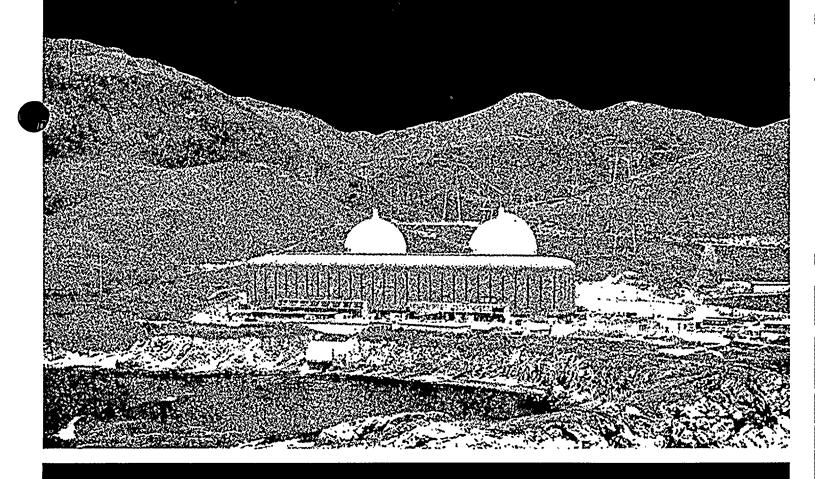
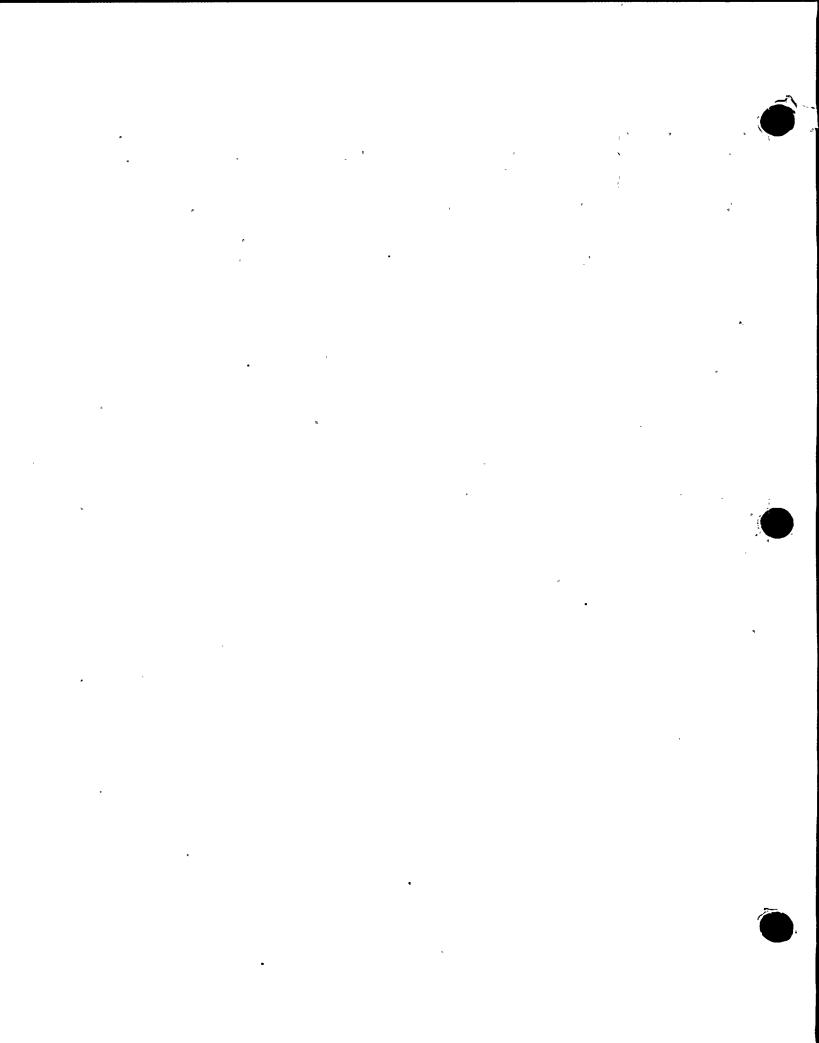
#### SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM

Final Report — Volume V April 1984

PACIFIC GAS AND ELECTRIC COMPANY Diablo Canyon Units 1 and 2 Docket Nos. 50-275 and 50-323





Programme addish

#### SIB EBOSE L. EMMINESK ABBSONSTABLE

THE STALLOWS COLLECT THE SAME OF THE SAME TO THE MED WHE

CROS GROUPS SULLANTED TO

1 she . 40 tec Ot-29-ba. to the property with the mark of the property of the property

. 1 .

- Fig. 77.44 to preclate werent fubit res said

WHENCE EMP COOF: DEFLECT in it too too. mor load with time

YERSTE ... 2-0571 -4

" Na Estato".

1011 CE . B. 72/3-10

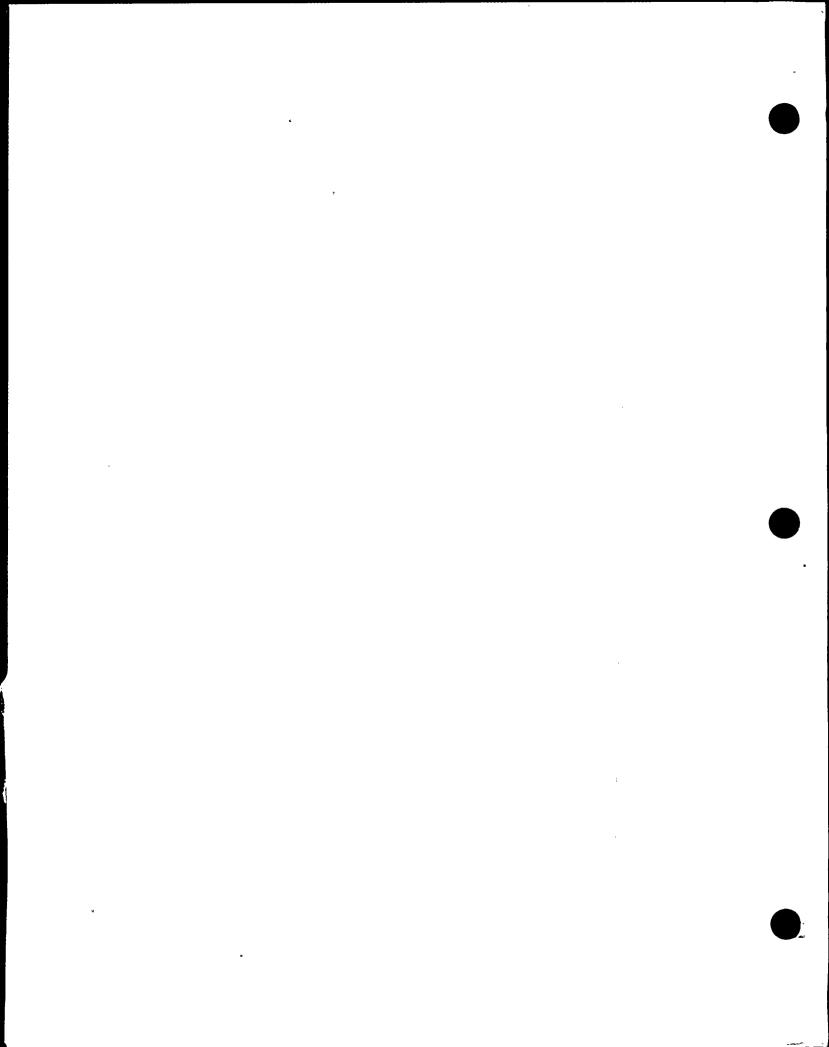
.. COMPONERED

THE TRUE HERE FLORE THE TANTON 1151-0"

~ = 7.702.705

CON CONTENTATION SHEET (IDS) IND SYSTEMS INTERACTION PROCREM I CHRIVER PLANT, UNLIT MO. 1 leng are a electric co.

#### T 0. --



SHEET	1	OF	_1_
nnocnom	•		

SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

• • • • • • • • • • • • • • • • • • • •
POSTULATED INTERACTION NO.: 01-03-05-02
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, north east corner by containment, 95°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Pipe whip restraint to line 593-10".  (Restraint B1076).
TARGET: TARGET CODE: P-0573-4  AFW line 573-4".
POSTULATED INTERACTION:  Lateral movement of whip restraint results in impact (contact load) with line 573.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install bracket & restraint to wall to preclude movement of whip restraint.
M. Jones 06/11/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Lateral brace has been provided per DCN DCO-EC-5485-RO. See DWG SK-193-001, Rev. O, and resolution sheet dated 05-29-84.
S. Gaballah 05/09/84  DISCIPLINE ENGINEER/DATE  B. Sarkar 05/09/84  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NA
S. Chesnut 06/14/84 I. W. Horn 07/02/84

S:5/14/184

F0011A/00727-17

(FOR MODIFICATIONS ONLY)

'FIELD VERIFICATION BY WALKDOWN TEAM

ं । प्राथमध

OU OTHICE & & . TIME SHEET \_\_\_1\_ OF \_\_1\_\_

, APACIFIC GAS & ELECTRIC CO.

MAGE DER L'ENDUCED SYSTEMS INTERACTION PROGRAM

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION-NOT: TOT-03-11-01
FIRE-ZONE 28 TOTAL LOCATION OUTSIDE Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE:
Elev. 110, MS loop 2 area.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE ST. 3-3740-9 (16.57 E.780) SOURCE CODE: C-PLAT-28  Grating kick plate. The still response to the still
Grating kick plate. " 9915 7295 73
the world
1-07AC
TARGET: TARGET CODE: P-0576-3
AFW line 576-3" drain connection.
46444 1.000 (1979 ) 1844 1875 1875 1875 1875 1875 1875 1875 1875
र्थ प्रकार के प्रकार के प्रकार के अधिक अधिक अधिक के प्रकार के प्रकार के अधिक के अधिक के अधिक के अधिक के अधिक के
POSTULATED INTERACTION: PHENOMENA CODE: INTERFERE
Grating slides into 1" drain connection causing kick plate to impact drain connection.
to a Market
A A B LAG PARK HE LIGHT BAR HE LIGHT BAR BAR AT LIGHT BAR BAR BAR AT LIGHT BAR
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Cut kick plate away from drain connection to preclude contact.
- 1/4 K #
The state of the s
M. Jones 06/11/80
WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:
<ul> <li>Grating kick plate cut away to provide clearance. See work request No. C-507 and interaction resolution sheet.</li> </ul>
The grant is a capacital and a
1
S. Hanusiak 02/18/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak 02/19/81  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAN
S. E. Traisman 01/26/83 L. W. Horn 03/07/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1 OF 1
SHEET 1 OF 1

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, CONTTONO. 1

#### SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET CIDS YEARS

	INIERICITON	>\!!!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!	80222218317203		
POSTULATED INTERACTIO	XN NO.: <u>01-05-</u>	05-01	that we want	cuti655T%	er ar s
FIRE ZONE 28	LOCATION	utside Areas			
LOCATION WITHIN FIRE Elev. 110, MS lo	ZONE:	, <u>Maria de la companya del companya del companya de la companya d</u>	::*	_ 36.1 + 1+55 aool 88 0 .	TR FORFTRA
IDENTIFICATION OF INT	TERACTING COMPO	NENTS ETHIS	१८५५ '६	bled at 800	T POSTATIVACE
SOURCE: 3x3 angle bracke	et pipe support	to test line	<u>SOURCE C</u> 2475 3/4".	ODE: <u>P-2475</u>	<u>–0.75 ಸಭ್ಯಕ್ಷಾನಾತ</u> ಭಾಕ್ಷಿಕ್ಕೂಡಿ
TARGET: AFW line 570-3".	ye or the state of	•.	TARGET CO	ODE: <u>P-0570</u>	**************************************
POSTULATED INTERACTION Movement of line 3/16".		n impact with		CODE: INTE	
RECOMMENDED RESOLUTION Cut angle bracket bracket.			between li	ne 570 and a	ngle
	w <b>A</b>	. <u>K.3</u> . carase: ur	THE STATE OF THE S	Eroprilos a	25C23 2 101 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
M. Jones 06/1	1/80		·	•	
FINAL RESOLUTION BY R			⊤t DWG 153—1	, Rev. 3.	, tie m a prose
There was a fiel inches between tanalysis and sho clearance. See necessary.	he pipe and the lead that the lead that the lead that the lead that the lead the lea	e support whi ine (570–3")	ch was inves movement is	stigated fur less than t	ther by stress he existing
C. R. VanNatta 08/03 DISCIPLINE ENGINEER/				rause 08	
DISCIPLINE RESPONSIBL	E FOR RESOLUTION	ON: CE EE E	MS ENG GC	HVAC I&C	<u>[PSE</u> ] NPO NAM
	•	<u>.</u>	•	v	1
S. E. Traisman 06/29 FIELD VERIFICATION BY			L. W. Hor		/84 PROVAL/DATE:

SW 201

SHEET	1	OF	_1_
ROGRAM			

#### PACIFIC GAS & EIFTTRIC CO. DIABLO CANYCH PLANT, UNIT NO. 1

SFISHICALLY INDUCED SYSTEMS INTERACTION P

	INTERACTION DOCUME	ENTATION SHEET (IDS)
POSTULATED INTERACTION	021 RO.: 01-06-01-01	
FIRE ZOME 3-0-1	LOCATICS Safety	Related Pump FLOOR FI EVATION 100'
LOCATION MITHEN FIRE		1
IDENTIFICATION OF IN	TERACTING COMPOSERTS	Our Control of Control
Pipe support (d	rawing- 50%-649272) to	SOURCE CODE: P-2442-6 p aux. steam pipe line 2442 and line 1862-8"
′ 4″	Section 2	•
TARGET: Auxiliary feedwa	ater pump 2 2 1	TARGET CODE: M-AFWPP1-1
	$\frac{ \mathbf{y}  = \frac{1}{2} \left( \frac{1}{2} \right) \right)}{1}} \right)}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}$	and the second s
movements result 1-1.	ntacts 1 ind 1862. Rep	PHENOMENA CODE: DEFLECT peated contact due to thermal seismic and other contact and
RECOMPENDED RESOLUTION Relocate pine su	ON BY MALKDOWN TEAM:	1862.27 L.
		•
M. Jones Of	5/24/80	

MALKDOWN TEAM ORIGINATOR/DATE.

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

The angle of support 85S/30R was cut to provide adequate clearance.

C. R. Van Natta 08/16/84 DISCIPITAL FAGTAFER/DATE K. M. Krause 08/16/83 FINGR, GROUP SUPERVISOR/DATE

DISCIPITME RESPONSIBLE FOR RESOLUTION: CE FE EMS FNG GC HVAC ICC [PSE] NPO NAM

02/10/84 G. Zaharoff FIFID VERIFICATION BY HALKDOWN TEAM (FOR MODIFICATIONS CALY)

SHEET 1 OF	1
------------	---

	ACTION DOCUMENTATION SI		
POSTULATED INTERACTION NO.:	01-06-01-02	gene was sometiment	"it with the
FIRE ZONE 3-Q-1 LOCA	TION Safety Related Pur	FLOOR ELEVATION 100	ONL REE
LOCATION WITHIN FIRE ZONE: Elev. 110, Along south	wall of room	METERS FIRE TAST: W. M.O. Coas Mar. Line & Care	vor kar.
IDENTIFICATION OF INTERACTIN	G COMPONENTS	. T. Gallingson, & bottag	us arkset
SOURCE: 1 1/2" Copper Water sup	्रामदेश . ५७ ch (३१) ply Pipe	SOURCE CODE: P-USB-301	
	i Antiguesia	1 - 1	; K
TARGET: AFW Pump 1-1	Day 2	TARGET CODE: M-AFWPP1-1	· <u>Stant</u>

POSTULATED INTERACTION: (JAMES OF LOSS OF PROPERATION): (PHENOMENA CODE PROPERATION): (PHENOMENA

RECOMMENDED RESOLUTION BY WALKDOWN TEAMER SHIP IN THE PROPERTY OF THE PROPERTY

M. Jones 04/29/82
WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Judgement made during field walkdown is that sources, 1 1/2" copper line, cannot develop enough kinetic energy to damage target, Aux. F. W. Pump, due to protection given by other class I pipe and instrument supports (Ref. SIP Manual, Appendix B, Page B-37, R-14). Therefore no action necessary

C. R. VanNatta 07/28/83
DISCIPLINE ENGINEER/DATE

K. M. Krause - 08/03/83 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO .NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALY)

L. W. Horn 09/29/83
SIP PROJECT ENGINEER APPROVAL/DATE

إراب ورورة كيمياء

JIIL 1 2 01 ,	SHEFT	1	OF	1
---------------	-------	---	----	---

10/20/83

SIP PROJECT ENGINEER APPROVAL/DATE

I.. W. Horn

# PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO :: - 01-06-01-03-
FIRE ZONE 3-Q1 LOCATION Safety Related Pump FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 112', over AFW pump 1-1.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: NS-CD /
SHIER TO BEEN TROPE
TARGET:  AFW pump 1-1.  TARGET CODE: M-AFWPP1-1
The state of the s
POSTULATED INTERACTION:  Misc. components, such as argon & hydrogen piping, pipe suport rod, and lifting cable, fall onto AFW pump.
•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: 100 100 100 100 100 100 100 100 100 10
M. Jones 04/29/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Area will be cleared of temporary and listed abandoned components prior to initial critically. As instructed by NPPR DCO-83 No. P0005 and SIP request No. 314
DISCIPILINE ENGINEER/DATE  J. Townsend  ENGR. GROUP SUPERVISOR/DATE
DISCIPITNE RESPONSIBLE FOR RESOLUTION: CE, EF, FMS ENG GC HVAC I&C PSF [NPO] NAN

[0039A/01027-1]

FIFLD VFRIFICATION BY WALKDOWN TEAM

SHEET	1	OF	

SIP PROJECT ENGINFER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

	INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION	N NO.: 01-07-02-02
	LOCATION Penetration Areas FLOOR, ELEVATION, 85'-0"
	ZONE: 257, 25 45 266 H1, 1520 1 2 57, 250 250 257, 257 257
IDENTIFICATION OF INTE	ERACTING COMPONENTS
SOURCE:	SOURCE CODE: P-0721-17
	Dear with the second of the se
TARGET: K5971.	TARGET CODE: E-K5971-2
	THE STATE OF THE S
L721 could move a	ow 1.721 so impact could not occur.
G. Whorisky 06/0 WALKDOWN TEAM ORIGINAT	TOR/DATE
	ed. Field inspection indicate adequate clearance.
J. Abraham 08/10/ DISCIPITNE FNGTNFER/D	
DISCIPITME RESPONSIBLE	F FOR RESOLUTION: CE [FE] EMS ENG GC HVAC IGC PSE NPO NAI
	L. W. Horn 08/24/83

[0039A/0101Z-39]

FIFI.D VERIFICATION BY WALKDOWN TEAM

DIABLO CANYON PLANT, UNIT NO. 1 SFISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS) POSTULATED INTERACTION NO.: 01-09-01-01 FLOOR ELEVATION \_115'-0" FIRE ZONE 3-BB LOCATION Penetration Area LOCATION WITHIN FIRE ZONE: Elev. 115, GE Area, along West Wall IDENTIFICATION OF INTERACTING COMPONENTS SOURCE CODE: E-L.F-3BB SOURCE: Overhead light fixture (2 fixtures), chain supported TARGET CODE: I-I.CV108 TARGET: Motor Operator to Valve LCV-108 213 ': ' " - PHENOMENA CODE: FIXTURE POSTULATED INTERACTION: Fixture falls, impacts actuator. RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of fixture mount, modifications will be required. 6/10/80 M. Jones WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, Detail 9 (Category X). This fixture type has been qualified by analysis per calculation 52.24.52. :::16 No further action necessary. Resolved by analysis. G. C. Bhatt 03/04/83 R. J. Swaim 3/4/83 ENGR. GROUP SUPERVISOR/DATE DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EF] EMS ENG GC HVAC I&C PSE NPO NAN L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.

SHEET \_\_\_1\_ OF \_\_1\_

A CONTRACT OF STREET

**FOODS A / OOSS 7-17** 

SHEET	1	OF	1	

INTERMOTION DOCUMENTAL	TOM SHEET (IDS)
POSTULATED INTERACTION NO.: 01-09-02-06	
FIRE ZONE 3-BB LOCATION Penetration	Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100', 15' col. line and K.	٠٠. نين • • • • • • • • • • • • • • • • • • •
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Support to line 1445-4".	SOURCE CODE: P-1445-4
A A BY.	ran it
TARGET: K6254.	TARGET CODE: E-K6254-3
POSTULATED INTERACTION: Clevis rod support deflects and impacts	PHENOMENA CODE: DEFLECT
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure by simplified analysis that integ	rity of conduit will not be damaged
G. Whorinskey 05/08/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added support by generic DCN DC1-EP-5061	PRO-HGR. DWG 049339-339/280R.
C. R. VanNatta 07/21/83	K. M. Krause 07/21/83
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE .	EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 10/14/83	L. W. Horn 10/24/83
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY)	SIP PROJECT ENGINEER APPROVAL/DATE

[0032A/0074Z-1]

SHEET \_\_\_1\_ OF \_\_1\_

## PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO: 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 01-09-02-07	
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"	
LOCATION WITHIN FIRE ZONE: Elev. 115', near door #348, area GF. :	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Construction scaffolding.  SOURCE CODE: NS-CD	
TARGET: TARGET CODE: E-K5962 Conduit K5962.	
POSTULATED INTERACTION:  Construction scaffolding is not secured.  PHENOMENA CODE: HOUSFKFEP	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove or secure scaffolding prior to plant fuel load.	
P. Anderson 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Scaffolding to be removed per ART No. 192.	
S. Hanusiak 07/20/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak 07/28/81  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG [GC] HVAC ICC PSE NPO NA	<del>M</del>
S. F. Traisman 08/31/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS CNLY)	

SHEET	1	OF	1
-------	---	----	---

ŗ

## PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 01-10-01-01	•
FIRE ZONE 3-88 LOCATION Penetrat	ion Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, GE Area, along West Wall	
IDENTIFICATION OF INTERACTING COMPONENTS	
<u>SOURCE</u> : Overhead light fixture (2 fixtures),	SOURCE CODE: E-LF-3BB chain supported
TARGET: Motor Operator to Valve LCV-109	TARGET CODE: I-LCV109
POSTULATED INTERACTION: Fixture falls, impacts actuator.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of fixture mount, mo	difications will be required.
M. Jones 6/10/80 WALKDOWN TEAM ORIGINATOR/DATE	•
The above source light fixture has been installed in accordance with PG&E Dwg This fixture type has been qualified No further action necessary. Resolved	en field inspected and verified to be . 050041, Detail 9 (Category X). by analysis per calculation 52.24.52.
R. J. Swaim 3/4/83	G. C. Bhatt 03/04/83
DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE	ENGR. GROUP SUPERVISOR/DATE  [EE] EMS ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALY)	L. W. Horn 8/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

[0006A/0066Z-2]

SHEET1_O	F1
----------	----

POSTULATED INTERACTION DO.: 01-10-02-01
FIRE ZOME 388 LOCATION Penetration Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZOME: Elev. 119', 3' West of 'R'-line, Col 15 <sup>7</sup> - 17'
IDENTIFICATION OF INTERACTURG COMPONENTS
SOURCE:  Fluorscent Light - Pendant mounted  SOURCE CODE: E-K6436-1.25
TARGET:  K6436 (Conduit)  TARGET CODE: E-LF-3RB
PHENOMENA CODE: FIXTURE  Fixture above conduit, could fall, impacting conduit.
RECOMPENDED RESOLUTION BY MALKDOWN TEAM:  Verify integrity of fixture.
MALKIONN TEAM ORIGINATOR/DATE
The above source light fixture has been field inspected and verified to be installed in accordance with PGandE Dwg 050041, Detail 9 (Category XI).  This fixture has been qualified by analysis per Civil Calculation 52.24.52.  No further action necessary. Resolved by Analysis.
R. J. Swaim 03/04/83 G. C. Rhatt 03/04/83
R. J. Swaim 03/04/83  DISCIPITINE FRIGHTHER/DATE  G. C. Rhatt 03/04/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPITUE RESPONSIBIE FOR RESOLUTION: CE [FE] FPIS ENG GC HVAC IAC PSE NPO MAN
L. W. Horn 08/24/83
FIFI D VERTEICATION BY HAI KOOKH TEAM SIP PROJECT FRIGTHER APPROVAL/DATE (FOR MODIFICATIONS COLY)

The state of the s

SHEET	1_	OF	_1_	45
-------	----	----	-----	----

POSTULATED INTERACTION NO.: 01-12-01-01
FIRE ZONE 28 LOCATION Outside Areas FLOOR ELEVATION 109'-6"
LOCATION WITHIN FIRE ZONE: Elev. 110, near loop 2 penetration
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: SO
TARGET:  I CV-110-AFW valve.  TARGET CODE: M-LCV110
POSTULATED INTERACTION:  Actuator on this valve is tall and unsupported. Failure of the upper structure could compromise AFW system operation.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Finsure qualification of value upperstructure and proper modelling in AFW system seismic analyses.
M. Jones 06/11/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The actuators for LCV-110 and LCV-111 were recently replaced. These postulated interactions were "discovered" before the supports were attached to the actuators. Since this time, the designs for the supports have been completed and sent to the field. (see DWG #049302 Shs. 42 and 50). The new supports have been modeled in Hosgri 2-8, Rev. 6.  Note: The supports associated with LCV-110 were part of original design and were not added as a result of the STP.
G. B. Page 11/17/81 T. Connell III DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN
M. Baker 06/28/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELE DIABLO CANYON PLANT, SEISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTATION	UNIT NO. 1 INTERACTION PROGRAM
POSTULATED INTERACTION NO.: 01-12-02-01	
FIRE ZONE 3-BB LOCATION Penetration	Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Auxiliary building near 224° containment,	elev. 113'.
IDENTIFICATION OF INTERACTING COMPONENTS	••
SOURCE: 2-1/2" fire line.	SOURCE CODE: P-SPR-3BB
<u>TARGET</u> : K5755.	TARGET CODE: E-K5755-0.75
POSTULATED INTERACTION:  Fire line falls due to being supported by	PHENOMENA CODE: SPTFAIL rod hangers only.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Show by simplified analysis analysis that	conduit will not be jeopardized.
G. Whorisky 05/08/81 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	•
See IDS No. 25-185-02-02.  C. R. VanNatta 04/27/83  DISCIPLINE ENGINEER/DATE	K. M. Krause 08/04/83 ENGR. GROUP SUPERVISOR/DATE

L. W. Horn 08/23/83

SIP PROJECT ENGINEER APPROVAL/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN

M. Baker

(FOR MODIFICATIONS CNLY)

06/28/83

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET 1 OF 1
1 ON PROGRAM (IDS)
FLOOR ELEVATION 100'-0"
•
CE CODE: M-FE
ET CODE: E-HNJB
MENA CODE: LOOSE & MECHFAIL : HNJB.
• .
anism to keep canister on
-release restraint to the fire

POSTULATED INTERACTION NO.: 01-12-02-02
FIRE ZONE 5-A-3 LOCATION Electrical Rooms FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100', DC switchgear room 1-3.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Fire extinguisher FE-A115 02-12.
TARGET: TARGET CODE: E-HNJB HNJB (cable tray).
POSTULATED INTERACTION:  Extinguisher could fall from its mounting and impact HNJB.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure stability of extinguisher by providing mechanism to keep canister on station mount.
P. Anderson 06/05/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: G.C. has been instructed to provide positive quick-release restraint to the fire extinguisher per ART 375.
DISCIPLINE ENGINEER/DATE  J. A. Longworth  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NAME

S. E. Traisman 11/02/83
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

11.8. 8/28/84

SHEET	1	OF	1
-------	---	----	---

POSTULATED INTERACTION NO.: 01-12-02-03
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 110', near col. J & 15.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Fire protection piping.  SOURCE CODE: P-SPR-3BB
<u>TARGET</u> : <u>TARGET CODE</u> : <u>E-K5755+</u>
POSTULATED INTERACTION:  Fire protection piping falls due to failure of fixed-end rod hangers.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace fixed-end rod hangers with clevis-end types.
P. Anderson 06/09/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: See IDs No. 25-185-02-02.
C. R. VanNatta 04/27/83 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

M. Baker 06/28/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

SIP PROJECT ENGINEER APPROVAL/DATE

SHEET _	1	_ OF _	1	-
Rogram )				

L. W. Horn 11/11/82 SIP PROJECT ENGINEER APPROVAL/DATE

DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 01-12-02-04
FIRE ZONE 5-A-4 LOCATION Electrical Rooms FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Flev. 100', Col. 16 <sup>3</sup> & J.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  2" fire protection piping.  SOURCE CODE: P-USB-5A4
<u>TARGET CODE</u> : <u>E-K7143-2</u> K7143 to box BJH 309.
POSTULATED INTERACTION:  There exists about 1/8" clearance between source line and target. Excessive movement of source line could damage conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  By simplified analysis, ensure integrity of conduit.
P. Anderson 06/10/81 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:
Resolved by analysis. See Resolution Report No. 49.
ACB
P. Anderson 09/24/81 J. A. Ante 03/17/82 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

PACIFIC GAS & ELECTRIC CO.

[0006A/0066Z-3]

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	1

07/03/84

1. W. Horn

SIP PROJECT ENGINFER APPROVAL/DATE

## PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS.)

POSTULATED INTERACTION NO.: 01-12-02-06	· · · · · · · · · · · · · · · · · · ·
FIRE ZONE _28 LOCATION _Outside Areas	FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 106' azimuth 320°, outer edge of pipe	rack.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Construction deficiency.	SOURCE CODE: NS-CD
TARGET: Conduit K-5755-3/4".	TARGET CODE: F-K5755-0.75
POSTULATED INTERACTION: Missing condulet cover.	PHENOMENA CODE: HOUSEKEEP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace cover.	·
S. E. Traisman 06/30/82 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Replace condulet cover. IDS is a result of transferred to onsite quality control. Cons during normal course of construction activity	truction deficiency to be corrected
DISCIPLINE ENGINFER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE FM	S F.NG GC HVĄC I&C PSE NPO NAN <u>[QC</u>

F00284/00827-17

FIFI.D VERIFICATION BY WALKDOWN TEAM

			UNIT NO. NTERACTI	1 ON PROGRAM	OF .	. <del></del>
POSTULATED INTERA	CTION NO.: 01-12-	05-02		•		
FIRE ZONE 3-BR	LOCATION P	enetration A	rea	FLOOR ELEVA	<u>100' иот</u> т	<del>-o" (</del> {
LOCATION WITHIN F Cols. L and						) .
IDENTIFICATION OF	INTERACTING COMPO	NENTS				•
SOURCE: Construction	deficiency.		SOUR	CF CODE: N	S-CD	
TARGET: Conduit KK79	<b>\</b> 3-3/4".		TARG	ET CODE: E	<u>-KK793-0.7</u>	5
POSTULATED INTERA	<u>CTION</u> : def "C" condul	et left with		MFNA CODE:_ ver.	HOUSEKFFP	<del></del>
RECOMMENDED RESOL	UTION BY WALKDOWN	TEAM:				
,	1.06/00/01					
R. I. CLOU WALKDOWN TEAM OR	d 06/09/81 GINATOR/DATE				n.	
Replace cove	BY RESPONSTBLE DIS	CTPITNE: . per ART 160				
DISCIPLINE ENGIR	REER/DATE		F.NC	A. G. Bart R. GROUP SU	a 07/15/ JPERVISOR/D	ATE
DISCIPI INE RESPON	ISIBLE FOR RESOLUTI	ON: CE EE	ems eng	[ <u>QC</u> ] HVAC	I&C PSE	NPO NA
FIELD VERIFICATION	N BY WALKDOWN TEAM	i		<u>l. W. Horn</u> JECT ENGINE		

[00204/01007 517

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET 1 OF 1

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 01-12-05-03
FIRE ZONE 3-Q-2 LOCATION Safety Related Pump FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, (T-U, 15-15 <sup>2</sup> ), 11' above the floor
IDENTIFICATION OF INTERACTING COMPONENTS .
SOURCE: SOURCE CODE: P-ULB-302
2" copper line 1431 and 4" service air line. Both lines run 14" from the $15^2\ \text{wall}.$
TARGET: TARGET CODE: E-KK793-0.75
· Conduit KK 793-3/4"
POSTULATED INTERACTION: PHENOMENA CODE: deflect
The two lines impact the conduit 1/4" away due to seismic movement.

#### RECOMMENDED RESOLUTION BY WALKDOWN TEAM:

Secure both lines to the existing support with U bolts. The support is 166" west of the U column line and 25" west of the wall between T and U.

E. Denison 07/08/81
WALKDOWN TEAM ORIGINATOR/DATE

#### FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Add seismic stop by generic DCN-DC1-EP-5061-PRO HGR. DWG. 049339 sht. 331

C. R. Van Natta 07/29/83
DISCIPLINE ENGINEER/DATE

K. M. Krause 07/29/83
ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC IGC [PSE] NPO NAN

S. E. Traisman 09/21/83
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

Lee Horn 01/18/84
SIP PROJECT ENGINEER APPROVAL/DATE

CVV)

			•	
SHEET	1	OF	1	

INTERHOLITON DOCUM	ENIHITON SHEEL (TD2)
POSTULATED INTERACTION NO.: 01-12-10-01	·
FIRE ZONE 5-A-1 LOCATION Elect	rical Rooms FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: El. 102' in Vital 480V Swgr Room 1F	·
IDENTIFICATION OF INTÉRACTING COMPONENTS	•
SOURCE:  8 Hr battery operated lighting unit	SOURCE CODE: E-LF-BOL
<u>TARGET</u> : Aux FW Transformer TFW-1	TARGET CODE: E-TFW1
POSTULATED INTERACTION:  Lighting Unit Supports Fail, Unit F on to Transformer Case	PHENOMENA CODE: FIXTURE
•	•
· ·	•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify Integrity of Battery Operate Unit Support	
S.E. Traisman 07/27/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLI Lighting Support has been Seismical See Calc. No. 30-01-73-01.	
R. J. Swaim 11/23/82	C. Bhatt 11/23/82
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: C	E [EE] EMS ENG GC HVAC I&C PSE NPO NA
	. I II Home 01/03/83
FIELD VERIFICATION, BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	SIP PROJECT ENGINEER APPROVAL/DATE

(0061Z/FINAL:p.29)

SHEET	1	OF.	1	14
PROGRAM				'))

L. W. Horn 10/20/83 SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 01-13-01-01				
FIRE ZONE 28 LOCATION Outside Areas FLOOR ELEVATION 109'-6"				
LOCATION WITHIN FIRE ZONE: Elev. 110, near loop 2 penetration				
IDENTIFICATION OF INTERACTING COMPONENTS				
SOURCE:  Motion due to postulated HOS6RI event.				
TARGET:  AFW valve LCV-113  TARGET CODE: M-LCV113				
, , ,				
POSTULATED INTERACTION:  Actuator on this valve is tall and unsupported. Failure of the upper structure could compromise AFW system operation.				
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure qualification of valve upper structures and proper modelling in AFW system seismic analyses.				
M. Jones 06/22/84 WALKDOWN TEAM ORIGINATOR/DATE				
The actuators for LCV-110 and LCV-111 were recently replaced. These postulated interactions were "discovered" before the supports were attached to the actuators. Since this time, the designs for the supportss have been completed and sent to the field (see attached Dwg. #049302 Shs. 42 and 50). The new supports have been modeled in HOSGRI 2-8 Rev. 6  Note: The supports associated with LCV 113 were part of original design and were not added as a result of the S.I.P.				
G. B. Page 11/17/81 T. Connell III DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE				
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN				

M. Baker 06/23/83 FIELD VERIFICATION BY WALKDOWN TEAM

	SHEET	1	OF	1
--	-------	---	----	---

POSTULATED INTERACTION NO.: 01-13-02-01	•
FIRE ZONE 28 LOCATION Outside Areas	FLOOR ELEVATION 109'-6"
1.OCATION WITHIN FIRE ZONE: Flev.115; east end of pipe rack by AFW ICV	' s
IDENTIFICATION OF INTERACTING COMPONENTS	
Source: Seismic motion as a result of postulated Ho	SOURCE CODE: NS-CO
TARGET: Conduit K 6145-3/4"	TARGET CODE: E-K6145-0.75
POSTULATED INTERACTION:  Conduit lacking support near termination of	PHENOMENA CODE: Loose f conduit to LCV-111
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Add support to conduit K 6145 near flex conduit off of adjacent structural steel.	nnection to I,CV-111 support con-
•	
S. F. Traisman 06/30/82 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSTBLE DISCTPLINE: Resolved per ART 344.	
M. J. Hanz 02/07/83 DISCIPLINE ENGINEER/DATE	G. L. Glascock 06/22/84 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE E	EMS [ENG] GC HVAC I&C PSE NPO NA
S. F. Traisman 08/24/83 FIFLD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 09/08/83 SIP PROJECT ENGINFER APPROVAL/DATE

	SHEET1_ OF1_
PACIFIC GAS & ELECTR	
DIABLO CANYON PLANT, U	
SEISMICALLY INDUCED SYSTEMS INT	
INTERACTION DOCUMENTATION	SHEET (IDS)
POSTULATED INTERACTION NO.: 01-14-01-01	
FIRE.ZONE 3-BB LOCATION Penetration Are	PA FLOOR ELEVATION 110'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, over auxiliary feed pump 1-3.	·
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:	SOURCE CODE:C_PLAT_38B
Overhead platform and grates.	SOURCE CODE.
Over nead practici in and 31 accs.	•
TARGET:	TARGET CODE: M-AFWPP1-3
Aux. feedwater pump 1-3 and associated pipir	ng & instruments.
•	·
	DUCTION CO
Platform falls, impacts pump, etc.	PHENOMENA CODE: CIVILFAIL
•	
	•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform by simplified a	inalysis.
M. Jones 06/10/80	
WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The platform and grating have been qualified	by analysis. See resolution sheet.
and Calc. No. 01-14-01-01.	
S. Hanusiak 02/03/81	E. P. Wollak
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE E	MS ENG GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn

08/23/82

SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1 OF 1
--------------

All all all pool all all all all all all all all all
POSTULATED INTERACTION NO.: 01-15-01-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, GE Area, along West Wall
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: E-LF-3BB  Overhead light fixture (2 fixtures), chain supported
TARGET:  Motor Operator to Valve LCV-113  TARGET CODE: I-LCV113
POSTULATED INTERACTION:  Fixture falls, impacts actuator.  PHENOMENA CODE: FIXTURF
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, modifications will be required.
M. Jones 6/10/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, Detail 9 (Category X).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83  DISCIPLINE ENGINEER/DATE  BISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NA

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 8/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

AGTS

SHEET	1	OF	1	
-------	---	----	---	--

	INTERACTION DOCUMENTATION	SHEET (IDS)			
POSTULATED INTERACTION	NO.: <u>01-15-02-01</u>		•		
FIRE ZONE 6-A-5	LOCATION <u>Electrical Room</u>	FLOOR I	ELEVATION _	115'-0"	<b>-</b> ·
LOCATION WITHIN FIRE ZO Elev. 115', outsid	ONE: de D.C. switchgear room 1—	1, near fan S	S-44		
IDENTIFICATION OF INTER	RACTING COMPONENTS				
SOURCE: Handrails		SOURCE CO	DE: C-HAND	RAIL	_
· <u>TARGET</u> : KT987		TARGET CO	<u>DE: E-KT98</u>	7-1.50	
POSTULATED INTERACTION: Handrails could in		<u>PHENOMENĄ (</u>	200E: LOOSE		
RECOMMENDED RESOLUTION Secure handrails	BY WALKDOWN TEAM:				
P. Anderson 6/ WALKDOWN TEAM ORIGINATO FINAL RESOLUTION BY RES Handrails to be se	OR/DATE				
S. Hanusiak 07/20/ DISCIPLINE ENGINEER/DA DISCIPLINE RESPONSIBLE		ENGR. GRO	ak 7/28/81 NUP SUPERVI HVAC I&C	SOR/DATE	Nai

5-111121 5-111121

S. E. Traisman

(FOR MODIFICATIONS ONLY)

F00044/00697 4F7

FIELD VERIFICATION BY WALKDOWN TEAM

08/31/82

L. W. Horn
SIP PROJECT ENGINEER APPROVAL/DATE

SHEFT	1	OF	1

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM

INTERACTION DOCUMENTATION SHFET (IDS)
POSTULATED INTERACTION NO.: 01-15-02-03
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 112, 7' west of col. L, mid room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: F-RS-3RR  Lateral brace to cable tray.
TARGET:  Conduit KT-243-1.25".  TARGET CODE: E-KT243-1.25
POSTULATED INTERACTION:  Lateral motion of cable tray results in brace contacting and damaging conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Relocate cable tray support brace away from conduit to provide 2" clear-ance.
M. Jones 06/09/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Relocate cable tray support brace way from conduit to provide 2" clearance.  Per ART 329.
Peter P. Chu 11/17/82  DISCIPLINE ENGINEER/DATE  DISCIPLTNE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NA
S. F. Traisman 08/24/83  FIFI.D VERIFICATION BY WALKDOWN TEAM  I. W. Horn 09/08/83  SIP PROJECT ENGINEER APPROVAL/DATE

[0029A/0086Z-5]

(FOR MODIFICATIONS ONLY)

A615

•	
POSTULATED INTERACTION NO.: 01-15-10-01	
FIRE ZONE 5-A-3 LOCATION Electrical Rooms FLOOR ELEVATION 100'-0"	<del></del>
LOCATION WITHIN FIRE ZONE: Elev. 102', in vital 480V Swgr room lH.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  8 Hr battery operated lighting unit.  SOURCE CODE: E-L.F-BOL	<b>-</b>
TARGET: TARGET CODE: F-TFW2  Aux. FW transformer TFW-2.	
POSTULATED INTERACTION:  Lighting unit supports fail, unit falls onto transformer case.	_
Engineering unite supported fully unite fulls office of another me.	
•	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of battery operated lighting unit support.	
S. E. Traisman 07/27/87 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Lighting support has been seismically qualified by analysis. See Civil Cal 30-01-73-01.	c. No.
hars .	
R. J. Swaim 11/23/82  DISCIPLINE ENGINEER/DATE  G. C. Bhatt 11/23/82  ENGR. GROUP SUPERVISOR/DATE	
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC 1&C PSE NPO	NAN

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

01/03/83

[0006A/0066Z-5]

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET 1 OF 1	
--------------	--

POS	STULATED INTERACTION	No.: 01-16-01-01		
FI	RE ZONE 3-BB	LOCATION Penetra	tion Area FLOOR ELE	VATION _115'-0"
Ľα	CATION WITHIN FIRE ZO Elev. 115, GE Area	ONE: a, along West Wall		
IDS	ENTIFICATION OF INTE	RACTING COMPONENTS		
<u>so.</u>	URCE: Overhead light fi	xture (2 fixtures),	SOURCE CODE: chain supported	E-L F-3RB
TAF	RGET: Motor Operator to	Valve LCV-115	TARGET CODE:	TLCV115
<u>P09</u>	STULATED INTERACTION Fixture falls, im		PHENOMENA CODE	:FIXTURE
<u>REC</u>	COMMENDED RESOLUTION Ensure integrity		odifications will be re	quired.
	M. Jones LKDOWN TEAM ORIGINATO	OR/DATE		
<u>fii</u> kus	installed in accor This fixture type	light fixture has b rdance with PG&E Nw	een field inspected and g. 050041, Detail 9 (Ca by analysis per calcula	tegory X).
DI	R. J. Swaim 3/4/8: ISCIPLINE ENGINEER/DO SCIPLINE RESPONSIBLE	ATE	G. C. Rhat ENGR. GROUP S	tt 03/04/83 SUPERVISOR/DATE C I&C PSE NPO N
				•

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

I.. W. Horn 8/24/83
SIP PROJECT ENGINEER APPROVAL/DATE

reservate signal de la company

SHEET	1	OF	1

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 01-17-02-01
FIRE ZONE 4-A LOCATION Aux./Fuel Handling FLOOR FLEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, area H, outside chemical lab, access hatch in ceiling, 15" down from door 145
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Hot water line insulated with black foam.  SOURCE CODE: NS-T
TARGET: Conduit K7227.
POSTULATED INTERACTION:  Contact between uninsulated pipe and K7227 below valve (Postulated heat damage).
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of K7227 or place insulation between the pipe and K7227
E. Dennison 06/05/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Initial "final resolution" found unacceptable. See field verification (4/28/82).  1/4" thick pipe insulation has been placed between hot water pipe and conduit K7227. Insulation secured per ART 397 which was written as a result of F.V.R. dated 04/28/82, and resolved interaction.
DISCIPLINE FNGTNEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN
M. Jones 04/28/82 L. W. Horn 04/20/84  FIFLD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

[0028A/00827-42]

SHEET	1	<b>OF</b>	1
-------	---	-----------	---

THIEFURITOR DOON WELLITTON CHARLE (120)
POSTULATED INTERACTION NO.: 01-18-01-01
FIRE ZONE 53 LOCATION Aux./Fuel Handling FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Along Col. 15.7 between Cols. U and T (in stairwell east of area GE).
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Battery operated light fixture and assoc. power conduit.
<u>TARGET</u> :  Inst. lines assoc. with PT-433 (AFP 2-3), PS-421 (AFP2-21), and PS-422 (AFP2-3).
POSTULATED INTERACTION:  Conduit is run above target tubes. Light fixture mounting fails fixture pulls it conduit off wall and ceiling and conduit damages target inst. tubes.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Reroute conduit underneath target inst. tubes.  Note: This TDS is a result of SIP review of DCN DC1-EE-17081.
S. Skochko 01/18/84 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Reroute conduit underneath the instrument tubing to preclude postulated interaction. Resolved by modification. See ART 499.
red)
R. J. Swaim 03/04/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC 1&C PSE NPO NAN
S. Chesnut 05/16/84  FIELD VERIFICATION BY WALKDOWN TEAM  L. W. Horn 06/25/84  SIP PROJECT ENGINEER APPROVAL/DATE

[0006A/0066Z-7]

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 01-19-02-01
FIRE ZONE 4-A LOCATION Auxiliary Building FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, Chem Lab area, cable spreading room NE, through door #147 and 146.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Class II plaster/metal stud wall.
TARGET:  K6958, K6959, K6960, K6961, K6954, K6995, K6956, K6957, K7033 and K7034 conduits.
POSTULATED INTERACTION:  Class II wall could fall and impact targets.  PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Insure integrity of Class II wall.
Paul Anderson 06/05/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Wall qualified by analysis. See Calc. No. 01-19-02-01.
S. Hanusiak 09/21/81 DISCIPLINE ENGINEER/DATE  E. Wollak 09/24/81 ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
•

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 01/03/83 SIP PROJECT ENGINEER APPROVAL/DATE



PACIFIC GAS & ELEC DIABLO CANYON PLANT, SEISMICALLY INDUCED SYSTEMS I INTERACTION DOCUMENTATIO	UNIT NO. 1 INTERACTION PROGRAM
POSTULATED INTERACTION NO.: 01-19-02-02	
FIRE ZONE 14-A LOCATION Turbine Build	ing FLOOR ELEVATION 104'-0"
LOCATION WITHIN FIRE ZONE: Elev. 118' in vicinity of stairwell 18, Co	ls. C and 7.
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Stairway 1B - elev. 104' to 119'.	SOURCE CODE: C-STAIR-14A
TARGET: Conduit 'K2665-1".	TARGET CODE: E-K26665-1
POSTULATED INTERACTION: Stairway fails, impacts conduit.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of stairway by simplified	i analysis.
S. E. Traisman 07/20/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The stairway has been seismically qualified Calc. No. 01-19-02-02.	ed with modifications. See ART 394 and
•	
S. Gaballah 06/08/83 DISCIPLINE ENGINEER/DATE	B. Sarkar 06/21/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	EMS ENG GC HVAC I&C PSE NPO NAN
S. E. Traisman 11/02/83 FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS CNLY)

SHEET1_ OF1_	
PROGRAM DS)	
OOR ELEVATION 85'-0"	
CODE: M-TANK	
CODE: E-K2665-1	
NA CODE: SPTFAIL could sustain heat damage	fro
not damaged by tank modification to prevent	

### DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION INTERACTION DOCUMENTATION SHEET (I

PACIFIC GAS & ELECTRIC CO.

AND A PARK OF A

POSTULATED INTERACTION NO.: 01-19-02-03 FIRE ZONE 14-A LOCATION Turbine Building FL LOCATION WITHIN FIRE ZONE: Elev. 103', near Cols. C and 8. IDENTIFICATION OF INTERACTING COMPONENTS SOURCE: SOURCE FW HTR 1-6 drain tank. TARGET: TARGET Conduit K2665-1". POSTULATED\_INTERACTION: PHENOME Tank failure/displacement damages conduit. Conduit adjacent line.

#### RECOMMENDED RESOLUTION BY WALKDOWN TEAM:

Verify integrity of tank. Also show that conduit is displacement or high temperature. Otherwise provide interaction.

#### S. E. Traisman 07/20/82 WALKDOWN TEAM ORIGINATOR/DATE

#### FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Drain tank support has been seismically qualified by analysis. Seismic movement of tank and temperature of wiring have been evaluated. No modification is required. See Calc. No. 01-19-02-03.

.S. Gaballah 06/15/83 DISCIPLINE ENGINEER/DATE

B. Sarkar " 06/21/83 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC IEC PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 06/21/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	<b>OF</b>	1

,	· · · · · · · · · · · · · · · · · · ·
POSTULATED INTERACTION NO.: 01-19-02-04	
FIRE ZONE 14-A LOCATION Turbine Building	FLOOR ELEVATION 119'-0"
LOCATION WITHIN FIRE ZONE: Elev. 118' in vicinity of stairway 15, cols. C	;+8;
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Firewater sprinkler lines above stairway 15.	SOURCE CODE: P-SPR-14A
TARGET: Conduit K2665-1".	TARGET CODE: E-K2665-1
POSTULATED INTERACTION:  Conduit runs N-S at east edge of stairway and above 119' level. Threaded sprinkler piping w conduit.	PHENOMENA CODE: SPTFAIL  as such is unprotected from source with fixed end rod hangers fall ont
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install bilateral supports to sprinkler piping stairway 15.	g in the area above
S. E. Traisman 07/20/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added supports per generic DCN DC1-EP-5061-HGR Rev. 1.	R. No. 049339 SHT. 338 thru 340,
C. R. VanNatta 08/11/83 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	K. M. Krause 08/11/83  ENGR. GROUP SUPERVISOR/DATE  ENG GC HVAC I&C [PSE] NPO NAN
	W. Horn 10/20/83 P PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRI DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 01-19-02-05	•
FIRE ZONE 14-A LOCATION Turbine Building	FLOOR ELEVATION 104'-0"
LOCATION WITHIN FIRE ZONE: Elev. 118', in vacinity of stairway 15, cols.	. C + 8.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Crane east of MSR 1-1C.	SOURCE CODE: M-HOIST-14A
TARGET: Conduit K2665-1".	TARGET CODE: E-K2665-1
POSTULATED INTERACTION:  Conduit runs north—south at east edge of stai source above 119' level. Crane comes off mor	<u>PHENOMENA CODE: MECHFAIL</u> irway and as such in unprotected fr norail and impacts conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of crane by simplified analy monorail to keep crane at south end of monora	ysis. Alternatively, install stops
S. E. Traisman 07/20/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Install crane stops on monorail as recommended.	ed. See ART #398 and resolution
sheet. S. Gaballah <u>06/08/83</u>	B. Sarkar 06/21/83

Gregory Zaharoff 02/08/84 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY)

DISCIPLINE ENGINEER/DATE

W. Horn 04/20/84 SIP PROJECT ENGINEER APPROVAL/DATE

ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

SHEET _	1_	OF	1
---------	----	----	---

L. W. Horn 04/20/84
SIP PROJECT ENGINEER APPROVAL/DATE

# PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

INTERACTION DOCUMENTATION	SHEET (IDS)
POSTULATED INTERACTION NO.: 01-19-02-06	
FIRE ZONE 14-A LOCATION Turbine Building	g FLOOR ELEVATION 104'-0"
LOCATION WITHIN FIRE ZONE: Elev. 118' in vicinity of stairwell 15, cols	. C and 8.
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Firewater hosereel FW-124-T26-1.	SOURCE CODE: M-HR
TARGET: Conduit K-2665-1".	TARGET CODE: E-K2665-1
POSTULATED INTERACTION:  Conduit runs N-S at east edge of stairwell as above 119' level. Hose reel comes loose and	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Pin hose reel wheel to hose reel mounting sup	pport.
S. E. Traisman 07/20/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added cotter pin and washer to keep hose ree support per ART 373. See IDS 01-19-02-07 for	
J. Haake DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EM	J. A. Longworth 05/03/83 ENGR. GROUP SUPERVISOR/DATE S] ENG GC HVAC ICC PSE NPO NAME

[0039A/0101Z-16]

S. E. Traisman 02/24/84

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	1

•
POSTULATED INTERACTION NO.: 01-19-02-07
FIRE ZONE 14-A LOCATION Turbine Building FLOOR ELEVATION 104'-0"
LOCATION WITHIN FIRE ZONE: Elev. 118' in vicinity of stairway 15, Columns C and B.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: M-FE Fire exit FE T119-07-1
TARGET: Conduit K2665-1"  TARGET CODE: E-K2665-1
POSTULATED INTERACTION:  Conduit runs N-S at east edge of stairwell and as such is unprotected from sources above 119' level. Fire ext. comes loose and falls on conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Clamp fire ext. in place with quick release mechanism.
S. E. Traisman 02/20/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Install fire extinguisher with hook and NFPA approved quick release strap.  Per ART 373.
J. Haake 05/02/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NA

S. E. Traisman 02/24/84
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS CALY)

L. W. Horn 07/09/84 SIP PROJECT ENGINEER APPROVAL/DATE

1.1.8. 8/28/84

SHEET 1 OF 1	
--------------	--

POSTULATED INTERACTION NO.: 01-19-02-11
FIRE ZONE 14-A LOCATION Turbine Building FLOOR ELEVATION 104'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117', between column lines 5 and 7 and C and D.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: E-LF-14A  Fluorescent light fixture support beam (5 locations).
TARGET:  Conduit K2665 - 1".  TARGET CODE: E-K2665-1
PHENOMENA CODE: FIXTURE  East—west horizontal support beam for a row of fluorescent light fixtures (type fixtures per beam) is above target conduit. Connection tieing support beam to turbine building struct. steel fails or slips loose, support beam impacts condubelow. Existing source/target clearance 1".
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Resupport light fixutre support beam in vicinity of target conduit so that interaction is eliminated.
S. E. Traisman 07/20/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Light fixtures are installed in accordance with DWG No. 050041, details 31 thru 36. These details are seismically qualified by Civil engineering Calculation No. 52.24.52, Rev 3. (Refer to same calculation p. 54.1 for details).
S. R. Wang 08/03/83  DISCIPLINE ENGINEER/DATE  G. C. Bhatt 08/03/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAM
L. W. Horn 10/20/83
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

AGB

[0006A/0066Z-8]

	SHEET	. 1	OF	1
--	-------	-----	----	---

1. W. Horn 01/19/84

SIP PROJECT FAGTNEER APPROVAL/DATE

### PACIFIC GAS & FLECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SFISHICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 01-19-02-17
FIRE 70MF, 3-1 LOCATION Aux./Fuel Handling FLOOR FLEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Rehind aux. bldg. control room, 2'-6" east of Col. T.
IDENTIFICATION OF INTERACTING COMPONENTS .
SOURCE:  Nz storage bottles (3).
TARGET CODE: F-6993-4  Conduits K6993-4" and K6998-4" encased within pyrocrete fireproofed vault.
PHENOMENA CODE: LOOSE & MECHEATL  Two bottles are mounted in permanent storage racks, third bottle is tied to the wall with rope. Bottles become dislodged from storage rack or temporary mount, nozzles are broken off, bottles become missiles and have potential to impact target conduits.  Note: This IDS is a result of the final sip area walkdown of compartment 85-J-2.
PECOMMENDED RESOLUTION BY WAIKDOWN TEAM:  1. Tighten storage rack anchor bolts. Remove debris from behind channel and rack base to insure that he vertical channel is flush against the wall.  2. If the third bottle is required to be in the area, provide permanent mount; otherwise remove from area.
S. Chesnut 07/27/83 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by analysis — see NPPR #DCO-83-NO-POO15
D. W Shelley 06/20/84  DISCIPITME FINGTHEER/DATE  J. Arnold  FINGR. GROUP SUPERVISOR/DATE
DISCIPITME RESPONSIBLE FOR RESOLUTION: CE FE EMS ENG GC HVAC ISC PSE [NPO] NAN

[0012A/0073Z-2]

S. F. Traisman

(FOR MODIFICATIONS CHLY)

FIFI.D VERTEICATION BY MALKDOWN TEAM

07/27/83

SHFFT
FLOOR FI.EVATION 100'-0"
RCE CODE: M-TANK
GET CODE: M-AFWPP1-3
OMENA CODE: SPTFAILEFNVIRON id onto motor. Tank ling through opening in
nalysis. See resolution sheet and

#### PACIFIC GAS & FIECTRIC CO. DIABLO CANYON PLANT, UNIT NO. SFISHICALLY INDUCED SYSTEMS INTERACTE INTERACTION DOCUMENTATION SHEET

POSTULATED INTERACTION NO.: 01-20-01-01 Intercomp

FIRE ZONE 3-Q-2 L LOCATION WITHIN FIRE ZONE Flev. 105' Col. T		ed Pump FLOOR FI.EVA	TION 100'-0"
IDENTIFICATION OF INTERAC	TING COMPONENTS		
SOURCE: Hydrazine and ammoni	a Tanks, El 115'	SOURCE CODE:M_	TANK
TARGET: Aux. Feedwater Pump	Motor 1-3, El 100'	TARGET CODE: M-	AFWPP1-3
		PHENOMENA CODE: SP Ils liquid onto motor. from falling through o	Tank
RECOMMENDED RESOLUTION BY Verify integrity of			
	DATE NSIBIE DISCIPITNE: en seismically qualif	ied by analysis. See re	esolution sheet ar
calc. No. 01-20-01-0			
S. Gaballah 06/15/8 DISCIPI INE FNGINFER/DATE		B. Sarkar ENGR. GROUP SUPER	
DISCIPITNE RESPONSIBLE FO	R RESOLUTION: [CE] FE	FMS FNG GC HVAC I	C PSE NPO NAN
FIFID VERTEICATION BY WAL (FOR MODIFICATIONS ONLY)	KDOWN TEAM	L. W. Horn SIP PROJECT FNGTNFER	08/04/83 APPROVAL./DATE
	\$ \$15/84		

SHEET .	1	<b>OF</b>	1
---------	---	-----------	---

POSTULATED INTERACTION NO.: 01-20-01-02 INTERCOMP	
FIRE ZONE 3-R LOCATION Safety Related Pump FLOOR ELEVATION 100'-0"	
LOCATION WITHIN FIRE ZONE: Elev. 105', col T between 15 and 15.7.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Hydrazine and ammonia tanks, elev. 115'.	
TARGET:  Auxiliary feedwater pump motor 1-3, elev. 100'.	
POSTULATED INTERACTION:  1/2" and 3/4" unions on piping to tanks fail, hydrazine and/or ammonia leaks on motor below.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of piping system associated with tanks by simplified analysis.	•
S. E. Traisman 08/04/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
Change the unions to socket welded flanges. PLS. Refer to resolution document. See ART-346.	
B. Abella 01/07/83 K. M. Krause 02/15/83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE	
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NA	'nΝ
S. E. Traisman 08/24/83  FIELD VERIFICATIONS BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS CNLY)	•

SHEET1 OF1
Program S)
OR ELEVATION 100'-0"
•
CODE: N-BATT CHG
CODE: E-FNJB
A CODE: LOOSE
<sup>7</sup> 82.
•

POSTULATED INTERACTION NO.: 01-20-02-01
FIRE ZONE 5-A-2 LOCATION Electrical Rms FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, DC switch gear unit 1-2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Battery charger on floor.
TARGET:  FNJB (cable tray)  TARGET CODE: E-FNJB
POSTULATED INTERACTION:  Battery charger on wheels could roll and hit tray.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove or secure battery charger.
P. Anderson 06/04/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Battery charger not present in swgr. room as of 08/31/82.
A. G. Barta 08/06/81  DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE [NPO] NAN
S. E. Traisman 08/31/82 L. W. Horn 10/29/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

[0012A/0073Z-3]

SHEET	1	0	F <u>1</u>	_

POSTULATED INTERACTION NO.: 01-20-02-02
FIRE ZONE 5-A-4 LOCATION <u>Flectrical Rooms</u> FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100', near Col. H & 16 <sup>6</sup> .
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: NS-CD
TARGET:  Conduits K7231 and K7237 to PM 30.
POSTULATED INTERACTION:  Temp scaffolding is very close to target conduit and could crush them in event o seismic activity.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove scaffolding prior to operation.
P. Anderson 06/10/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Scaffolding to be removed per ART 192.
S. Hanusiak 07/20/81  DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG [GC] HVAC IEC PSE NPO NAN

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

10/28/82

[0030A/0087Z-6]

S. E. Traisman 08/31/82

FIFLD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALY)

FLOOR	ELEVATION 115'-0"
SOURCE C	ODE: C-HANDRAIL
TARGET C	ODE: E-K7237-2
HENOMENA	CODE: LOOSE
	•
E. P. Wo	llak 7/28/81
ENGR. G	ROUP SUPERVISOR/DATE

POSTULATED INTERACTION NO.: 01-20-02-03

IDENTIFICATION OF INTERACTING COMPONENTS

LOCATION WITHIN FIRE ZONE: Elev. 115', 15<sup>7</sup> & H

Handrails

SOURCE:

TARGET:

K7237

FIRE ZONE 6-A-5 LOCATION Electrical Room

POSTULATED INTERACTION: Handrails are not secured.	PHENOMENA CODE: LOOSE
	•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Secure handrails prior to operation.	
P. Anderson 6/10/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Handrails to be secured per ART No. 190. (attached)	
S. Hanusiak 07/20/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	E. P. Wollak 7/28/81  ENGR. GROUP SUPERVISOR/DATE  EMS ENG GC HVAC I&C PSE NPO NA
S. E. Traisman 08/31/82 FIELD VERIFICATIONS BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 10/28/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	0 <del>F</del>	1

L. W. Horn 10/20/83 SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 01-20-02-04
FIRE ZONE 14-A LOCATION Turbine Bldg FLOOR ELEVATION 104'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117', 2' N and E of turbine pedestal cols. C and 7.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-4434-1  MSR 1-1C HP STM supply leak off line K14-4434-1".
TARGET:
POSTULATED INTERACTION:  Conduit runs N - S, source line runs E - W, existing clearance 2". Source line free to slide off supports and impact conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add restraint on supports for line 4434 in vicinity of interaction to prevent line from slipping off support.
S. E. Traisman 07/20/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Added support by generic DCN DC1-EP-5061-FGR DWG No. 049339 Sht. 349, Rev. 1.
C. R. VanNatta 08/19/83  DISCIPLINE ENGINEER/DATE  BY COUNTY SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC (PSE) NPO NAN

[0014A/0079Z-3]

S. E. Traisman 09/21/83
FIELD VERIFICATION BY WALKDOWN TEAM

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 01-20-02-06
FIRE ZONE 14-A LOCATION Turbine Building FLOOR ELEVATION 104'-0"
LOCATION WITHIN FIRE ZONE: Elev. 116', Col. 5, between Cols. C and D.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Support bracket mounted off of 6" const. air hdr. line.
TARGET: Conduit K2666-1.  TARGET CODE: E-K2666-1
POSTULATED INTERACTION:  Support bracket mounted off of 6" const. air header line (for support of small bore const. lines) touches conduit. Seismic excitation of header line could damage conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove source line before plant operation.
S. E. Traisman 07/20/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by NPPR DCO-83-NO-P0017.

LOCATION WITHIN FIRE ZONE: Elev. 116', Col. 5, between Cols. C and D.
identification of interacting components
SOURCE: Support bracket mounted off of 6" const. air hdr. line.
TARGET: Conduit K2666-1.  TARGET CODE: E-K2666-1
POSTULATED INTERACTION:  Support bracket mounted off of 6" const. air header line (for support of small bore const. lines) touches conduit. Seismic excitation of header line could damage conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove source line before plant operation.
S. E. Traisman 07/20/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by NPPR DCO-83-NO-POO17.
DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE EE EMS EMG [GC] HVAC I&C PSE NPO NA
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)			
POSTULATED INTERACTION NO.: 01-20-02-07			
FIRE ZONE 14-A LOCATION Turbine Building FLOOR ELEVATION 104'			
LOCATION WITHIN FIRE ZONE: Elev. 116' col line 6 between C and D.			
IDENTIFICATION OF INTERACTING COMPONENTS			
SOURCE:  SOURCE CODE: M-FCV723  Air operator chamber for FCV-723 (on cond. bypass around SW evap. line - 24").			
TARGET: TARGET CODE: E-K2666-1 K2666-1" conduit.	-		
POSTULATED INTERACTION:  Air operator chamber fails at connection to valve operator. Conduit cated 1-1/2" below chamber is damaged.			
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of air chamber by simplified analysis.			
S. E. Traisman 07/20/83  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Reroute conduit K2666-1" underneath cross I-beam running between col. 5 and 6 at column line "C". Resolved by modification. See ART 423 for details.			
N. Barangan 08/05/83 C. Kahl 08/05/83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE			
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN			

L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE

F00000 /00067 63

S. E. Traisman 11/21/83
FIELD VERIFICATION BY WALKDOWN TEAM

	PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMTCALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHFFT (IDS)			
POSTULATED INTERACTION NO.: 01-20-09				
	FIRE ZONE 14-A LOCATION Turbine Building FLOOR ELEVATION 104'-0"			
	LOCATION WITHIN FIRE ZONE: Flev. 117' between column lines 5 and 7 and C and D.			
	INFINITIFICATION OF INTERACTING COMPONENTS			
	SOURCE:  SOURCE CODE: F-LF-14A  Fluorescent light fixture support beam (5 locations).			
	TARGET:  Conduit K2666-1".  TARGET CODE: E-K2666-1			
k	PHENOMENA CODE: FIXTURE  East-west horizontal support beam for a row of fluorescent light fixtures (typ fixtures per beam) is above target conduit. Connection tieing support beam to turbine building structure. Steel fails or slips loose, support beam impacts conduit below. Existing source/target clearance 1".			
s	RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Resupport light fixture support beam in vicinity of target conduit so that interaction is eliminated.			
1	S. Traisman 07/20/82 WALKDOWN TEAM ORIGINATOR/DATE			
Aers	FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Light fixtures are installed in accordance with DWG No. 050041 details 31 thru  36. These details are seismically qualified by civil engineering calculation No. 52.24.52, Rev. 3. (Refer to same calculation, p. 54.1 for details).  Resolved by analysis.			
	S. R. Wang 08/03/83 S. Auer 08/29/84 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE			
1	DISCIPI.INE RESPONSIBIE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN			
	L. W. Horn 10/20/83  FIFI.D VERIFICATION BY WALKDOWN TEAM SIP PROJECT FAGINFER APPROVAL/DATE			
	FIFI.D VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)			

SHEET1 OF1
PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 02-01-03-02
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE:  Flev. 125, at MFW loop 3 penetration.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-0557-16  Pipe whip restraint.
TARGET:  1" tie-in & root valve to MFW line 557-16".  TARGET CODE: PA-0557-16
POSTULATED INTERACTION:  Vertical movement of whip restraint results in impact with 1" tie-in root valve.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Remove tie—in & root valve to eliminate interaction.  2. Extend root valve away from whip restraint and add supports to whip restrain to reduce deflection and possible impact with 1" tie—in pipe.
M. Jones 06/11/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Interaction is resolved per ART 225. Also, the rod hanger hooks have been replaced w/eye books. See RICA resolution report: #26 and tech, review.

#### FINAL RESOLUTION

replaced w/eye hooks. See RLCA resolution report

J. A. Longworth ENGR. GROUP SUPERVISOR/DATE DISCIPLINE ENGINEER/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

S. Chestnut 04/27/84 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 05/15/84 SIP PROJECT ENGINEER APPROVAL/DATE



SHEET 1 OF 1  CO. NO. 1 CTION PROGRAM ET (IDS)
FLOOR ELEVATION 115'-0"
OURCE CODE: P0556-16
ARGET CODE: PA-0556-16
NOMENA CODE: DEFLECT & SPTFAIL pact with tie-in pipe.
traint., ctions.
rod hanger hooks have been or resolution. See RLCA
J. A. Longworth' NGR. GROUP SUPERVISOR/DATE
NG GC HVAC I&C [PSE] NPO NAN

POSTULATED INTERACTION NO.: 02-01-04-02
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, near MFW loop 4 penetration.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Pipe whip restraint to line 556-16".  SOURCE CODE: P-0556-16
TARGET:  1" tie-in & root valve to MFW line 556-16".  TARGET CODE: PA-0556-16
POSTULATED INTERACTION:  Lateral movement of whip restraint results in impact with tie-in pipe.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Remove tie-in & root valve, or  2. Reroute tie-in connection away from whip restraint.  Note: Root valve has seal welded threaded connections.
M. Jones 06/11/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Interaction is resolved per ART 225. Also, the rod hanger hooks have been replaced w/eye hooks. See IDS No. 02-01-03-02 for resolution. See RLCA Report #26.
DISCIPLINE ENGINEER/DATE  J. A. Longworth  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN
S. Chestnut 04/27/84  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

[0032A/0074Z-4]

SHEET 1 OF 1
PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1
SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM .
INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 02-01-04-03
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 120, MFW loop 4.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-388
Platform grate.
TARGET: TARGET CODE: PA-0556-16
Vent pipe & root valve to MFW line 556-16" between FCV-441 & isolation check valve.
POSTULATED INTERACTION:  Movement of MFW pipe or grate results in impact with vent pipe.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Cut grate away from vent pipe consistent with thermal & seismic movements.
•
M. Jones 06/11/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  2" min. clearance will be provided per ART 166.
S. Hanusiak 07/15/81 E. P. Wollak 07/29/81 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NA
•

347184

S. E. Traisman 08/31/82
FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

F00114/00727\_27

L. W. Horn 10/28/82 SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 02-03-02-01
FIRE ZONE 28 LOCATION Outside Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 109, on containment wall, near Column N.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Steam line, 1" diameter pipe with 1" of insulation.
TARGET: TARGET CODE: E-K5865-1.25  Conduit K5865
POSTULATED INTERACTION:  Postulated heat damage to the conduit with the steam line 1/8" away.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure the integrity of the conduit by analysis or reroute K5865 locally.
Edward Dennison 06/05/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by analysis described in RLCA report No. 40.
D 1 01-11 00/20/01
Shah Motiwalla 08/26/81  DISCIPLINE ENGINEER/DATE  R. L. Cloud 08/28/81  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN
L. W. Horn 11/02/82

SIP PROJECT ENGINEER APPROVAL/DATE

SOURCE:

TARGET:

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY) [0028A/0082Z-23]

SHEET		OF	
-------	--	----	--

5	5	
5	)	

POSTULATED INTERACTION NO.: 02-03-02-02
FIRE ZONE 28 LOCATION Outside Areas FLOOR ELEVATION 119'-0"
1.OCATION WITHIN FIRE ZONE: Elev. 120, east end of platform 9' from the containment.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: NS-T
TARGET:  K5865 conduit.  TARGET CODE: K5865
POSTULATED INTERACTION:  Fight inch clearance between the steam dun main and K5865. Posutulated heat damage due to missing insulation.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of the conduit by analysis or replace the missing insu- lation.
Edward Dennison 06/05/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Resolved by analysis as described in RLCA Report #43.
S. Motiwalla 08/26/81  DISCIPILINE ENGINFER/DATE  DISCIPILINE RESPONSIBLE FOR RESOLUTION: CF. FE EMS [FNG] GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM  SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

SHEET	1_	OF	_1_
-------	----	----	-----

			THIERHOITO	I DOCOLEMINIT	On Shee	i (ID3)					
	POSTULATED	INTERACTION	NO.: 02-0	3-02-03		•		•			
	FIRE ZONE	28	LOCATION	Outside Area		_ FLOOR	ELEVA	TION .	85'-	0"	
		ITHIN FIRE ZO 89, at conta		l, col. line	11.7.						
•	IDENTIFICA	TION OF INTER	RACTING COM	PONENTS			•				
	SOURCE: Turbi	ne building	roll-up doo	r #192.	<u>so</u>	URCE CO	DE:	<u>C-D00</u>	R		<b></b> -
	TARGET: Condu	it K6067-1 1,	/4".		TAI	rget co	DE:	E-K6	067–1	. 25	<del></del>
		INTERACTION up door & as:		chanism falls		NOMENA ts cond		SPT	FAIL		_
		D RESOLUTION e integrity o			m by sir	mplifie	d anal	ysis.			
	FINAL RESO	nes 06/30/8 EAM ORIGINATO LUTION BY RES up door and a sis. See res	PONSIBLE DE SSOCIATED DE LA COMPANIO DEL COMPANIO DE LA COMPANIO DEL COMPANIO DE LA COMPANIO DEL COMPANIO DEL COMPANIO DE LA COMPANIO DEL COMPANIO DEL COMPANIO DE LA COMPANIO DE LA COMPANIO DEL COMPANIO DEL COMPANIO DE LA COMPANIO DEL COMPANIO DE LA COMPANIO DEL	nechanism hav	e been s No. O2-C	seismica 03-02-0	ally q	ualif:	ied b	y	
	DISCIPLIN	llah 09/01/8 E ENGINEER/DA RESPONSIBLE	ITE	TION:[CE] EE		VGR. GR		PERVI	SOR/D	ATE	Nai

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 10/25/83
SIP PROJECT ENGINEER APPROVAL/DATE

SHEET _	1 OF	1
---------	------	---

THIERWOITOR DOOR WELLITOR OUTE, (TDO)
POSTULATED INTERACTION NO.: 02-03-02-04
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: EL 105', 4' from containment wall, azimuth 20°
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Gland steam and air ejector to plant vent 16" line.
TARGET: TARGET CODE: E-K5865-1.25  Conduit K5865-1 <sup>1</sup> /4.
Pipe clamp for source line impacts conduit and damages conduit. Clearance is 0".
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Relocate pipe clamp hanger east approx. 3'-0" to next available support location.
S. E. Traisman 06/30/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Recommended resolution - OK. See DCN-DC1-EP-5062, HGR. DWG. 049306-7/5R, SHT #7.
C. R. VanNatta 07/21/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 07/21/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN
·

L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman 11/02/83
FIELD VERIFICATION BY WALKDOWN TEAM

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS).	
POSTULATED INTERACTION NO.: 02-03-02-07	
FIRE ZONE 28 LOCATION Outside Areas FLOOR ELEVATION 85'-0"	
LOCATION WITHIN FIRE ZONE: Elev. 108', east end of pipe rack.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Conduit KR0134 - 3/4".  SOURCE CODE: F-R-28	
TARGET:	
POSTULATED INTERACTION:  Source and target conduits impact and damage K5865 conduit. Clearance is nil Source conduit appears over-spanned due to missing support.	•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add support to conduit KKO134 in vicinity of point of contact with K5865.	
S. E. Traisman 06/30/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added additional support to conduit. See ART 343. Resolved by modification.	
M. J. Hanz 02/07/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO N	IAN
S. E. Traisman 08/18/83 I W. Horn 08/23/83 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE	

POSTULATED INTERACTION NO.: 02-04-01-01  FIRE ZONE 3-8B LOCATION Penetration Area FLOOR ELEVATION 115'-0"  LOCATION WITHIN FIRE ZONE:     Elev. 125, near MFW Loop 3 Penetration  IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE: SOURCE CODE: E-LF-3BB Overhead light fixture (Ball/Socket mount)
LOCATION WITHIN FIRE ZONE: Elev. 125, near MFW Loop 3 Penetration  IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE: SOURCE CODE: E-LF-3BB
Elev. 125, near MFW Loop 3 Penetration  IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE:  SOURCE CODE: E-LF-3BB
SOURCE: SOURCE CODE: E-LF-3BB
TARGET:  TARGET CODE: M-FCV440  MFW Isolation Valve FCV-440 Power & Control Cable
POSTULATED INTERACTION:  PHENOMENA CODE: FIXTURE  Fixture falls, impacts power & control cable.
PECOMPTINED RECOLUTION BY HALVRAND TEAM.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly by analysis.
M. Jones 6/11/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&F Dwg. 050041, Detail 9 (Category X).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

8/24/83

Hers.

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET	1	OF	_ <b>1</b> .
-------	---	----	--------------

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM

THICKHOITOM DOCOMENINITOM SUEEL (TD2)
POSTULATED INTERACTION NO.: 02-04-01-02
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near MFW loop 3 penetration.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-3BB Overhead platforms (2), railings, grates & ladder.
TARGET:  TARGET CODE: M-FCV440  MFW isolation valve FCV-440 & operator.
POSTULATED INTERACTION:  Platforms, etc. fall, impact operator and valve.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platforms, etc. by simplified analysis.
M. Jones 06/11/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The platforms, railings, grating and ladder have been seismically qualified by analysis. See resolution sheet and Calc. 02-04-01-02.
S. Hanusiak 02/03/81 E. P. Wollak DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAT

3:5 721174

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1 OF 1  ON PROGRAM (IDS)
FLOOR ELEVATION 115'-0"
RCE CODE: E-LF-3BB
GET CODE: M-FCV441
OMENA CODE: FIXTURF
alysis.

POSTULATED INTERACTION NO.: 02-05-01-01	
FIRE ZONE 3-BB LOCATION Penetration Area	FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, at MFW Loop 4 Penetration	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead light fixture (Ball/Socket mount)	SOURCE CODE: E-LF-3BB
TARGET:  MFW Loop 4 Isolation Valve FCV-441 Power & Co	TARGET CODE: M-FCV441 ontrol Cable
POSTULATED INTERACTION:  Fixture falls, impacts power & control cable.	PHENOMENA CODE: FIXTURF
•	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly b	by analysis.
M. Jones 6/11/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field installed in accordance with PG&E Dwg. 05004:  This fixture type has been qualified by analy No further action necessary. Resolved by analy	1, Detail 9 (Category X). ysis per calculation 52.24.52.
R. J. Swaim 3/4/83 DISCIPLINE ENGINEER/DATE	G. C. Bhatt 03/04/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EM	
	L. W. Horn 8/24/83

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	1_
-------	---	----	----

POSTULATED INTERACTION NO.: 02-05-01-02
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near loop 4 MRW penetration.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: C-PLAT-3BB Overhead platforms (2), railings, grates & ladder.
TARGET:  TARGET CODE: M-FCV441  MFW isolation valve FCV-441 & operator.
POSTULATED INTERACTION:  Platforms, etc. fall, impact FCV-441 and operator.
•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platforms, etc. by simplified analysis.
M. Jones 06/11/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The platforms, railings, grates and ladder have been qualified by analysis. See resolution sheet and Calc. 03-19-01-01 and Calc. 03-64-01-01.
•
S. Hanusiak 02/19/81 E. P. Wollak DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN



S S	HEET1_ OF1_
PACIFIC GAS & ELECTRIC CO.	
DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PRO	GRAM -
INTERACTION DOCUMENTATION SHEET (IDS)	,
POSTULATED INTERACTION NO.: 03-01-01-01	• ,
FIRE ZONE 28 LOCATION Outside Areas FLOOR	ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 119, near MS containment penetrations, loops 1&2.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: SOURCE COD	E: _C-PLAT-28
Overhead cyclone fence panels, platforms, grates, & rail	ings.
TARGET: TARGET COD	E: _I-PT514
PT-514 instrument tap & tubing.	
	ODE: CIVILFAIL
Sources fall, impact tap and tubing.	•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of sources listed above by simplified and	nalysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The sources have been qualified by analysis. See resolution Calc. No. 03-01-01-01 and referenced Calc. No. 30-01-54-0	
T.	
S. Hanusiak 01/23/81 E. P. W DISCIPLINE ENGINEER/DATE ENGR. GROU	Nollak JP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC	אעמר דור מפר שמה שמא
Producting Resourance for Resourance: [CE] EE ENS ENG GC	HAUC TOO LOC MAN
•	

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

F00004/00707-47

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET 1 OF 1	
--------------	--

POSTULATED INTERACTION NO.: 03-01-01-02	
FIRE ZONE 28 LOCATION Outside Area	FLOOR ELEVATION 85'
LOCATION WITHIN FIRE ZONE: Elev. 105, under MS loop 1, near contains	nent wall.
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Line 3433-1 1/2"; steam lead 1 drain.	SOURCE CODE: P-3433-1.50
TARGET: Instrument tubing to PT-514.	TARGET CODE: I-PT514
POSTULATED INTERACTION:  Lateral movement of line 3433 results in	PHENOMENA CODE: DEFLECT impact with tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Add lateral restraint to line 3433 to pre	clude contact.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added & modified pipe supports. See pipe hanger dwg. 049315 sht. 380 on generic DC 160 on generic DCN DC1-EP-5060.	
C. R. VanNatta 05/13/83	K. M. Krause 05/13/83
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	EM ENG GC HVAC ISC [PSE] NPO NAM
S. E. Traisman 10/14/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	1. W. Horn 10/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

L. W. Horn 10/20/83 SIP PROJECT ENGINEER APPROVAL/DATE

# PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 03-01-03
FIRE ZONE 28   LOCATION   Outside Areas   FLOOR FLEVATION   85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 90-115, pipe rack area.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Construction deficiency.  SOURCE CODE: NS-CD
TARGET: Tubing to PT-514.
POSTULATED INTERACTION:  Tubing has been damaged during construction & has had support clips removed in some places.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Inspect tubing and repair if/as required. Add missing support clips.
M. Jones 06/29/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  IDS is a result of a construction deficiency. IDS transferred to onsite quality control. Construction deficiency to be corrected during normal course of construction activities.
DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE NPO NAN [QC]

F0028A/00827-37

FIELD VERTFICATION BY WALKDOWN TEAM

SHEET	1_	OF	

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 103-01-02-01
FIRE ZONE 28 LOCATION Outside Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: ELEV. 85, under MS Loops 1,2 along containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-3103-2 Line 3103 - 2"; fan heating coil trap drain header .
TARGET:  Mechanical panel 103 and attached tubing  TARGET CODE: IPM103
POSTULATED INTERACTION:  Line 3103 falls on mechanical panel due to lack of vertical support and failure of threaded couplings.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install additional pipe supports as required to preclude falling of pipe.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added and modified supports per ART 149 and Cloud Res. RPT. 20
J. A. Ante 05/12/81  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE NPO NAN
•

S. E. Traisman 08/24/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)
(0061Z/FINAL/p.30)

L. W. Horn 09/08/83 SIP PROJECT ENGINEER APPROVAL/DATE



SHEET1_ OF1
l N PROGRAM EDS)
OOR ELEVATION 85'-0"
•
E CODE: <u>C-PLAT-28</u> nd security barrier panel
CODE: I-PM103
ENA CODE: CIVILFAIL
palysis.
ition short and referenced

POSTULATED INTERACTION NO.: 03-01-02-02
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, under MS loops 1,2 along containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead platforms (2 levels), grates, handrails, and security barrier panel ladder; grating.
TARGET:  Mechanical panel 103 and attached tubing.  TARGET CODE: I-PM103
POSTULATED INTERACTION: Platforms fall, impact mechanical panel.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platforms, etc. by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Sources have been qualified by analysis. See resolution sheet and referenced Calc. No. 03-01-02-01.
S. Hanusiak 02/19/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
L. W. Horn 08/23/82

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

•
POSTULATED INTERACTION NO.: 03-02-01-01
FIRE ZONE 28 LOCATION Outside Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: ELEV. 105, under MS Loop 1, near containment
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Line 3433 - 1-1/2"; steam lead 1 drain
TARGET:  Instrument tubing to PT-515  TARGET CODE: I-PT515
POSTULATED INTERACTION:  Lateral movement of line 3433 results in impact with tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add lateral restraint to line 3433 to preclude contact.
M. G. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: See IDS #03-01-01-02.
C. R. Van Natta 05/13/83  DISCIPLINE ENGINEER/DATE  J. A. Longworth 05/13/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC PSE NPO NAT
S. E. Traisman 10/14/83 L. W. Horn 10/24/83 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

to it discussed to a vertical and an interior
PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-02-01-02
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 119'-0"
LOCATION WITHIN FIRE ZONE: Elev. 119, near MS containment penetrations, loops 162.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Source Code: C-PLAT-28  Overhead cyclone fence panels, platforms, grates, & railings.
TARGET:  PT-515 instrument tap & tubing.  TARGET CODE: I-PT515
POSTULATED INTERACTION: Platforms fall, impact taps and tubing.  Phenomena Code: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of structurals listed above by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Sources have been qualified by analysis. See resolution sheet and referenced
Calc. No. 03-01-01.

### TARGET: PT-515 instrument tap & tubir POSTULATED INTERACTION: Platforms fall, impact taps a RECOMMENDED RESOLUTION BY WALKDOW Ensure integrity of structura M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE D Sources have been qualified Calc. No. 03-01-01-01. E. P. Wollak S. Hanusiak 02/19/81 ENGR. GROUP SUPERVISOR/DATE DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAN 08/23/82 L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

. {

SHEET 1 OF1
PACIFIC GAS & ELECTRIC CO.
DIABLO CANYON PLANT, UNIT NO. 1 , \ SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM , )
INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-02-01-03
FIRE ZONE 28 LOCATION Outside Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 90-115, pipe rack area.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: NS-CD_
Construction deficiency.
TARGET: TARGET CODE: 1-PT515
Tubing to PT-515.
POSTULATED INTERACTION:  Tubing has been damaged during construction & has had support clips removed in some places.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Inspect tubing and repair if/as required. Add missing support clips.
M. Jones 06/29/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPITNE:  IDS is a result of a construction deficiency. IDS transferred to onsite quality control. Construction deficiency to be corrected during normal course of construction activities.
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPI.INE RÈSPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE NPO NAN [OC]
In .

I. W. Horn 10/25/83 SIP PROJECT ENGINEER APPROVAL/DATE

4
SHEET1_ OF1_
1 ON PROGRAM (IDS)
FLOOR ELEVATION 85'-0"
1
CE CODE: P-3103-2
ET CODE: <u>I-PM107</u>
MENA CODE: SPTFAIL & PIPEFAIL vertical
: eclude falling of '
•

POSTULATED INTERACTION NO.	: 03-02-02-01				
FIRE ZONE 28 LO	CATION <u>Outside Ar</u>	eas	_ FLOOR ELEVA	NTION 85'-0'	16
LOCATION WITHIN FIRE ZONE: ELEV. 85, under MS Lo	ops 1,2 along con	tainment v	uall		
IDENTIFICATION OF INTERACT	ING COMPONENTS				
SOURCE: Line 3103-2"; fan hea	ting coil trap dra		OURCE CODE: P-	-3103-2	
TARGET: Mechanical panel 107	and attached tubi		ARGET CODE: I-	- <u>PM107</u>	<del></del>
POSTULATED INTERACTION: Line 3103 falls on me support and failure o		e to lack	ENOMENA CODE: of vertical	SPTFAIL &	PIPEFAIL
RECOMMENDED RESOLUTION BY Install additional pi pipe.		quired to	preclude fall	ing of	
M. G. Jones 06/04/8 WALKDOWN TEAM ORIGINATOR/D					
FINAL RESOLUTION BY RESPON Added supports - See					٠
J. A. Ante 05/12/81 DISCIPLINE ENGINEER/DATE		<u> </u>	S, Chitnis		ATE
DISCIPLINE RESPONSIBLE FOR	RESOLUTION: CE	ee ems e	ENG GC HVAC	IEC PSE	NPO NAN
S. E. Traisman FIELD VERIFICATION BY WALK	08/24/83 DOWN TEAM		Horn C		L/DATE

SHEET 1 OF 1	
--------------	--

·
POSTULATED INTERACTION NO.: 03-02-02-02
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, under MS loops 1,2 along containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead platforms (2 levels), grates, handrails, and security barrier panel grating, and ladder.
TARGET:  Mechanical panel 107 and attached tubing.  TARGET CODE: I-PM107
POSTULATED INTERACTION:  Platforms fall, impact mechanical panel.  Platforms fall, impact mechanical panel.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platforms, etc. by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Sources have been qualified by analysis. See resolution sheet and referenced Calc. No. 03-01-01-01.
S. Hanusiak 02/19/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAN
L. W. Horn 08/23/82
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

\$ 1818Y

SHEET		OF	1
-------	--	----	---

POSTULATED INTERACTION NO.: 03-03-01-01	•
FIRE ZONE 28 LOCATION Outside Area	FLOOR ELEVATION 85'-0
LOCATION WITHIN FIRE ZONE: Elev. 105, under MS loop 1, near containment	nt wall.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Line 3433-1 1/2"; steam lead 1 drain.	SOURCE CODE: P-3433-1.50
TARGET: Instrument tubing to PT-516.	TARGET CODE: I-PT516
POSTULATED INTERACTION: Lateral movement of line 3433 results in i	PHENOMENA CODE: DEFLECT
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Add lateral restraint to line 3433 to precl	ude contact.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: See IDS #03-01-01-02.	
C. R. VanNatta 05/13/83 DISCIPLINE ENGINEER/DATE	K. M. Krause 05/13/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE E	MS ENG GC HVAC ICC [PSE] NPO NAN
	L. W. Horn 10/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET	1_	OF	_1_
	à		



THIERICIT	TOUR DOCUMENTALITY	SHEET (IDS)
POSTULATED INTERACTION NO.: 03-	-030102	
FIRE ZONE 28 LOCATION	Outside Area	FLOOR ELEVATION 119'-0"
LOCATION WITHIN FIRE ZONE: Elev. 119, near MS contains	ment penetrations,	, loops 1&2.
IDENTIFICATION OF INTERACTING CO	MPONENTS	
SOURCE: Overhead cyclone fence pane	els, platforms, gr	SOURCE CODE: C-PLAT-28 rates, & railings.
TARGET: PT-516 instrument tap & tub	oing.	TARGET CODE: I-PT516
POSTULATED INTERACTION: Structurals fall, impact ta	ap and tubing.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDO Ensure integrity of structu		e by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE  The structures have been qu referenced Calc. No. 03-04-	alified by analys	sis. See resolution sheet and
S. Hanusiak 02/19/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOL	UTION: [CE] EE E	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC ICC PSE NPO R
FIELD VERIFICATION BY MALKDOWN T	FAM C	L. W. Horn 08/23/82

SHEET _	1	OF	. 1
---------	---	----	-----

SIP PROJECT ENGINEER APPROVAL/DATE

## PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 03-03-02-01
FIRE ZONE 28 LOCATION Outside Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, under MS Loops 1,2 along containment wall
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-3103-2  Line 3103-2"; fan heating coil trap drain header
TARGET:  ,Mechanical panel 111 and attached tubing  TARGET CODE: I-PM111
POSTULATED INTERACTION:  Line 3103 falls on mechanical panel due to lack of vertical support and failure of threaded couplings.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install additional pipe supports as required to preclude falling of pipe.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added supports — See IDS #03-01-02-01.
J. A. Ante 05/12/81  DISCIPLINE ENGINEER/DATE  S. Chitnis  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC PSE NPO NAN
S. F. Traisman 08/24/83 L. W. Horn 09/08/83 '

[0021A/0061Z-32]

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	
-------	---	----	--

THIERHCITON DOCOMENIUITON SHEET (TD2)
POSTULATED INTERACTION NO.: 03-03-02-02 .
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, under MS loops 1,2 along containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS .
SOURCE:  Overhead platforms (2 levels), grates, handrails, and security barrier panel grating and ladder.
TARGET:  Mechanical panel 111 and attached tubing.  TARGET CODE: I-PM111
POSTULATED INTERACTION: Platforms fall, impact mechanical panel.  Phenomena Code: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platforms, etc. by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Sources have been qualified by analysis. See resolution sheet and referenced Calc. No. 03-01-01-01.
S. Hanusiak 02/19/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAI
L. W. Horn 08/23/82

2 18 184

SIP PROJECT ENGINEER APPROVAL/DATE

	PACIFIC GAS					t
CETCH	DIABLO CANYON : ICALLY INDUCED SY			M	1	j
	INTERACTION DOCUM				1	1
			• •		,	1
POSTULATED INTERACTION	No.: <u>03-03-03-01</u>		<del> </del>		人	
FIRE ZONE 28	LOCATION Outside	e Areas	FI.OOR EI.E	VATION 1	18'-0"	<del></del>
1.OCATION WITHIN FIRE ZO Outside GW north w		e 11, elev.	120'.			
IDENTIFICATION OF INTER	ACTING COMPONENTS					
SOURCE:			SOURCE CODE:	NS-CD		
Construction defic	iency.					
			•			
•						
TARGET:			TARGET CODE:	F-KT610-	1	
Conduit KT610.						
				•		
POSTULATED INTERACTION:		<u> </u>	HENOMENA CODE	:_ HOUSEK	FEP	
Flex is severed an	d wires are expos	ed.				
•						
		•				•
RECOMMENDED RESOLUTION	BY WALKDOWN TEAM:			•		
Fix flex conduit.						
			*			
G. Worisky 06/0						
WALKDOWN TEAM ORIGINATO	R/DATE		·			
FINAL RESOLUTION BY RES	PONSIBLE DISCIPLI	NE:				
Resolved per ART 1	58. Replace brok	en flex cor	nduit KT610.			
				•		
		_	A. G. Bar			_
DISCIPLINE ENGINEER/DA	TE		ENGR. GROUP	SUPERVISO	R/DATE	
DISCIPLINE RESPONSIBLE	FOR RESOLUTION: C	E EE EMS E	NG [QC] HVAC	I&C PSE	NPO	NAN
S. E. Traisman O	9/29/82 ALKDOWN TEAM	STR	L. W. Horn PROJECT ENGI	10/28/ NEER APPRO	32 OVAL/D	ATE
	· · — • • • • • • • • • • • • • • • • •					_

SHEET \_\_\_1\_ OF \_\_1\_

SHEET	1	OF	1

#### PACIFIC GAS & ELECTRIC CO. · DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM

INTERACTION DOCUMEN	ITATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-03-03-02	•
FIRE ZONE 28 LOCATION Outside	Area FLOOR ELEVATION 119'-0"
LOCATION WITHIN FIRE ZONE: Outside area GW north wall, elev. 130	), along containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platform and railings.	SOURCE CODE: C-PLAT-28
TARGET: K5837, K6411, KT610 conduits.	TARGET CODE: E-KT610-1
POSTULATED INTERACTION: Platform and railings fail and impact	PHENOMENA CODE: CIVILFAIL conduits.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform and rail	ings.
E. W. Worinskey 06/09/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE Source components have been seismical sheet and Calc. #03-03-03-02.	: ly qualified by analysis. See resolution
S. Hanusiak 01/16/82 DISCIPLINE ENGINEER/DATE	E. P. Wollak 01/20/82 ENGR. GROUP SUPERVISOR/DATE
DISCILLTING RESLOWSIBLE LOK RESOURTION: TOP	JEE EMS ENG GC HVAC ICC PSE NPO NAN
	1 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET 1 0	F1_
-----------	-----

POSTULATED INTERACTION NO.: 03-04-01-01
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 119'-0"
LOCATION WITHIN FIRE ZONE: Elev. 119, near MS containment penetraions, loops 1&2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-28  Overhead cyclone fence panels, platforms, grates, and railings.
TARGET:  PT-524 instrument tap and tubing.  TARGET CODE: I-PT524
POSTULATED INTERACTION: Structurals fall, impact tap and tubing.  PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of structurals listed above by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Qualified by analysis. See resolution sheet & Calc. No. 03-04-01-01.
S. Hanusiak 01/30/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
,

SE:	DIABIO ( SMICALLY INDE	FIC GAS & ELECTR CANYON PLANT, UNI UCFD SYSTEMS INTI N DOCUMENTATION S	IT NO. 1 ERACTION PROGRAM	_ OF <u></u>
POSTULATED INTERACTION	ON NO.: <u>03-0</u>	4-01-02		ر (
FIRE ZONE 28	LOCATION .	Outside Areas	FLOOR ELEVATION	85'-0"
LOCATION WITHIN FIRE Elev. 90-115, p				
IDENTIFICATION OF IN	TERACTING COM	PONENTS		
SOURCE: Construction de	ficiency.		SOURCE CODE: NS-CD	<del></del>
TARGET: Tubing to PT-524	١.		TARGET CODE: I-PT524	
POSTULATED INTERACTION Tubing has been some places.		ng construction (	PHENOMENA CODE: HOUSE Chas had support clips	
RECOMMENDED RESOLUTION Inspect tubing a			dd missing support clip	os.
M. Jones 06/ WALKDOWN TEAM ORIGINA				
	of a construction defici	tion deficiency.	. IDS transferred to c acted during normal com	
DISCIPLINE FACINEED	DATE		FACE COMID SUBFRITS	OR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EF. FMS ENG GC HVAC I&C PSE NPO NAN [QC]

L. W. Horn 10/25/83
SIP PROJECT ENGINEER APPROVAL/DATE

~ 11	•	^-	•
SHEET	- 1	131-	

POSTULATED INTERACTION NO.: 03-04-02-01
FIRE ZONE 28 LOCATION Outside Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, under MS Lead 1,2 along containment wall
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-3103-2  Line 3103-2"; fan heating coil trap drain header
TARGET:  Mechanical panel 104 and attached tubing.  TARGET CODE: I-PM104
POSTULATED INTERACTION:  Line 3103 falls on mechanical panel due to lack of vertical support and failure of threaded couplings.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install additional pipe supports as required to preclude falling of pipe.
M. G. Jones 06/04/80  WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added supports - See IDS #03-01-02-01.
5. A. Ante 05/12/81  DISCIPLINE ENGINEER/DATE  S. Chitnis  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn 09/08/83 SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman 08/24/83
FIELD VERIFICATION BY WALKDOWN TEAM

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

. TARGET:

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE .

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-05-01-01
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 119'-0"
LOCATION WITHIN FIRE ZONE: Elev. 119, near containment penetrations, MS loops 162.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-28 Overhead cyclone fence panels, platforms, grates, and railings.
TARGET:  PT-525 instrument tap & tubing.  TARGET CODE: I-PT525
POSTULATED INTERACTION:  Structurals fall, impact tap and tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of structurals listed above by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Sources have been qualified by analysis. See resolution sheet and referenced Calc. No. 03-04-01-01.
S. Hanusiak 02/19/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

5.G 8474 L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

F00000/00707 127

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-05-01-02
FIRE ZONE 28 LOCATION Outside Areas FLOOR ELEVATION 85'-0"
1.OCATION WITHIN FIRE ZONE: Elev. 90-115, pipe rack area.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Construction deficiency.  SOURCE CODE: NS-CD
TARGET: Target CODE: I-PT525 Tubing to PT-525.
POSTULATED INTERACTION:  Tubing has been damaged during construction & has had support clips removed in some places.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Inspect tubing and repair if/as required. Add missing support clips.
M. Jones 06/29/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  IDS is a result of a construction deficiency. IDS transferred to onsite quality
control. Construction deficiency to be corrected during normal course of construction activities.

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE NPO NAN [QC]

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 10/25/83 SIP PROJECT ENGINEER APPROVAL/DATE

ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE ENGINEER/DATE

•
SHEET 1 OF 1 I PROGRAM IDS)
LOOR ELEVATION 85'-0"
E CODE: P-3103-2
CODE: I-PM108

POSTULATED INTERACTION NO.: 03-05-02-01
FIRE ZONE 28 LOCATION Outside Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, under MS Lead 1,2 along containment wall
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Line 3103-2"; fan heating coil trap drain header
TARGET:  Mechanical panel 108 and attached tubing  TARGET CODE: I-PM108
POSTULATED INTERACTION:  Line 3103 falls on mechanical panel due to lack of vertical support and failure of threaded couplings.
RECOTTENDED RESOLUTION BY WALKDOWN TEAM:  Install additional pipe supports as required to preclude falling of pipe.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added supports - See IDS #03-01-02-01,
5. A. Ante 05/12/81 S. Chitnis
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE NPO NAMED DESCRIPTION OF THE P

S. E. Traisman 08/24/83
FIELD VERIFICATION BY WALKDOWN TEAM 08/24/83 (FOR MODIFICATIONS ONLY)

09/08/83 L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE

<i>(</i>	

SHEET \_\_\_1\_ OF \_\_1\_\_

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 03-05-02-02
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, under MS loops 1,2 along containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: _C-PLAT-28
Overhead platforms (2 levels), grates, handrails, and security barrier panel grating and ladder.
TARGET: TARGET CODE: I-PM108  Mechanical panel 108 and attached tubing.
POSTULATED INTERACTION: PHENOMENA CODE: CIVILFAIL
Platforms fall, impact mechanical panel.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platforms, etc. by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Sources have been qualified by analysis. See resolution sheet and referenced Calc. Nos. 03-04-01-01 & 03-04-02-02.
S. Hanusiak 02/19/81 E. P. Wollak
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAT
1 ti liama 00/00/00
FIELD VERIFICATION BY WALKDOWN TEAM · SIP PROJECT ENGINEER APPROVAL/DATE
(FOR MODIFICATIONS CALY)

[00000,/00707\_14]

SHEET1 OF	1
-----------	---

POSTULATED INTERACTION NO.: 03-05-02-03						
FIRE ZONE 1-B LOCATION Containment: FLOOR ELEVATION 91'-0"						
LOCATION WITHIN FIRE ZONE: Azimuth 310°, adjacent to crane wall (1'-6" away).						
IDENTIFICATION OF INTERACTING COMPONENTS						
SOURCE: SOURCE CODE: H-DUCT-1B Trapeze hanger for supply air duct ot bottom of reactor vessel.						
TARGET:  Instrument lines to FIC 499A (RCS RTD flow controller) and LT-501 (SGI-1 level).						
POSTULATED INTERACTION:  Trapeze hanger undergoes large displacements during seismic event and impacts the target installation lines running along crane wall approximately 1'-6" away. Rod hangers are attached to support beam with "C" clamps: A suspect configuration.						
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Provide restraint to trapeze or alternative hanger configuration.  Note: This interaction is a result of final SIP area walkdown.						
S. Chesnut 09/28/83 WALKDOWN TEAM ORIGINATOR/DATE						
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Reference telecon A. Matyes & J. Dokladal dated 10/05/82. The support to be removed since it does not impact the duct/duct support seismic qualification. See ART 450.						
J. Dokladal J. A. Longworth 10/05/83 DISCIPITNE FNGTNEER/DATE ENGR. GROUP SUPERVISOR/DATE						
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] ICC PSE NPO NAN						
S. E. Traisman 11/29/83 L. W. Horn 01/18/84  FIFLD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE						



SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

K THE THE TOTAL POSSIBLE OF THE TOTAL POSSIB	
POSTULATED INTERACTION NO.: 03-06-01-01	• .
FIRE ZONE 28 LOCATION Outside	Area FLOOR ELEVATION 119'-0"
LOCATION WITHIN FIRE ZONE: Elev. 119, near containment penetration	ons, MS loops 1&2.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead cyclone fence panels, platfor	SOURCE CODE: _C-PLAT-28 rms, grates, and railings.
TARGET: PT-526 instrument tap & tubing.	TARGET CODE: I-PT526
POSTULATED INTERACTION: Structurals fall, impact tap and tubin	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of structurals listed	d above by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Sources have been qualified by analysis Calc. No. 03-04-01-01.	: is. See resolution sheet and referenced
S. Hanusiak 02/19/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE]	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE  EE EMS ENG GC HVAC ICC PSE NPO NAM
	L. W. Horn 08/23/82

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-06-02-01
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, under MS loops 1,2 along containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead platforms (2 levels), grates, handrails, and security barrier panel grating and ladder.
TARGET:  Mechanical panel 112 and attached tubing.  TARGET CODE: I-PM112
POSTULATED INTERACTION:  Platforms fall, impact mechanical panel.  Platforms fall, impact mechanical panel.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platforms, etc. by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Sources have been qualified by analysis. See resolution sheet and referenced Calc. No. 03-04-01-01.
S. Hanusiak 02/19/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

	INTERACTION DOCUMENT	ATION SH	EET (IDS)					
POSTULATED INTERACTION I	O.: <u>03-06-02-02</u>		·					
FIRE ZONE 28	LOCATION Outside Ar	eas	FLOOR	ELEVA	TION	85' <u>-</u> 0'	)i	_
LOCATION WITHIN FIRE ZO Elev. 85, under MS	WE: leads 1,2 along con	tainment	wall.					
IDENTIFICATION OF INTER	ACTING COMPONENTS							
SOURCE: Line 3103-2"; fan 1	neating coil trap dr	•	SOURCE COM	<u>DE: P-</u>	3103-	2		-
TARGET: Mechanical panel 13	.2 and attached tubi		TARGET CO	<u>DE: I-</u>	PM112	•		<b>-</b>
POSTULATED INTERACTION: Line 3103 falls on failure of threaded	;mechanical panel d l couplings.		H <b>ENOMENA</b> ck of ver				d	-
		•	•					
RECOMMENDED RESOLUTION E Install additional pipe.	IY WALKDOWN TEAM: pipe supports as re	quired to	precludo	e fall	ing of	f		
M. G. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR	<del></del>							
FINAL RESOLUTION BY RESP Added and modified	ONSIBLE DISCIPLINE: supports. See IDS	No. 03-01	1-02-01 .					
•								
J. A. Ante O5/12/8 DISCIPLINE ENGINEER/DAT	E E		S. Chi			SOR/D	ATE	
DISCIPLINE RESPONSIBLE F	OR RESOLUTION: CE	EE EMS	ENG GC	HVAC	ıec	PSE	NPO	NA
		1	1. 1		4			

S. E. Traisman 08/24/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

L. W. Horn 09/08/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	_1_
-------	---	----	-----

L. W. Horn 08/23/82

SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 03-07-01-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, along containment wall, 215°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead platform is used for the support of target:  .
TARGET:  Class 1A instrument tubing.  TARGET CODE: I-TUBING
POSTULATED INTERACTION:  Platform falls, damaging tubing. Platform could also impact Class I instrument panels.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure that platform is Class I or qualify accordingly by analysis.
MALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The platform has been seismically qualified by analysis subject to modification. See resolution sheet Rev. 1 and IDS file No. 06-60-10-05.
S. Hanusiak 08/08/80  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAME OF THE PROPERTY OF THE PROPERT

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

F0011A/0072Z-67

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-07-02-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, near Containment, 2150
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixture, ball/socket mounted.
TARGET:  Mechanical Panel 106 and attached tubing.  TARGET CODE: I-PM106
POSTULATED INTERACTION:  Fixture falls, impacts panel.  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of fixture mount, possibly by analysis.
M. Jones 6/4/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, Detail 9 (Category X).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAI

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

8/24/83

ACK,

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

CHEET	1	ΩE	1
SHEEL		_ T	

INTERNCTION DOCUMENTATION SHEET (IDS)		
POSTULATED INTERACTION NO.: 03-07-02-02		
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"		
LOCATION WITHIN FIRE ZONE: Elev. 115, near containment, 215°.		
IDENTIFICATION OF INTERACTING COMPONENTS		
SOURCE: SOURCE CODE: C-PLAT-388  Ladder.		
TARGET:  Mechanical panel 106 and attached tubing.  TARGET CODE: I-PM106		
POSTULATED INTERACTION:  Ladder falls, impacts panel.		
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of ladder by simplified analysis.		
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  I.adder qualified by analysis. See resolution sheet and Calc. No. 03-07-02-02.		
S. Hanusiak 08/08/80  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN		

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: _03-08-01-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near MS Loop 3, 4 Penetration
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Source code: E-I.F-3BB  Overhead light fixture, ball/socket mounted. (2 fixtures)
TARGET:  PT-535 Tubing  TARGET CODE: 1-PT534
POSTULATED INTERACTION - PHENOMENA CODE: FIXTURE  Fixture falls, impacts PT-535 Tubing  .
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of fixture mount, possibly by analysis.
M. Jones 6/4/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, Detail 9 (Category X).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83 G. C. Bhatt 03/04/83
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

8/24/83

[0006A/0066Z-14]

Act

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)			
POSTULATED INTERACTION NO.: 03-08-01-02			
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"			
LOCATION WITHIN FIRE ZONE: Elev. 125, near MS Loop 3, 4 Penetration .			
IDENTIFICATION OF INTERACTING COMPONENTS			
SOURCE:  Overhead light fixture, ball/socket mounted. (2 fixtures)			
TARGET: TARGET CODE: I-PT534 PT-534 Tubing			
POSTULATED INTERACTION:  PHENOMENA CODE: FIXTURE  Fixture falls, impacts PT-534 Tubing			
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:			
Ensure integrity of fixture mount, possibly by analysis.			
M. Jones 6/4/80 WALKDOWN TEAM ORIGINATOR/DATE			
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, Detail 9 (Category X).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.			
R. J. Swaim 3/4/83  DISCIPITNE ENGINEER/DATE  G. C. Bhatt 03/04/83  ENGR. GROUP SUPERVISOR/DATE			
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN			

L. W. Horn 8/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-09-01-01
FIRE ZONE 3-B8 LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near MS Loop 3, 4 Penetration
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixture, ball/socket mounted. (2 fixtures)
TARGET: TARGET CODE: I-PT536  PT-536 Tubing
POSTULATED INTERACTION:  Fixture falls, impacts PT-536 Tubing  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly by analysis.
M. Jones 6/4/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&F Dwg. O50041, Detail 9 (Category X).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83 G. C. Bhatt 03/04/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

8/24/83

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

	·
	PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
	POSTULATED INTERACTION NO.: 03-09-02-01
	FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
	LOCATION WITHIN FIRE ZONE: Elev. 115, near containment, 215°.
	IDENTIFICATION OF INTERACTING COMPONENTS
	SOURCE: SOURCE CODE: C-PLAT-3BB Ladder.
<i>-</i> - •	TARGET:  TARGET CODE: I-PM113  Mechanical panel 113 and attached tubing.
	POSTULATED INTERACTION:  Ladder falls, impacts panel.  PHENOMENA CODE: CIVILFAIL
٠	RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of ladder by simplified analysis.
	M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE
	FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Ladder qualified by analysis. See resolution sheet and Calc. No. 03-07-02-02.
	S. Hanusiak 02/19/81 DISCIPLINE ENGINEER/DATE  E. P. Wollak ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

35228N

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

·
SHEET 1 OF 1  PACIFIC GAS & FLECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCFD SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-10-01-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near MS Loop 3, 4 Penetration
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: E-LF-3BB  Overhead light fixture, ball/socket mounted. (2 fixtures)
TARGET: PT-544 Tubing  TARGET CODE: I-PT544
POSTULATED INTERACTION:  Fixture falls, impacts PT-544 Tubing
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly by analysis.
M. Jones 6/4/80 WALKDOWN TEAM ORIGINATOR/DATE
The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, Detail 9 (Category X).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83 G. C. Bhatt 03/04/83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

8/24/83 4

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO.CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-11-01-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near MS Loop 3, 4 Penetration
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixture, ball/socket mounted. (2 fixtures)
TARGET:  PT-545 Tubing  TARGET CODE: 1-PT545
POSTULATED INTERACTION:  PHENOMENA CODE: FIXTURE  Fixture falls, impacts PT-545 Tubing
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly by analysis.
M. Jones 6/4/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&F Dwg. 050041, Detail 9 (Category X).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83  DISCIPLINE ENGINEER/DATE  G. C. Bhatt 03/04/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC ICC PSE NPO NA

1.. W. Horn 8/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

[0006A/0066Z-18]

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

•
SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-12-01-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near MS Loop 3, 4 Penetration
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: E-LF-3BB Overhead light fixture, ball/socket mounted. (2 fixtures)
TARGET: TARGET CODE: I-PT546 PT-546 Tubing
POSTULATED INTERACTION:  Fixture falls, impacts PT-546 Tubing
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly by analysis.
MALKDOWN TEAM ORIGINATOR/DATE
The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, Detail 9 (Category X). This fixture type has been qualified by analysis per calculation 52.24.52. No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83  DISCIPLINE ENGINEER/DATE  G. C. Bhatt 03/04/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

8/24/83 I.. W. Horn SIP. PROJECT ENGINEER APPROVAL/DATE

٠,,٠

AUS

PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 03-17-01-01	•
FIRE ZONE 28 LOCATION Outside Area	FLOOR ELEVATION 109'-6"
LOCATION WITHIN FIRE ZONE: Elev. 110, near containment penetration, MS	loop 1.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead platforms, grates, handrails, etc.	SOURCE CODE: C-PLAT-28
TARGET: Operator to valve FCV-41.	TARGET CODE: M-FCV41
POSTULATED INTERACTION: Platforms, etc. fall, impact operator.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platforms, etc. by simpl	ified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Sources have been qualified by analysis. Se Calc. No. 03-04-01-01.	e resolution sheet and referenced
S. Hanusiak 02/19/81	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

į

DISCIPLINE ENGINEER/DATE

SHEET	1	OF	1

		•	
POSTULATED INTERACTION	N No.: 03-17-07-01	•	
FIRE ZONE _28	LOCATIONOutside	Areas FLOOR ELEVATION	1091-6"
LOCATION WITHIN FIRE : Elev. 117', east	ZONE: end of pipe rack nea	ar STM lead 1—1 MSIV.	
IDENTIFICATION OF INT	ERACTING COMPONENTS		
SOURCE: FCV-25 value bod	у.	SOURCE CODE: M-FCV2	<u>!5</u>
TARGET: Terminal box to	actuator for MSIV FCV	TARGET CODE: M-FCV4	1
associated equal which could damage	rigidly attached to a izing line around FCV ge terminal box and a	PHENOMENA CODE: MECH adjacent structural steel. FO (-41) will have thermal and se associated conduits to box. E alve insulation is O".	V-25 (and ismic motion
southerly direct: motion as they a	l growth and seismic ion. Motion of equal re rigidly connected.	motion of main steam line at izing line and FCV-25 will be If motion in southerly dire proximately 2"), relocate ter	the same as MSI ction is
S. E. Traisman OG WALKDOWN TEAM ORIGINAT			
FINAL RESOLUTION BY RE		: rgets per calc. by E. L. Gree	n dated 10-27-83
E. L. Green 10/27/ DISCIPLINE ENGINEER/E DISCIPLINE RESPONSIBLE	DATE	K. M. Krause 10 ENGR. GROUP SUPERVI EE EMS ENG GC HVAC I&C	SOR/DATE
FIELD VERIFICATION BY (FOR MODIFICATIONS CALL		L. W. Horn 01/18/ SIP PROJECT ENGINEER AP	

Sw

SHEET 1 OF 1  ON PROGRAM (IDS)
FLOOR ELEVATION 109'-6"
CE CODE: C-PLAT-28
SET CODE: M-FCV42
MENA CODE: CIVILFAIL
- analysis.
See resolution sheet and

SIP PROJECT ENGINEER APPROVAL/DATE

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. SEISMICALLY INDUCED SYSTEMS INTERACTI INTERACTION DOCUMENTATION SHEET

POSTULATED INTERACTION NO.: 03-18-01-01
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 109'-6"
LOCATION WITHIN FIRE ZONE: Elev. 110, near containment penetration, MS loop 2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead platforms, grates, handrails, etc.  SOURCE CODE: C-PLAT-28
TARGET:  Operator to valve FCV-42.
POSTULATED INTERACTION: Platforms, etc. fall, impact operator.  Phenomena Code: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platforms, etc. by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platforms, etc. have been qualified by analysis. See resolution sheet and referenced Calc. No. 03-04-01-01.
S. Hanusiak 02/19/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAME
L. W. Horn 08/23/82

35 8/4184

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1_	_ OF _	1

•	THE POCO ENTINE	one of the case of
POSTULATED INTERACTION	NO.: 03-18-07-01	
FIRE ZONE	LOCATION Outside Areas	FLOOR ELEVATION
LOCATION WITHIN FIRE ZO Elev. 117', east e	NE: nd of pipe rack NR STM ]	ead 1-2 MS.
IDENTIFICATION OF INTER	ACTING COMPONENTS	
SOURCE: MSIV FCV-42 actuate	or.	SOURCE CODE: M-FCV25
TARGET: Terminal box to MS	IV FCV-42.	TARGET CODE: E-FCV42
FCV-42 impacting to Box is rigidly supp	erminal box support and ported to adjacent struc	PHENOMENA CODE: INTERFERE/DEFLECT result in actuator for MSIV damaging terminal box. Terminal tural steel, while main steam is e area). Fxisting clearance
		terminal box to provide 2" clear r.
S. E. Traisman 06/30/8 WALKDOWN TEAM ORIGINATOR	R/DATE	
	ve, cut away a portion o	f unistrut support for terminal, al box and actuator. See ART 329.
Peter P. Chu 11/17/82 DISCIPLINE ENGINEER/DAT	TE	G. C. Bhatt 11/17/84  ENGR. GROUP SUPERVISOR/DATE  EMS ENG GC HVAC I&C PSE NPO NAN
	IO/14/83 ALKDOWN TEAM	L. W. Horn 04/20/84 SIP PROJECT ENGINEER APPROVAL/DATE

AGB

SHEET _	1	OF _	_1_
---------	---	------	-----

POSTULATED INTERACTION NO.: 03-18-07-02	•
FIRE ZONE 28 LOCATION Outside Area	FLOOR ELEVATION 109'-5"
LOCATION WITHIN FIRE ZONE: Elev. 109'6", pipe rack.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platform grating elev. 109'5 <sup>1</sup> /4", platform 42F	SOURCE CODE: C-PLAT-28 FW.
TARGET: Conduit K-5807-1".	TARGET CODE: E-K5807-1
POSTULATED INTERACTION:  Sharp point of floor grating contacts conduit.  and conduit could damage conduit.	PHENOMENA CODE: CIVILFAIL  Relative motion between grating
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Cut away a portion of platform grating to prove conduit.	vide 2" clearance between grating and
S. E. Traisman 06/30/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Provide 2" clearance between grating and condu- ART-358.	uit No. K-5807-1" as recommended per
S. Gaballah 04/05/83 DISCIPLINE ENGINEER/DATE	B. Sarkar 04/19/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS	ENG GC HVAC I&C PSE NPO NAN

L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman 09/08/83
FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	1	

	INTERACTION DOCUMENTALLO	WI SHEET (IDS)
POSTULATED INTERACTION	AN NO.: 03-19-01-01	•••
FIRE ZONE 3-BB	LOCATION Penetration 6	Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE Elev. 125, GW ar	ZONE: rea, near loop 3 penetratio	on.
IDENTIFICATION OF INT	TERACTING COMPONENTS	
SOURCE: Overhead platfor	rm, grates, handrails.	SOURCE CODE: C-PLAT-3BB
TARGET: Operator to FCV-	-43.	TARGET CODE: M-FCV43
POSTULATED INTERACTION Platform, etc.	<u>M</u> : falls, impacts operator.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION Ensure integrit	ON BY WALKDOWN TEAM: y of platform, etc. by sim	plified analysis.
M. Jones 06/0		•
FINAL RESOLUTION BY Platform etc. que Calc. No. 03-19	RESPONSIBLE DISCIPLINE: ualified by analysis. See -O1-O1.	•
S. Hanusiak 08 DISCIPLINE ENGINEER		V. J. Ghio 08/08/80 ENGR. GROUP SUPERVISOR/DATE
		EMS ENG GC HVAC I&C PSE NPO NAM
		L. W. Horn 08/23/82

5 Ca 8/84

SHEET	1_	OF.	_1_
-------	----	-----	-----

BOSTILLATED THEEDASTICAL NO	•
POSTULATED INTERACTION NO.: 03-19-03-01  FIRE ZONE 3-BB LOCATION Penetration Ar	rea FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 120, under FCV-43.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platforms 3 GW & 8 GW.	SOURCE CODE: C-3GW
TARGET: Air supply tubing to FCV-43.	TARGET CODE: M-FCV43
POSTULATED INTERACTION: Platforms fall, impact tubing.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platforms by simplified as needed.	d analysis. Secure grates to platform
M. Jones 11/05/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Sources have been qualified subject to modi sheet and Calc. No. 03-19-01-01, No. 03-64-	
S. Hanusiak 02/04/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	E. P. Wollak 03/09/81 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO NAI
S. E. Traisman . 08/31/82	L. W. Horn 10/28/82

岩岩砂

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

•
SHEET 1 OF 1
PROGRAM DS) .
OOR ELEVATION 115'-0"
5)
•
CODE: NS-CD
CODE: E-K6110-1.50
NA CODE: HOUSEKEFP
6
,

I. W. Horn 10/28/82 SIP PROJECT ENGINEER APPROVAL/DATE

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION INTERACTION DOCUMENTATION SHEET (I

POSTULATED INTERACTION NO	0.: <u>03–19–07–03</u>		
FIRE ZONE 3-BR I	LOCATION Penetration Are	eas FLOOR ELE	EVATION 115'-0"
LOCATION WITHIN FIRE ZONE Elev. 115', area GW,	_		$\langle \hat{y} \rangle$
IDENTIFICATION OF INTERAC	CTING COMPONENTS		, ,
SOURCE: Construction deficie	ency.	SOURCE CODE:	NS-CI)
TARGET: K6110 at BJG 247.		TARGET CODE:	E-K6110-1.50
POSTULATED INTERACTION: Cover plate missing.		PHENOMENA CODE	: HOUSEKEFP
RECOMMENDED RESOLUTION BY Replace missing cove			
E. Denison 06/08/8 WALKDOWN TEAM ORIGINATOR/ FINAL RESOLUTION BY RESPO	/DATE	plate.	
DISCIPILINE ENGINFER/DATE DISCIPILINE RESPONSIBLE FO		FAGR. GROUP	orta 07/15/81 SUPERVISOR/DATE C I&C PSE NPO NAM

S. F. Traisman 08/31/82
FIFLD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	_1_	15
				17

POSTULATED INTERACTION NO.: 03-20-03-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, under FCV-44
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Insulation to lines 3421 & 3411  SOURCE CODE: NS-T
TARGET:  Air supply flexible hose to FCV-44.
POSTULATED INTERACTION:  Hot insulation causes heat damage to flexible hose.
Flexible hose-synflex 3000-16, SAE 100R7,1" Samual Moore #9-0018.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify by analysis that temperature of surface of insulation is low enough to preclude damage to flexible hose.
M. Jones 11/05/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Line qualified by thermal analysis, see RLCA Resolution Report #25
Shah Motiwalla 04/27/81  DISCIPLINE ENGINEER/DATE  R. L. Cloud 04/28/81  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

SHEET	1	OF	_1_

THICKNOTION DOGGETHINITON CHEET (LDC)
POSTULATED INTERACTION NO.: 03-20-03-02
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 120, under FCV-44.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Platforms 3 GW & 5 GW and associated ladders.  SOURCE CODE: C-3GW
TARGET:  Air supply tubing to FCV-44.
POSTULATED INTERACTION: Platforms fall, impact tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platforms/ladders by simplified analysis. Secure grates to platforms as needed.
M. Jones 11/05/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Sources have been qualified subject to ART 85. See resolution sheet and Calc. No. 03-20-03-02.
S. Hanusiak 03/12/81 DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAME
S: E. Traisman 08/31/82 L. W. Horn 10/29/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-20-07-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: EL 125, Adjacent to main steam FCV 22.
identification of interacting components
SOURCE:  Main steam line 225-28" with insulation.  SOURCE CODE: P-0225-28
TARGET:  Conduit K6457 and tee it connects into.  TARGET CODE: E-K6457-1.25
POSTULATED INTERACTION:  Motion under thermal expansion impacts conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Show by analyis that thermal motion of LZ25 will not damage conuit contents.
8. Worinski 05/08/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  No modification required. I-Beam support prevents impact to the target (Conduction K6457). See sketch shown on IDS No. 03-20-07-01.
R. P. Espinelli  DISCIPLINE ENGINEER/DATE  W. Vahlstrom 07/12/84  ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN

L. W. Horn 08/04/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET	1	OF	_ 1_

•	,	1
		$\mathcal{L}$
	_/	

POSTULATED INTERACTION NO.: 03-20-07-02
FIRE ZONE 3-BR LOCATION Penetration Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125' adjacent to main steam FCV 22.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Radiant heat from main steam line lead #4.  SOURCE CODE: NS-T
<u>TARGET</u> : <u>TARGET CODE</u> : <u>E-K6457-1.25</u> Conduit K6457-1.25.
POSTULATED INTERACTION:  Conduit runs within 5" of uninsulated section of 536 F main steam line. Wires within conduit rated to max. 90° C.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Finsure wires can withstand expected temperatures.
G. Whorisky 05/08/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Install 2'" of 1" insulation to conduit K6457 to protect cable from heat damage per ART 383. For eng. resolution see RICA Report #42.
•
R. J. Swaim 07/27/83 S. Auer 06/01/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM  (FOR MODIFICATIONS ONLY)  SIP PROJECT ENGINEER APPROVAL/DATE

	SHEET1_ OF1_
PACIFIC GAS & ELECTRI	
DIABLO CANYON PLANT, UNI	
SEISMICALLY INDUCED SYSTEMS INTE	
· INTERACTION DOCUMENTATION S	HEE! (IDS)
POSTULATED INTERACTION NO.: 03-20-07-04	
FIRE ZONE 3-BB LOCATION Penetration Are	as FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE:	
Elev. 115, below main steam FCV 22.	
IDENTIFICATION OF INTERACTING COMPONENTS	
	•
SOURCE: L4347-3"	SOURCE CODE: P-4347-3
TARGET:	TAROFT CORE. F. Heroe A
K6702.	TARGET CODE: E-K6702-1
POSTULATED INTERACTION:	PHENOMENA CODE: DEFLECT
4347-3" swings due to being supported by clevi	is rod hangers. impacts K6702.
· ·	
•	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	
Demonstrate by simplified analysis that integr	rity of conduit will not be
compromised.	
	-
G. Whorisky 05/08/81	
WALKDOWN TEAM ORIGINATOR/DATE	
FINAL_RESOLUTION BY RESPONSIBLE DISCIPLINE:	,
Rerouted the conduit per ART-222. See RLCA Re	esolution Report #33.
	•
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	ENG GC HVAC I&C [PSE] NPO NAN
	<del></del>

L. W. Horn 10/25/83 SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman 09/21/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

SHEET	•	OF	•
SHEEL		UP	

/-
POSTULATED INTERACTION NO.: 03-20-07-05
FIRE ZONE 3-88 LOCATION Penetration Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115 at 15 and L
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Main steam line 225-28" with insulation.  SOURCE CODE: NS-T
TARGET:  Conduit K6464.  TARGET CODE: E-K6464-1.25
POSTULATED INTERACTION:  Steam line moves under thermal expansion and impacts conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Demonstrate that motion of steam line will not damage integrity of
conduit, or reroute conduit.
P. Worinski 05/08/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Local reroute of target conduit per ART 222. For eng. resolution see  R.L.C.A. Report #33.
•
H. Luey 07/31/81 R. L. Cloud 07/30/81 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NA
S. E. Traisman 09/21/83  FIELD VERIFICATION BY WALKDOWN TEAM  L. W. Horn 10/25/83  SIP PROJECT ENGINEER APPROVAL/DATE

[0028A/0082Z-28]

SHEET	 OF	_1_

POSTULATED INTERACTION NO.: 03-20-07-06
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, Area GW FCV 22.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SGBO to SGBD demins L4072, 5' diameter.  SOURCE CODE: P-4072-3 -
TARGET CODE: E-K6702-1 K6702.
POSTULATED INTERACTION:  Horizontal pipe, already touching vertical K6702, will swing through conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of the conduit or locally reroute K6702 along a nearby column.
E. Denison 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: See ART 222, Res. Rpt 33.
'i
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC !I&C [PSE] NPO NAN

S. E. Traisman 09/21/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

L. W. Horn 10/25/83 SIP PROJECT ENGINEER APPROVAL/DATE

Sw

SHEET	1	OF	1
011551	-	••	

 _	l,
	- ]
14	J
٠ /	

POSTULATED INTERACTION	No.: <u>03-20-07-07</u>
FIRE ZONE 3-BB	LOCATION Penetration Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZO Elev. 115, area GW	
IDENTIFICATION OF INTER	RACTING COMPONENTS .
SOURCE: SG 12 blowdown to (Both 3" diameter	SOURCE CODE: NS-T flash TK L3876 and SG13 blowdown to flash TK L3876. pipe with 1" of insulation).
TARGET: Conduit K6702.	TARGET CODE: E-K6702-1
POSTULATED INTERACTION; Both steam pipes a	; PHENOMENA CODE: ENVIRON are 1/4" from K6702 (Postulated heat damage).
RECOMMENDED RESOLUTION  Ensure integrity of column.	BY WALKDOWN TEAM: of wires within conduit or reroute K6702 down nearby
Edward Dennison 06/03/ WALKDOWN TEAM ORIGINATO	

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

The above interaction has been resolved by analysis per RLCA Resolution Report No. 42. No further action necessary.

NOTE: This resolution supercedes any previous resolution of this interaction. See ART-300.

S. Motiwalla 08/26/81
DISCIPLINE ENGINEER/DATE

R. L. Cloud 08/28/81

ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN

L. W. Horn 05/16/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)
[0028A/0082Z-29]

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-20-07-08
FIRE ZONE 3-BB - LOCATION Penetration Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115', area GW, under FCV22.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SG14 blowdown to flash TK L3880 3" diameter pipe with 1" of insulation.
TARGET: TARGET CODE: E-K6703-1.25 K6703.
POSTULATED INTERACTION:  T-K6703 runs across the pipe and has dented the insulation.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure no heat damage to the wires inside K6703 or reroute the conduit.
E. Denison WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above interaction has been resolved by analysis per RLCA Resolution Report No 42. No further action necessary.  Note: This resolution supercedes any previous resolution supercedes any previous resolution of this interaction. See ART 300.
S. Motiwalla 08/26/81  DISCIPLINE ENGINEER/DATE  R. L. Cloud 08/28/81  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN

L. W. Horn 05/16/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET	1	OF	1

200000000000000000000000000000000000000
POSTULATED INTERACTION NO.: 03-20-07-09
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115. area GW, above FCV44.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Main Steam Lead 4 to turbine L585.
TARGET:  Conduit K6457 at the tee.  TARGET CODE: E-K6457-1.25
POSTULATED INTERACTION:  K6457 touches the insulation which causes the circuits in the conduit to overheat and degrade the function of the circuit(s).
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure no heat damage to the wires inside K6457 or reroute the coduit.
Edward Dennison 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by analysis described in RLCA Report #43.
S. Motiwalla 08/26/81  DISCIPLINE ENGINEER/DATE  R. L. Cloud 08/28/81  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAME

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 04/18/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1 OF 1	_
--------------	---

1	(	
5	$\mathcal{E}$	,1

POSTULATED INTERACTION NO.: 03-20-07-10	
FIRE ZONE 3-RR LOCATION Penetration Areas FLOOR FLEVATION 115'-	0"
LOCATION WITHIN FIRE ZONE: Flev. 115, area GW, near FCV 44.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Main steam lead #4 to turbine L585 2' diameter pipe with 8" of insulation	n.
TARGET:  K6464 conduit  TARGET CODE: E-K6464-1.25	
POSTULATED INTERACTION: PHENOMENA CODE: ENVIRON	
K6464 runs along the bottom of the main steam lead with no clearance.  RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure no heat damage to the wires inside K6464 or reroute the conduit.	
Edward Dennison 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resoved per analysis described in RICA Report #43.	
S. Motiwalla 08/26/81 R. L. Cloud 08/28/8 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DA	
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE FMS [ENG] GC HVAC I&C PSE	NPO NAN
FIFID VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL  (FOR MODIFICATIONS ONLY)	/DATE

SHEET _	_1_	_ OF _	1	
ROGRAM				

POSTULATED INTERACTION NO.: 03-22-01-01	<u>.                                    </u>
FIRE ZONE 28 LOCATION Outside Areas	FLOOR ELEVATION 119'-0"
LOCATION WITHIN FIRE ZONE: Elev. 122, along outside wall of containment	nt by MS loops 1,2.
IDENTIFICATION OF INTERACTING COMPONENTS	, '
SOURCE: Platform grates.	SOURCE CODE: C-PLAT-28
TARGET: Instrument tubing to PCV-19.	TARGET CODE: I-PCV19
•	*
POSTULATED INTERACTION:	PHENOMENA CODE: CIVILFAIL & LOOSE
Grates slide into tubing due to failure of	hold down clips.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Install protection around tubing, possibly steel.	by using Uni-strut or Channel
M. Jones 06/10/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Protective channel steel installed to protective ART 272 and memo dated 07/10/80.	ect tubing.
DISCIPLINE ENGINEER/DATE	G. H. Moore ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE ENGINEER/DHTE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE !	
	TO THE OF BANK THE FEET IN A BUIL
S. E. Traisman 08/31/82 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY)	L. W. Horn 10/29/92 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1 OF 1		1	OF	1
--------------	--	---	----	---

i	
POSTULATED INTERACTION NO.: 03-22-02-01	
FIRE ZONE 28 LOCATION Outside Area	FLOOR ELEVATION 119'-10"
LOCATION WITHIN FIRE ZONE: Elev. 122, along ouside wall of containment	nt, near MS loop 2.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: 4" auxiliary feedwater pipe, line 476.	SOURCE CODE: P-0476-4
TARGET: Instrument tubing to PCV-19.	TARGET CODE: I-PCV19
POSTULATED INTERACTION: . Lateral movement of 4" pipe results in in	PHENOMENA CODE: DEFIFCT pact with tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add plate to pipe support 1-24R to preclude 476.	de large lateral movement of line
M. Jones 06/10/80 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added lateral restraint for line 1-Ka6-476 Rev. 3. Issued for construction per DC1-6 (HGR. 1-24R). REf: RLCA No. 46.	
B. Abella 12/08/83 DISCIPLINE ENGINEER/DATE	K. M. Krause 12/08/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	ETS ENG GU HVAC IEC [PSE] NPO 'NAM
S. E. Traisman 02/24/84 FIELD VERIFICATION BY WALKDOWN TEAM	I W. Horn 04/08/83 SIP PROJECT ENGINEER APPROVAL/DATE

[0040A/0106Z-47]

SHEET	1	OF	

	1	· · · · · · · · · · · · · · · · · · ·	
POSTULATED INTERACTION NO	: 03-22-02-02	· · · · · · · · · · · · · · · · · · ·	<del>-</del> .
FIRE ZONE 28 .1.0	CATION Outside	Area FLOO	R ELEVATION 119'-10"
I.OCATION WITHIN FIRE ZONE Flev. 122', along out		nment bý MS loops	1,2.
JDENTIFICATION OF INTERACT	TING COMPONENTS	•	
SOURCE: Platform grates.		SOURCE CO	DOE: CIPLAT-28
TARGET: Instrument tubing to PCV-19).	PCV-19 (bottled		DOE: T-PCV19 ve mounted SV on
POSTULATED INTERACTION: Grates slide into tul	oing due to failu		CODE: CIVILFAIL & LOOSE
RECOMMENDED RESOLUTION BY Install protection are steel.		sibly by using Uni	i—Strut or Channel
M. Jones 06/10/8			
FINAL RESOLUTION BY RESPONTANT Install protective ch	ISIBLE DISCIPITNE mannel to protect	: tubing per ART 27	72.
E. M. Valeriano 07/10/80 DISCIPLINE ENGINEER/DATE		G. H. Mc ENGR. GF	OOTE 07/10/80 ROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR	RESOLUTION: CE	EE EMS ENG GC	HVAC [ICC] PSE NPO NAM
S. E. Traisman 08/ FIELD VERIFICATION BY WALK			Horn 10/29/82 ENGINEER APPROVAL/DATE
(FOR MODIFICATIONS ONLY)		ē	

[0039A/0102Z-60]

,
SHEET1 OF1
ON PROGRAM (IDS)
TLOOR ELEVATION 119'-0"
loops 1,2.
CE COOE: C-PLAT-28
T CODE: I-PCV19  12 supply tube to valve
MENA CODE: CIVILFAIL & LOOSE of Clips.
Uni-Strut or Channel
ng per ART 272.
G. H. Moore 06/10/80

POSTULATED INTERACTION NO.: 03-22-03-01
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 119'-0"
LOCATION WITHIN FIRE ZONE: Elev. 122, along outside wall of containment by MS loops 1,2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Platform grates.  SOURCE CODE: C-PLAT-28
TARGET:  TARGET CODE: I-PCV19  Instrument tubing to PCV-19 (normal air supply on N2 supply tube to valve mounted SV on PCV-19).
POSTULATED INTERACTION:  Grates slide into tubing due to failure of holddown clips.
•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install protection around tubing, possibly by using Uni-Strut or Channel steel.
M. Jones 06/10/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Protective channel steel installed to protect tubing per ART 272.
E. M. Valeriano 06/10/80  DISCIPLINE ENGINEER/DATE  G. H. Moore 06/10/80  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [I&C] PSE NPO NAN
S. E. Traisman 08/31/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

SHEET	1	OF	_1_	37
-------	---	----	-----	----

INTERNOTION DOCOLERINITOR SHEET (155).
POSTULATED INTERACTION NO.: 03-22-03-02
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 119'-0"
LOCATION WITHIN FIRE ZONE: Elev. 122, along containment wall, near MS loop 2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-28
TARGET:  3/4" copper tube air supply to PCV-19, 20.
POSTULATED INTERACTION:  Grates slide into tubing due to failure of holddown clips.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install guard pipe around tubing to protect from impact.
M. Jones 06/10/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Protection provided for tubing per ART 272.
E. M. Valeriano 06/10/80  DISCIPLINE ENGINEER/DATE  . G. H. Moore 06/10/80  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [160] PSE NPO NAN
S. E. Traisman 08/31/82  FIELD VERIFICATION BY WALKDOWN TEAM  L. W. Horn 10/29/82  SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 03-22-08-01
FIRE ZONE _28 LOCATION _Outside Area FLOOR ELEVATION _109'-6"
LOCATION WITHIN FIRE ZONE: Elev. 106, at turbine bldg. wall, near door 386 entrance to auxiliary bldg.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: Approx. 2" diameter steam line to RO system.  SOURCE CODE: P-USB-28
TARGET: Conduit K5849-3".  TARGET CODE: E-K5849-3
POSTULATED INTERACTION: PHENOMENA CODE: DEFLECT  Lateral motion coupled w/failure of fixed end rod hangers of source pipe results in impact with conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add bilateral pipe support to source pipe to reduce lateral motions. Add to beam between turbine & containment buildings, azimuth 270°. Keep lateral gaps at a minimum.
M. Jones 06/30/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Recommended resolution — OK. See DCN DCI-EP-5061 — HGR. DWG. 049339 sheets 350 & 351, (339/350R & 351R).
C. R. VanNatta 10/10/83  DISCIPLINE ENGINEER/DATE  BISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NA

Sw

L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman 11/29/83 FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 03-22-13-01
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZCNE: Elev. 85, under MS. leads 1,2 along containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-3103-2  Line 3103-2"; Fan heating coil trap drain header.
TARGET:  TARGET CODE: I-PM100  Mechanical panel 100 and attached tubing.
POSTULATED INTERACTION:  Line 3103 falls on mechanical panel due to lack of vertical support and failure of threaded couplings.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install additional pipe supports as required to preclude falling of pipe.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: See IDS No. 03-01-02-01. Added supports.
J. A. Ante 05/06/81 R. L. Cloud 05/06/81
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN
S. E. Traisman 08/24/83 L. W. Horn 09/08/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-22-13-02
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, under MS loops 1,2 along containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Source code: _C-PLAT-28  Overhead platforms (2 levels), grates, handrails, security barrier panel grating and ladder.
TARGET:  Mechanical panel 100 and attached tubing.  TARGET CODE: I-PM100
POSTULATED INTERACTION: Platforms fall, impact mechanical panel.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platforms, etc. by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platforms qualified by analysis. See resolution sheet, referenced Calc. No. 03-01-01-01 and 03-04-01-01.
S. Hanusiak 02/19/81 E. P. Wollak DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAM

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

" SOURCE:

SHEET	1	OF	1

ſ.	<u>/</u>
1	۷

POSTULATED INTERAC	<del></del>		
FIRE ZONE _28	LOCATION _	Outside Areas	FLOOR ELEVATION 127'-31/4"
LOCATION WITHIN FI Elev. 128, (N			i e
IDENTIFICATION OF	INTERACTING COM	PONENTS	
SOURCE: Vertical stea	m dump near outo	er containment	SOURCE CODE: NS-T wall.
TARGET: Conduits K577	6, K5862, K5842	, K5861.	TARGET CODE: E-K5776+
POSTULATED INTERAC	TION:		PHENOMENA CODE: ENVIRON
		y from conduit.	Postulated heat damage.
RECOMMENDED RESOLU Ensure integr reroute the c	ity of wires wi		nsulate the steam dump, or
Edward Dennison O WALKDOWN TEAM ORIG			
	Y RESPONSIBLE D per ART # 289. on per RLCA #43	(Addition of i	nsulation)
S. Motiwalla 08			R. L. Cloud 08/28/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONS	IBLE FOR RESOLU	TION: CE EE E	EMS [ <u>eng</u> ] GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION (FOR MODIFICATIONS		<del>AM</del>	L. W. Horn 04/20/84 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	0F	1
	1	Ur.	1

POSTULATED INTERACTION NO.: 03-22-24-02
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 127'-3"
LOCATION WITHIN FIRE ZONE: Elev. 128, (N, 6 <sup>4</sup> ).
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-ULB-28  Vertical steam dump near outer containment wall.
TARGET: TARGET CODE: E-K5776+ K5776, K5862, K5842, and K5861.
POSTULATED INTERACTION:  Horizontal deflection of 4" by the vertical steam dump — hits the conduits o the wall.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of clearance by analysis of seismic and thermal movements.
E. Denison 06/05/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Field inspected by C. R. Van Natta (OPEG-Piping) & E. L. Green (OPEG-Piping) determined that the line K15-228-28 (with vertical steam dump) is adequately supported by existing configuration (anchor above the conduits and anchor at fluedhead). The line 228-28 show maximum temperature is 354° F, therefore it was sent to electrical group to investigate if conduits required insulation. Electrical group has advised me that insulation will not be required. (See item 17 drawing 50029). Therefore no action necessary.
C. R. VanNatta 09/22/83 K. M. Krause 09/22/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN
I II Uoma 02/02/04

Sh

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF .	1_
-------	---	------	----

INTERNOTION DOCUMENTALIO	M SHEET (IDS)
POSTULATED INTERACTION NO.: 03-22-24-03	
FIRE ZONE 28 LOCATION Outside Area	FLOOR ELEVATION 127'-3"
LOCATION WITHIN FIRE ZONE: Elev. 128, 10' from BJF17, near the contain	inment wall.
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Grating.	SOURCE CODE: C-PLAT-28
TARGET: K5774.	TARGET CODE: E-K5774-0.75
POSTULATED INTERACTION: Unbolted grating impacts the conduit.	PHENOMENA CODE: CIVILFAIL & LOOSE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Bolt down grating.	•
Edward Denison 06/09/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Grating to be bolted down per ART No. 187.	
S. Hanusiak 07/20/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	E. P. Wollak 07/28/81 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO NAN
S. E. Traisman 09/29/82  FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)  S.G. 8/4/74	L. W. Horn 10/28/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1_	OF	_1_	(14)
-------	----	----	-----	------

L. W. Horn 10/29/82 SIP PROJECT ENGINEER APPROVAL/DATE

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 03-24-01-01
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 119'-10"
LOCATION WITHIN FIRE ZONE: Elev. 122, along outside wall of containment by MS loops 1,2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-28 Platform grates.
TARGET:  TARGET CODE: I-PCV20  Instrument tubing to PCV-20 (signal tubing from R-20 to PCV-20)
POSTULATED INTERACTION:  Grates slide into tubing due to failure of holddown clips.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install protection around tubing, possibly by using Uni-Strut or Channel steel.
M. Jones 06/10/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Protective channel installed to protect tubing. Per ART 272.
E. M. Valeriano 06/10/80  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [I&C] PSE NPO NO.

[0010A/0078Z-5]

S. E. Traisman 08/31/82
FIELD VERIFICATION BY WALKDOWN TEAM

				1 //
SHEET	1	OF	1	1115

POSTULATED INTERACTION NO.: 03-24-02-01
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 119'-10"
LOCATION WITHIN FIRE ZONE: Elev. 122, along outside wall of containment MS loops 1,2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Platform grates.
TARGET:  Instrument tubing to PCV-20 (bottled air tubing to SV mounted on PCV-20)
POSTULATED INTERACTION:  Grates slide into tubing due to failure of holddown clips.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install protection around tubing, possibly by using Uni-Strut or Channel steel.
M. Jones 06/10/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Protective channel steel installed to protect tubing per ART 272.
E. M. Valeriano 06/10/80 DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [I&C] PSE NPO NA

S. E. Traisman 08/31/82
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)
[0010A/0078Z-6]

L. W. Horn 10/29/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET _	1	_ OF .	1	
OGRAM				

POSTULATED INTERACTION NO.: 03-24-03-01	
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 119'-0"	
LOCATION WITHIN FIRE ZONE: Elev. 122, along outside wall of containment by MS loops 1, 2.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: SOURCE CODE: C-PLAT-28 Platform grates.	
TARGET:  Instrument tubing to PCV-20 (normal air supply on N <sub>2</sub> supply tube to SV mounted on PCV-20).	±
POSTULATED INTERACTION:  Grates slide into tubing due to failure of holddown clips.	=
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install protection around tubing, possibly by using Uni-Strut or Channel steel.	
M. Jones 06/10/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Protective steel channel installed to protect tubing per ART 272.	
E. M. Valeriano 06/10/80  DISCIPLINE ENGINEER/DATE  G. H. Moore 06/10/80  ENGR. GROUP SUPERVISOR/DATE	
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [I&C] PSE NPO	VAN

L. W. Horn 10/29/82

SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman 08/31/82
FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	11	OF	_ 1
-------	----	----	-----

POSTULATED INTERACTION NO.: 03-24-23-01	
FIRE ZONE 28 LOCATION Outside Areas	_ FLOOR ELEVATION109'-6"
LOCATION WITHIN FIRE ZONE: Elev. 115', east corner of pipe rack.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: SO Construction deficiency.	NURCE CODE: NS-CD
TARGET:  Air bottle to 10% steam dump valve, PCV-20.	RGET CODE: M-BOTTLF
POSTULATED INTERACTION:  Support clamps have been removed and wire used f	NOMENA CODE: 1.00SE or support of bottle.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace missing support clamps.	·
M. Jones 06/30/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  IDS is a result of a construction deficiency. To control. Construction deficiency to be corrected construction activities.	IDS transferred to onsite quality od during norma) course of .
	•
DISCIPLINE ENGINEER/DATE	NGR. GROUP SUPERVISOR/DATE
DISCIPI, INE RESPONSIBLE FOR RESOLUTION: CE EE EMS E	ENG [QC] HVAC I&C PSE NPO NAN
	L. W. Horn 05/25/83 PROJECT ENGINEER APPROVAL/DATE

F0028A/00827-97

SHEET	 OF	_1_	, /
			45

POSTULATED INTERACTION NO.: 03-24-30-01	<del></del>
FIRE ZONE 28 LOCATION Outside Areas	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE:  Elev. 140', Azimuth 15° on containment wall atmosphere.	on wall, near SG 1—3 release to
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Uninsulated relief pipes.	SOURCE CODE: NS-T
TARGET: Conduits K5786, K7684, and K7682 conduit.	TARGET CODE: F-K5786+
POSTULATED INTERACTION:  3/4" clearance to K5786  3/4" clearance to K5784  3/4" clearance to k5782	PHENOMENA CODE: ENVIRON
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure no heat damage to the wires inside the reroute.	e conduits, insulate, or
Fdward Dennison 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Resolved per analysis described in RLCA Repor	rt #50.
S. Motiwalla 09/30/81 DISCIPLINE ENGINFER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	R. L. Cloud 10/01/82 ENGR. GROUP SUPERVISOR/DATE  [ENG] GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)
[0028A/0082Z-55]

L. W. Horn 11/02/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET _	1	OF _	_1
---------	---	------	----

POSTULATED INTERACTION NO.: 03-24-30-02	
FIRE ZONE _28 LOCATION _Outside Areas	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: . Elev. 140', inside panel, 15 <sup>7</sup> , near SG1-3.	ر سار
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Construction deficiency.	SOURCE CODE: NS-CD
TARGET: Flex conduits associated with K6505 and K5	<u>TARGET CODE</u> : <u>E-K6505+</u> 781.
POSTULATED INTERACTION: Loose connection at coupling.	PHENOMENA CODE: HOUSEKEEP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Tighten connections to valve.	
E. Denison 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Resolved per ART 155.	
DISCIPLINE ENGINFER/DATF DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	A. G. Barta 07/15/81  ENGR. GROUP SUPERVISOR/DATE  ENG [QC] HVAC I&C PSE NPO NAN
S. E. Traisman 08/31/82 FIELD VERIFICATION BY WALKDOWN TEAM	I. W. Horn 10/29/82 SIP PROJECT ENGINEER APPROVAL/DATE

F00204/00027 107

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1	
SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)	
POSTULATED INTERACTION NO.: 03-24-30-03	
FIRE ZONE 28 LOCATION Outside Areas FLOOR FLEVATION 140'-0"	
LOCATION WITHIN FIRE ZONE: Elev. 140, (15 <sup>7</sup> ), near SG 1-3 release to atmosphere.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: SOURCE CODE: E-R-28 None.	•
TARGET: . TARGET CODE: F-K6505 T-K6505, K5781, and K6506.	•
POSTULATED INTERACTION:  Vertical conduits impact, due to seismic movements.	•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of the conduits by analysis or provide horizontal bracing.	
E. Denison 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Provided horizontal bracing to secure conduits. See ART 233. Resolved by modification.	
A. G. Rarta 08/06/81 S. Auer 08/29/84 DISCIPLINE ENGINFER/DATE ENGR. GROUP SUPERVISOR/DATE	
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NO	AN

L. W. Horn 10/29/82 SIP PROJECT ENGINEER APPROVAL/DATE

AGR

(FOR MODIFICATIONS ONLY)

S. E. Traisman 08/31/82
FIELD VERIFICATION BY WALKDOWN TEAM

SHEET1_ OF1
ON PROGRAM (IDS)
FLOOR ELEVATION 140'-0"
, 5' from 1030—14RT.
CE CODE: NS-CD eficiency).
ET CODE: E-K5781-0.75
MENA CODE: SPTFATL
pport.
Report No. 44.
R. L. Cloud 09/24/81 R. GROUP SUPERVISOR/DATE

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO.

INTERACTION DOCUMENTATION	
POSTULATED INTERACTION NO.: 03-24-30-04	•
FIRE ZONE 28 LOCATION Outside Areas	FLOOR ELEVATION 140'-0"
<b>LOCATION WITHIN FIRE ZONE:</b> Elev. 140, (15 <sup>7</sup> ), near SG1—3 release to atm	osphere, 5' from 1030–14RT.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:	SOURCE CODE: NS-CD
loose bolts on support number S341 (constructions)	tion deficiency).  TARGET CODE: E-K5781-0.75
Conduit K5781.  POSTULATED INTERACTION:	PHENOMENA CODE: SPTFATL
The support falls and impacts the conduit.	

#### RECOMMENDED RESOLUTION BY WALKDOWN TEAM:

Either tighten the bolts or remove the unneeded sup

F. Denison 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Resolved by analysis described in RLCA Resolution

E. Denison 09/15/81 DISCIPLINE ENGINEER/DATE ENG

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG [QC] HVAC ICC PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 11/22/82 SIP PROJECT ENGINEER APPROVAL/DATE

[0028A/0082Z-11]

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-26-13-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: . Elev. 125, near MS Loop 3, 4 Penetration
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixture, ball/socket mounted. (2 fixtures)
TARGET:  PT-536A  TARGET CODE: I-PT536A
POSTULATED INTERACTION:  Fixture falls, impacts PT-536A  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly by analysis.
M. Jones 6/4/80 WALKDOWN TEAM ORIGINATOR/DATE
The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, Detail 9 (Category X).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
D 7 Curi- 2/A/02 G C Rhatt 03/04/83

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn SIP PROJECT ENGINFER APPROVAL/DATE

ENGR. GROUP SUPERVISOR/DATE

AcB

R. J. Swaim

DISCIPLINE ENGINEER/DATE

3/4/83

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-26-14-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near MS Loop 3, 4 Penetration
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Source code: E-LF-38B  Overhead light fixture, ball/socket mounted. (2 fixtures)
TARGET: TARGET CODE: T-PT536A PT-536A Tubing
POSTULATED INTERACTION:  Fixture falls, impacts PT-536A Tubing
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly by analysis.
M. Jones 6/4/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, Detail 9 (Category X).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83  DISCIPLINE ENGINEER/DATE  G. C. Bhatt 03/04/83  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

I. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

8/24/83

Acis

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET	1	OF	_1_
-------	---	----	-----

POSTULATED INTERACTION NO.: 03-26-22-01	· · · · · · · · · · · · · · · · · · ·
FIRE ZONE 28 LOCATION Outside Area	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 140, near SG 1—3 release to atmospher	e inside panel, 15 <sup>7</sup> .
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Panel (8' tall).	SOURCE CODE: I-PANEL.
<u>TARGET:</u> K6505.	TARGET CODE: E-k6505-0.75
POSTULATED INTERACTION:  Panel falls (assumed to be Class II).	PHENOMENA CODE: SPTFAIL.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of panel.	-
Edward Denison 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Valve panel and the supporting platform (19 as Class I structures. See Calcs No. 52.15 DC1-EC-13109-RD.	CW-1) have been checked and qualified .12.6. For modification see DCN No.
S. Gaballah 04/08/83 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	J. K. McCall 04/08/83 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC ICC PSE NPO NAN
S. E. Traisman 02/24/84 FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 04/20/84 SIP PROJECT ENGINEER APPROVAL/DATE

5.48184

(FOR MODIFICATIONS ONLY)

[0009A/0070Z-21]

SHEET 1	OF	1
---------	----	---

10101	CHCITON DOCOLEMENT	on once: (IDS)	•	
POSTULATED INTERACTION NO.:	03-26-25-01		•	
FIRE ZONE 7-A LOCA	TION Electrical Re	ooms FLOOR ELE	EVATION 127'-4"	
LOCATION WITHIN FIRE ZONE: Elev. 128' cable spread	ing room			ч
IDENTIFICATION OF INTERACTION	IG COMPONENTS			•
SOURCE: Floor plates		SOURCE CODE:	C-PLAT-7A	<del></del> -
TARGET: K5794, generally all co	onduits on floor	TARGET CODE:	E-K4794~1	·
POSTULATED INTERACTION:  Floor plates are not se impact much conduit.	- ecured to I—beams o	<u>PHENOMENA CODE</u> n floor. Loose pla		
RECOMMENDED RESOLUTION BY WAS	NLKDOWN TEAM:	v		
Paul Anderson 06/04/81 WALKDOWN TEAM ORIGINATOR/DAT FINAL RESOLUTION BY RESPONSI Floor plate to be secur	E BLE DISCIPLINE:		,	
S. Hanusiak 07/20/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR R	ESOLUTION:[CE] EE	ENGR. GROUP	N 07/28/81 SUPERVISOR/DATE C I&C PSE NP	
S. E. Traisman 01/26 FIELD VERIFICATION BY WALKDO		L. W. Horn	3/7/83	ĀTE

\$\$18Y

[0004A/0062Z-39]

(FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRI DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S	TT NO. 1 RACTION PROGRAM
POSTULATED INTERACTION NO.: 03-26-25-02	
FIRE ZONE 3-BB LOCATION Penetration Area	s FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115', area GW, near BJG 143.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Two vertical spring hangers.	SOURCE CODE: P-0123-6
<u>TARGET</u> : K5779.	TARGET CODE: E-K5779-1
POSTULATED INTERACTION: Spring hangers hit horizontal conduit.	PHENOMENA CODE: DEFLECT
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of conduit.	÷
E. Denison 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	•

#### FINAL RESOLUTION BY

Spring cans on 58S/46V have been lowered so as to avoid the interaction. See attached copy of DC1-EP-17430, Rev. O.

E. L. Green 01/25/84 DISCIPLINE ENGINEER/DATE

01/25/84 K. M. Krause ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

S. E. Traisman 02/24/84 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

04/20/84 L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1 OF 1  PACIFIC GAS & FIECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SFISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-28-01-01
FIRE ZONE 3-BR LOCATION Penetration Area FLOOR ELEVATION 140'-0"
1.OCATION WITHIN FIRE ZONE: Flev. 140', outside by main steam loops 3 & 4 relief valves.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Platform & grating.  SOURCE CODE: C-PLAT-3BR
TARGET: TARGET CODE: I-PCV22  Instrument tubing to PCV-22.
POSTULATED INTERACTION:  Lateral movement of platform results in tubing being compressed between platform and main steam loop 4 relief header.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Reroute tubing away from platform and main steam relief header.
M. Jones 06/10/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Tubing rerouted per ART 272.
F. M. Valeriano 07/10/80  DISCIPLINE ENGINFER/DATE  BISCIPLINE RESPONSIBLE FOR RESOLUTION: CE FE EMS ENG GC HVAC [I&C] PSE NPO NAN
S. E. Traisman 08/31/82 I. W. Horn 10/29/82 FIFLD VERIFICATION BY WALKDOWN TEAM SIP. PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

SHEET	1	OF	_1_
-------	---	----	-----

l <sub>j</sub> h	
ijΛ	

POSTULATED INTERACTION NO.: 03-28-02-01				
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 140'-0"				
LOCATION WITHIN FIRE ZONE: Elev. 140, outside by main steam loops 3&4 relief valves.				
IDENTIFICATION OF INTERACTING COMPONENTS				
SOURCE:  Platform & grates.  SOURCE CODE: C-PLAT-3BB				
TARGET:  Instrument tubing to PCV-22 (bottled air tubing to valve [PCV-22] mounted SV).				
POSTULATED INTERACTION:  Lateral movement of platform results in tubing being compressed between platform and main steam loop 4 relief header.				
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Reroute tubing away from platform and main steam relief header.				
•				
M. Jones 06/10/80 WALKDOWN TEAM ORIGINATOR/DATE				
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Tubing rerouted per ART 272.				

E. M. Valeriano 06/10/80
DISCIPLINE ENGINEER/DATE

G. H. Moore 06/10/80 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [IEC] PSE NPO NAN

S. E. Trainsman 08/31/82
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

L. W. Horn 10/29/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1
~		•••	<b>=</b>

POSTULATED INTERACTION NO.: 03-28-03-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 140, outside by main steam loops 3&4 relief valves.
IDENTIFICATION OF INTERACTING COMPONENTS .
SOURCE: SOURCE CODE: C-PLAT-3BB Platform & grates.
TARGET:  Instrument tubing to PCV-22 (n <sub>2</sub> supply tubing to valve [PCV-22] mounted SV)
POSTULATED INTERACTION:  Lateral movement of platform results in tubing being compressed between platform and main steam loop 4 relief header.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Reroute tubing away from platform and main steam relief header.
M. Jones 06/10/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Tubing rerouted per ART 272.
E. M. Valeriano 06/10/80  DISCIPLINE ENGINEER/DATE  G. H. Moore 06/10/80  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [I&C] PSE NPO NAN
S. E. Trainsman 08/31/82  FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)  L. W. Horn 10/29/82  SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRIC C	SHEET OF	1
DIABLO CANYON PLANT, UNIT M		
SEISMICALLY INDUCED SYSTEMS INTERAC	TION PROGRAM :	
. INTERACTION DOCUMENTATION SHEE	T (IDS)	
POSTULATED INTERACTION NO.: 03-28-13-01		
FIRE ZONE 3-BB LOCATION Penetration Area	FLOOR ELEVATION 115'-0	<u>,                                    </u>
LOCATION WITHIN FIRE ZONE: Elev. 125, near MS Loop 3, 4 Penetration		
IDENTIFICATION OF INTERACTING COMPONENTS		
SOURCE: Overhead light fixture, ball/socket mounted. (2	URCE CODE: E-LF-388 fixtures)	
TARGET:	RGET CODE: I-PT546A	
PT-546A	•	
	NOMENA CODE: FIXTURE	
Fixture falls, impacts PT-546A		
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly by a	nalvsis.	•
Elisare shares and the meaning processes as		
•		
	•	
M. Jones 6/4/80_		
WALKDOWN TEAM ORIGINATOR/DATE	ч	,
Programment of		
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field in	spected and verified to b	oe o
installed in accordance with PG&F Dwg. 050041, D	etail 9 (Category X).	
This fixture type has been qualified by analysis No further action necessary. Resolved by analys	per calculation 52.24.52	2.
•		
R. J. Swaim 3/4/83	G. C. Bhatt 03/04/83	<del></del>
DISCIPLINE ENGINEER/DATE	NGR. GROUP SUPERVISOR/DAT	. C
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS E	CNG GC HVAC I&C PSE F	IPO N

L. W. Horn 8/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET1 OF1
------------

POSTULATED INTERACTION NO.: 03-28-14-01	·
FIRE ZONE 3-BB LOCATION Penetration A	rea FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near MS Loop 3, 4 Penetration	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead light fixture, ball/socket mounted	SOURCE CODE: E-1F-3BR d. (2 fixtures)
TARGET: PT-546A tubing	TARGET CODE: _T-PT546A
POSTULATED INTERACTION: Fixture falls, impacts PT-546A tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of fixture mount, possibly	y by analysis.
M. Jones 6/4/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been fixed installed in accordance with PG&E Dwg. 0500.  This fixture type has been qualified by analytical source. Resolved by a fixed by a	041, Detail 9 (Category X). alysis per calculation 52.24.52.
R. J. Swaim 3/4/83 DISCIPLINE ENGINEER/DATE	G. C. Bhatt 03/04/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE]	EMS ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 8/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

[0006A/0066Z-24]

SHEET	1	OF	1	

L. W. Horn 04/20/84 SIP PROJECT ENGINEER APPROVAL/DATE

# PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 03-28-23-01	•
FIRE ZONE 28 LOCATION Outside Area	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 140, near SG 1—3 release to atmosphere	inside panel.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Panel (8' tall).	SOURCE CODE: I-PANEL
TARGET: Flex K6557 to valve.	TARGET CODE: E-K6557-1
Postulated Interaction:  Panel falls (assumed to be Class II).	PHENOMENA CODE: SPTFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of panel.	
Edward Denison 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Valve panel and the supporting platform (19G4- as Class I structures. See Calcs No. 52.15.12 DC1-EC-13109-RD.	-1) have been checked and qualified 2.6. For modification see DCN No.
S. Gaballah 08/04/83 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS	J. K. McCall 08/04/83 ENGR. GROUP SUPERVISOR/DATE S ENG GC HVAC ICC PSE NPO NAM

568/8Y

S. E. Traisman 02/74/84
FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS CNLY)

[0009A/0070Z-22]

•	
PACIFIC GAS & ELECTR: DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INTI INTERACTION DOCUMENTATION S	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 03-28-23-02	· ·
FIRE ZONE _28 LOCATION Outside Areas	FLOOR ELEVATION 140'-0"
1.OCATION WITHIN FIRE ZONE: Elev. 140', inside panel (15 <sup>7</sup> ), near SG 1-3 (	release to atmosphere.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Construction deficiency.	SOURCE CODE: NS-CD
TARGET: Flex conduits associated with K6557 and K658:	TARGET CODE: F-K6557+
POSTULATED INTERACTION:  Toose connection at couplings to target condu	PHENOMENA CODE: HOUSEKEEP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Tighten connections to valve.	
E. Denison 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Resolved per ART 155.	
DISCIPLINE ENGINEFR/DATE	A. G. Barta 07/15/81  ENGR. GROUP SUPERVISOR/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 06/06/83 SIP PROJECT ENGINEER APPROVAL/DATE

DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE EE FMS ENG [QC] HVAC I&C PSE NPO NAN

SHEET	.1	OF	1

POSTULATED INTERACTION NO.: 03-29-01-01
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 160', around steam generator 1-1.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-1C  Kick plate and platform grating.
TARGET:  Instrument tap & root valve to LT-501.
POSTULATED INTERACTION:  Steam generator thermal and/or seismic movements could result in platform structure and kick plate impacting instrument tap and root valve.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Provide additional clearance between platform, etc. and instrument tap.  2. Ensure integrity of platform, etc. by simplified analysis.
M. Jones 04/01/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: This interaction duplicates interaction No. 03-30-01-02.
S. Hanusiak 01/21/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak 01/27/81  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] FF FMS FNG GC HVAC TCC RSF NPO NA

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 10/25/83 SIP PROJECT ENGINEER APPROVAL/DATE



ĺ

SHEET	1	OF	1

	•
POSTULATED INTERACTION NO.: 03-29-01-02	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 104'-7"
LOCATION WITHIN FIRE ZONE: Elev. 110', at missile barrier, near steam of	generator 1-1.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Construction deficiency.	SOURCE CODE: NS-CD
TARGET: Instrument tubing to LT-501.	TARGET CODE: I-I.T501
POSTULATED INTERACTION: Tubing clips are missing (2 places).	PHENOMENA CODE: HOUSEKEFP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace missing tubing clips.	· -
M. Jones 12/02/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPITNE: Two tubing clips installed as required per	ART 144.
F. M. Valeriano 04/27/81 DISCIPLINE ENGINEER/DATE	F. Mori 07/23/84  ENGR. GROUP SUPERVISOR/DATE
DISCIPITNE RESPONSIBLE FOR RESOLUTION: CF. FF. E	ms ENG [ <u>QC]</u> HVAC I&C PSE NPO NAN
S. Harris 02/17/84  FIFID VERIFICATION BY WALKDOWN TEAM  (FOR MODIFICATIONS ONLY)	L. W. Horn 02/17/84 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET1_ OF1_	
Program DS)	
OOR ELEVATION 91'-0"	
CODE: E-LF-1A	
CODE: I-LT501	
NA CODE: FIXTURE .	•

POSTULATED INTERACTION NO.: 03-29-01-03	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 98, near missile barrier 335°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead light fixture.	SOURCE CODE: E-LF-1A
TARGET: Instrument tubing to LT-501.	TARGET CODE: I-LT501
POSTULATED INTERACTION: Light fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE .
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	·
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Wall mounted rigidly fixed incandescent ltg.  O50041. Field inspection reveals interaction Resolved by analysis. See Cloud Report No.	n not credible. No action necessary
R. J. Swaim 01/14/83 DISCIPLINE ENGINEER/DATE	V. Shet 01/14/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EM	S ENG GC HVAC ICC PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM S (FOR MODIFICATIONS ONLY)	L. W. Horn 01/27/83 IP PROJECT ENGINEER APPROVAL/DATE

J.:: J. 1	SHEET	1	OF	1
-----------	-------	---	----	---

POSTULATED INTERACTION NO.: 03-29-01-04	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-1, at missile barrier.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Air registers (2).	SOURCE CODE: H-DUCT-1B
TARGET: Instrument tubing to LT-501.	TARGET CODE: I-LT501
POSTULATED INTERACTION: Registers fall, impact tubing.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by simplif	ied analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Attached EDS nuclear/calculation/problem No. registers will not fall. No field modificat	
•	
DISCIPLINE ENGINEER/DATE .	D. W. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	s eng CC [ <u>hag</u> ] igc baé ndo nav

L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE



PACIFIC GAS & ELE DIABLO CANYON PLANT, SEISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTATI	UNIT NO. 1 INTERACTION PROGRAM
POSTULATED INTERACTION NO.: 03-29-03-03	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Flev. 117 Az. 208º against cont. wall be	low box BTX8E.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Grating and beam supported to interior st	SOURCE CODE: C-GRATING ructure.
TARGET: Conduit KX390 supported to cont. wall.	TARGET CODE: E-KX390-1.50
POSTULATED INTERACTION:  As conduit drops through grating it is ad beam. Differential seismic motion could ing and conduit. Existing gap is ± 1/8".	cause impact between beam or grat
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  . Modify conduit to ensure minimum spacing	requirements.
K. N. Anderson 02/11/81 WALKDOWN TEAM ORIGINATOR/DATE	
Penetration by RESPONSIBLE DISCIPLINE:  Penetration box BTX8E and support S206 for detached from containment wall per DCN DC the possibility of impact between CND. and to differential motion between containment action necessary. Resolved by modification any previous resolution of this interaction.	1-FC-3604. This modification eliminate: d platform grating and/or floor beam du t and annulus structure. No fúrther on. This resolution supercedes
R. J. Swaim 06/24/83 DISCIPLINE ENGINEER/DATE	S. Auer 08/23/84 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE  $[\underline{\text{FE}}]$  EMS ENG GC HVAC I&C PSE NPO NAN

I. W. Horn 01/18/84
SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman 11/02/83
FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

KGB

SHEET	1	OF	_1_

TMI	EKHCIION DOCUMENIA:	ITOM SHEET (TDS)	<b>t</b>
POSTULATED INTERACTION NO.	: _03-30-01-01		
FIRE ZONE 1-A LO	CATION <u>Containment</u>	FLOOR, ELEV	ATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, on missile	wall, 295°.		•
IDENTIFICATION OF INTERACT	ING COMPONENTS	•	,
SOURCE: 1" line 1870-SG 1,2 N	supply.	SOURCE CODE:	P-1870-1
TARGET: Mechanical panel 56 tu	ubing.	TARGET CODE:	I-PM56
POSTULATED INTERACTION: Line 1870 does not mee damage mechanical pane			SPTFAIL & PIPEFAIL Pipe could fall,
RECOMMENDED RESOLUTION BY WE Perform additional sein supports. Add restrain	ismic analysis on l	ine 1870 to ensure i	ntegrity of the
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DA	<del>nte</del>		
FINAL RESOLUTION BY RESPONS  Hanger DWG. 049339 Sht by H. Hohmann dated 08  Jones dated 02/24/82 w  report.	. 117 is a portion 3/02/82 is a respon	se to field verifica	tion report by M.
C. R. VanNatta 01/24/83			e 01/24/83
DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR	RESOLUTION: CE EE	•	UPERVISOR/DATE  I&C [PSE] NPO NAN
S. E. Traisman 12/ FIELD VERIFICATION BY WALKD (FOR MODIFICATIONS ONLY)	19/83 OWN TEAM	L. W. Horn SIP PROJECT ENGINE	O4/15/83 EER APPROVAL/DATE

[0032A/0074Z-5]

SHEET	1_	OF	_1_
-------	----	----	-----

POSTULATED INTERACTION NO.: 03-30-01-02	· ·
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 160', around steam generator 1-1.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Kick plate and platform grating.	SOURCE CODE: C-PLAT-1C
	·
TARGET: Instrument tap & root valve to LT-517.	TARGET CODE: I-LT517
POSTULATED INTERACTION:  Steam generator thermal and/or seismic move structure and kick plate impacting instruments.	PHENOMENA CODE: INTERFERE ements could result in platform ent tap and root valve.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Provide additional clearance between polytomic description of platform, etc. by second control of platform.	
M. Jones 04/01/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Existing clearance is adequate by analysis subject to modification per DCN DC1-EC-3897	also platform is seismically qualified 7. See Calc. No. 03-30-01-02.
S. Hanusiak 01/21/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	E. P. Wollak 01/22/81 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO NAN
M. Baker 06/28/83. FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 10/25/83 SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

SHEET	1	OF	1

55

			) )
POSTULATED INTERACTION	NO.: 03-30-01-03		, -
FIRE ZONE 1-C	LOCATION Containment	FLOOR ELEVATION	140'-0"
LOCATION WITHIN FIRE 2 Elev. 140', insid	CONE: de SG 1—1 shield wall.	•	
IDENTIFICATION OF INTE	RACTING COMPONENTS		
SOURCE: Construction defi	ciency.	SOURCE CODE: NS-CE	)
TARGET: Instrument tubing	3 to I.T-517.	TARGET CODE: I-LTE	517
POSTULATED INTERACTION Support clamps mi	<u>l</u> : ssing to this and other	PHENOMENA CODE: HOU stainless tubing in this	
RECOMMENDED RESOLUTION Replace missing s		•	
M. Jones 04/01/WALKDOWN TEAM ORIGINAT	TOR/DATE		
	nstalled as required per	· ART 272.	
F. M. Valeriano 07/10 DISCIPLINE ENGINEER/I	DATE	G. H. Moore C ENGR. GROUP SUPERV EMS ENG [QC] HVAC ISC	ISOR/DATE
S. Harris 02/19 FIELD VERIFICATION BY (FOR MODIFICATIONS CAN	WALKDOWN TEAM	L. W. Horn SIP PROJECT ENGINEER A	09/30/82 PPROVAL/DATE

SHEET	1	_ OF	_1_

02/16/83

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

# PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT MO. 1 SFISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 03-30-01-04	<u> </u>
FIRE ZONE 1-R LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: . Flev. 125', at missile barrier, 313°.	•
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Line 1870-1"; N <sub>2</sub> supply line.	SOURCE CODE: P-1870-1
TARGET: Instrument tubing to LT-517.	TARGET CODE: T-I.T517
POSTULATED INTERACTION:  Pipe falls on tubing due to failure of fixed:	PHENOMENA CODE: SPTFAIL -end rod supports.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of line 1870 by analysis.	<i>:</i>
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE	x
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Design calculations by H. Hohmann date 08/02 DCN-DC1-EP-3606, resolves all interactions i Report by M. Jones dated 02/24/82.	/82, ART—010, DWG 049339, and dentified in the Field Verification
C. R. VanNatta 01/24/83 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EM	K. M. Krause 01/24/83 EMGR. GROUP SUPERVISOR/DATE S EMG GC HVAC ISC [PSE] MPO MAN
	•

M. Baker 02/14/83

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

	SHEET	1	OF	1
--	-------	---	----	---

POSTULATED INTERACTION NO.: 03-30-01-05
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-1, at missile barrier.
IDENTIFICATION OF INTERACTING COMPONENTS .
SOURCE:  Air registers (2).  SOURCE CODE: H-DUCT-18
TARGET:  Instrument tubing to LT-517.  TARGET CODE: I-LT517
POSTULATED INTERACTION:  Registers fall, impact tubing.  PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by simplified analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Registers qualified by analysis. See IDS No. 03-29-01-04.
D. H. Hagstrom 09/08/82
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN
L. W. Horn 09/08/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

[0013A/0081Z-8]

SHFET	•	OF	•
SHEEL	- 1	( )↓	

	•	<b>\</b>	
POSTULATED INTERACTION	NO.: 03-30-02-01	<del></del>	
FIRE ZONE 1-A	LOCATION Containment	FLOOR ELI	EVATION 117'-0"
LOCATION WITHIN FIRE Z Flev. 117', on mi			
IDENTIFICATION OF INTE	RACTING COMPONENTS		
<u>SOURCE</u> : 1" line 1870-SG 1	,2 Nz supply.	SOURCE CODE:	P-1870-1
TARGET: Mechanical panel	56.	TARGET CODE:	
POSTULATED INTERACTION Line 1870 does no damage mechanical	t meet B31.1 hanger spacing		E: <u>SPTFAIL &amp; PTPEFATI.</u> Line 1831 could fall
	BY WALKDOWN TEAM: I seismic analysis of line straints as required.	1870 to ensure	: integrity of the
(DCN-DC1-FP-3606 )	DR/DATE.	ncerns identifi	
C. R. VanNatta 01/2. DISCIPLINE ENGINEER/DE DISCIPLINE RESPONSTRLE		ENGR. GROUP	CAUSE 01/24/83 SUPERVISOR/DATE OC ISC [PSE] NPO NAN

S. E. Traisman 04/19/83
FIFID VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

I. W. Horn 04/19/83 SIP PROJECT ENGINEER APPROVAL/DATE

كبها

SHEET TOP I	SHEET	1	OF	1	
-------------	-------	---	----	---	--

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-31-01-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, on missile wall, 295°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  1" Line 1870-SG 1,2 N <sub>2 supply</sub> .  SOURCE CODE: P-1870-1
TARGET:  Mechanical panel 52 tubing.  TARGET CODE: I-PM52
PHENOMENA CODE: SPTFAIL & PIPEFAIL  Line 1870 hanger does not meet B31.1 hanger spacing requirements. Pipe could fall, damage mechanical panel 52 tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional seismic analysis on line 1870 to insure integrity of the supports. Add restraints as required
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hanger DWG. 049339 SHT. 117 is a portion of DCN DC1-EP-3606. Design calculations by H. Hohmann dated 08/02/82 is a response to field verification report by M. Jones dated 02/24/82 which resolves all interaction concerns identified in the report.
C. R. VanNatta 01/24/83 K. M. Krause 01/24/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 12/19/83 L. W. Horn 04/15/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

SHEET	1	ΛC	1
SHEEL		OT-	

POSTULATED INTERACTION NO.: 03-31-01-02					
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"				
LOCATION WITHIN FIRE ZONE: Elev. 160', around steam generator 1-1.					
IDENTIFICATION OF INTERACTING COMPONENTS	·				
SOURCE:  Kick plate and platform grating.	SOURCE CODE: C-PLAT-1C				
TARGET: Instrument tap & root valve to LT-518.	TARGET CODE: I-LT518				
POSTULATED INTERACTION:  Steam generator thermal and/or seismic movements could result in platform structure and kick plate impacting instrument tap and root valve.					
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Provide additional clearance between place.  2. Ensure integrity of platform, etc. by s					
M. Jones 04/01/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Existing clearance is adequate by analysis. See resolution and calc. sheets.  Also see IDS File #03-30-01-02 for platform integrity.					
S. Hanusiak 01/21/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	E. P. Wollak 01/27/81 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO NAN				
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 10/25/83 SIP PROJECT ENGINEER APPROVAL/DATE				

			•	
SHEET	1_	_ OF	1	

POSTULATED INTERACTION NO.: _	03-31-01-03	<del></del>
FIRE ZONE 1-B LOCAT	ION <u>Containme</u>	ent FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-1,	at missile bar	rrier.
IDENTIFICATION OF INTERACTING	COMPONENTS	1
SOURCE: Air registers (2).	٠	SOURCE CODE: H-DUCT-1B
TARGET: Instrument tubing to LT-	518.	TARGET CODE: I-I.T518
POSTULATED INTERACTION: Registers fall, impact to	ubing.	PHENOMENA CODE: MECHFAIL
•		
RECOMMENDED RESOLUTION BY WALK Ensure integrity of air i		implified analysis.
		·
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE		
FINAL RESOLUTION BY RESPONSIBLE Register qualified by ana		OS 03-29-01-04.
	•	· · · · · · · · · · · · · · · · · · ·
	,	D. H. Hagstrom 09/08/82
DISCIPLINE ENGINEER/DATE		ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RES	SOLUTION: CE E	E EMS ENG GC [HVAC] ICC PSE NPO NAN
	r, •	
FIELD VERIFICATION BY WALKDOWN	TEAM	I. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

RIS

SHEET	1	<b>OF</b>	1
-------	---	-----------	---

POSTULATED INTERACTION NO.: 03-31-02-01	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, on missile wall, 295°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: 1" line 1870—SG 1,2 N <sub>2</sub> supply.	SOURCE CODE: P-1870-1
TARGET: Mechanical panel 52.	TARGET CODE: I-PM52
POSTULATED INTERACTION: Line 1870 does not meet B31.1 hanger spacing damage mechanical panel 52.	PHENOMENA CODE: SPTFAIL & PIPEFAIL requirements. Line 1831 could fall,
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional seismic analysis on line supports. Add restraints as required.	1870 to ensure integrity of the
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hanger DWG. 049339 SHT. 117 is a portion of by H. Hohmann dated 08/02/82 is a response t Jones dated 02/24/82 which resolves all inte report.	o field verification report by M.
C. R. VanNatta 01/24/83 DISCIPLINE ENGINEER/DATE	K. M. Krause - 01/24/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE E	IS ENG GC HVAC ICC [PSE] NPO NAN
S. E. Traisman 12/19/83 FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 04/15/83 SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS CNLY)

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-32-01-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117', on missile wall, 295°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  1" line 1870-SG1, 2 N <sub>2</sub> supply.  SOURCE CODE: P-1870-1
TARGET: TARGET CODE: I-PM48  Mechanical panel 48 tubing.
POSTULATED INTERACTION:  Line 1870 does not meet B31.1 hanger spacing requirements. Line 1870 could fall, damage mechanical panel 48 tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional seismic analysis on line 1870 to ensure integrity of the supports. Add restraints as required.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hanger DWG 049339 Sht. 117 is a portion of DCN DC1-EP-3606. Design calculation b H. Hohmann dated 08/02/82 is a response to field verification report by M. Jones dated 02/24/82 which resolves all interaction concerns identified in the report.
C. R. VanNatta 01/24/83  DISCIPLINE ENGINEER/DATE  K. M. Krause  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

S. E. Traisman 12/19/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

> 04/15/83 L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE

SHEET1. OF _	1
--------------	---

FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"

POSTULATED INTERACTION NO.: 03-32-01-02

(FOR MODIFICATIONS ONLY)

F00384/01007-207

LOCATION WITHIN FIRE ZONE: Elev. 160', around steam generator 1-1.	
IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE:	SOURCE CODE: C-PLAT-1C
Kick plate and platform grating.  TARGET:	TARGET CODE: I-LT519
Instrument tap & root valve to LT-518.  POSTULATED INTERACTION:	DHENOMENA CODE: TATEPEEPE
Steam generator thermal and/or seismic mov structure and kick plate impacting instrum	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Provide additional clearance between p  2. Ensure integrity of platform, etc: by	•
M. Jones 04/01/80 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Source (platform 76F) is Class I platform containment Calc. #769 — 1 thru 8 also exi analysis. See resolution sheet and referen	sting clearance is adequate by
S. Hanusiak 01/21/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak 01/27/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	EMS ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 10/25/83 SIP PROJECT ENGINEER APPROVAL/DATE

5.58184

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 03-32-01-03	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-1, at missile barrier.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Air registers (2).	SOURCE CODE: H-DUCT-18
TARGET: Instrument tubing to LT-519.	TARGET CODE: I-LT519
POSTULATED INTERACTION: Registers fall, impact tubing.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by simpli	fied analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS No	. 03-29-01-04.
DISCIPLINE ENGINEER/DATE	D. H. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE E	
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

[0013A/0081Z-10]

SHEET	11	OF	1

×
POSTULATED INTERACTION NO.: 03-32-02-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, on missile wall 295°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-1870-1  1" line 1870-SG 1,2 N2 supply.
TARGET: TARGET CODE: I-PM48  Mechanical panel 48.
POSTULATED INTERACTION:  Line 1870 does not meet B31.1 hanger spacing requirements. Pipe could fall on mechanical panel.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional seismic analysis on line 1870 to ensure integrity of the supports. Add restraints as required.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hanger DWG. 049339 Sht. 117 is a portion of DCN DC1-EP-3606. Design calculation by H. Hohmann dated 08/02/82 is a response to field verification report by M. Jones dated 02/24/82 which resolves all interaction concerns identified in the report.
C. R. VanNatta 01/24/83 DISCIPLINE ENGINEER/DATE  K. M. Krause 01/24/83 ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NA
S. E. Traisman 12/19/83 I. W. Horn 04/15/83  FTELD VERTECATION BY HALKDOWN TEAM STR DROTTER ADDROVAL (DATE

(FOR MODIFICATIONS ONLY)

SHEET	1	0F	1

THIERHOLION DOCOMENINITON SHEET (TD2)
POSTULATED INTERACTION NO.: 03-32-05-01
FIRE ZONE 1-A . LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117', on missile wall, 295°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-1870-1  1" line 1870-SG 1,2 N2 supply.
TARGET: TARGET CODE: I-LT516  LT 516.
POSTULATED INTERACTION:  Line 1870 does not meet B31.1 hanger spacing requirements. line 1870 could fall, damage LT 516.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional seismic analysis on line 1870 to ensure integrity of the supports. Add restraints as required.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hanger DWG 049339 Sht. 117 is a portion of DCN DC1-EP-3606. Design calculation by H. Hohmann dated 08/02/82 is a response to field verification report by M. Jones dated 02/24/87 which resolves all interaction concerns identified in the report.
C. R. VanNatta 01/24/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 01/24/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 12/19/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS CALLY)

SHEET 1 OF 1	
--------------	--

	•
POSTULATED INTERACTION NO.: 03-33-01-01	<del></del>
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, on missile wall, 295°.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: 1" line 1870—SG 1,2 N <sub>2</sub> supply.	SOURCE CODE: P-1870-1
TARGET: Mechanical panel 44 tubing.	TARGET CODE: I-PM44
	•
POSTULATED INTERACTION:  Line 1870 does not meet B31.1 hanger spacing damage mechanical panel 44 tubing.	PHENOMENA CODE: SPTFAIL & PIPEFAIL requirements. Line 1831 could fall,
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional seismic analysis on line supports. Add restraints as required.	1870 to ensure integrity of the
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hanger DWG. 049339 SHT. 117 is a portion of the by H. Hohmann dated 08/02/82 is a response to Jones dated 02/24/82 which resolves all interpret.	o field verification report by M.
C. R. VanNatta 01/24/83 DISCIPLINE ENGINEER/DATE	K. M. Krause - 01/24/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EM	S ENG GC HVAC ISC [PSE] NPO NAN
S. E. Traisman 10/14/83  FIELD VERIFICATION BY WALKDOWN TEAM ST	L. W. Horn 04/15/83 IP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

			•
CUCET	4	ΛE	•
SHEET	1	UT	1

•	INTERACTION DOCUMENTA	ATION SHEET (IDS)	
POSTULATED INTERACTI	ON NO.: 03-33-01-02	<del></del> .	
FIRE ZONE 1-C	LOCATION <u>Containmer</u>	nt FLOOR ELEVATION 140'-0"	
LOCATION WITHIN FIRE Elev. 160', aro	ZONE: und steam generator 1-1.	·	
IDENTIFICATION OF IN	TERACTING COMPONENTS	,	
SOURCE: Kick plate and	platform grating.	SOURCE CODE: C-PLAT-1C	
TARGET: Instrument tap	& root valve to FT-512.	TARGET CODE: I-FT512	
	thermal and/or seismic	PHENOMENA CODE: INTERFERE movements could result in platform trument tap and root valve.	v
		en platform, etc. and instrument tap. by simplified analysis.	
M. Jones 04/0			
Existing cleara		ysis. See resolution sheet and 03-30-01-02 for platform integrity.	
S. Hanusiak 01/2 DISCIPLINE ENGINEER DISCIPLINE RESPONSIBI	DATE	E. P. Wollak 01/27/81 ENGR. GROUP SUPERVISOR/DATE  EE EMS ENG GC HVAC I&C PSE NPO I	Nan
FIELD VERIFICATION BY (FOR MODIFICATIONS OF		L. W. Horn 10/25/83 SIP PROJECT ENGINEER APPROVAL/DATE	

POSTULATED INTERACTION NO.: 03-33-01-03	,
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elêv. 125, near RCP 1-1, at missile barrie	er.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Air registers (2).	SOURCE CODE: H-DUCT-18
TARGET: Instrument tubing to FT-512.	TARGET CODE: I-FT512
POSTULATED INTERACTION: Registers fall, impact tubing.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  'Ensure integrity of air registers by simple	ified analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS N	o. 03–29–01–04.
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	D. H. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE . EMS ENG GC [HVAC] I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1_	OF	1_

•	· ·
POSTULATED INTERACTION NO.: 03-33-02-01	
FIRE ZONE 1-A LOCATION Containment	t FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, on missile wall, 295°.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: 1" line 1870-SG 1,2 N <sub>2</sub> supply.	SOURCE CODE: P-1870-1
TARGET:  Mechanical panel 44.	TARGET CODE: I-PM44
POSTULATED INTERACTION:  Line 1870 hangers do not meet B31.1 hang fall, damage mechanical panell 44.	PHENOMENA CODE: SPTFAIL & PIPEFAIL ger spacing requirements. Line 1831 could
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional seismic analysis on l supports. Add restraints as required	line 1870 to insure integrity of the
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hanger DWG. 049339 SHT. 117 is a portion by H. Hohmann dated 08/02/82 is a respondance of the dated 02/24/82 which resolves all report.	
C. R. VanNatta 01/24/83 DISCIPLINE ENGINEER/DATE	K. M. Krause - 01/24/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE 'EE	E EMS ENG GC HVAC I&C [PSE] NPO 'NAN
•	
S. E. Traisman 12/19/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 04/15/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	0F	1

POSTULATED INTERACTION NO.: 03-34-01-02
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-1, at missile barrier.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Air registers (2).  SOURCE CODE: H-DUCT-1B
TARGET: TARGET CODE: I-FT513 .  Instrument tubing to FT-513.
POSTULATED INTERACTION:  Registers fall, impact tubing.  PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of air registers by simplified analysis.
-
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS No. 03-29-01-04.
D. H. Hagstrom 09/08/82 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN
L. W. Horn 09/08/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

[0013A/0081Z-14]

(FOR MODIFICATIONS ONLY)

SHEET 1 OF	1
------------	---

POSTULATED INTERACTION NO.: 03-35-01-01	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91, along missile wall 60°.	. • '
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: 2" scupper drain (line 4397).	SOURCE CODE: P-4397-2
TARGET: Instrument panel 84 tubing.	TARGET CODE: I-PM84
POSTULATED INTERACTION: Drain line 4397 runs 2' above tubing. Dr	PHENOMENA CODE: SPTFAIL rain line falls, impacts tubing
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	
Perform additional seismic analysis on li supports.	ine 4397 to ensure integrity of the
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE	ı
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hanger modified. See IDS file No. 07-12-	02-01.
P. H. Anderson 01/14/81 DISCIPLINE ENGINEER/DATE	J. A. Ante 01/14/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	EMS ENG GC HVAC ! I&C [PSE] NPO NAN
S. E. Traisman 02/19/83  FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 11/12/82 SIP PROJECT ENGINEER APPROVAL/DATE

SW

	SETS	DIABLO (	CANYON PLANT JCED SYSTEMS	, UNIT	NO. 1	ROGRAM			
*	0220		N DOCUMENTAT					•	
POSTULATED	INTERACTION	NO.: 03-3	5-01-03		-	-			(
FIRE ZONE	1-R	LOCATION .	Containment		· FLOOF	R ELEVA	TION 91'-	-0"	_ )
	ITHIN FIRE Z								
IDFNTIFICA	TION OF INTE	RACTING COM	PONENTS						•
SOURCE: 1" RC	P #3 seal wa	ter lines.		<u>s</u>	OURCE CO	NOF: P	-USB-1R		
<u>TARGET</u> : Instr	ument tubing	to 1T-502.	•	<u>1</u>	ARGET CO	<u>π</u> : <u>π</u>	-I T502		_
	INTERACTION al movement		results in				DFFLFCT		<b></b>
		4	•						
	N RESOLUTION te tubing aw g.			vide mi	nimum 6'	' clear	ance, or <u>c</u>	guard	
	•		٠						
	nes 12/03/8						•		
FINAL RESO	LUTION BY RE	SPONSIBLE D	ISCTPLINE: to provide a	dequat.e	clearar	ice.			
F. M. Val	eriano 01/15 E ENGINFER/D	/82 ATE		_			06/18/84 PERVISOR/D		
DISCIPLINE	RESPONSIBLE	FOR RESOLU	FION: CE EE	EMS	ENG GC	HVAC	[I&C] PSE	NPO	NAN
M. Jo	nes 05/0 FICATION BY	5/82 HALKDOWN TE	<del>-</del>	SIP	I W. I	lorn ENGINE	09/30/82 ER APPROV	2 AL/DAT	Ē

SHEET \_\_\_1 OF \_\_1

(FOR MODIFICATIONS ONLY)

·	SEISMTCAL	IABLO CA	C GAS & FI.E NYON PLANT, ED SYSTEMS DOCUMENTATI	UNIT I	WO. 1 TTION PI		1_	_ OF .		•
POSTULATED I	NTERACTION NO.:	03-35-	01-04			-				
FIRE ZONE 1	<u>-B</u> LOO	MOITA	Containment	<u>.                                    </u>	_ FLOOR	R ELEVA	MOIT	91'	-0"	_
	HIN FIRE ZONE: 10, next to SG	1-2.								
IDENTIFICATI	ON OF INTERACTI	NG COMPO	NENTS							
SOURCE: Light f	ixture.			<u>s</u>	OURCE CO	<u> </u>	-LF-1	B		<b>-</b> ·
TARGET: Instrum	ent tubing to L	T-502.		<u>Tr</u>	ARGET CO	<u> 30</u> 0: _ <u>1</u>	<u>-I.T50</u>	2		_
. <u>POSTULATED I</u> Fixture	NTERACTION: falls, impacts	tubing.		<u>РНЕ</u>	ENOMENA	CODE:	FIXT	URE		_
	RESOLUTION BY Wintegrity of li									
M. Jones 12.	/03/80 1 ORIGINATOR/DA	TE	•							
Resolve	TION BY RESPONS d by analysis. A Report 8 & 7	light f	ixture was	qualifi	ed by (	Civil C	alc. !	52.24	.52	
	waim 01/25/83 FNGTNFER/DATE				G. C. E				ATE	
DISCIPLINE RE	ESPONSJBIE FOR	RESOLUTIO	ON: CE [ <u>EF</u> ]	EMS E	ING GC	HVAC	I&C	PSE	NPO	NAN

L. W. Horn,

SIP PROJECT ENGINEER APPROVAL/DATE

FJFI.D VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

Acres

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 03-35-01-05
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-1, at missile barrier.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Air registers (8' long).  SOURCE CODE: H-DUCT-1B
· ·
TARGET:  Instrument tubing to LT-502.  TARGET CODE: I-LT502
POSTULATED INTERACTION:  Register falls, impacts tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by simplified analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS No. 03-29-01-04.
D. H. Hagstrom 09/08/82
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN
L. W. Horn 09/08/82
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

[0013A/0081Z-7]

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 03-35-02-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'-O"
LOCATION WITHIN FIRE ZONE: Elev. 91, along missile wall 60°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  2" scupper drain (line 4397).
TARGET: TARGET CODE: I-PM84 Instrument panel 84.
POSTULATED INTERACTION:  Drain line 4397 runs 2' above panel.  PHENOMENA CODE: SPTFAIL  Drain line falls, impacts panel.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional seismic analysis on line 4397 to ensure integrity of the supports.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hanger modified. See IDS file No. 07-12-02-01.
P. H. Anderson 01/14/81  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAME OF THE PROPERTY OF THE PROP
S. E. Traisman 02/19/83  FIELD VERIFICATIONS ONLY)  L. W. Horn 11/02/82  SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 03-35-02-02	·
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: . Elev. 91', at missile barrier, 60°.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Iodine Removal Unit E-16.	SOURCE CODE: H-E16
TARGET: Instrument panel 84.	TARGET CODE: _I-PM84
POSTULATED INTERACTION:  Iodine removal unit mounting bolts fail in panel.	PHENOMENA CODE: SPTFAIL n shear, resulting in unit sliding into
•	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Install hold-down clamps to unit mounting	skid to preclude movement of unit.
•	•
•	
M. Jones 08/12/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  EDS Calc. No. 1 has demonstrated the adequated modifications are required.	uacy of the existing anchorage. No field
•	,
,	•
DISCIPLINE ENGINEER/DATE	D. H. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	
The second secon	
	L. W. Horn 09/10/82
FIELD VERIFICATION BY WALKDOWN TEAM	SIP PROJECT ENGINEER APPROVAL/DATE

My.

SHEETI UP I	SHEET	1 _	OF	1
-------------	-------	-----	----	---

POSTULATED INTERACTION NO.: 03-36-01-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 123, at missile barrier, 36°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Wall mounted light fixture.
TARGET:  Instrument tubing to FT-522.
POSTULATED INTERACTION:  PHENOMENA CODE: FIXTURE  Fixture falls, impacts tubing. Fixture is mounted loosely to existing  J-Box.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Secure light fixture to J-Box.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by Modification. Mounting was inspected and found to be flexible but positively attached. Judged acceptable. See ART 136.
A. G. Barta 02/12/82 W. Vahlstrom 02/12/82 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAM
S. Harris 02/19/82 L. W. Horn 09/30/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

SHEET	1	OF	
-------	---	----	--

POSTULATED INTERACTION NO.: 03-36-01-02	
FIRE ZONE 1-B LOCATION Containm	ent FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-2, at missile ba	rrier.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Air registers (8' long).	SOURCE CODE: H-DUCT-1B
TARGET: Instrument tubing to FT-522.	TARGET CODE: _I-FT522
POSTULATED INTERACTION: Register falls, impacts tubing.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by s	implified analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See I	
DISCIPLINE ENGINEER/DATE	D. H. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE	EE EMS ENG GC [HVAC] I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

RYS

				,	Sł	HEET 1	OF 1	
		SEI	DIABLO (	FIC GAS & ELECTR CANYON PLANT, UR UCED SYSTEMS INT N DOCUMENTATION	RIC CO. HIT NO. 1 TERACTION PROC	•		_
POSTI	JLAŤED	INTERACTIO	N NO.: 03-3	6-03-02		•		
FIRE	ZONE .	1-A	LOCATION .	Containment	FLOOR I	ELEVATION _	117'-0'	<u> </u>
LOCA		ITHIN FIRE 117 col. J	ZONE: 6 PM 45 DWG !	57685.	•			
IDEN	TIFICA	Tion of int	ERACTING COM	PONENTS				
SOUR	<del></del>	grating.			SOURCE CODE	E: <u>C-GRATI</u>	NG	
TARG		conduit.			TARGET COD	E: <u>E-</u> KX197	7-1.25	
POST	<u>ULATED</u> Grati	INTERACTION INTERA	<del>M</del> : conduit. Co	uld impact with	PHENOMENA Codamage if mo			EFL FCT
RECO			ON BY WALKDOW ion between g	N TEAM: rating and cond	, uit.		·	
WALK	J. F.	Grant 09/ EAM ORIGINA	/17/80 NTOR/DATE		, '	,		
<u>FINA</u>	L RESO Clear Note:	ance to be	RESPONSIBLE D provided per is duplicate	ISCIPLINE: ART 213. with IDS 03-40	-03-02.			
		siak 07/21 E ENGINEER/				o]]ak 00 UP SUPERVIS		<del></del>
DISC	IPLINE	RESPONSIBL	E FOR RESOLU	TION: [CE] EE E	MS ENG GC	HVAC I&C	PSE NP	o nai

L. W. Horn 09/30/82

SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

02/17/82

5 G 118 BY

FIELD VERIFICATION BY WALKDOWN TEAM

S. Harris\_

SHEET	1_	OF	_1_

POSTULATED INTERACTION NO.: 03-37-01-01
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 160', around steam generator 1-2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: Structural platform, railings and grates.  SOURCE CODE: C-PLAT-1C
TARGET:  TARGET CODE: I-FT523  Instrument tap and tubing from steam generator 1-2 to FT-523.
POSTULATED INTERACTION:  Motion of steam generator and/or platform results in contact between instrument tap and platform.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify that existing clearance between platform and instrument tap is adequate to preclude contact. Provide additional clearance if/as required.
MALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Existing clearance is adequate by analysis. See resolution and Calculation sheets for platform qualification. See IDS file No. 03-30-01-02.
S. Hanusiak 01/21/81 DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
I. W. Horn 11/01/82 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

SHEET	 1	Ur	
OGRAM			

POSTULATED INTERACTION NO.: 03-37-01-03
TRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 125'-0"
OCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-2, at missile barrier.
DENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Air registers (8' long).
TARGET: TARGET CODE: I-FT523  Instrument tubing to FT-523.
POSTULATED INTERACTION:  Register falls, impacts tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by simplified analysis.
M. Jones 12/03/80 HALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Register qualified by analysis. See IDS No. 03-29-01-04.
D. H. Hagstrom 09/08/82  DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN
L. W. Horn 09/08/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

[0013A/0081Z-10]

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM
INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-37-03-02
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 112 col. 13 near platform at valve 8703 DWG 57685.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Platform structure.  SOURCE CODE: C-PLAT-1A
TARGET:  KX246.  TARGET CODE: E-KX246-2.50
POSTULATED INTERACTION:  Platform structure within 1/8" of conduit.  Platform and/or grating could pinch conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Provide clearance between platform and conduit.
J. G. Grant 09/10/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  It has concluded the part of structure in question is a light flexible angle hanger. Very little relative movement between conduit and hanger are expected (they are attached to same structure) and flexible angle hanger is not capable o damaging rigid pipe conduit.
S. Hanusiak 01/22/81 F. P. Wollak DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

5:5/14184

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

R. L. Cloud 06/24/81
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

į

SHEET	1	OF	_ 1

POSTULATED INTERACTION NO.: 03-38-01-01
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 160', around steam generator 1-2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-1C Kick plate and platform grating.
TARGET:  TARGET CODE: I-LT527  Instrument tap & root valve to LT-527.
POSTULATED INTERACTION:  Steam generator thermal and/or seismic movements could result in platform structure and kick plate impacting instrument tap and root valve.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Provide additional clearance between platform, etc. and instrument tap.  2. Ensure integrity of platform, etc. by simplified analysis.
M. Jones 04/01/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Existing clearance is adequate by analysis. See resolution sheet and Calc. #03-38-01-01. For platform qualification see IDS File #03-30-01-02.
S. Hanusiak 01/27/81 E. P. Wollak 01/27/81 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAI
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)  S.C. 9   9   184

SHEET _	1	_ OF _	_1
DOCDAM			

L. W. Horn 02/16/83 SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 03-38-01-03	<del></del>
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'
LOCATION WITHIN FIRE ZONE: Elev. 121 at missile barrier, 16°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: lighting transformer TL-17.	SOURCE CODE: E-TL17
TARGET: Instrument tubing to 1.T-527.	TARGET CODE: 1-LT527
POSTULATED INTERACTION: Transformer overturns, impacts tubing.	PHENOMENA CODE: SPTFATL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Finsure by analysis that transformer will not	overturn.
M. G. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Bracing provided per ART 282 to prevent over cation.	turning. Resolved by modifi-
A. G. Barta 01/18/82 DISCIPLINE ENGINFER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EM	S. Auer 08/23/84 ENGR. GROUP SUPERVISOR/DATE S ENG GC HVAC I&C PSE NPO NAN

S. E. Traisman 02/14/83 FIFLD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

A213

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 03-38-01-05	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-2, at missile barrier.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Air registers (8' long).	SOURCE CODE: H-DUCT-18
TARGET: Instrument tubing to LT-527.	TARGET CODE: I-LT527
POSTULATED INTERACTION: Register falls, impacts tubing.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by simplif	fied analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS No.	03-29-01-04.
DISCIPLINE ENGINEER/DATE	D. H. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EN	AS ENG GC [HVAC] I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

RYS

	SHEET1 OF1
PACIFIC GAS & ELECTRIC DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION SE	T NO. 1 RACTION PROGRAM
POSTULATED INTERACTION NO.: 03-38-03-04	•
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117 above accum. 102 at PM57 DWG 57685.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Floor grating.	SOURCE CODE: C-GRATING
TARGET: KX195 conduit.	TARGET CODE: E-KX195-1
POSTULATED INTERACTION:  Grating contacts conduit. Could damage condu	PHENOMENA CODE: INTERFERE & DEFLECT
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Provide clearance between platform and conduit	
J. F. Grant 09/17/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Min. 2" clearance around the conduit has been	provided per ART No. 016.
S. Hanusiak 01/16/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE

M. Jones 02/17/82
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAN

ί

SHEET	1	OF	1

INTERNCTION DOCUMENT	HITOM SUEEL (IDS)
POSTULATED INTERACTION NO.: 03-39-01-01	•
FIRE ZONE 1-C LOCATION Containme	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 160', around steam generator 1-2	2.
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Structural platform, railings and graf	SOURCE CODE: C-PLAT-1C
TARGET: Instrument tap and tubing from steam of	TARGET CODE: _I-LT528 enerator 1-2 to FT-528.
POSTULATED INTERACTION:  Motion of steam generator and/or platf tap and platform.	PHENOMENA CODE: INTERFERE & DEFLECT form results in contact between instrument
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify that existing clearance between preclude contact. Provide additional	. platform and instrument tap is adequate to clearance if/as required.
M. Jones 07/16/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Existing clearance is adequate by anal Calc. #03-39-01-01. Also see IDS File	ysis. See resolution sheet and #03-30-01-02 for for platform qualification
S. Hanusiak 01/27/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE]	E. P. Wollak 01/27/81 ENGR. GROUP SUPERVISOR/DATE  EE EMS ENG GC HVAC I&C PSE NPO NAN
ETELD VEDTETCATTON BY MALVOYS TEAM	L. W. Horn 07/08/83

(FOR MODIFICATIONS ONLY)

SHEET	1	OF	_1_
-------	---	----	-----

POSTULATED INTERACTION NO.: 03-39-01-02
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-2, at missile barrier.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Air registers (8' long).
TARGET: TARGET CODE: J-LT528  Instrument tubing to LT-528.
POSTULATED INTERACTION:  Register falls, impacts tubing.  PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of air registers by simplified analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Register qualified by analysis. See IDS No. 03-29-01-04.
•
D. H. Hagstrom 09/08/82  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

[0013A/0081Z-12]

SHEET	1	OF	2

POSTULATED INTERACTION	No.: <u>03-40-01-01</u>	
FIRE ZONE _I_C	LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZO Elev. 160, around	ONE: I steam generator 1-2.	• · · · · · · · · · · · · · · · · · · ·
IDENTIFICATION OF INTER	RACTING COMPONENTS	
SOURCE: Wall (concrete).		SOURCE CODE: C-RSM-IC
TARGET: Instrument tap from	om steam generator 1—2 to	TARGET CODE: I-LT529 LT-529.
		PHENOMENA CODE: INTERFERF/DEFLECT of steam generator results in and wall.
' tap.		es not compromise instrument
M. Jones 07/15/80		
WALKDOWN TEAM ORIGINATO	DR/DATE	
interaction. No r DCPP start-up, the	nent sufficiently distant resolution required. Acco ere exists approximately 6 learance between instrumen	
050000 510 5100 5100 550 550 550 550 550		E. Connell III 07/13/84  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE ENGINEER/DA		
DISCIPLINE RESPONSIBLE	FOR RESOLUTION: CE EE [E	<u>ms] eng GC hvac 1&amp;C PSE NPO NAN</u>

FIFLD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

I.. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

11.2. 8/31/84

SHFET	2	OF	2
~~~~			_

POSTULATED	INTERACTION	NO.:	03-40-01-01	•

### CONTINUED FROM PAGE ONE:

ſ.

From the Hosgri Seismic Analysis 1-1 Rev. 6, 6-11-74; (1) the largest horizontal and vertical displacements are 0.13 inches and 0.004 inches respectively, (2) From the Flex Analysis 10 Rev. E 8-16-77, the displacements due to thermal expansion at the top of the steam generator are 2.84" vertical and 1.1" - 1.2" horizontal. (3) Therefore, the combined thermal and seismic displacements are 1.3" horizontal and 2.9" vertical, less than the allowables.

- (1) Typical for all four steam generators.
- (2) largest displacements experienced.
- (3) Conservative values considering only expansion of interests occurs to level of instrument tap.

		DIABLEISMICALLY I	CIFIC GAS & O CANYON PL NDUCED SYST ION DOCUMEN	ANT, UNIT	NO. 1	, PROGRAM	1 OF	<u> </u>	
POSTULA	TED INTERACT	ION NO.: 03	-40-01-02	<del></del>		<del></del>			
FIRE ZO	NE 1-A	LOCATIO	N <u>Contain</u>	ent	FLO	OR ELEV	ATION 91	<u>-0"</u>	-
	N WITHIN FIR ev. 123, at	E ZONE: missile barr	ier, 36 <sup>0</sup> .						
IDENTIF	ICATION OF	NTERACTING C	OMPONENTS	•					
SOURCE:		.ight fixture	•		SOURCE	CODE: _	E-LF-1A		-
TARGET:		oing to LT-52	9.		TARGET	CODE:	I-LT529	· · · · · · · · · · · · · · · · · · ·	_
Fi	TED INTERAC xture falls Box.	TION: impacts tub	ing. Fixtu	<u>ş</u> ure is mol	PHENOME! inted lo	NA CODE: posely to	FIXTURE o existing	3	<b>-</b>
		Fixture to J-		•	•				
WALKDOW FINAL R Se	N TEAM ORIG ESOLUTION B ecure light as inspected acceptable.	<pre>CNATOR/DATE  Y RESPONSIBLE fixture to J-</pre>	DISCIPLING box. Resolute be flexible	ved by mod	dificat itively	ion. Se attache	e ART 136 d. Judge	, Moun d	ling
	Barta O PLINE ENGINE	2/12/82 ER/DATE					om 02/12 UPERVISOR		
DISCIPL	IŅE RESPONS	IBLE FOR RESC	CE CE	[ <u>ee</u> ] ems	ENG	GC HVAC	I&C PS	E NPO	NAN
e	Harrie	02/19/82			L. W.	Horn	09/30/82		

· SIP PROJECT ENGINEER APPROVAL/DATE

res

S. Harris

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	1	

POSTULATED INTERACTION NO.: 03-40-01-03	
FIRE ZONE 1-B . LOCATION Containmen	FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-2, at missile barr	rier.
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Air registers (8' long).	SOURCE CODE: H-DUCT-18
TARGET: Instrument tubing to LT-529.	TARGET CODE: I-LT529
POSTULATED INTERACTION: Register falls, impacts tubing.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by sim	plified analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS	No. 03-29-01-04.
	•
DISCIPLINE ENGINEER/DATE	D. H. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	
	L. W. Horn . 09/08/82
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	SIP PROJECT ENGINEER APPROVAL/DATE

BUS

SHEET 1 OF 1
--------------

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-40-03-02
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117 col. 16 PM 45 DWG 57685.
. IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-GRATING Floor grating.
TARGET:  KX197 conduit.  TARGET CODE: E-KX197-1.25
POSTULATED INTERACTION:  Grating touches conduit. Could impact with damage if movement occurs.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Provide separation between grating and conduit.
J. F. Grant 09/17/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Min. 2" clearance around the conduit has been provided per ART No. 017.
S. Hanusiak 01/16/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
S. Harris 02/17/82  FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)  1. W. Horn 09/30/82  SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 03-40-03-03
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115', area GW.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-74GW Platform 74GW and ladder.
TARGET:  Conduit KT351-3".  TARGET CODE: E-KT351-3
POSTULATED INTERACTION: Platform and ladders fail and impact conduits.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platforms and ladder.
G. Whorinskey 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Ladder qualified by analysis. See Calc. No. 03-07-02-02. Platform 74 GW qualified by analysis subject to modification. See resolution sheet and IDS file No. 03-07-01-01 & 06-60-10-05.
S. Hanusiak 08/21/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak 09/03/81  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC IEC PSE NPO NA

5.6 7/28/84 L. W. Horn

08/23/82

SIP PROJECT ENGINEER APPROVAL/DATE

F00114/00727-127

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET	1	OF	1
-------	---	----	---

POSTULATED INTERACTION NO.: 03-41-01-01	<u> </u>
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-3, at missile barrio	er.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Air registers (2).	SOURCE CODE: H-DUCT-18
TARGET: Instrument tubing to LT-503.	TARGET CODE: I-LT503
<u>POSTULATED INTERACTION</u> : Registers fall, impact tubing.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by simpl	ified analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS N	o. 03–29–01–04.
	D. H. Hagstrom 09/08/82
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	ems eng gc [ <u>hvac]</u> i&c pse npo nan
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

My

					SHEET	1 OF 1
			DIABLO (	FIC GAS & ELECTRI CANYON PLANT, UNI UCED SYSTEMS INTE N DOCUMENTATION S	T NO. 1 RACTION PROGRAM	
POST	JLATED	INTERACTION	NO.: <u>03-4</u>	2-01-01	<del> </del>	
FIRE	ZONE _	1-C	LOCATION	Containment	FLOOR ELEVATI	ON 140'-0"
LOCAT		THIN FIRE ZO 146', inside		ll, near SG1—3.		v
IDEN	TIFICAT	TION OF INTER	ACTING COM	PONENTS	•	
SOUR		ruction Defic	iency.		SOURCE CODE: NS-	CD
TARG		ument tubing	to LT-539.		TARGET CODE: I-L	T539
POST		INTERACTION: support cli		sing (2 places).	PHENOMENA CODE: H	OUSEKEEP
RECO	<u>THENDER</u> Replac	O RESOLUTION ce missing su	BY WALKDOW pport clip	IN TEAM:		
WALK		ones 12/03 EAM ORIGINATO			,	
FINA	L RESOL Clips	LUTION BY RES	required p	ISCIPLINE: Per ART 143.		

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG [QC] HVAC I&C PSE NPO NAN

02/19/82 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

DISCIPLINE ENGINEER/DATE

09/30/82 L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE

E. M. Valeriano 04/27/81 ENGR. GROUP SUPERVISOR/DATE

SHEET	1	OF _	1

POSTULATED INTERACTIO	N NO.: 03-42-01-0	2		
FIRE ZONE 1-B	LOCATIONCont	ainment	FLOOR ELEVATION 125'-0"	
LOCATION WITHIN FIRE Elev. 125, near	ZONE: ' RCP 1-3, at missil	é barrier.		
IDENTIFICATION OF INT	ERACTING COMPONENT	s		
SOURCE: Air registers (2	2). ,		SOURCE CODE: H-DUCT-1B	_
TARGET: Instrument tubir	ng to LT-539.		TARGET CODE: I-LT539	_
POSTULATED INTERACTION Registers fall,			PHENOMENA CODE: MECHFAIL	<del></del>
RECOMMENDED RESOLUTION Ensure integrity	ON BY WALKDOWN TEAM of air registers	<u>1</u> : by simplif	ied analysis.	
M. Jones 12/0 WALKDOWN TEAM ORIGINA			•	
FINAL RESOLUTION BY I	RESPONSIBLE DISCIPL led by analysis. S	<u>INE</u> : See IDS No.	03-29-01-04.	
	1			
			D. H. Hagstrom 09/08/82	_
DISCIPLINE ENGINEER			ENGR. GROUP SUPERVISOR/DATE	
DISCIPLINE RESPONSIB	LE FOR RESOLUTION:	CE EE EM	NS ENG GC [HVAC] IEC PSE NPO	NAN
FIELD VERIFICATION B'		š	L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DA	ĪĒ

Bls

SHEET 1 OF 1	
--------------	--

POSTULATED INTERACTION NO.: 03-43-01-01	•
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 160', around steam generator 1-3.	
IDENTIFICATION OF INTERACTING COMPONENTS	·
SOURCE: Kick plate and platform grating.	SOURCE CODE: C-PLAT-1C .
TARGET: Instrument tap & root valve to LT-537.	TARGET CODE: I-LT537
POSTULATED INTERACTION:  Steam generator thermal and/or seismic move structure and kick plate impacting instrum	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Provide additional clearance between positions.  2. Ensure integrity of platform, etc. by	4
. M. Jones 04/01/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Existing clearance is adequate by analysis Calc. 03-43-01-01. For platform qualifica	
S. Hanusiak 01/27/81	E. P. Wollak 01/27/81
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	EMS ENG GC HVAC I&C PSE NPO NAN
	L. W. Horn 10/25/83
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	SIP PROJECT ENGINEER APPROVAL/DATE

SHEE! OF	1	OF	1	SHEET
----------	---	----	---	-------

POSTULATED INTERACTIO	N NO.: <u>03-43</u>	3-01-02				
FIRE ZONE 1-B	LOCATION _	Containment	: FL00	R ELEVATION 12	25'-0"	
LOCATION WITHIN FIRE Elev. 125, near		nissile barri	er.			
IDENTIFICATION OF INT	ERACTING COM	PONENTS				
SOURCE: Air registers (2			SOURC	E CODE: H-DUCT	<u>(–18</u>	<del></del>
TARGET: Instrument tubin	g to LT-537.		TARGE	T CODE: I-LT5	17	_
POSTULATED INTERACTION Registers fall,		3.	PHENOM	BENA CODE: MECH	IFAIL	_
RECOMMENDED RESOLUTION Ensure integrity			olified ana	alysis.	•	
M. Jones 12/0 WALKDOWN TEAM ORIGINA		•				
FINAL RESOLUTION BY R Register qualifi			No. 03-29-	01 <b>–</b> 04.		
			n	H. Hagstrom	09/08/82	
DISCIPLINE ENGINEER/	DATE		ENGR	. GROUP SUPERVI	SOR/DATE	•
DISCIPLINE RESPONSIBL	E FOR RESOLUT	TION: CE EE	EMS ENG	GC [HVAC] I&C	PSE NPO	NAN
FIELD VERIFICATION BY (FOR MODIFICATIONS ON		<u> </u>		Horn 09/08 ECT ENGINEER AF		Ē

[0013A/0081Z-22]

SHEET	1	OF	1

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 03-43-03-01	•
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0
LOCATION WITHIN FIRE ZONE: Elev. 110' east stairs DWG 57687.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Stairs	SOURCE CODE: C-STAIR-1A
TARGET: KX177	TARGET CODE: E-KX177-0.75
POSTULATED INTERACTION: Steps on stairs run right next to conduit. conduit.	PHENOMENA CODE: INTERFERE & DEFLECT Movement of stairs could impact
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Provide clearance between stairs and conduit	it.
J. F. Grant 09/10/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Min 2" clearance around the conduit has been	n provided per ART No. 018.
S. Hanusiak 01/16/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE E	S. Hanusiak ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC IEC PSE NPO NAN

5:5 19184

[0031A/00847-7]

S. Harris

(FOR MODIFICATIONS ONLY)

02/16/82

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	. 1

POSTULATED INTERACTION NO.: 03-44-01-01
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 160'-0" around steam generator 1-3.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: Structural platform, railings and grates.  SOURCE CODE: C-PLAT-1C
TARGET:  TARGET CODE: I-LT538  Instrument tap and tubing from steam generator 1-3 to LT-538.
POSTULATED INTERACTION:  Motion of steam generator and/or platform results in contact between instrument tap and platform.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify that existing clearance between platform and instrument tap is adequajte to preclude contact. Provide additional clearance if/as required.
M. Jones 07/16/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Existing clearance is adequate. See interaction resolution sheet, also reference DWG No. 502970 and IDS file No. 03-49-01-04.
S. Hanusiak 01/27/81  DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
I. W. Horn 10/25/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)					
POSTULATED INTERACTION NO.: 03-44	4-01-02				
FIRE ZONE 1-B LOCATION	Containment	_ FLOOR ELEVATION _125'-0"			
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-3, at 1	missile barrier.				
IDENTIFICATION OF INTERACTING COM	PONENTS	•			
SOURCE: Air registers (2).		SOURCE CODE: H-DUCT-18			
TARGET: Instrument tubing to LT-538.		TARGET CODE: I-LT538			
POSTULATED INTERACTION: Registers fall, impact tubing	<b>3</b> •	PHENOMENA CODE: MECHFAIL			
RECOMMENDED RESOLUTION BY WALKDOW Ensure integrity of air regis		ed analysis.			
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE		•			
Register qualified by analys:	ISCIPLINE: is. See IDS No.	03-29-01-04.			

D. H. Hagstrom 09/08/82 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN

L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1_
-------	---	----	----

C. Caffarm of the set of the community of the community of the caffarm of the caf

•	INTERACTION DOCUMENTATIO	ON SHEET (IDS)
POSTULATED INTERACTION	NO.: <u>03-44-03-01</u>	
FIRE ZONE 1-A	LOCATIONContainment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZO Elev. 110', east s		
IDENTIFICATION OF INTER	RACTING COMPONENTS	
SOURCE: Stairs	•	SOURCE CODE: C-STAIR-1A
TARGET: KX178		TARGET CODE: E-KX178-0.75
POSTULATED INTERACTION: Steps on stairs ru conduit.		PHENOMENA CODE: INTERFERE & DEFLECT ement of stairs could impact
RECOMMENDED RESOLUTION Provide clearance	BY WALKDOWN TEAM: between stairs and condu	uit.
J. F. Grant 09/10 WALKDOWN TEAM ORIGINATO FINAL RESOLUTION BY RES Min. 2" clearance	DR/DATE SPONSIBLE DISCIPLINE:	been provided per ART No. 019.
S. Hanusiak 01/16/ DISCIPLINE ENGINEER/DA DISCIPLINE RESPONSIBLE	NTE	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO NAM
S. Harris 02/1 FIELD VERIFICATION BY W (FOR MODIFICATIONS ONLY	IALKDOWN TEAM	L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

F0031A/0084Z-87

SEISMICA INT	PACIFIC GAS & ELECT DIABLO CANYON PLANT, U ALLY INDUCED SYSTEMS IN TERACTION DOCUMENTATION	HIT NO. 1 ITERACTION PROGRAM
POSTULATED INTERACTION NO.		
FIRE ZONE 1-B LO	CATION <u>Containment</u>	FLOOR ELEVATION 125'-0"
·	: l3; at missile barrier	•
IDENTIFICATION OF INTERACT	IING COMPONENTS	
SOURCE: Air registers (2).		SOURCE CODE: H-DUCT-18
TARGET:Instrument tubing to	FT-533.	TARGET CODE: 1-FT533
POSTULATED INTERACTION: Registers fall, impac	ct tubing.	PHENOMENA CODE: MECHFAIL
•	•	
RECOMMENDED RESOLUTION BY Ensure integrity of a	- <u>WALKDOWN TEAM</u> : air registers by simpli	fied analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/	DATE	
FINAL RESOLUTION BY RESPONDED REGISTER qualified by	NSIBLE DISCIPLINE: / analysis. See IDS No	. 03–29–01–04.
	_	D. H. Hagstrom 09/08/82
DISCIPLINE ENGINEER/DATE	-	ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

DOCTIL ATER THE DAME OF	NO - 02 AE 02 01		,	•	
POSTULATED INTERACTION FIRE ZONE 1-A	<u> </u>		FLOOR ELE	VATION117'-0"	
LOCATION WITHIN FIRE Z Flev. 117' Az 235	ONE:  against containm	ent wall.			
IDENTIFICATION OF INTE	RACTING COMPONENTS				
SOURCE: Grating attached	to interior concre		ource code:	C-GRATING	
TARGET: Conduit KX110 att	ached to containme		ARGET CODE:	E-KX110-2	
	: through grating, n ential seismic mot	ext to beam,		: INTERFERE/RFI.STRU	<u>CT</u>
	•				
	BY WALKDOWN TEAM: eam and/or routing uit and beam and g		ensure minim	num 2" clear-	
		*1	٠		
P. H. Anderson 02/18, WALKDOWN TEAM ORIGINATO	<del></del>				
detached from con- the possibility o to differential mo	TX24E and support tainment wall per I finance between Control to the This resolution	S-305 for co DCN DCI-EC-3 NC. and plat ainment and	604. This mo form grating annulus struc	dification eliminat and/or floor beam c uture. No further	du
R. J. Swaim. 06/24/9 DISCIPLINE ENGINFER/DE			S. Auer ENGR. GROUP S	08/23/84 SUPERVISOR/DATE	
DISCIPLINE RESPONSIBLE	FOR RESOLUTION: C	E [EE] EMS	ENG GC HVAC	: I&C PSE NPO NA	AN

S. F. Traisman 11/02/82
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)
[0029A/0086Z-11]

ASTO

L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)			
POSTULATED INTERACTION NO.: 03-46-01-01	<del></del> .		
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 125'-0"		
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-3, at missile barrier.			
IDENTIFICATION OF INTERACTING COMPONENTS			
SOURCE: Air registers (2).	SOURCE CODE: H-DUCT-18		
TARGET: Instrument tubing to FT-532.	TARGET CODE: I-FT532		
POSTULATED INTERACTION: Registers fall, impact tubing.	PHENOMENA CODE: MECHFAIL		
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by simplifi	ed analysis.		
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS No.	03–29–01–04.		
DISCIPLINE ENGINEER/DATE	D. H. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE		
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	ENG GC [HVAC] I&C PSE NPO NAN		

L. W. Horn

09/08/82

SIP PROJECT ENGINEER APPROVAL/DATE

[0013A/0081Z-25]

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET	1	0F	1

	THE POST POST THE	TON SHEET (IDS)	
POSTULATED INTERACTION	NO.: 03-47-01-01		
FIRE ZONE 1-B	LOCATION Containment	FLOOR ELEVATION 91'-0"	
LOCATION WITHIN FIRE ZO Elev. 103, at miss	NNE: Bile barrier, 205°.	,	
IDENTIFICATION OF INTER	ACTING COMPONENTS		
SOURCE: 2" RCP lube oil so	cupper drain line.	SOURCE CODE: P-4397-2	
TARGET: Instrument tubing	to LT-504.	TARGET CODE: I-LT504	
POSTULATED INTERACTION: Lateral deflection impact with tubing	of 2" pipe due to fai	PHENOMENA CODE: SPTFAIL lure of fixed-end rod support resu:	lts ir
RECOMMENDED RESOLUTION Replace fixed-end		with a bi-lateral support.	
M. Jones 12/03/ WALKDOWN TEAM ORIGINATO FINAL RESOLUTION BY RES Recommended resolu	R/DATE	1–17–02.	
C. R. VanNatta 06/02 DISCIPLINE ENGINEER/DATED SCIPLINE RESPONSIBLE 1	TE .	K. M. Krause 06/02/83 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C [PSE] NPO	
S. E. Traisman FIELD VERIFICATION BY WA	ALKDOWN TEAM	L. W. Horn 08/23/83 SIP PROJECT ENGINEER APPROVAL/DA	TE ,

[0014A/0079Z-10]

PACIFIC GAS & ELECTRE DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S	TT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 03-47-01-02	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 104'-7"
LOCATION WITHIN FIRE ZONE: Elev. 115, at SG 1-4.	55
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Line 1038-2"; SG 1-4 blowdown.	SOURCE CODE: P-1038-2
TARGET: Instrument tubing to LT-504 (low side).	TARGET CODE: I-LT504
POSTULATED INTERACTION:  Thermal/seismic movements of line 1038 result currently rests against line 1038.	PHENOMENA CODE: INTERFERE & DEFLECT in impact with tubing. Tubing
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Reroute tubing away from line 1038 to provide	e minimum 6" clearance.
M. Jones 12/03/83 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Modification per ART 269. Tubing rerouted to from line 1038-2".	provide greater than 6" clearance
E. M. Valeriano 05/15/82 DISCIPLINE ENGINEER/DATE	F. Mori 06/29/84 ENGR. GROUP SUPERVISOR/DATE
CATTE MINDING WITE	midit duoi doi ERTIOUN/ DITE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [I&C] PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

S. E. Traisman 02/14/83

I.. W. Horn 02/16/83 SIP PROJECT ENGINEER APPROVAL/DATE

*!* '.

PACIFIC GAS & ELEC DIABLO CANYON PLANT, SEISMICALLY INDUCED SYSTEMS I INTERACTION DOCUMENTATIO	UNIT NO. 1 INTERACTION PROGRAM
POSTULATED INTERACTION NO.: 03-47-01-03	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 1911-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, at missile barrier, near valve	8141C.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Light fixture.	SOURCE CODE: E-LF-1B
TARGET: Instrument tubing to LT-504 (high side).	TARGET CODE: I-I.T504
POSTULATED INTERACTION: Fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	•
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Fixture qualified by analysis. See Civil	Calc. 52.24.52, Rev. 1 & 2.
Kets	·
R. J. Swaim 01/25/83 DISCIPLINE ENGINEER/DATE	G. C. Bhatt 01/25/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EF]	EMS ENG GC HVAC I&C PSE NPO NAM

1. W. Horn 08/12/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

Kes

DIABLO CANYON P SEISMICALLY INDUCED SYS	SHEET 1 OF 1  E ELECTRIC CO.  LANT, UNIT NO. 1  TEMS INTERACTION PROGRAM  NTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-47-01-04	,
FIRE ZONE 1-8 LOCATION Contain	ment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, at SG 1-4.	•
IDENTIFICATION OF INTERACTING COMPONENTS	,
SOURCE: Light fixture.	SOURCE CODE: E-LF-1B
TARGET:  Instrument tubing to LT-504 (low sid	TARGET CODE:I_LT504 e).
POSTULATED INTERACTION: Fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	·
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLIN  Fixture qualified by analysis. See	
R. J. Swaim 01/25/83 DISCIPLINE ENGINEER/DATE	G. C. Bhatt 01/25/83  ENGR. GROUP SUPERVISOR/DATE  FEET EMS ENG GC HVAC I&C PSE NPO NAN
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE	TEET ELIS EUG OF LANC TOT ASE UNO MHU

L. W. Horn 08/12/83

SIP PROJECT ENGINEER APPROVAL/DATE

ACES

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET	1 (	)F	1

POSTULATED INTERACTION NO.: 03-47-01-05	,
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-4, at missile barrier	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Air registers (2).	SOURCE CODE: H-DUCT-18
TARGET: Instrument tubing to LT-504.	TARGET CODE: I-LT504
POSTULATED INTERACTION: Register falls, impacts tubing.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by simpli	fied analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS No	. 03–29–01–04.
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE E	D. H. Hagstrom 09/08/82  ENGR. GROUP SUPERVISOR/DATE  MS ENG GC [HVAC] I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

MS

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 03-47-03-02
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-O"
LOCATION WITHIN FIRE ZONE: Elev. 117 at BTX8E DWG 57687.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-GRATING Floor grating.
TARGET: TARGET CODE: E-KX390-1.50  KX390.
POSTULATED INTERACTION:  Floor grating would impact conduit.  PHENOMENA CODE: INTERFFRE & DFFI FCI
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Provide clearance between grating and conduit.
J. F. Grant 09/10/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Min. 2" clearance around the conduit has been provided per ART No. 277.
S. Hanusiak 01/16/81  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAME
M. Jones 04/28/82 I. W. Horn 09/30/82 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	1

POSTULATED INTERACTION	No.: 03-48-01-01	· · · · · · · · · · · · · · · · · · ·
FIRE ZONE 1-A	LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZO Elev. 117, 220° or		•
IDENTIFICATION OF INTE	RACTING COMPONENTS	•
SOURCE: Line 1870—1" n <sub>2</sub> so	upply line.	SOURCE CODE: P-1870-1
TARGET: Mechanical panel	59 tubing.	TARGET CODE: 1-PM59
POSTULATED INTERACTION Line 1870 hangers damage mechanical	do not meet B31.1 hanger	PHENOMENA CODE: SPTFAIL & PIPEFAIL spacing requirements. Pipe could fall
		e 1870 to verify adequacy of the
M. Jones 04/15/	/80	
WALKDOWN TEAM ORIGINATO		
by H. Hohmann date	9 SHT. 117 is a portion of odd 08/02/82 is a response	of DCN DC1-EP-3606. Design calculations to field verification report by M. steraction concerns identified in the
C. R. VanNatta 01/24 DISCIPLINE ENGINEER/DA		K. M. Krause - 01/24/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE	FOR RESOLUTION: CE EE	EMS ENG GC HVAC ICC [PSE] NPO NAN

L. W. Horn 04/15/83 SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

12/19/83

SHEET _	1	OF.	_1_	
MARSON				

POSTULATED INTERACTION NO.: 03-48-01-02
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 160'-0" around steam generator 1-4.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-1C Structural platform, railings and grates.
TARGET:
POSTULATED INTERACTION:  Motion of steam generator and/or platform results in contact between instrument tap and platform.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify that existing clearance between platform and instrument tap is adequate to preclude contact. Provide additional clearance if/as required.
M. Jones 07/16/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Existing clearance is adequate by analysis. See resolution sheet and Calc. No. 03-48-01-02 also IDS file No. 03-49-01-04.
S. Hanusiak 01/21/81 E. P. Wollak 01/27/81 DISCIPLINE ENGINFER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
1. W. Horn 10/25/83  FIELD VERTETCATTON BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)
, 3114°

	SHEET	1	OF	1
--	-------	---	----	---

POSTULATED INTERACTION NO.: 03-48-01-03
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-4, at missile barrier.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: H-DUCT-18 Air registers (2).
TARGET:  Instrument tubing to LT-547.  TARGET CODE: I-LT547
POSTULATED INTERACTION:  Register falls, impacts tubing.  PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of air registers by simplified analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS No. 03-29-01-04.
D. H. Hagstrom 09/08/82
DISCIPLINE ENGINEER/DATE . ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM  (FOR MODIFICATIONS ONLY)  L. W. Horn 09/08/82  SIP PROJECT ENGINEER APPROVAL/DATE

PAS

SHEET	1	0F	1
	•	••	•

POSTULATED INTERACTION NO.: 03-48-02-01	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, 220° on missile wall.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Line 1870-1" N <sub>2</sub> supply line.	SOURCE CODE: P-1870-1
TARGET: Mechanical panel 59.	TARGET CODE: I-PM59
POSTULATED INTERACTION:  Line 1870 hangers do not meet B31.1 hang damage mechanical panel 59.	PHENOMENA CODE: SPTFAIL & PIPEFAIL er spacing requirements. Pipe could fall
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Perform additional piping analysis on li	ne 1870 to verify adequacy of the
supports. Add restraints as required  M. Jones 04/15/80  WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hanger DWG. 049339 SHT. 117 is a portion by H. Hohmann dated 08/02/82 is a respon Jones dated 02/24/82 which resolves all report.	of DCN DC1-EP-3606. Design calculations se to field verification report by M. interaction concerns identified in the
C. R. VanNatta 01/24/83 DISCIPLINE ENGINEER/DATE	K. M. Krause 01/24/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 12/19/83 FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 04/15/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	_ 1_	OF	1

POSTULATED INTERACTION NO.: 03-48-03-01	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'-0" .
LOCATION WITHIN FIRE ZONE: Elev. 117', Az. 210°, against containment w	vall.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Beam and grating at elev. 117'.	SOURCE CODE: C-Grating
TARGET: KX103 below BTX8E.	TARGET CODE: E-KX103-1.50
POSTULATED INTERACTION:  As conduit passes through elev. 117', there beam and grating. The conduit is supported to differential motion.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Locally reroute the conduit to provide at 1	east 1" clearance.
Paul H. Anderson 06/03/81 WALKDOWN TEAM ORIGINATOR/DATE	•
Penetration box BTX8E and support S206 for containment wall per DCN DCI-EC-3604 (DWG O This modification eliminates the possibility grating and/or floor beam due to differentiannulus structure. No further action neces previous resolution of this interaction. R	50030, PEN 8E SH. 1 of 3 attached) by of impact between CND and platform al motion between containment and sary. This resolution supercedes any
R. J. Swaim 06/24/83 DISCIPLINE ENGINEER/DATE	S. Auer 06/24/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] E	

L. W. Horn 01/18/84

SIP PROJECT ENGINEER APPROVAL/DATE

F0006A/0066Z-307

S. E. Traisman 11/02/83
FIELD VERIFICATION BY WALKDOWN TEAM

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)			
POSTULATED INTERACTION NO.: 03-49-01-01			
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"			
LOCATION WITHIN FIRE ZONE: Elev. 117, 221°, along missile wall.			
IDENTIFICATION OF INTERACTING COMPONENTS			
SOURCE:  SOURCE CODE: E-LF-1A  Overhead light fixture.			
.TARGET: Target CODE: I-PM55 Tubing to mechanical panel 55.			
POSTULATED INTERACTION:  Fixture falls, impacts tubing.			
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of light fixture mount. Simple analysis should be adequate.  M. Jones 04/15/80			
WALKDOWN TEAM ORIGINATOR/DATE			
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Fixture qualified by analysis. See Civil Calc. 52.24.52.			
R. J. Swaim 01/28/83 G. C. Bhatt 01/28/83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE			
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EF] EMS ENG GC HVAC I&C PSE NPO NAN			

L. W. Horn 06/08/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	11	OF	1

	THIERHCITON DOCU	MENIALION SHEE	TI (TD2)		
POSTULATED INTERACTIO	N NO.: _03-49-01-0	2			
FIRE ZONE 1-A	LOCATION Conta	inment	FLOOR ELEVAT	ION 117'-0"	
LOCATION WITHIN FIRE Elev. 117, 220°	ZONE: on missile wall.				
IDENTIFICATION OF INT	ERACTING COMPONENT	s			
SOURCE: Line 1870-1" N <sub>2</sub>	supply line.	<u>so</u>	OURCE CODE: P	-1870-1	-
TARGET: Mechanical panel	55 tubing.	<u>TA</u>	RGET CODE: I	<u>-PM55</u>	-
POSTULATED INTERACTION Line 1870 hanger fall, damage med	<u>N</u> : s do not meet the hanical panel 55 t	B31.1 hanger s	NOMENA CODE: Spacing require	SPTFAIL & PIPEFA ements. Pipe co	AIL ould
RECOMMENDED RESOLUTION Perform additions supports. Add re	N BY WALKDOWN TEAM al piping analysis estraints as requi	on line 1870	to verify adec	quacy of the	
M. Jones 04/1 WALKDOWN TEAM ORIGINAT					
by H. Hohmann dat	ESPONSIBLE DISCIPLE 39 Sht. 117 is a posed 08/02/82 is a posed 08/02/82 is a posed which resolves	ortion of DCN response to fi	eld verificati	on report by M.	
C. R. VanNatta 01/ DISCIPLINE ENGINEER/E		· E	K. M. Krause NGR. GROUP SUF		
DISCIPLINE RESPONSIBLE	FOR RESOLUTION: (	CE EE EMS EI	NG GC HVAC	I&C [PSE] NPO	NAN
S. E. Traisman FIELD VERIFICATION BY (FOR MODIFICATIONS ONL	WALKDOWN TEAM			04/15/83 R APPROVAL/DATE	J

SHEET 1 OF 1 IC CO. IT NO. 1 ERACTION PROGRAM SHEET (IDS)
FLOOR ELEVATION 140'-0"
•
SOURCE CODE: C-PLAT-1C
TARGET CODE: <u>I-LT548</u> or 1-4 to LT-548.
PHENOMENA CODE: INTERFERE & DEFLECT sults in contact between instrument
orm and instrument tap is adequate to nce if/as required.
See resolution sheet and 0-01-04.

#### PACIFIC GAS & ELECTRI DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S

POSTULATED INTERACTION NO.: 03-49-01-03	•
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 160'-0" around steam generator 1-4.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Structural platform, railings and grates.	SOURCE CODE: C-PLAT-1C
TARGET: Instrument tap and tubing from steam generate	TARGET CODE: I-LT548 or 1-4 to LT-548.
POSTULATED INTERACTION:  Motion of steam generator and/or platform restap and platform.	PHENOMENA CODE: INTERFERE & DEFLECT sults in contact between instrument
÷	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify that existing clearance between platform preclude contact. Provide additional clearance.	
M. Jones 07/16/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Existing clearance is adequate by analysis.  Calc. No. 03-49-01-03 also IDS File No. 03-49	
S. Hanusiak 01/27/81  DISCIPLINE ENGINEER/DATE	E. P. Wollak 01/27/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EM	S ENG GC HVAC IEC PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SI (FOR MODIFICATIONS ONLY)	L. W. Horn 10/25/83 P PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

the control of the co

-INTERACTION DOCUMENTATION	N SHEET (IDS)
POSTULATED INTERACTION NO.: 03-49-01-04	•
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 160'-0" around steam generator 1-4.	
IDENTIFICATION OF INTERACTING COMPONENTS	
Source: Structural platform, railings and grates.	SOURCE CODE: C-PLAT-1C
TARGET: Instrument tap and tubing from steam genera	TARGET CODE: I-PX11 ator 1-4 to PX-11.
POSTULATED INTERACTION:  Motion of steam generator and/or platform r tap and platform.	PHENOMENA CODE: INTERFERE & DEFLECT results in contact between instrument
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify that existing clearance between plate preclude contact. Provide additional clear	
M. Jones 07/16/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Existing clearance is adequate by analysis Subject to modification per DCN DC1-EC-5010	also — platform qualified by analysis.
resolution sheet.	•
S. Hanusiak 01/21/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	E. P. Wollak 01/22/81 ENGR. GROUP SUPERVISOR/DATE  EMS ENG GC HVAC I&C PSE NPO NAN
M. Baker 06/28/83 FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 10/25/83 SIP PROJECT ENGINEER APPROVAL/DATE

5:5 7/1/14

(FOR MODIFICATIONS ONLY)

F00704/01007\_207

PACIFIC GAS & ELECTRI DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S	ET NO. 1- ERACTION PROGRAM
POSTULATED INTERACTION NO.: 03-49-01-05	<del></del>
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE:  Elev. 125, near RCP 1-4, at missile barrier.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Air registers (2).	SOURCE CODE: H-DUCT-1B .
TARGET: Instrument tubing to LT-548.	TARGET CODE: I-LT548
POSTULATED INTERACTION: Register falls, impacts tubing.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by simplify	ied analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS No.	03-29-01-04.
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	D. H. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE ENG GC [HVAC] I&C PSE NPO NAN

1. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET 1 OF 1
--------------

POSTULATED INTERACTION NO.: 03-49-02-01	· ·
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, 220° on missile wall.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Line 1870-1" N2 supply line.	SOURCE CODE: P-1870-1
TARGET: Mechanical panel 55.	TARGET CODE: I-PM55
POSTULATED INTERACTION:  Line 1870 hangers do not meet the B31.1 han fall, damage panel.	PHENOMENA CODE: SPTFATL & PIPEFAIL ger spacing requirements. Pipe could
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional piping analysis on line supports. Add restraints as required.	1870 to verify adequacy of the
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hanger DWG. 049339 Sht. 117 is a portion of by H. Hohmann dated 08/02/82 is a response Jones dated 02/24/82 which resolves all intreport.	to field verification report by M.
C. R. VanNatta 01/24/83 DISCIPLINE ENGINEER/DATE	K. M. Krause 01/24/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE E	MS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 12/02/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY)	L. W. Horn 04/15/83 SIP PROJECT ENGINEER APPROVAL/DATE
F.	, , , , , , , , , , , , , , , , , , ,

	SHEET1_ OF1_:
PACIFIC GAS & ELE DIABLO CANYON PLANT, SEISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTATE	ECTRIC CO. , UNIT NO. 1 INTERACTION PROGRAM
POSTULATED INTERACTION NO.: 03-50-01-01	•
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, 221°, along missile wall.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead light fixture.	SOURCE CODE: E-LF-1A
TARGET: Tubing to mechanical panel 51.	TARGET CODE: J-PM51
POSTULATED INTERACTION:  Fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	
Ensure integrity of light fixture mount. adequate.	Simple analysis should be
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Fixture qualified by analysis. See Civi	l Calc. 52.24.52.
ν <b>ό</b>	

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

l.. W. Horn 06/08/83 SIP PROJECT ENGINEER APPROVAL/DATE

G. C. Bhatt 01/28/83

ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC ICC PSE NPO NAN

AUB

R. J. Swaim 01/28/83

DISCIPLINE ENGINEER/DATE

SHEET	1	OF	1

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM THTEPACTION PROGRAM

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-50-01-02
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, 220° on missile wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Line 1870-1" N <sub>2</sub> supply line.  SOURCE CODE: P-1870-1
TARGET: TARGET CODE: I-PM51 Mechanical panel 51 tubing.
POSTULATED INTERACTION:  Line 1870 hangers do not meet B31.1 hanger spacing requirements. Pipe could fal damage mechanical panell 51 tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional Piping analysis on line 1870 to verify adequacy of the supports. Add restraints as required
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hanger DWG. 049339 SHT. 117 is a portion of DCN DC1-EP-3606. Design calculation by H. Hohmann dated 08/02/82 is a response to field verification report by M. Jones dated 02/24/82 which resolves all interaction concerns identified in the report.
C. R. VanNatta 01/24/83  DISCIPLINE ENGINEER/DATE  K. M. Krause _01/24/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

S. E. Traisman 12/19/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS CNLY)

L. W. Horn 04/15/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	_1_
-------	---	----	-----

POSTULATED INTERACTION NO.: 03-50-01-03	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-4, at missile barrier	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Air registers (small).	SOURCE CODE: H-DUCT-18
TARGET: Instrument tubing to LT-549.	TARGET CODE: I-LT549
POSTULATED INTERACTION: Register falls, impacts tubing.	PHENOMENA CODE: MECHFAIL .
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by simplif	ied analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS No.	. 03-29-01-04.
DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EM	D. H. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE S ENG GC [HVAC] I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM

L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE



SHEET	1	OF	1

FLOOR ELEVATION 117'-0"
• (
SOURCE CODE: P-1870-1
TARGET CODE: I-PM51
PHENOMENA CODE: SPTFAIL & PIPEFAIL er spacing requirements. Pipe could
870 to verify adequacy of the
DCN DC1—EP—3606. Design calculation o field verification report by M. racion concerns identified in the

SHEET	1	<b>OF</b>	1

POSTULATED INTERACTION NO.: 03-51-01-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, 220° on missile wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Line 1870-1" N <sub>2</sub> supply line.  SOURCE CODE: P-1870-1
TARGET:  Mechanical panel 47 tubing.  TARGET CODE: I-PM47
POSTULATED INTERACTION:  Line 1870 hangers do not meet B31.1 hanger spacing requirements. Pipe could fall damage mechanical panel 47 tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional piping analysis on line 1870 to verify adequacy of the supports. Add restraints as required
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hanger DWG. 049339 SHT. 117 is a portion of DCN DC1-EP-3606. Design calculations by H. Hohmann dated 08/02/82 is a response to field verification report by M. Jones dated 02/24/82 which resolves all interaction concerns identified in the report.
C. R. VanNatta 01/24/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 01/24/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 12/02/83 L. W. Horn 04/15/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS CALY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-51-01-02
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, 221°, along missile wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixture.  SOURCE CODE: E-LF-1A
TARGET: Target CODE: I-PM47 Tubing to mechanical panel 47.
POSTULATED INTERACTION  Fixture falls, impacts tubing.  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture mount. Simple analysis should be adequate.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Fixture qualified by analysis. See Civil Calc. 52.24.52.
R. J. Swaim 01/28/83 G. C. Bhatt 01/28/83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NA

L. W. Horn 06/08/83

SIP PROJECT ENGINEER APPROVAL/DATE

1613

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

POSTULATED INTERACTION NO.: 03-51-01-03
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 160'-0" around steam generator 1-4.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: Structural platform, railings and grates.  SOURCE CODE: C-PLAT-1C
TARGET:  Instrument tap and tubing from steam generator 1-4 to FT-542.
POSTULATED INTERACTION:  Motion of steam generator and/or platform results in contact between instrument tap and platform.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify that existing clearance between platform and instrument tap is adequate to preclude contact. Provide additional clearance if/as required.
M. Jones 07/16/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Existing clearance is adequate by analysis. See interaction resolution sheet and Calc. No. 03-51-01-03 also IDS File No. 03-49-01-04.
S. Hanusiak 01/27/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak 01/27/81  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

PACIFIC GAS & FI.F DIABLO CANYON PLANT, SEISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTATE	, UNIT NO. 1 INTERACTION PROGRAM ,
POSTULATED INTERACTION NO.: 03-51-01-04	
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0" .
LOCATION WITHIN FIRE ZONE: elev. 150', inside shield wall, near SG1-	- <b>4</b> .
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Construction deficiency.	SOURCE CODE: NS-CD
TARGET: Instrument tubing to FT-542 (high leg).	TARGET CODE: I-FT542
POSTULATED INTERACTION: Tubing clips are missing (2 places).	PHENOMENA CODE: HOUSFKEFP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace missing tubing clips.	
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Clips provided as required per ART 142.	
DISCIPLINE ENGINFER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	E. M. Valeriano 04/27/81  ENGR. GROUP SUPERVISOR/DATE  EMS ENG [QC] HVAC I&C PSE NPO NAN
S. Harris 02/19/82 FIFLD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	1. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

F0028A/0082Z-157

	*		
SHEET	1	OF	1

POSTULATED INTERACTION NO.: 03-51-01-05	<u> </u>
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-4, at missile barr:	ier.
IDENTIFICATION OF INTERACTING COMPONENTS	, ,
SOURCE: Air registers (small).	SOURCE CODE: H-DUCT-1B
TARGET: Instrument tubing to FT-542.	TARGET CODE: I-FT542
POSTULATED INTERACTION:  Register falls, impacts tubing.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by simple states and states are states as a simple state of the state of	plified analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS	No. 03-29-01-04.
DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	D. H. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE  EMS ENG GC [HVAC] I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

[0013A/0081Z-24]

SHEET	1	ΛE	1
STILL		OT.	_ 1

	THIERACITON	DOCUMENTALION	SHEE! (IDS)	•
POSTULATED INTERACTION	M NO.: 03-51-	-02-01		
FIRE ZONE 1-A	LOCATION _C	Containment	FLOOR ELEVATI	ON 117'-0"
LOCATION WITHIN FIRE Elev. 117, 220°	ZONE: on missile wa	11.	,	
IDENTIFICATION OF INT	ERACTING COMP	ONENTS		
SOURCE: Line 1870-1" N <sub>2</sub>	supply line.		SOURCE CODE:	P-1870-1
TARGET: Mechanical panel	47.		TARGET CODE:	I-PM47
POSTULATED INTERACTION Line 1870 hanger fall, damage med	s do not meet			SPTFAIL & PIPEFAIL rements. Pipe could
RECOMMENDED RESOLUTION Perform addition supports. Add r	al piping anal	lysis on line 1	870 to verify ad	equacy of the
M. Jones 04/ WALKDOWN TEAM ORIGINA				
by H. Hohmann da	39 Sht. 117 is ted 08/02/82 i	s a portion of is a response t	o field verifica	Design calculation tion report by M. identified in the
<u>C. R. VanNatta 01/2</u> DISCIPLINE ENGINEER/				se 01/24/83 UPERVISOR/DATE
DISCIPLINE RESPONSIBL	E FOR RESOLUTI	CON: CE EE EM	IS ENG GC HVAC	I&C [PSE] NPO NA
				i
S. E. Traisman FIELD VERIFICATION BY	WALKDOWN TEAM	ī s	L. W. Horn IP PROJECT ENGIN	O4/15/83 EER APPROVAL/DATE
(FOR MODIFICATIONS ON	LY)			0'1

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 03-52-01-01
FIRE ZONE 1-8 LOCATION Containment FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, near RCP 1-4, at missile barrier.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Air registers (small).  SOURCE CODE: H-DUCT-18
TARGET:  Instrument tubing to FT-543.  TARGET CODE: I-FT543
POSTULATED INTERACTION:  Register falls, impacts tubing.  PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of air registers by simplified analysis.
M. Jones 12/03/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Register qualified by analysis. See IDS No. 03-29-01-04.
•
D. H. Hagstrom 09/08/82 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN
L. W. Horn 09/08/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

[0013A/0081Z-25]

PACIFIC GAS & ELECTRIC DIABLO CANYON PLANT, UNIT SEISMICALLY INDUCED SYSTEMS INTER INTERACTION DOCUMENTATION SA	F NO. 1 RACTION PROGRAM
POSTULATED INTERACTION NO.: _03-53-01-02	•
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Flev. 160, along the containment wall.	•
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Overhead light fixtures at elev. 220 FT ±.	SOURCE CODE: E-LF-1C
TARGET: Misc. Class I components on elev. 140.	TARGET CODE: GENERIC
POSTULATED INTERACTION:  Fixtures fall, impact inst. lines and misc. a generators, main steam piping, pressurizer, e	PHENOMENA CODE: FIXTURE ppurtenances assoc. with steam tc.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly b safety strap to fixtures.  M. Jones 04/01/80	y simplified analysis, or attach

M. Jones 04/01/80 WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Fixture qualified by analysis. See Civil Calc. 52.24.52, Rev. 1 & 2.

Art

R. J. Swaim 01/25/83 DISCIPLINE ENGINEER/DATE

G. C. Bhatt 01/28/83 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 08/12/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1
-------	---	----	---

POSTULATED INTERACTION NO.: 03-53-02-01
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 140, 325°, along containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-3256-2  1-1/2" line along containment wall, vertical run line 3256 (auxiliary steam line for tritium control).
TARGET:  MS line 1-1 flow element FE 512.  TARGET CODE: I-FE512
POSTULATED INTERACTION:  Pipe falls due to lack of vertical support, impacts FE 512.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install additional support or seismic stops to line 3256 to preclude falling.
M. Jones 04/01/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Refer to IDS 25-127-02-02.
C. R. VanNatta 05/13/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 05/13/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 09/21/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

SHEET	1	OF	1
-------	---	----	---

POSTULATED INTERACTION NO.: 03-53-02-02
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev 140, 325°, 16°, and 175° along containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Class II duct supported to containment.  SOURCE CODE: H-DUCT-1C
TARGET:
POSTULATED INTERACTION:  Duct falls, impacts instruments.  PHENOMENA CODE: SPTFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of duct. This duct is well supported, and simplified analysis should prove integrity.
M. Jones 04/02/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  EDS Calc. No. 3 shows existing duct support is adequate. No field modifications are required.
D. H. Hagstrom  DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN
L. W. Horn 09/10/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

[0013A/0081Z-26]

SHEET _	1	_ OF .	_1_
ROGRAM			

POSTULATED INTERACTION NO.: 03-54-02-01				
FIRE ZONE 1-C LOCATION Containment FLOOR FIEVATION 140'-0"				
LOCATION WITHIN FIRE ZONE: Elev 140, 325°, 16°, and 175° along containment wall.				
IDENTIFICATION OF INTERACTING COMPONENTS				
SOURCE:  Class IT duct supported to containment.  SOURCE CODE: H-DUCT-1C				
TARGET:				
POSTULATED INTERACTION:  Duct falls, impacts instruments.				
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of duct. This duct is well supported, and simplified analysis should prove integrity.				
M. Jones 04/02/80 WALKDOWN TEAM ORIGINATOR/DATE				
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Duct supports qualified by analysis. See IDS File No. 03-53-02-02.				
D. H. Hagstrom  DISCIPI.INE FAGTNFER/DATE  ENGR. GROUP SUPERVISOR/DATE				
DISCIPITNE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] IEC PSE NPO NAN				

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 09/10/82
SIP PROJECT ENGINEER APPROVAL/DATE



SHEET	1	OF	1
-------	---	----	---

	THIERHOITON BOCOLEMENT	ON SHEET (IDS)
POSTULATED INTERACTION	NO.: 03-55-01-02	•
FIRE ZONE 1C	LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZO Elev. 180, top of	ONE: steam generator 1-4.	
IDENTIFICATION OF INTE	RACTING COMPONENTS	
SOURCE: Platform railing.	•	SOURCE CODE: C-PLAT-1C
TARGET: Root valve to N <sub>2</sub>	connection to main steam	TARGET CODE: I-VALVE
POSTULATED INTERACTION Railing contacts		PHENOMENA CODE: INTERFERE & DEFLEC
RECOMMENDED RESOLUTION Cut railing away		
M. Jones 07/16/80 WALKDOWN TEAM ORIGINATO FINAL RESOLUTION BY RECUt-out provided	OR/DATE	<b>278.</b>
S. Hanusiak 02/03/ DISCIPLINE ENGINEER/D DISCIPLINE RESPONSIBLE	PATE	E. Wollak 02/19/81 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO NA

3 116134

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

M. Jones 04/28/82
FIELD VERIFICATION BY WALKDOWN TEAM

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-55-02-01
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev 140, 325°, 16°, and 175° along containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Class II duct supported to containment.  SOURCE CODE: H-DUCT-1C
TARGET:
POSTULATED INTERACTION:  Duct falls, impacts instruments.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of duct. This duct is well supported, and simplified analysis should prove integrity.
M. Jones 04/02/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Duct supports qualified by analysis. See IDS File No. 03-53-02-02.

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

DISCIPLINE ENGINEER/DATE

L. W. Horn 09/10/82 SIP PROJECT ENGINEER APPROVAL/DATE

ENGR. GROUP SUPERVISOR/DATE

D. H. Hagstrom

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN

the same of the sa
SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
ULATED INTERACTION NO.: 03-58-01-01
ZONE 28 LOCATION Outside Area FLOOR ELEVATION 109'-6"
TION WITHIN FIRE ZONE: Elev. 110, near containment penetration, MS loop 1.
TIFICATION OF INTERACTING COMPONENTS
SOURCE CODE: C-PLAT-28  Overhead platforms, grates, handrails, etc.
T: TARGET CODE: M-FCV25 Operator to valve FCV-25.
Platforms, etc. fall, impact operator.  Platforms, etc. fall, impact operator.
•
MENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platforms, etc. by simplified analysis.
M. Jones 06/04/80 OWN TEAM ORIGINATOR/DATE
RESOLUTION BY RESPONSIBLE DISCIPLINE: Platforms, etc. have been qualified by analysis. See resolution sheet and referenced Calc. No. 03-04-01-01.

#### WALKDOWN TEAM ORIGINATOR/DATE

RECOMMENDED RESOLUTION BY WALKDOWN TEAM:

POSTULATED INTERACTION NO.: 03-58-01-01

IDENTIFICATION OF INTERACTING COMPONENTS

POSTULATED INTERACTION:

FIRE ZONE 28

TARGET:

LOCATION WITHIN FIRE ZONE:

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platforms, etc. have been qualified by analysis. Se referenced Calc. No. 03-04-01-01.

S. Hanusiak 02/19/81	E. P. Wollak
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

08/23/82 L. W. Horn FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

SHEET _	1_	_ OF _	1
---------	----	--------	---

POSTULATED INTERACTION NO.: 03-58-05-01				
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"				
LOCATION WITHIN FIRE ZONE: Elev. 113, auxiliary bldg. along column 1 @ 2240 containment.				
IDENTIFICATION OF INTERACTING COMPONENTS				
SOURCE: SOURCE CODE: P-SPR-388				
TARGET:  K5815  TARGET CODE: E-K5815-1				
PHENOMENA CODE: SPTFAIL & PIPEFAIL Fire line deflects or falls due to being supported by fixed end rod hangers.				
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Show by simplified analysis that conduits will not be jeopardized.				
E. Whorinski 05/08/81 WALKDOWN TEAM ORIGINATOR/DATE				
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Field inspection of Target conduit K5815-1" (F BUS) reveals that conduit runs in GE-CW for a 5'-O" length along column J. Ref: DWG 502078 cable tray & conduit layout plan below. El. 115'.O" area GE-CW. Sprinkler line in vicinity of K5815 is below conduit and has seismic supports ( support No. 50R-341 in vicinity of K5815 was installed 02/28/79. Ref: Pullman QC inspection green tag). Conduit run outside of GE-CW in area FW, however, no sprinkler protection is provided in the area. Therefore, no action necessary.				
C. R. VanNatta 04/25/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 05/25/83  ENGR. GROUP SUPERVISOR/DATE				
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN				
L. W. Horn 06/16/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS CNLY)				

SHEET	1_	OF	_1_
-------	----	----	-----

I.. W. Horn 10/05/83
SIP PROJECT ENGINEER APPROVAL/DATE

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION	NO.: 03~58~05~02		
,	LOCATION Outside Area	as FLOOR ELEVATION 109'-4"	
LOCATION WITHIN FIRE ZO Outside elev. 120	ONE: ' area GW north wall.		
identification of inter	RACTING COMPONENTS	•	
SOURCE: Platform and rail:	ings.	SOURCE CODE: C-PLAT-28	
TARGET: Conduits KT062, K	5815.	TARGET CODE: E-ICTO62 +	,
POSTULATED INTERACTION: Platform fails and	: d impacts conduits.	PHENOMENA CODE: CIVILFAIL .	<del></del>
RECOMMENDED RESOLUTION Ensure integrity of	BY WALKDOWN TEAM: of platform and railings	<b>s.</b>	
G. Whorinski 06/WALKDOWN TEAM ORIGINATO FINAL RESOLUTION BY RES The platform has been DCN DC1-EC-126	OR/DATE SPONSIBLE DISCIPLINE:	ied by analysis, subject to modific 8-05-02.	ation
S. Gaballah 03/16/8 DISCIPLINE ENGINEER/DA DISCIPLINE RESPONSIBLE	ATE	B. Sarkar 03/16/83 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO	- Nan

S.5 818184

[0009A/0070Z-24]

M. Baker 06/28/83
FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	_ OF _	_1
-------	---	--------	----

POSTULATED INTERACTION NO.: 03-60-01-01
FIRE ZONE 28 LOCATION Outside Area FLOOR ELEVATION 109'-6"
LOCATION WITHIN FIRE ZONE: Elev. 110, near containment penetration, MS loop 2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead platforms, grates, handrails, etc.  SOURCE CODE: C-PLAT-28
TARGET: Operator to valve FCV-24.
POSTULATED INTERACTION:  Platforms, etc. fall, impact operator.  Phenomena Code: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platforms, etc. by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platforms, etc. have been qualified by analysis. See resolution sheet and referenced Calc. No. 03-04-01-01.
S. Hanusiak 02/19/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
L. W. Horn 08/24/82

इंदि।अ

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 03-62-01-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, GW area, near loop 3 penetration.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead platform, grates, handrails.  SOURCE CODE:C-PLAT-3BB
TARGET:  Operator to FCV-23.  TARGET CODE: M-FCV23
POSTULATED INTERACTION: Platform, etc. falls, impacts operator.  Phenomena Code: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform, etc. by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform, etc. qualified by analysis. See resolution sheet and Calc. No 03-19-01-01.
S. Hanusiak 02/19/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
L. W. Horn 08/23/82

SIP PROJECT ENGINEER APPROVAL/DATE

[0011A/0072Z-13]

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET		OF	1
-------	--	----	---

POSTULATED INTERACTION NO.: 03-64-01-01				
FIRE ZONE 3-88	LOCATION _ Penetration (	Area FLOOR ELEVATION 115'-0"		
LOCATION WITHIN FIRE ZONE: Elev. 125, GW area, near loop 4 penetration.				
IDENTIFICATION OF INTE	ERACTING COMPONENTS			
SOURCE: Overhead platform	m, grates, handrails.	SOURCE CODE: C-PLAT-388		
TARGET: Operator to FCV-2	<b>24.</b>	TARGET CODE: CIVILFAIL		
POSTULATED INTERACTION Platform, etc. fa	y: alls, impacts operator.	PHENOMENA CODE: CIVILFAIL		
RECOMMENDED RESOLUTION Ensure integrity	N BY WALKDOWN TEAM: of platform, etc. by simp	olified analysis.		
WALKDOWN TEAM ORIGINAT	ESPONSIBLE DISCIPLINE:	e resolution sheet and Calc. No		
S. Hanusiak 08/08 DISCIPLINE ENGINEER/DISCIPLINE RESPONSIBLE	DATE	V. J. Ghio 08/08/80  ENGR. GROUP SUPERVISOR/DATE  EMS ENG GC HVAC ICC PSE NPO NA		

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET1_ OF1_	
--------------	--

4	Z. (1. (2. (1. (1. (1. (1. (1. (1. (1. (1. (1. (1	2011 011221 (250)	
POSTULATED INTERACTION I	NO.: 04-01-01-01	<u></u>	n .
FIRE ZONE 28	LOCATION Outside Area	FLOOR ELEVATION 8	5'-0"
LOCATION WITHIN FIRE ZON Az O±, between rel:	NE: ief valve JIB cranes @	pipeway structure.	
IDENTIFICATION OF INTER	ACTING COMPONENTS		
SOURCE: Handrails @ top of	pipeway structure.	SOURCE CODE: C-HANDR	AIL
TARGET:  Vent line off of K	14-593-4", STM supply	TARGET CODE: P-0593- to T-D AFW pump.	4
	ely in sockets. High s s, dropping on target	PHENOMENA CODE: LOOSE vertical acceleration cause line below.	s handrails to
RECOMMENDED RESOLUTION E Secure handrails by	B <u>Y WALKDOWN TEAM</u> : y means of bolts or pi	ns.	
W. F. Walker 02/24/8 WALKDOWN TEAM ORIGINATOR FINAL RESOLUTION BY RESP	R/DATE	e Calc. #040101.	•
N. K. Makam 04/18/8 DISCIPLINE ENGINEER/DAT DISCIPLINE RESPONSIBLE F	ΤE	Fathy A. Morsy 04, ENGR. GROUP SUPERVISO EMS ENG GC HVAC ISC	OR/DATE
S. Skochko 06/08 FIELD VERIFICATION BY WA	ALKDOWN TEAM	. L. W. Horn 06/ SIP PROJECT ENGINEER APP	

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 04-02-03-01			
FIRE ZONE 28 LOCATION Outside Areas FLOOR ELEVATION 85'-0"			
LOCATION WITHIN FIRE ZONE: Flev. 110, over mechanical panel 142, 10'from containment wall.			
IDENTIFICATION OF INTERACTING COMPONENTS			
SOURCE: SOURCE CODE: NS-CD			
TARGET:  Pull box BJF6 to conduit K5907-1-1/2".  TARGET CODE: F-BJF6			
POSTULATED INTERACTION: PHENOMENA CODE: HOUSEKFFP Pull box cover is missing.			
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace missing pull box cover.			
M. Jones 06/30/82 WALKDOWN TEAM ORIGINATOR/DATE			
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  IDS is a result of a construction deficiency. IDS transferred to onsite quality control. Construction deficiency to be corrected during normal course of construction activities.			
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE			
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE FE EMS ENG GC HVAC ICC PSE NPO NAN [QC			
### TIFID VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)			

SHEET	1	0 <del>F</del>	1
	-		

POSTULATED INTERACTION NO.: 04-03-01-03
FIRE ZONE 3-P-2 LOCATION HVAC Fan Room FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, by containment 66°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead platforms (2) and ladders (3).  SOURCE CODE: C-PLAT-3P2
TARGET:  Line 593-4", steam supply line.  TARGET CODE: P-0593-4
POSTULATED INTERACTION:  Platform and ladder fall, impact line 593.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platform and ladder by simplified analysis.
M. Jones 06/11/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platform and ladder qualified by analysis, see resolution sheet and Calc. No. 04-03-01-03.
S. Hanusiak 01/29/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NA
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

[00104/00787\_27]

SHEET		OF	_1_
-------	--	----	-----

POSTULATED INTERACTION NO.: 04-03-01-05
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, NE corner.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: Line 2416-1".  SOURCE CODE: P-2416-1
TARGET:  Drain connection to line 593-4".  TARGET CODE: P-0593-4
POSTULATED INTERACTION:  Line 2416 deflects vertically, impacts drain connection.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add clips to existing clamp & shoe assemblies of line 2416-1", located on each side of contact point.
M. Jones 06/11/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added and modified per Dwgs-2165-12; 2165-13; 2165-14 & 2165-34.
C. R. VanNatta 06/15/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 06/15/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 08/24/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

•		SHEET1 OF1
,		··· ·· <u></u>
	PACIFIC GAS & ELECTRIC CO.	

#### DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 04-04-01-01
FIRE ZONE 3BB LOCATION Penetration Area FLOOR ELEVATION 115'
LOCATION WITHIN FIRE ZONE: Elev. 115. Along East Wall
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead Light Fixtures (2)  SOURCE CODE: E-LF-3BB
TARGET:  Power and Control Cable to FCV-95  TARGET CODE: M-FCV25
POSTULATED INTERACTION:  PHENOMENA CODE: FIXTURE  Fixtures Fall, Impact Power and Control Cable.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure Integrity of Fixture Mounts, by Analysis.
M. G. Jones 6/11/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The Above Source Light Fixtures have been Field Inspected and Verified to be installed in accordance with PG&E Dwg. 050041, Detail 9 (Catagory X).  This Fixture Trace has been Outlified by Applyaio Por Calculation 52 24 52
This Fixture Type has been Qualified by Analysis Per Calculation 52.24.52.  R. J. Swaim  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC PSE NPO NAN

L. W. Horn · 8/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1
-------	---	----	---

L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

OSTULATED INTERACTION NO.: _05-01-01.			
IRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 112'-0"			
LOCATION WITHIN FIRE ZONE: Containment annulus, azimuth 30°, 5' form containment liner.			
DENTIFICATION OF INTERACTING COMPONENTS			
OURCE:  Conduit K1534-5", RCP 1-2 power conduit.  SOURCE CODE: E-K1534-5			
ARGET: TARGET CODE: P-1040-2.5  Line K16-1041-2 1/2", SG 1-2 blowdown line.  Line K16- 1040-2 1/2", SG 1-1 blowdown line.			
Conduit supports consist of a variety of trapeze and cantilever configurations with PlOOO vertical struts of lengths up to 6 1/2'. No longitudinal supports are provided and the conduit/support system exhibits low frequency flexibility in the lateral direction. Supports for source conduit assumed to fail due to lateral, longitudinal, and torsional seismic loads. Probable failure point of support is at upper support connection points and/or at the top of the PlOOO vertical' strut. Result is that the conduit and its assoc. failed supports drop downward. The first intervening objects which the conduit/supports fall onto are the two target blowdown lines 2 1/2" to 4" below. Added load of long span of 5" conduit and assoc. supports fails the target lines and/or pipe supports.  ECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Determine load imposed on blowdown lines/supports resulting from failed conduit supports and evaluate acceptability of such load on the piping/ support system.  2. Provide additional support for conduit in vicinity of interaction points such that if other conduit supports fail, conduit will not drop onto target lines.  S. E. Traisman 09/15/83  ALKDOWN TEAM ORIGINATOR/DATE			
INAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Modify per ART 445.			
N. Barangan 09/22/83 C. Kahl 09/23/83 DISCIPITNE FNGTNEER/DATE ENGR. GROUP SUPERVISOR/DATE			
ISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAT			

S. F. Traisman

11/02/83

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

MB

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  ALLY INDUCED SYSTEMS INTERACTION PROGRAM FERACTION DOCUMENTATION SHEET (IDS)
: 05-04-03-01
OCATION Containment FLOOR ELEVATION 110'-9"
: e barrier, near RCPP1-1.
TING COMPONENTS
SOURCE CODE: E-LF-1B.
FCV-760.
PHENOMENA CODE: FIXTURE ts tubing.
·
WALKDOWN TEAM: Light fixture.
DATE
SIBLE DISCIPLINE: analysis. See Civil Calc. 52.24.52, Rev. 1 & 2.
G. C. Bhatt 01/25/83 ENGR. GROUP SUPERVISOR/DATE

POSTULATED INTERACTION NO.: 05-04-03-01 FIRE ZONE 1-B LOCATION Containment LOCATION WITHIN FIRE ZONE: Elev. 115, at missile barrier, near RCPP1 IDENTIFICATION OF INTERACTING COMPONENTS

SEISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTATI

SOURCE: light fixture.

TARGET: Air supply tubing to FCV-760.

POSTULATED INTERACTION:

RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.

Fixture falls, impacts tubing.

M. Jones 11/05/80 WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Fixture qualified by analysis. See Civil AGO

R. J. Swaim 01/25/83 DISCIPLINE ENGINEER/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn 08/17/83 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM	
INTERACTION DOCUMENTATION SHEET (IDS)	ſ
POSTULATED INTERACTION NO.: 05-04-05-01	1
FIRE ZONE 3-RB LOCATION Penetration Areas FLOOR ELEVATION 115'-0"	
LOCATION WITHIN FIRE ZONE: Flev. 115', area GW.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: SOURCE CODE: NS-CD 4 construction gas lines v1.5", green, orange, white, gray.	
TARGET: * TARGET CODE: E-KT027-2 · Conduit KT027.	
POSTULATED INTERACTION:  Gas lines impact conduit due to lack of lateral support.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  These lines are believed to be temporary lines. Insure that they are removed prior to plant start-up.	
G. Worisky 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  lines will be removed as directed by NPPR #DC1-83-NO-PO012.	٠
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG [GC] HVAC ICC PSE NPO N	AN
L. W. Horn 08/25/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE	

(FOR MODIFICATIONS ONLY)

[0030A/0087Z-8]

SHEET \_\_\_1\_ OF

SHEET1 OF1
PROGRAM DS)
OOR ELEVATION 110'-0"
all.
CODE: P-3847-6
CODE: M-FCV763
NA CODE: INTERFERE & DEFLECT 63, relative movement could
relative movement by providing a walkdown.

# PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1

SEISMICALLY INDUCED SYSTEM INTERACTION DOCUMENTA	
POSTULATED INTERACTION NO.: 05-08-01-01	<del></del>
FIRE ZONE 1-B LOCATION Containmen	t FLOOR ELEVATION 110'-0"
LOCATION WITHIN FIRE ZONE: Azimuth 200° between steam generator 1-	4 and crane wall.
IDENTIFICATION OF INTERACTING COMPONENTS -	
SOURCE: Line No. 3847-6". (RHR pp 1-2 INJ. cold leg 4)	SOURCE CODE: P-3847-6
TARGET: FCV-763 (operator), SG blowdown 1-4 iso	TARGET CODE: M-FCV763
POSTULATED INTERACTION: Insulation on line No. 3847 is in conta damage the operator on FCV-763.	PHENOMENA CODE: INTERFERE & DEFLEC ct with FCV-763, relative movement could
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Rework insulation on line 3847 as requirately air gap between insulation and valve Note: This interaction is a result of	
S. L. Harris 09/28/83 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Insulation on line #3847 reworked to pro FCV-763. (Per ART 453.)	, ovide 1" clearance around the operator on
C. R. VanNatta 10/10/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EF	K. M. Krause 10/10/83  ENGR. GROUP SUPERVISOR/DATE  E EMS ENG GC HVAC I&C [PSE] NPO NAM
S. E. Traisman 11/29/83  FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY) A/0074Z-13]	L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] IGC PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

DISCIPLINE ENGINEER/DATE

L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

D. H. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE

í

PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	RIC CO. HIT NO. 1 FERACTION PROGRA	ET1 OF _1
LATED INTERACTION NO.: 05-10-03-02	<del> </del>	•
ZONE 1-B LOCATION Containment	FLOOR EL	EVATION 112'-0"
ION WITHIN FIRE ZONE: Elev. 120', at missile barrier, near pressur	rizer.	
IFICATION OF INTERACTING COMPONENTS .		
E: Temporary florescent light fixture.	SOURCE CODE:	E-I.F-18
<u>T:</u> Air supply tubing to FCV-76.	TARGET CODE:	I-FCV761
LATED INTERACTION: Fixture falls, impacts tubing,	PHENOMENA CODI	E: FIXTURE
MENDED RESOLUTION BY WALKDOWN TEAM: Remove temporary light fixture before plant	start-up.	
M. Jones 11/06/80  OWN TEAM ORIGINATOR/DATE  RESOLUTION BY RESPONSIBLE DISCIPLINE: 1.ight fixture removed 02/19/82 per ART 043.		

l. W. Horn 09/30/82

SIP PROJECT ENGINEER APPROVAL/DATE

#### PACIFIC GAS & ELECTRIC DIABLO CANYON PLANT, UNIT SEISMICALLY INDUCED SYSTEMS INTERA INTERACTION DOCUMENTATION SHE

POSTULATED INTERACTION NO.: 05-10-03-02

IDENTIFICATION OF INTERACTING COMPONENTS

LOCATION WITHIN FIRE ZONE:

SOURCE:

FIRE ZONE 1-B LOCATION Containment

TARGET: Air supply tubing to FCV-76.	TARGET CODE: I-FCV761
POSTULATED INTERACTION:  Fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove temporary light fixture before plant	start-up.
M. Jones 11/06/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Light fixture removed 02/19/82 per ART 043	
	A. G. Barta 02/12/82
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	ENGR. GROUP SUPERVISOR/DATE ENG [GC] HVAC I&C PSE NPO NAM

S. Harris 11/06/80

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET		OF	_1_
-------	--	----	-----

POSTULATED INTERACTION NO.: 05-16-03-01	•
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 110'-9"
LOCATION WITHIN FIRE ZONE: Elev. 110, near RCP 1-3, along missile bar	rrier.
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Air registers (2).	SOURCE CODE: H-DUCT-18
TARGET: Air supply tubing to FCV-762.	TARGET CODE: I-FCV762
POSTULATED INTERACTION: Air registers fall, impact tubing.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of air registers by simpl	lified analysis.
M. Jones 11/15/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Register qualified by analysis. See IDS N	No. 03-29-01-04.
DISCIPLINE ENGINEER/DATE	D. H. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	EMS ENG GC [HVAC] ISC PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

AVS

SHEET	1	OF	1

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM

	INTERACTION DOCUMENTA	TION SHEET (IDS)
POSTULATED INTERACTION	ON NO.: 05-16-05-03	
FIRE ZONE 1-A	LOCATION _Containmen	t FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE Elev. 117 Col.		
. IDENTIFICATION OF IN	TERACTING COMPONENTS	
SOURCE: Floor grating.	,	SOURCE CODE: C-GRATING
TARGET: K1741		TARGET CODE: E-K1741-2
POSTULATED INTERACTION Floor grating c		PHENOMENA CODE: INTERFERE & DEFLECT d impact if movement occurred.
,		· .
RECOMMENDED RESOLUTION Provide clearance	ON BY WALKDOWN TEAM: ce between floor grating	and conduit.
J. F. Grant 09/1		•
FINAL RESOLUTION BY I	RESPONSIBLE DISCIPLINE: ce around the conduit ha	s been provided per ART O21.
S. Hanusiak 01, DISCIPLINE ENGINEER,	/16/81 /DATE	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBI	LE FOR RESOLUTION: [CE] I	EE EMS ENG GC HVAC I&C PSE NPO NAN
M. Jones C	02/17/83 Y WALKDOWN TEAM	L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

SHEET1_ OF1_	
*	1
ROGRAM	

POSTULATED INTERACTION NO.: 05-16-05-05
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115', area GW.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: NS-CD  4 construction gas lines, three 1.5" - green, orange, white. One 2.5" - gray.
TARGET: Conduit KT026.
POSTULATED INTERACTION:  Gas lines impact conduit due to lack of lateral support.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  These lines are believed to be temporary lines. Insure they are removed prior to plant start.
G. Worisky 06/08/81
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Lines will be removed as directed by NPPR No. DC1-83-NO-POO12.
J. Townsend
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CF. FF. FMS. ENG [GC] HVAC ICC. PSE NPO NAMED IN THE RESPONSIBLE FOR RESOLUTION: CF. FF. FMS. ENG. [GC] HVAC. ICC. PSE NPO NAMED IN THE RESOLUTION OF THE PAGE IN THE PAGE

I.. W. Horn

08/24/83

SIP PROJECT ENGINEER APPROVAL/DATE

[0030A/00877-10]

FIFID VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 05-17-01-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, near penetration 77.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: Steam generator blowdown line 1042 - 2 1/2".
TARGET: TARGET CODE: P-1162-0.75  Class E blowdown line to pressurizer relief tank.
POSTULATED INTERACTION:  Line 1042 moves laterally, impacts vent connection to class E line.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add lateral restraint to line 1042 to preclude contact with vent connection.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Review of seismic and thermal expansion movement analysis done by PG&E & Bechtel show that the postulated interaction will not occur. Therefore no action necessary. See RLCA Resolution Report # 54.
C. R. VanNatta 06/22/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 06/22/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
L. W. Horn 07/08/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

SHEET1 OF 1	
-------------	--

POSTULATED INTERACTION NO.: 05-21-02-01	
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 110'-9"	
LOCATION WITHIN FIRE ZONE: Near steam generator 1-4.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Overhead HVAC ducts and air register.  SOURCE CODE: H-DUCT-18	<b></b>
TARGET: TARGET CODE: I-FCV763 FCV-763.	_
POSTULATED INTERACTION:  Ducts and/or register fall on valve and control circuits (air supply, positi switches).	on
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of ducts and register. Simplified analysis coupled with de inspection is suggested.	tailed
M. Jones 04/01/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  EDS Calc. No. 2 has demonstrated the integrity of the identified duct and register. No field modifications are required.	,
DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO	NAN

L. W. Horn 06/08/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1_	OF	_1_
-------	----	----	-----

POSTULATED INTERACTION NO.: 05-27-03-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, 220°, on missile wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Line 1870-1" N2 supply line.  SOURCE CODE: P-1870-1
TARGET: TARGET CODE: I-PM162  Mechanical panel 162 tubing.
POSTULATED INTERACTION:  Line 1870 hangers do not meet the B31.1 hanger spacing requirements. Pipe could fall, damage mechanical panel 162 tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional piping analysis on line 1870 to verify adequacy of the supports. Add restraints as required.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hanger DWG 049339 Sht. 117 is a portion of DCN DC1-EP-3606. Design calculation by H. Hohmann dated 08/02/82 is a response to field verification report by M. Jones dated 02/24/82 which resolves all interaction concerns identified in the report.
C. R. VanNatta 01/24/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 01/24/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 12/12/83  FIFLD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)



PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS).
POSTULATED INTERACTION NO.: 05-22-03-02
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE:  Flev. 117, 221°, along missile wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: F-LF-1A  Overhead light fixture.
TARGET:  Tubing to mechanical panel 162.  Tubing to mechanical panel 162.
POSTULATED INTERACTION:  Fixture falls, impacts tubing.  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of light fixture mount. Simple analysis should be adequate.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Fixture qualified by analysis. See Civil Calc. 52.24.52.
R. J. Swaim 01/28/83  DISCIPLINE ENGINEER/DATE  G. C. Bhatt 01/28/83  ENGR. GROUP SUPERVISOR/DATE  PROCEDULATION: CE [EE] EMS. ENG. CC. HVGC. TEC. PSE. NPO. NAN

L. W. Horn 06/08/83 SIP PROJECT ENGINEER APPROVAL/DATE

[0006A/0066Z-36]

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

Acro

	SEISMICALLY	PACIFIC GAS & ELIBLO CANYON PLANT, INDUCED SYSTEMS CTION DOCUMENTAT	, UNIT NO. 1 INTERACTION I		<u>1</u> OF	<u>1</u>
POSTULATED INT	ERACTION NO.: _	05-22-03-03				
FIRE ZONE 1-B	LOCAT	ION <u>Containment</u>	FLOOR I	ELEVATION _	110'-9"	<del>-</del>
LOCATION WITHI Elev. 110		along missile ba	arrier.			
IDENTIFICATION	OF INTERACTING	COMPONENTS				
SOURCE: Air regis	ter.		SOURCE	CODE: H-DU	ICT-1B	<del></del>
<u>TARGET</u> : Air suppl	y tubing to FC\	/ <del>-</del> 763.	TARGET (	CODE: I-FO	CV763	
POSTULATED INT Air regis	ERACTION: ter falls, impa	acts tubing.	PHENOMEN	A CODE: ME	CHFAIL	
	SOLUTION BY WAN	<u>KDOWN TEAM:</u> register by simp	lified <sup>°</sup> analys	is.		
	11/05/80 ORIGINATOR/DATE					
	ON BY RESPONSIE qualified by ar	<u>BLE DISCIPLINE:</u> nalysis. See IDS	No. 03-29-01-	-04.		
	- 17-			. Hagstrom		
DISCIPLINE EN	GINEER/DATE			GROUP SUPER		
DISCIPLINE RES	PONSIBLE FOR RE	SOLUTION: CE EE	EMS ENG G	C [HVAC] I	C PSE 1	NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

09/08/82 L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE

	SHEET	1	OF	1	
--	-------	---	----	---	--

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 05-22-04-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, 220°, on missile wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: Line 1870-1" N <sub>2</sub> supply line.  SOURCE CODE: P-1870-1
TARGET:  Mechanical panel 162.  TARGET CODE: I-PM162
POSTULATED INTERACTION:  Line 1870 hangers do not meet the B31.1 hanger spacing requirements. Pipe could fall, damage mechanical panel 162.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional piping analysis on line 1870 to verify adequacy of the supports. Add restraints as required.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hanger DWG. 049339 SHT. 117 is a portion of DCN DC1-EP-3606. Design calculations by H. Hohmann dated 08/02/82 is a response to field verification report by M. Jones dated 02/24/82 which resolves all interaction concerns identified in the report.
C B VanNatéa 01/24/02 V M Vanue 01/24/02
C. R. VanNatta 01/24/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 01/24/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC IEC [PSE] NPO NAN
S. E. Traisman 10/14/83 L. W. Horn 04/15/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

SHEET1 OF1
1 ON PROGRAM (IDS)
, , , , , , , , , , , , , , , , , , ,
FLOOR ELEVATION 117'-0"
• •
•
CE CODE: C-GRATING
SET CODE: E-K1741-2
MENA CODE: INTERFERE & DEFLECT
f movement occurred.
•
it.
vided per ART #22.
3.

THIERHCITON DOCOMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 05-22-05-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117 Col. 7 at BTX12F DWG 57687.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-GRATING Floor grating.
TARGET:  K1741  TARGET CODE: F-K1741-2
POSTULATED INTERACTION:  PHENOMENA CODE: INTERFERE & DEFLECT  Floor grating close to conduit and could impact if movement occurred.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Provide clearance between floor grating and conduit.
J. F. Grant 09/17/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Min. 2" clearance around the conduit has been provided per ART #22. Note: This TDS is duplicate with TDS #05-16-05-03.
S. Hanusiak 01/16/81  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAME

M. Jones 02/17/82 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 05/27/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1 (	OF .	1
-----------	------	---

FIRE ZONE	_1 <b>-</b> B	LOCATION _Contai	nment	FLOOR ELEV	ATION112'-1-	-1/2
LOCATION W	ITHIN FIRE Z					
IDENTIFICA	TION OF INTE	ERACTING COMPONENTS	<b>:</b>	•		
' <u>SOURCE</u> : Tie r	od supportin	ng FCV 763.	<u>s</u>	OURCE CODE:	M-FCV763	
TARGET:	conduit from	n conduit K1788 TO	<u>T</u> FCV 163, line	ARGET CODE: 2 1048-2 1/2	E-K1788-1 '.	
POSTULATED Tie ro	<u>INTERACTION</u> od could imp	l: act flex conduit.	РН	ENOMENA CODE:	DEFLECT	
RECOMMENDED Shield	O RESOLUTION	BY WALKDOWN TEAM:				
RECOMMENDED Shield	O RESOLUTION d flex condu	BY WALKDOWN TEAM: it from tie rod.			,	
Shield	flex condu	it from tie rod.				
B. Smi WALKDOWN TE FINAL RESOL Flex o	th 02/10 AM ORIGINATO OUTION BY REsonduit will letails. The	it from tie rod.	abolic curve the spring HG	from a fixed rod will no	point. See I t impact flex	DWG
B. Smi WALKDOWN TE FINAL RESOL Flex comore do condui	th 02/10 AM ORIGINATO OUTION BY REsonduit will letails. The	O/81 OR/DATE  SPONSIBLE DISCIPLING bahave like a para is concluded that the no action necess	abolic curve the spring HG sary.	rod will no K. M. Krause	t impact flex	
B. Smi WALKDOWN TE FINAL RESOL Flex comore do condui C. R. VanN DISCIPLINE	th 02/10 EAM ORIGINATO OUTION BY RE- conduit will letails. This.t. Therefore	O/81 OR/DATE  SPONSIBLE DISCIPLING bahave like a para is concluded that the no action necess	abolic curve the spring HG sary.	rod will no  K. M. Krause NGR. GROUP SI	t impact flex  O6/14/83  UPERVISOR/DATE	
B. Smi WALKDOWN TE FINAL RESOL Flex comore do condui  C. R. VanN DISCIPLINE .	th 02/10 EAM ORIGINATO OUTION BY RE- conduit will letails. This t. Therefore EATE 06/14/ ENGINEER/DA	O/81 OR/DATE SPONSIBLE DISCIPLING bahave like a parais concluded that the no action necessive no action necessive.	abolic curve the spring HG sary.  E E EEE EMS E	rod will no K. M. Krause NGR. GROUP SI NG GC HVAC	O6/14/83 UPERVISOR/DATE	<u>-</u>

SHEET	1 '	OF	1

INIERHOITON DOCORERINIA	ou succi (Ins)
POSTULATED INTERACTION NO.: 05-27-03-01	
FIRE ZONE 3-BB LOCATION Penetration	Area FLOOR ELEVATION 110'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, at containment 127°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead platform.	SOURCE CODE:C-PLAT-388
TARGET: FCV-250.	TARGET CODE: M-FCV250
POSTULATED INTERACTION: Platform falls, impacts valve and attached	PHENOMENA CODE: CIVILFAIL d tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform by analysis.	•
M. Jones 05/07/80	
WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform, etc. qualified by analysis. Second-27-03-01.	e resolution sheet and Calc. No
S. Hanusiak 08/08/80 DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	V. J. Ghio 08/08/80 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO NAN
•	L. W. Horn 09/30/82
FIELD VERIFICATION BY WALKDOWN TEAM	SIP PROJECT ENGINEER APPROVAL/DATE

[0011A/0072Z-15]

(FOR MODIFICATIONS ONLY)

SHEET _	1_	OF	1_	_/	
					\

POSTULATED INTERACTION NO.: 05-28-03-01
FIRE ZONE 3-88 LOCATION Penetration Area FLOOR ELEVATION 100'-0"
1.OCATION WITHIN FIRE ZONE:  Flev. 100", GF area, near penetration 37, 131°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: PS-1040-2.50  Tension rods to pipe whip restraint to line 1040, support node 648-R4.
TARGET:  Air supply tubing to valve FCV-250.
POSTULATED INTERACTION: PHENOMENA CODE: DFFIFCT Lateral movement of tension rods causes impact with tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add shield bracket to column 9 to protect tubing from impact.
M. Jones 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Instrument line rerouted per ART 272.
E. M. Valeriano  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE FE EMS ENG GC HVAC [I&C] PSE NPO NAME
S. E. Traisman  I. W. Horn 10/29/82  FIFI D VERTFICATION BY WALKDOWN TEAM SIP PROJECT ENGINFER APPROVAL/DATE

F0039A/01017-427

(FOR MODIFICATIONS ONLY)

FIFID VERIFICATION BY WALKDOWN TEAM

SHEET1_ OF	1
------------	---

. INTERHCITOR	DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 05-31	<u>-03-01</u>
FIRE ZONE 3-BB LOCATION _	Penetration Area FLOOR ELEVATION 110'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, at containment 127	•
IDENTIFICATION OF INTERACTING COMP	ONENTS
SOURCE: Overhead platform.	SOURCE CODE: C-PLAT-3BB
TARGET: FCV-249.	TARGET CODE: M-FCV249
POSTULATED INTERACTION: Platform falls, impacts valve	PHENOMENA CODE: CIVILFAIL and attached tubing.
RECOMMENDED RESOLUTION BY WALKDOWN Ensure integrity of platform	
M. Jones 05/07/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DI  Platform is qualified by anal 05-27-03-01.	SCIPLINE: ysis. See resolution sheet and Calc. No
S. Hanusiak 08/08/80 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUT	V. J. Ghio 08/08/80  ENGR. GROUP SUPERVISOR/DATE  ION: [CÉ] EE EMS ENG GC HVAC I&C PSE NPO NAI
FIELD VERIFICATION BY WALKDOWN TEA (FOR MODIFICATIONS ONLY)	L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

F0011A/0072Z-16]

SHEET _	1	_ OF _	1	445
ogram				

L. W. Horn 08/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

TOOD TITLETON 1001 ON
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, GE area, near penetration 37, 131°.
IDENTIFICATION OF INTERACTING COMPONENTS .
SOURCE:  SOURCE CODE: P-1040-2.50  Tension rods to pipe whip restraint to line 1040, support node 648-R4.
TARGET:  - Air supply tubing to valve FCV-248.
POSTULATED INTERACTION:  Lateral movement of tension rods causes impact with tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add shield bracket to column 9 to protect tubing from impact.
M. Jones 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:
The tension rods are located approx 40" above platform 73 G grating and the air supply tubing is located approx 9" below 73 G platform grating. The interposing grating precludes the interaction. No modification is necessary.
S. Skochko 06/27/83  DISCIPLINE ENGINEER/DATE  J. P. Meierdierks 06/27/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [IEC] PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)  POSTULATED INTERACTION NO.: 05-35-03-01  FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 110'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, at containment 127°.
IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE:  Overhead platform.  SOURCE CODE: C-PLAT-3BB
TARGET:  FCV-246.  TARGET CODE: M-FCV246
POSTULATED INTERACTION:  Platform falls, impacts valve and attached tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform by analysis.
M. Jones 05/07/80 WALKDOWN TEAM ORIGINATOR/DATE  ETHOL RESOLUTION BY RESPONSIBLE DISCIPLINE.
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platform is qualified by analysis. See resolution sheet and referenced Calc. No 05-27-03-01.
S. Hanusiak 08/08/80 V. J. Ghio 08/08/80 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

09/30/82

5:429/84

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

• •
SHEET1_ OF1
I Program (DS)
OOR ELEVATION 1.00 1-0"
CODE: P-1040-2.50
CODE: M-FCV246
NA CODE: DFFLFCT tubing.
om impact.
rm 73 G grating and the air

POSTULATED INTERACTION NO.: 05-36-03-01		
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 1.00 9-0"		
LOCATION WITHIN FIRE ZONE: Elev. 100', GE area, near penetration 37, 131°.		
IDENTIFICATION OF INTERACTING COMPONENTS		
SOURCE:  SOURCE CODE: P-1040-2.50  Tension rods to pipe whip restraint to line 1040, support node 648-R4.		
TARGET:  Air supply tubing to valve FCV-246.  TARGET CODE: M-FCV246		
POSTULATED INTERACTION:  I.ateral movement of tension rods causes impact with tubing.		
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add shield bracket to column 9 to protect tubing from impact.		
M. Jones 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE		
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The tension rods are located approx 40" above platform 73 G grating and the air supply tubing is located approx 9" below 73 G platform grating. The interposing grating precludes the interaction. No modification is necessary.		
S. Skochko 06/22/83  DISCIPLINE ENGINEER/DATE  J. Meierdierks 06/27/83  ENGR. GROUP SUPERVISOR/DATE		
DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [IEC] PSE NPO NAN		
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS CALLY)		

[0039A/0101Z-44]

SHEET	1	OF	1

	*
POSTULATED INTERACTION NO.: 05-38-01-01	
FIRE ZONE 3-BB LOCATION Penetration	Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100- 5' from container wall azimuth	143°.
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE:  Motion due to postulated HOSGRI event.	SOURCE CODE: NS-CD
TARGET: FCV 160 S.G. to blowdown tank.	TARGET CODE: M-FCV160
POSTULATED INTERACTION:  Contr. deficiency: seismic compression s pipe attached to valve is in rigid guides tive.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Shim, 3/4" (about) between valve & compres	sion stop.
R. L. Cloud 06/09/81 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  A PG&E memo was sent to PPP/P. Steiger/R.  R. Tinkle on 05/03/83 stating that hanger order to resolve interaction.  Note: construction deficiency corrected	575/186R is to be reworked in
C. R. VanNatta 05/10/83 DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	K. M. Krause 05/10/83  ENGR. GROUP SUPERVISOR/DATE  EMS [ENG] GC HVAC TAC PSE NPO NAN
S. E. Traisman 11/02/83 FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)
TION NO.: 05-39-03-01
LOCATION Penetration Area FLOOR ELEVATION 110'-0"
RE ZONE: containment 127°.
INTERACTING COMPONENTS
form.
TARGET CODE: M-FCV244
TION:  PHENOMENA CODE: CIVILFAIL s, impacts valve and attached tubing.
TION BY WALKDOWN TEAM:
ity of platform by analysis.

POSTULATED INTERACTION NO.: \_05-39-03-01

Elev. 100, at containment 127°.

IDENTIFICATION OF INTERACTING COMPONENTS.

FIRE ZONE 3-BB

FCV-244.

POSTULATED INTERACTION:

SOURCE:

TARGET:

LOCATION WITHIN FIRE ZONE:

Overhead platform.

RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform by analysis.

Platform falls, impacts valve and attached tubing.

05/07/80 M. Jones WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Platform is qualified by analysis. See resolution sheet and referenced Calc. No 05-27-03-01.

S. Hanusiak 08/08/80 DISCIPLINE ENGINEER/DATE

V. J. Ghio 08/08/80 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

09/30/82 W. Horn SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	

POSTULATED INTERACTION NO.: 05-40-03-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
1.OCATION WITHIN FIRE ZONE: Elev. 100, GE area, near penetration 37, 131°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-1040-2.50  Tension rods to pipe whip restraint to line 1040, support Mode 648-R4.
TARGET:  Air supply tubing to valve FCV-244.
POSTULATED INTERACTION:  Lateral movement of tension rods causes impact with tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add shield bracket to column 9 to protect tubing from impact.
M. Jones 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The tension rods are located approx. 40" above platform 73G grating and the air supply tubing is located approx. 9" below platform 736 grating. The interposing grating precludes the interaction. No modification is necessary.
S. Skochko 06/27/83  DISCIPLINE ENGINEER/DATE  J. Mairdierks 06/27/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [IEC] PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM  (FOR MODIFICATIONS ONLY)  L. W. Horn 08/23/83  SIP PROJECT ENGINEER APPROVAL/DATE

	SHEET1_ OF1_
PACIFIC GAS & EL DIABLO CANYON PLANT SEISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTAT	, UNIT NO. 1 INTERACTION PROGRAM
POSTULATED INTERACTION NO.: 05-41-01-02	· · · · · · · · · · · · · · · · · · ·
FIRE ZONE 3-BB LOCATION Penetration	Area FLOOR ELEVATION 110'-0"
LOCATION WITHIN FIRE ZONE: Elev. 103, at containment wall 139°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platform and grates.	SOURCE_CODE: _C-PLAT-388
TARGET: Line 1863-1"; Nz supply line.	TARGET CODE: P-1863-1
POSTULATED INTERACTION: Platform falls, impacts line 1863.	PHENOMENA CODE: CIVILFAIL
	•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform by simplifi	ed analysis.
M. Jones 08/12/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform and grating have been seismica sheet and referenced Calc. No O5-27-03-0	Illy qualified by analysis. See resolution 1.
	•
S. Hanusiak 02/19/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] E	E EMS ENG GC HVAC ICC PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 08/23/82 · SIP PROJECT ENGINEER APPROVAL/DATE

5.5 7/27/94

F00110/00727\_107

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET1_ OF1
1 ON PROGRAM (IDS)
FLOOR ELEVATION 140'-0"
CE CODE: E-LF-1C
ET CODE: M-CROM
MENA CODE: FIXTURF
ints (strapping) if/as
analysis. See Civil Calc.
3. Sarkar 09/21/82 GR. GROUP SUPERVISOR/DATE

POST	ILATED	INTERACT	ION NO.: _06-01	L <del>-</del> 01-01					
FIRE	ZONE	1-C	LOCATION _	Containment	FI	LOOR ELEVAT	TION 140'	-0"	•
LOCAT		ITHIN FIRE 148, on t	E ZONE: walls above the	e reactor pit.	v			٠	
IDEN	TIFICA	TION OF I	NTERACTING COM	PONENTS					
SOUR	<u>E</u> : Big b	oeam batte	ry—operated lig	ghts (2).	SOURCE	E CODE: E-	-l F-1C		-
TARG		or vessel	and CRDM.		TARGE	T CODE: M	-CROM		<b>-</b>
POSTI		INTERACT	<u>ION</u> : om mounting, i	mpact CRDM.	PHENOM	ENA CODE:	FIXTURF		-
RECO	MENDI Insur requ	re integri	ION BY WALKDOW ty of lights.	N <u>TEAM</u> : Add additional	restrai	nts (strap	ping) if/a	ıs	•
		es 03/02/ TEAM ORIGI	82 NATOR/DATE						
FINA	Light	DLUTION BY Ls mountin D6-01-01-0		<u>ISCIPLINE</u> : ismically quali	fied by	analysis.	See Civil	Calc	•
DIS	. Gab	allah 08 NE ENGINEE	1/25/82 R/DATE			Sarkar . GROUP SU			
DISC	IPLIN	E RESPONSI	BLE FOR RESOLU	TION: CE [EE] E	MS ENG	GC HVAC	I&C PSE	NPO	NAN
			,			Horn ·10/			_
		IFICATION FICATIONS	BY WALKDOWN TE	AM	SIP PROJ	ECT ENGINE	ER APPROV	AL/DATI	E

SHEET 1 OF 1
PACIFIC GAS & ELECTRIC CO.
DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM
INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-01-01-02
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 140, over reactor pit.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-SHIELD
••
TARGET: TARGET CODE: M-CRDM
Reactor vessel and CRDM.
POSTULATED INTERACTION: . PHENOMENA CODE: CIVILFAIL
Concrete blocks overturn, fall into reactor pit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:
Ensure integrity of concrete shields by simplified analysis.
M. Jones 03/03/82 . WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:
Concrete radiation shields have been seismically qualified by analysis. See calculation No. 06-01-01-02 and resolution sheet.
0 0 1 133-1 00 (00 (00 00 00 00 00 00 00 00 00 00 0
S. Gaballah 09/22/82  DISCIPLINE ENGINEER/DATE  B. Sarkar 09/23/82  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAN

S: 50 8|15|77 L W. Horn 10/25/82 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET 1_ OF _ 1	
-----------------	--

THIERHOLICA DOCUMENTALITON SHEET (IDS)
POSTULATED INTERACTION NO.: 06-01-01-03
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE:  Elev. 140', near steam generator and inside Fuel Transfer Canal.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-MISC-1C Remote equipment operators (20' long, 8 pieces).
TARGET: TARGET CODE: M-CRDM  Reactor vessel & CRDM.
POSTULATED INTERACTION:  Remote operators fall from temporary mountings, impact CRDM.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Secure remote operators to mountings or remove from area.
MAI. KDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The remote operator attached to the wall near S/G 1-3 has been secured as per AR No. 412. See Calc. No. 06-01-01-03. Also other remote operators will remain in the fuel transfer canal with no interaction with CRDM or reactor vessel.
S. Gaballah 07/18/83  DISCIPLINE ENGINEER/DATE  8. Sarkar 07/18/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE ENGINEERYDHIE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
0. 5. 5. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.

S. E. Traisman 11/29/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

I. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & FI ECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMTCALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-01-04
FIRE ZONE 1-C LOCATION Containment: FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 140, around reactor pit.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Misc. lifting equipment (FH crane, head and reactor internals lifting devices, small hoists, etc). Hoist each side of SG1-3.
TARGET:  Reactor vessel & CRDM.  TARGET CODE: M-CRDM
POSTULATED INTERACTION:  Source components fail or fall, impacting reactor and appurtanences.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of source components by analysis. Stored components should be secured in place.
M. Jones 03/02/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSTBLE DISCIPLINE:  No modifications are required. Sources have no possibility of interaction with targets or qualified for Hosgri event. See rationale, in IDS file No. 06-01-01-04.
A. Appleford 11/28/82  DISCIPLINE FMGTNFER/DATE  B. Sarkar 12/07/82  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] HE EMS ENG GC HVAC ICC PSE NPO NAN

560

I. W. Horn 02/08/83 SIP PROJECT FMGTNFER APPROVAL/DATE

FIFI D VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	
-------	---	----	--

•	POSTULATED IN	TERACTION	<b>NO.:</b> <u>06-</u> 0	01-01-05							
	FIRE ZONE 1-	с	LOCATION	Containm	ment	FLO	OR ELEV	ATION _	140 %	-0"	
	LOCATION WITH Top of c	IN FIRE ZO ontainment									
	IDFNTIFICATIO	N OF INTER	ACTING COM	PONENTS							
	SOURCE: Power ca	ble to pol	ar crane d	lrive.		SOURCE	CODE: _	E-R-1C		<del> </del>	-
	TARGET: Reactor	vessel and	CRDM.			TARGET	<u>CODE</u> :	M-CROM		<u>.                                    </u>	<del></del>
	POSTULATED IN	TERACTION: unt (Elev.		ls, cable f	_	HENOMEN CRDM.	A CODE:	FIXTU	₹F		_
		ESOLUTION ntegrity o 01-01-05.			ing, by s	implifi	, ed anal	ysis.	See (	Civil	Calc
	M. Jones		R/DATE								
ke		ION BY RES counting ha 1-01-01.				d by an	alysis.	See (	Civil	Calc	•
	S. Gaballa DISCIPLINE E				_		arkar GROUP S				
	DISCIPLINE RE			TION: CE [	<u>eej</u> ems						NAN
)	FIELD VERIFIC			:AM		. W. Ho PROJEC			PROVAI	_/DAT	Ē .

SHEET 1	OF <u>1</u>
ROGRAM )	
• `	
R ELEVATION _	140'-0"

. L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 06-01-01-06	· ·
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 211', top of polar crane.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Service hoist.	SOURCE CODE: M-HOIST-1C
TARGET: Reactor vessel & CRDM.	TARGET CODE: M-CRDM
POSTULATED INTERACTION: Hoist falls, impacts CROM.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of hoist by anlysis. Secun motion.	re hoist to monorail to prevent
M. Jones 03/03/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Sources identified in technical review No. 9 qualified with modification per ART No. 413 Rev. 1.	
S. Gaballah 03/10/83 DISCIPLINE FNGINFER/DATE	B. Sarkar 03/10/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPILINE RESPONSIBLE FOR RESOLUTION: [CE] FE EN	AS FING GC HVAC ICC PSE NPO NAN

S. E. Traisman 11/29/83
FIFLD VERIFICATION BY WALKDOWN TEAM

	,			
POSTULATED INTERACTION NO.: 06-01-01-07				
FIRE ZONE IC LOCATION Containment	FLOOR ELE	VATION	140'	_
LOCATION WITHIN FIRE ZONE: Elevation 211, top of polar crane				
IDENTIFICATION OF INTERACTING COMPONENTS	•			
SOURCE: Misc. equipment (fire extinguishers, battery	SOURCE CODE: charger, etc.)	NS-CD	•	_
TARGET: Reactor vessel and CRDM	TARGET CODE:	M-CRDM		_
POSTULATED INTERACTION: Equipment falls from crane, impacts CRDM	PHENOMENA CODE	: HOUSEKEE	P	_
	,			
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove equipment before start-up.				
-				
M.G. Jones 3/3/82 WALKDOWN TEAM ORIGINATOR/DATE				
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Equipment removed as of 6/23/83.		<b>,</b>	,	
/ <del>\</del>	J.D. Townsers			,
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EM	ENGR. GROUP : S ENG GC HVA	•		NAN
DECEMBER RESPONDED FOR RESOLUTION. GE EE EIK	. Liu uu nym	G INC FOR	. MFU	18:118
S.E. Traisman 11/29/83 FIELD VERIFICATION BY WALKDOWN TEAM ST	L.W. Horn IP PROJECT ENGI	<u>1</u> NEER APPROV	/18/84 /AL/DAT	Ē
3Z/3 Dws		Re	v. 00/	4/21/

6/20/24

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 06-01-01-08
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Hydraulic fluid tank to dome service crane.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Hydraulic fluid tank to dome service crane.
TARGET:  Reactor vessel & CRDM.  TARGET CODE: M-CRDM
POSTULATED INTERACTION:  Tank overturns, falls from crane, impacts CRDM. Fluid spills onto CRDM resulting in fire.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of tank by analysis. Provide additional supports if/as required.
M. Jones 03/03/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: source component was seismically qualified by anlysis. Subject to modifications shown on DCN NO. SC1-EC-5349.
S. Gaballah 02/24/83 DISCIPLINE ENGINEER/DATE  B Sarkar 02/28/83 ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC IEC PSE NPO NAN

M. Baker 06/28/83

FIELD VERIFICATION BY WALKDOWN TEAM

PACIFIC GAS & FLECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-01-01-09
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 211, top of polar crane.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: NS-CD  Cover to electrical equipment, near gantry control panel 4.
TARGET: TARGET CODE: M-CRDM Reactor vessel & CRDM.
POSTULATED INTERACTION:  Cover falls, impacts CRDM.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Replace missing bolt to cover on bottom edge to ensure integrity of cover.
M. Jones 03/03/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  IDS is a result of a construction deficiency. IDS transferred to onsite quality control. Construction deficiency to be corrected during normal course of construction activities.
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLIANT DESCONSIBLE FOR DESCRIPTIONS OF THE FMS FNG OF HUAC TIC DSF NDO NAN FOO

07/29/84

1. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

[0028A/0082Z-17]

FIFI.D VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-01-01-10
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Above reactor vessel head.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: H-DUCT-1C  CRDM cooling fans and associated ducting.
TARGET: TARGET CODE: M-CRDM CRDM's.
POSTULATED INTERACTION:  Fans and/or associated duct supports fail and sources impact target below.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of fans and duct supports by simplified analysis.
S. E. Traisman 09/28/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Subject fans and ducts have been qualified with modification under the DCP Ductwork Reverification Program. For modification see DCN DC1-EC-3603 and for Calc. see Calc. File #52.7.12.1.
S Gahallah 07/12/83 B. Sarkar 07/12/83

FIFLD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

S. Gaballah 07/12/83

DISCIPI INF. ENGINFER/DATE

10/20/83 L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE

ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CF] EE FMS FNG GC HVAC ICC PSE NPO NAN

SHEET	1	0F	1

POSTULATED INTERACTION NO.: 06-01-02-01
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 114', inside containment building.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Handrails at fuel transfer canal, elev. 140'.
TARGET:  Reactor head equipment.  TARGET CODE: M-CRDM
POSTULATED INTERACTION:  Handrails fall into reactor pit impact reactor head equipment.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Secure removable handrails to mountings and/or ensure integrity of handrails by simplified analysis.
R. D. Dorli 04/01/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Handrails have been qualified by analysis. See resolution sheet and Calc No. 06-01-02-01, Rev. 1.
S. Hanusiak 04/22/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak 04/22/81  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

왕16/14

L. W. Horn 05/25/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

. SI	PACIFIC GAS & ELECT DIABLO CANYON PLANT, U EISMICALLY INDUCED SYSTEMS IN INTERACTION DOCUMENTATION	NIT NO. 1 TERACTION PROGRAM
POSTULATED INTERACT.	CON NO.: 06-01-02-02	•
FIRE ZONE 1-C	LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE Elev. 114', in:	E ZONE: side reactor pit.	•
IDENTIFICATION OF I	ITERACTING COMPONENTS	
SOURCE: CRDM hoists for	r stud tensioner.	SOURCE CODE: M-HOIST-1C
TARGET: CRDM.		TARGET CODE: MECHFATI.
POSTULATED INTERACT: Hoists fall, in		PHENOMENA CODE: LOOSE
	CON BY WALKDOWN TEAM: by of hoists by simplified an	alysis.
WALKDOWN TEAM ORIGIN FINAL RESOLUTION BY Since the stud	RESPONSIBLE DISCIPLINE:	talled on the monorail during reactor ution sheets.
S Caballab 12	(07/02	B. Sarkar 12/07/82

ENGR. GROUP SUPERVISOR/DATE

L. W. Horn

02/08/83

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

S. Gaballah 12/07/83

DISCIPLINE ENGINEER/DATE

SIP PROJECT ENGINEER APPROVAL/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

SHEET	<u>· 1</u>	OF _	_ 1

POSTULATED INTERACTION NO.: 06-01-02-03	•
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Flev. 143, over reactor pit.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Lifting cable to reactor/CRDM shield (2 place	SOURCE CODE: C-CABIE
TARGET: CRDM.	TARGET CODE: M-CRDM
•	•
POSTULATED INTERACTION: Cable, which is hanging loose swings into CR	PHENOMENA CODE: DEFLECT '
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Secure the free end of each calble with a sai	fety chain or other mechanism.
M. Jones 03/25/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Interaction connot occur when CRDM's must fur 06-01-02-03.	nction. See rationale in IDS file No
A. Appleford 10/06/82 DISCIPLINE ENGINEER/DATE	B. Sarkar 10/27/82  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS	
•	
FIELD VERIFICATION BY WALKDOWN TEAM SI (FOR MODIFICATIONS ONLY)	I. W. Horn 01/18/83  IP PROJECT ENGINEER APPROVAL/DATE

SHEET 1 OF 1	
--------------	--

I. W. Horn 07/03/84
SIP PROJECT ENGINEER APPROVAL/DATE

11.8. 8/21/84

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 06-01-04-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 112'-11/2"
LOCATION WITHIN FIRE ZONE: Elev. 112', in seal table room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: M-5-10PATH 5-path and 10-path drive assemblies over seal table.
TARGET:  Incore flux monitoring tubing.  TARGET CODE: I-FLUX MON
POSTULATED INTERACTION:  Drive assemblies fall upon tubes.  PHENOMENA CODE: SPTFAIL  .
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of drive assembly mountings and the mounting of the individual drive assembly components by simplified analysis. Secure 10-path drive assembly trolley to the I-beam.
M. G. Jones 03/17/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Modification provided per DCN #DCI-E-M-5332.
T. P. Lee 07/07/83 E. Connell III 07/07/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NA

[0034A/0085Z-4]

S. E. Traisman 02/24/84 FIELD VERIFICATION BY WALKDOWN TEAM

PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN	
SEISMICALLY INDUCED SYSTEMS INT	ERACTION PROGRAM
INTERACTION DOCUMENTATION	SHEET (IDS)
POSTULATED INTERACTION NO.: 06-01-04-02	·
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 112'-0"
LOCATION WITHIN FIRE ZONE: Elev. 112, in seal table room.	. かり
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Platform grating at elev. 125.	SOURCE CODE: NS-CD
	TARGET CODE: I-FLUX MON
TARGET: Vessel bottom conduits.	THREE CODE. 1-FLOX FROM
POSTULATED INTERACTION: Grating is stored loosely on overhead	PHENOMENA CODE: HOUSEKEEP platform. Grating falls, impacts
conduits.	
•	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove grating before start-up.	·
•	
M. Jones 03/17/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  No grating is stored loosely on upper plate of construction — no design documentation no	form. This work was done in the course ecessary.
	J. Townsend
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE E	ns eng GC hvac I&C PSE [ <u>NPO]</u> NAN
S. E. Traisman 11/02/83	L. W. Horn
, FIELD VERIFICATION BY WALKDOWN TEAM .	SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

[0039A/0102Z-2]

SHEET \_\_\_1\_ OF \_\_1\_\_

SHEET 1 OF 1
1 N PROGRAM IDS)
<u> </u>
LEVATION112'-11/2"
C 0005 - 4 00TT C
E CODE: M-BOTTLE
T CODE: I-FLUX MON
ENA CODE: SPTFAIL
to support bottle.
•

L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

D.J. E. 8/21/84

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION INTERACTION DOCUMENTATION SHEET (3

POSTULATED INTERACTION NO.: 06-01-04-03	
FIRE ZONE 1-8 LOCATION Containment  LOCATION WITHIN FIRE ZONE:  Elev. 112, in seal table room	FLOOR ELEVATION 112'-11/2"
IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE: Nitrogen storage bottle.	SOURCE CODE: M-BOTTLE
TARGET: Incore flux monitoring tubes.	TARGET CODE: I-FLUX MON
POSTULATED INTERACTION: Bottle overturns, impacts tubes.	PHENOMENA CODE: SPTFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Finsure that bottle mountings (chains) are Secure ends of chain to mounting bracket be	
M. G. Jones 03/15/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  See calculation No. M-159 for resolution a Modified latches at ends of chain.	and field modification, ART 307.
E. Barna 10/01/82  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	E. Connell III ENGR. GROUP SUPERVISOR/DATE  [EMS] ENG GC HVAC I&C PSE NPO NAN

[0034A/0085Z-5]

S. E. Traisman 11/29/83 FIELD VERIFICATION BY WALKDOWN TEAM

-3.			
	n.a===== = = = = =		T <u>1</u> 0F <u>1</u>
	PACIFIC GAS & DIABLO CANYON PLA		
SEIS	SMICALLY INDUCED SYSTE	MS INTERACTION PROGRA	м' .
	INTERACTION DOCUMENT	ATION SHEET (IDS)	•
POSTULATED INTERACTION	N NO.: 06-01-04-04		•
FIRE ZONE 1-B	LOCATION _Containme	nt FLOOR ELE	VATION 81'-6"
LOCATION WITHIN FIRE 7			
IDENTIFICATION OF INTE	ERACTING COMPONENTS	•	
SOURCE:		SOURCE CODE:	M_TANK
Reactor coolant o	drain tank.	SOUNCE CODE.	1 tes t HIMIX
nt			
TARGET: Vessel bottom cor	nduits.	TARGET CODE:	I-FLUX MON
,			·
POSTULATED INTERACTION		PHENOMENA CODE	
RCDT supports fai bottom conduits.	il, resulting in overt	urning of tank and su	bsequent impact with
words with contact to t			
			•
RECOMMENDED RESOLUTION	I BY WALKDOWN TEAM:		
	of RCDT supports by s	implified analysis.	•
			•
		•	
	•		
	03/17/82		
WALKDOWN TEAM ORIGINAT	OR/DATE		*
FINAL RESOLUTION BY RE			
The RCDT supports	s have been qualified	by analysis. See Cal	c. No.
S. Gaballah 10/06/	'82.	B. Sarkai	r 10/07/82
DISCIPLINE ENGINEER/D			SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE	. FOR RESOLUTION: [CE]	EE EMS ENG GC HVA	C IEC PSE NPO NAI
•			

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)
[0031A/0084Z-22]

SG 18+

L. W. Horn 11/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

POSTULATED INTERACTION NO.: 06-01-04-06  FIRE ZONE 1-B. LOCATION Containment FLOOR ELEVATION 117'-0"  LOCATION MITHIN FIRE ZONE:	PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	NIT NO. 1 TERACTION PROGRAM
LOCATION MITHIN FIRE ZONE:	POSTULATED INTERACTION NO.: 06-01-04-06	•
Theory seal table room, elev. 112', azimuth 270°.  IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE: Platform 72FG, elev. 125'.  SOURCE CODE: C-72FG  Platform 72FG, elev. 125'.  TARGET: Seal table.  POSTULATED INTERACTION: Platform fails, falls onto target.  PHENOMENA CODE: CIVILFAIL  PHENOMENA CODE: CIVILFAIL  RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Verify integrity of platform by simplified analysis.  S. F. Traisman 09/29/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Modification per ART No. 319 to be added to prevent postulated interaction. See resolution sheet and Calc. No. 06-01-04-06.  S. Gaballah 10/28/82 DISCIPLINE ENGINEER/DATE  B. Sarkar 10/28/82 ENGR. GROUP SUPERVISOR/DATE	FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 117'-0"
SOURCE: Platform 72FG, elev. 125'.  TARGET: Seal table.  POSTULATED INTERACTION: Platform fails, falls onto target.  Platform fails, falls onto target.  RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Verify integrity of platform by simplified analysis.  S. F. Traisman 09/29/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Modification per ART No. 319 to be added to prevent postulated interaction. See resolution sheet and Calc. No. 06-01-04-06.  S. Gaballah 10/28/82 DISCIPLINE ENGINEER/DATE  B. Sarkar 10/28/82 ENGR. GROUP SUPERVISOR/DATE		270°.
Platform 72FG, elev. 125'.  TARGET: Seal table.  POSTULATED INTERACTION: Platform fails, falls onto target.  Platform fails, falls onto target.  RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Verify integrity of platform by simplified analysis.  S. F. Traisman 09/29/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Modification per ART No. 319 to be added to prevent postulated interaction. See resolution sheet and Calc. No. 06-01-04-06.  S. Gaballah 10/28/82 DISCIPLINE ENGINEER/DATE  B. Sarkar 10/28/82 ENGR. GROUP SUPERVISOR/DATE	IDENTIFICATION OF INTERACTING COMPONENTS	
Seal table.  POSTULATED INTERACTION: PHENOMENA CODE: CTVILFAIL  Platform fails, falls onto target.  RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of platform by simplified analysis.  S. F. Traisman 09/29/82  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Modification per ART No. 319 to be added to prevent postulated interaction. See resolution sheet and Calc. No. 06-01-04-06.  S. Gaballah 10/28/82  DISCIPLINE ENGINEER/DATE  B. Sarkar 10/28/82  ENGR. GROUP SUPERVISOR/DATE		SOURCE CODE: C-72FG
Platform fails, falls onto target.  RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Verify integrity of platform by simplified analysis.  S. F. Traisman 09/29/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Modification per ART No. 319 to be added to prevent postulated interaction. See resolution sheet and Calc. No. 06-01-04-06.  S. Gaballah 10/28/82 DISCIPLINE ENGINEER/DATE  B. Sarkar 10/29/82  B. Sarkar 10/29/82  ENGR. GROUP SUPERVISOR/DATE		TARGET CODE: I-FLUX MON
S. F. Traisman 09/29/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Modification per ART No. 319 to be added to prevent postulated interaction. See resolution sheet and Calc. No. 06-01-04-06.  S. Gaballah 10/28/82 DISCIPLINE ENGINEER/DATE  B. Sarkar 10/28/82 ENGR. GROUP SUPERVISOR/DATE		PHENOMENA CODE: CIVILFAIL
S. F. Traisman 09/29/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Modification per ART No. 319 to be added to prevent postulated interaction. See resolution sheet and Calc. No. 06-01-04-06.  S. Gaballah 10/28/82 DISCIPLINE ENGINEER/DATE  B. Sarkar 10/28/82 ENGR. GROUP SUPERVISOR/DATE	÷	
WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCTPLINE:  Modification per ART No. 319 to be added to prevent postulated interaction. See resolution sheet and Calc. No. 06-01-04-06.  S. Gaballah 10/28/82  DISCIPILINE ENGINEER/DATE  B. Sarkar 10/28/82  ENGR. GROUP SUPERVISOR/DATE		analysis.
FINAL RESOLUTION BY RESPONSIBLE DISCTPLINE:  Modification per ART No. 319 to be added to prevent postulated interaction. See resolution sheet and Calc. No. 06-01-04-06.  S. Gaballah 10/28/82  B. Sarkar 10/28/82  DISCIPILINE ENGINEER/DATE  B. GROUP SUPERVISOR/DATE	S. F. Traisman 09/29/82 WALKDOWN TEAM ORIGINATOR/DATE	
DISCIPITIFE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE	Modification per ART No. 319 to be added to	prevent postulated interaction. See
	DISCIPIINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE

ऽ द्वास्त्रप

L. W. Horn 09/08/83 SIP PROJECT ENGINEER APPROVAL/DATE

S. F. Traisman 08/24/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

SHEFT	1	OF	1

t de la constant de l
POSTULATED INTERACTION NO.: 06-01-04-07
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE:  Bottom of reactor pit at elev. 64'.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: I-ELPPO6  Loose parts pinger No. ELPPO6 attached to flux monitoring tubes.
TARGET:  TARGET CODE: I-FI.UX MON  Incore flux monitoring tubes (part of RCS pressure boundary).
PHENOMENA CODE: SPTFAII  I.oose parts pinger mounted on a 39" x 4" x 3/4" stainless steel plate. Plate is supported off of two incore flux monitoring tubes. Seismic excitation of apparatus mounted on flux monitoring tubes damages flux monitoring tubes or apparatus mounting fails and impacts flux monitoring tubes.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify by analysis that the present configuration, (i.e.; loose parts pinger and stainless steel mounting plate mounted on two incore flux monitoring tubes) is qualified. Note: This IDS is being resolved via DC1-EM-13006 (06/23/83).
S. Sckochko 07/19/83 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  DC1-EM-13006-RO, requests that the loose parts pinger ELPPO6 be removed from the flux monitoring tubes which precludes the interaction.
S. Skochko 08/18/83  DISCIPLINE FNGINEER/DATE  J. Meierdierks 08/18/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE EE FMS ENG GC HVAC [IEC] PSE NPO NAM
S. F. Traisman 11/02/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-02-07-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 95, under steam generator 1-1.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Nearby shielding plates.  SOURCE CODE: C-SHIELD
TARGET:  Root valve 8061A.  TARGET CODE: I-8061A
POSTULATED INTERACTION:  Deflection of shielding plates results in impact with valve 8061A.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove or cut shielding plates away from valve 8061A.
M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Seismic displacements less than existing gap. No action required. See resolution (4 total) by RWE on 08/22/80.
DISCIPLINE ENGINEER/DATE  ##. J. Hansen 08/22/80  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET	1	OF	1

INTERACTION DOCUMENTAT	ION SHEET (IDS) .
POSTULATED INTERACTION NO.: 06-02-08-01	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 95, under steam generator 1-1.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Nearby shielding plates.	SOURCE CODE: C-SHIELD
TARGET: Root valve 8060A.	TARGET CODE: I-8060A
POSTULATED INTERACTION: Deflection of shielding plates results i	PHENOMENA CODE: DEFLECT n impact with valve 8060A.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove or cut shielding plates away from	valve 8060A.
M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Seismic displacements less than existing See resolution sheets (4 total) by RWE of	
F	
DISCIPLINE ENGINEER/DATE	H. J. Hansen 08/22/80 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	EMS ENG GC HVAC ISC [PSE] NPO NAN
•	
FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 10-28-82 SIP PROJECT ENGINEER APPROVAL/DATE

8~

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-02-09-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION: WITHIN FIRE ZONE: Elev. 95, under steam generator 1-1.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-SHIELD Source Code: C-SHIELD
TARGET: TARGET CODE: I-8059A .
POSTULATED INTERACTION:  Deflection of shielding plates results in impact with valve 8059A.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove or cut shielding plates away from valve 8059A.
M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Seismic displacements less than existing gap. No action required.  See resolution sheets (4 total) by RWE on 08/22/80.

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN

DISCIPLINE ENGINEER/DATE

10-28-82 L. W. Horn\_ SIP PROJECT ENGINEER APPROVAL/DATE

H. J. Hansen 08/22/80 ENGR. GROUP SUPERVISOR/DATE

**(**·

SHEET	1	OF	1

•
POSTULATED INTERACTION NO.: 06-03-05-01
FIRE ZONE 1-B CONTION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 96, under RCP's 1-4.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-3816-0.75  Class E lines 3816-3819, stem leakoff piping to valves 8073A-D.
TARGET:  Misc. RCL instrument taps & Class I conduit.  TARGET CODE: GENERIC
POSTULATED INTERACTION:  Class E pipe impacts Class I RCL instrument pipe & conduit due to lack of lateral support.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add additional restraints to lines 3816-3819 to preclude large deflections and reduce pipe seismic stresses.
M. Jones 04/08/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Pipe supports added per RLCA Resolution Report No. 6, Rev. A. Support E4 installed as one-way restraint w/pipe snubber used for other lateral direction.
P. H. Anderson 01/14/81  DISCIPLINE ENGINEER/DATE  J. A. Ante 01/14/81  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAM
M. Jones 02/25/82 L. W. Horn 09/30/82 FIELD VERIFICATIONS ONLY)  L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

Sw

SHEET1_ OF1_
PROGRAM 5)
OR ELEVATION 91'-0"
CODE: C-SHIELD

POSTULATED INTERACTION NO.: 06-03-05-02
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 95, under steam generator 1—2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-SHIELD  Nearby shielding plates.
TARGET: TARGET CODE: I-8061B.
PHENOMENA CODE: DEFLECT  Deflection of shielding plates results in impact with valve 80618.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove or cut shielding plates away from valve 8061B.
M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Seismic displacements less than existing gap. No action required. See resolution sheets (4 total) by RWE on 08/22/80.
# H. J. Hansen 08/22/80  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 10/28/82 SIP PROJECT ENGINEER APPROVAL/DATE



·
SHEET 1 OF 1  1 PROGRAM IDS)
LOOR ELEVATION 91'-0"
E CODE: C-SHIELD
T CODE:I-8060B
ENA CODE: DEFLECT th valve 80608.
в
ction required. See resolution

FIRE ZONE 1-B	LOCATION _	Containment	FLOOR ELE	EVATION _91'-	<u>o"                                    </u>
LOCATION WITHIN FI Elev. 95, und	RE <b>ZONE:</b> er steam generat	cor 1–2.			
IDENTIFICATION OF	INTERACTING COMP	PONENTS			
SOURCE: Nearby shield	ing plates.		SOURCE CODE:	C-SHIELD	
TARGET: Root valve 80	50B.		TARGET CODE:	I-8060B	
POSTULATED INTERAC Deflection of		es results in	PHENOMENA CODE		· · · · · · · · · · · · · · · · · · ·
RECOMMENDED RESOLUTION Remove or cut	FION BY WALKDOWN shielding plate		valve 80608.		
M. Jones 04/0 WALKDOWN TEAM ORIGI	shielding plate  09/80  NATOR/DATE  / RESPONSIBLE DI	SCIPLINE:	valve 8060B. gap. No action re	equired. See	resol
M. Jones 04/0 WALKDOWN TEAM ORIGI	shielding plate 09/80 (NATOR/DATE 7 RESPONSIBLE DI Acements less th al) by RWE on O8	SCIPLINE:	gap. No action re	equired. See en 08/25/82 SUPERVISOR/D	
M. Jones 04/0 WALKDOWN TEAM ORIGITATION BY Seismic displasheets (4 total	shielding plate  09/80  NATOR/DATE  ( RESPONSIBLE DI Acements less th Al) by RWE on O8	SCIPLINE: an existing of	gap. No action re <u>H. J. Hanse</u> ENGR. GROUP	en 08/25/82 SUPERVISOR/D	ATE

a a	
PACIFIC GAS & ELECTRIC DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S	T NO. 1 RACTION PROGRAM
POSTULATED INTERACTION NO.: 06-03-07-01	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 95, under steam generator 1—2.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Nearby shielding plates.	SOURCE CODE: C-SHIELD
TARGET: Root valve 8059B.	TARGET CODE:I-8059B
POSTULATED INTERACTION:  Deflection of shielding plates results in imp	PHENOMENA CODE: DEFLECT act with valve 8059B.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove or cut shielding plates away from valv	e 8059B.
M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
Seismic displacements less than existing gap. sheets (4 total) by RWE on 08/22/80.	No action required. See resolution
F	H. J. Hansen 08/22/80
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN

10-28-82 L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE

·
SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-04-03
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 95, under steam generator 1-3.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Nearby shielding plates.  SOURCE CODE: C-SHIELD
TARGET:  Root valve 8061C.  TARGET CODE: I-8061C
POSTULATED INTERACTION:  Deflection of shielding plates results in impact with valve 8061C.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove or cut shielding plates away from valve 8061C.
M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Seismic displacements less than existing gap. No action required. Resolution sheets (4 total) by RWE on 08/22/80.
H. J. Hansen 08/22/80  DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE  PROCEDULATE FOR PESCULATION OF FE TWO FIRE OF PROCEDURES AND
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAM

L. W. Horn 10/28/82

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

*	
PACIFIC GAS & ELECTRIC DIABLO CANYON PLANT, UNIT SEISMICALLY INDUCED SYSTEMS INTER INTERACTION DOCUMENTATION SE	T NO. 1 RACTION PROGRAM
POSTULATED INTERACTION NO.: 06-04-05-03	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION _91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 95, under steam generator 1-3.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Nearby shielding plates.	SOURCE CODE:C-SHIELD
TARGET: Root valve 8060C.	TARGET CODE: 1-8060C
POSTULATED INTERACTION:  Deflection of shielding plates results in impa	PHENOMENA CODE: DEFLECT act with valve 8060C.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove or cut shielding plates away from valve	≥ 8060C.
M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Seismic displacements less than existing gap. sheets (4 total) by RWE on 08/22/80.	No action required. See resolution
DISCIPLINE ENGINEER/DATE	H. J. Hansen 08/22/80 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 10/28/82 SIP PROJECT ENGINEER APPROVAL/DATE



SHEET	1_	OF	1_
-------	----	----	----

THIERHCITON DOCOUR	SHIHITOM SHEET (ID2)
POSTULATED INTERACTION NO.: 06-04-06-03	•
FIRE ZONE 1-B LOCATION Contain	ment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 95, under steam generator 1-3.	,
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Nearby shielding plates.	SOURCE CODE: C-SHIELD
TARGET: Root valve 8059C.	TARGET CODE: 1-8059C
POSTULATED INTERACTION:  Deflection of shielding plates resul	PHENOMENA CODE: DEFLECT ts in impact with valve 8059C.
•	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove or cut shielding plates away	from valve 8059C.
M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLING Seismic displacements less than exist sheets (4 total) by RWE on 08/22/80.	ting gap. No action required. See resolution
r	_
DISCIPLINE ENGINEER/DATE	H. J. Hansen 08/22/80 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE	EE EMS ENG GC HVAC IEC [PSE] NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALY)

L. W. Horn 10-28-82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	. 1	OF	1_
-------	-----	----	----

SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 06-05-08-01	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 95, under steam generator 1-4.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Nearby shielding plates.	SOURCE CODE: C-SHIELD .
TARGET: Root'valve 8061D.	TARGET CODE: I-8061D
POSTULATED INTERACTION:  Deflection of shielding plates results in important to the shielding plates results in the shielding pl	PHENOMENA CODE: DEFLECT pact with valve 8061D.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove or cut shielding plates away from value	ve 8061D.
M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Seismic displacements less than existing gap resolution sheets (4 total) by RWE on 08/22/8	
DISCIPLINE ENGINEER/DATE	H. J. Hansen 08/22/80 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	S ENG GC HVAC IEC [PSE] NPO NAM
	L. W. Horn 10/28/82

FIELD VERIFICATION BY WALKDOWN TEAM

	SHEET	1_	OF	1_
PACIFIC GAS & ELECTRIC CO.				
DIABLO CANYON PLANT, UNIT MO. 1				

[0007A/0067Z-25]

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION DO.: 06-05-09-01	·
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 95, under steam generator 1-4.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Nearby shielding plates.	SOURCE CODE: C-SHIELD
TARGET: Root valve 8060D.	TARGET CODE: I-8060D
POSTULATED INTERACTION:  Deflection of shielding plates results in in	PHENOMENA CODE: DEFLECT mpact with valve 8060D.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove or cut shielding plates away from va	lve 8060D.
M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
Seismic displacements less than existing gap resolution sheets (4 total) by RWE on 08/22/	o. No action required. See /80
DICCIDITUS ENCINEED (DATE	H. J. Hansen 08/25/80
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EP	ENGR. GROUP SUPERVISOR/DATE  IS ENG GC HVAC ICC [PSE] NPO NAN
	,
FIELD VERIFICATION BY WALKDOWN TEAM S	L. W. Horn 12/28/82 SIP PROJECT ENGINEER APPROVAL/DATE

4m

SHEET	1	OF	1
-------	---	----	---

POST	ULATED	INTERACTION	NO.: <u>06-05</u>	-10-01					
FIRE	ZONE	1-8	LOCATION _	Containment	FI	LOOR ELEV	ATION _91'-	0"	
LOCA		ITHIN FIRE ZO 95, under st		or 1–4.					
IDEN	TIFICA	TION OF INTER	ACTING COMP	ONENTS					
SOUR		y shielding p	lates.		SOURCE	E <u>CODE</u> : _	C-SHIELD		
TARG		valve 8059D.			TARGE	T_CODE:	I-8059D		
POST		INTERACTION: ction of shie	lding plate	s results in		ENA CODE: th valve 8			
RECO		D RESOLUTION e or cut shie			/alve 8059[	),			
WALK	L RESOL	O4/09/80 EAM ORIGINATO  LUTION BY RES ic displaceme s (4 total) b	PONSIBLE DI nts less th	an existing o	gap. No ac	ction requ	uired. See	resolu	ıtion
		E ENGINEER/DAT		ICAI: CE EE	ENGR.	GROUP SU	08/25/8 PERVISOR/D	ATE	KA
		FICATION BY W		<del>1</del>			10-28-82 ER APPROVAI	_/DATE	Ch

[0007A/0067Z-26]

SHEET	1	OF	1

THIERHCITOM DOCOURAINITOM SHEET (IDS)
POSTULATED INTERACTION NO.: 06-05-14-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 104'-7"
LOCATION WITHIN FIRE ZONE: loop 4, under RCP 4, elev. 110'.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  2" drain line (scupper drain).
TARGET:  Charging line 246 vent (2 valves).  TARGET CODE: PA-0246-3
POSTULATED INTERACTION:  2" drain line fails, falls on vent. Failure possible at mechanical coupling of scupper drain.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add vertical restraint at drain line mechanical coupling location near line 246 vent valves.
M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Bilat added near contact point per ART 006.
R. W. Eschenburg 11/12/80  DISCIPLINE ENGINEER/DATE  S. Chitnis 07/24/84  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAM
M. Jones 02/24/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

SHEET	1	OF	1
-------	---	----	---

POSTULATED INTERACTION NO.:	06-05-27-01	
FIRE ZONE 1-B LOC	ATION <u>Containment</u>	FLOOR ELEVATION 104'-7"
LOCATION WITHIN FIRE ZONE: Elev. 108, between SG1	-4 and RCP.	
IDENTIFICATION OF INTERACTION	NG COMPONENTS	•
SOURCE: 3x3 angle bracket of p	ipe support SI/57R.	SOURCE CODE: P-4398-2
<u>TARGET</u> : Line 1158-3"; loop 4 RT	TD return	TARGET CODE: P-1158-3
POSTULATED INTERACTION: Thermal/seismic movement Existing pipe support to	nt of line 1158 result to insulation of line	PHENOMENA CODE: INTERFERE s in impact with pipe support. 1158 - 3/8".
RECOMMENDED RESOLUTION BY WE Verify by analysis that damage line 1158.	NLKDOWN TEAM: : impact will not occ	; ur or that impact is insufficient to
M. Jones 02/24/82 WALKDOWN TEAM ORIGINATOR/DAT	_	
Relocated pipe & 1. 3"x3 Rev. 2 by DCN DC1-EP-36	" x 3/8" -0'-8 3/4" LO	g per hanger DWG No. 049339 Sht. 96,
C. R. VanNatta 01/10/83 DISCIPLINE ENGINEER/DATE		K. M. Krause 01/25/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR R	ESOLUTION: CE EE EMS	ENG GC HVAC ISC [PSE] NPO NAN
M. Baker 06/28/83 FIELD VERIFICATION BY WALKDO	WHITEAM SI	L. W. Horn 08/30/83 P PROJECT ENGINEER APPROVAL/DATE

[0032A/0074Z-15]

SHEET	1 -	OF	_1_

SIP PROJECT ENGINEER APPROVAL/DATE

## PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 06-06-02-01	•
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117', azimuth 247°, near BTX31E.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Grating.	SOURCE CODE: C-GRATING
TARGET: KX418 conduit.	TARGET CODE: E-KX418-1.50
POSTULATED INTERACTION:  Movement of grating could cause impact with There exists insufficient clearance.	PHENOMENA CODE: INTERFERE & DEFLEC conduit where conduit drops through
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Modify grating to ensure minimum 2" clearance	ce between grating and conduit.
A. G. Barta 07/19/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Clearance to be provided per ART No 184.	
S. Hanusiak 07/20/81  DISCIPITINE ENGINFER/DATE  DISCIPITINE RESPONSIBLE FOR RESOLUTION: [CE] EF EL	E. P. Wollak 07/28/81 ENGR. GROUP SUPERVISOR/DATE MS ENG GC HVAC I&C PSE NPO NA
M 7 02/17/02	1 ti Horn 00/20/82

FIELD VERIFICATION BY WALKDOWN TEAM

	-	SHEET1_ OF _1_
	IFIC GAS & FLECTRIC	
	CANYON PLANT, UNIT	
	DUCED SYSTEMS INTER	
INTERACTI	ON DOCUMENTATION SI	HEEL (IDS)
POSTULATED INTERACTION NO.: 06-	06-02-02	· ·
		,
FIRE ZONE 1-A LOCATION	Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE:		
Elev. 117, azimuth 297°.		•
•		4
IDENTIFICATION OF INTERACTING CO	MPONENTS	
		COURSE CORF. C CRATTIC
SOURCE:	•	SOURCE CODE: C-GRATING
Grating.		
TARGET:		TARGET CODE: E-KX418-1.50
KX418 conduit.		
Witte collector		
•		
POSTULATED INTERACTION:		PHENOMENA CODE: INTERFERE & DEFI ECT
Movement of grating could	ause impact with c	onduit where conduit drops through.
There exists insufficient	:learance.	
		ř
•		
RECOMMENDED RESOLUTION BY WALKED	V.M. TEAM.	
		between grating and conduit.
riodity gracing to ensure in	,	beauting and concern
•		
		•
A. G. Barta 02/19/81		
WALKDOWN TEAM ORIGINATOR/DATE	·	
		•
FINAL RESOLUTION BY RESPONSIBLE	<u>DISCIPLINE</u> :	
Clearance will be provided	per ART No. 174.	•
•		
		•
S. Hanusiak <u>07/17/81</u>		E. P. Wollak 07/23/81
DISCIPI INE ENGINEER/DATE		ENGR. GROUP SUPERVISOR/DATE
CACCALL SITE MICHITEMIN MILLS	•	·
DISCIPLINE RESPONSIBLE FOR RESO	LUTION: [CE] EE EMS	ENG GC HVAC ICC PSE NPO NAN

ड्याडाहर . 1. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

M. Jones 02/17/82
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

SHEET _	11	OF	1
PROGRAM			

SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 06-06-02-03	•
FIRE ZONE 3-BB LOCATION Penetration Are	Pas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE:  Flev. 100', area GW, (J-K, 12), on the ceili	ing.
IDENTIFICATION OF INTERACTING COMPONENTS	,0
SOURCE: Construction deficiency.	SOURCE CODE: NS-CD
TARGET: KK308-2".	TARGET CODE: E-KK308-2
POSTULATED INTERACTION: Missing condulet cover.	PHENOMENA CODE: HOUSEKEFP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace the cover.	
E. Denison 07/09/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Cover replaced per ART 210.	•
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE FE EMS	A. G. Barta 07/22/81 ENGR. GROUP SUPERVISOR/DATE ENG [QC] HVAC I&C PSE NPO NAN
S. E. Traisman 08/31/82	I. W. Horn 10/29/82

FIELD VERIFICATION BY WALKDOWN TEAM

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM:  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-06-02-04
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100', area GW, (J, 12), 11' above + left floor, between BJG230 and BJG273.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  2 rod hangers from: 1) 4" green service air, 39" east of J line, and 2) 12" bluewater pipe L721, 20" east of J line.
TARGET:
POSTULATED INTERACTION:  The pipes swing and the rod hangers impact KK308.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Reroute the conduit 2" to the east and remove the rod hanger from the 4" green service air line. The remaining supports are 14' apart and adequate per P. H. Anderson.
E. Denison 07/09/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Add pipe support by generic DCN-DC1-EP-5061 HGR No. 049339, sheet 337,  Rev 1.
C. R. VanNatta 08/04/83 K. M. Krause 08/04/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE ÉMS ENG GC HVAC ICC [PSE] NPO NAME
S. E. Traisman 10/11/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS CNLY)

SHEET1_ OF1_	1 OF 1
--------------	--------

THIERHCITON DOCUMENTH	IITOM SHEEL (ID2)
POSTULATED INTERACTION NO.: 06-06-02-05	· .
FIRE ZONE 3-BB LOCATION Penetratio	n Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, GEGW, (12°); 10" east of the 124' & PM 182, at the wall penetration	J line, 11' above the floor between PM
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: 4" O. D. Blue water pipe valve and vent	SOURCE CODE: P-4603-4
TARGET: KK307 2".	TARGET CODE: E-KK307-2
POSTULATED INTERACTION:  A 1" O. D. vertical valve from the 4" O above.	PHENOMENA CODE: INTAKE STRUCTURE & DEFLECT  D. blue water pipe impacts the conduit :
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Modify the existing rod hanger to prevenue of the support. Ensure hanger can to	nt upward pipe movement by adding a bolt ake buckling load.
Edward Denison 07/09/81 WALKDOWN TEAM ORIGINATOR/DATE ,	,
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added support by generic DCN DC1-EP-506:	1 HGR DWG No. 479339 Sht. 238, Rev. 1
C. R. VanNatta 08/19/83 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EN	K. M. Krause 08/19/83 ENGR. GROUP SUPERVISOR/DATE E EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 10/14/83  FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 10/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

SW

SHEET	1	OF	1

L. W. Horn 01/18/84
SIP PROJECT ENGINEER APPROVAL/DATE .

·.••

## PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 06-09-03-02	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117', Az. 210° against cont. wall.	
.IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE:  Beam and grating at Elev. 117'	SOURCE CODE: _C-GRATING
TARGET: KX161 below RTX8F.	TARGET CODE: E-KX161-2
POSTULATED INTERACTION:  As conduit passes through elev. 117', there is flooor beam and grating on one side. Additional ported to the cont. wall creating some different ported.	ally the conduit is sup-
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Locally reroute the conduit to provide at leas	t 1" clearance.
P. H. Anderson 06/03/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSTBLE DISCIPLINE:  Penetration box BTX8F and support S206 for conditioned from containment wall per DCN DC1-ECthe possibility of impact between CND, and plate differential motion between containment and action necessary.	3604. This modification eliminates tform grating and/or floor beam due
R. J. Swaim 06/24/83  DISCIPLINE ENGINEER/DATE	S. Auer 08/23/84  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS	ENG GC HVAC IEC PSE NPO NAN

[0029A/0086Z-13]

S. F. Traisman 11/02/83 FIFI.D VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

AGB

			_
SHEET	1	UE.	3
SHEEL	,	O,	_



POSTULATED INTERACTION NO.: 06-14-03-03	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE:  Elev. 110', area G, col. 8, outer wall.	ı
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Construction deficiency.	SOURCE CODE: NS-CD
TARGET: Conduit KT461.	TARGET CODE: E-KT461
POSTULATED INTERACTION: Cover to BTX26E is missing.	PHENOMENA CODE: HOUSFKEFP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace the cover.	:
E. Denison 06/10/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPITNE: Cover installed per ART 154.	•
DISCIPLINE FINGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	A. G. Barta 07/14/81 ENGR. GROUP SUPERVISOR/DATE ENG [QC] HVAC ISC PSE NPO NAN
S. Harris 02/19/82 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

[0028A/0082Z-19]

PACIFIC GAS & ELECTRIC DIABLO CANYON PLANT, UNIT SEISMICALLY INDUCED SYSTEMS INTER INTERACTION DOCUMENTATION SE	C CO. T NO. 1 RACTION PROGRA	er <u>1</u> OF <u>1</u>	
POSTULATED INTERACTION NO.: 06-15-02-02		•	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELI	EVATION117'-0"	
LOCATION WITHIN FIRE ZONE: Élev. 117', col. 17 crane wall DWG 57685.			
IDENTIFICATION OF INTERACTING COMPONENTS			
SOURCE: Floor grating.	SOURCE CODE:	C-GRATING	
TARGET: KX292 conduit.	TARGET CODE:	E-KX292-1.25	
POSTULATED INTERACTION:  Grating touches conduit. Could impact and dan occurs.		E: <u>INTERFERE &amp; DEFLE</u> if movement	<u>CT</u>
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Provide clearance between grating and conduit			
J. F. Grant 09/17/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Min. 2" clearance around the conduit has been	provided per	ART No. O23.	
S. Hanusiak 01/16/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS		SUPERVISOR/DATE	AN

54512Y

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

[0031A/0084Z-25]

S. Harris 02/17/82
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

•		
SHEET	 OF	_1_

				-
POSTULATED INTERACTION	NO.: 06-20	) <del>-03-02</del>		
FIRE ZONE 1-A	_ LOCATION _	Containment	FLOOR ELEVATION _	91'-0"
LOCATION WITHIN FIRE Z		atform at valve	8703, DWG 57685.	
IDENTIFICATION OF INTE	RACTING COMP	PONENTS	1	
SOURCE: Platform structur	<b>A.</b>		SOURCE CODE: C-PLAT-	1A
TARGET: KX246 conduit.			TARGET CODE: E-KX246	-2.50
POSTULATED INTERACTION Platform structur conduit.	: e within 1/8	3" of conduit pl	PHENOMENA CODE: INTERF atform and/or grating o	
RECOMMENDED RESOLUTION Provide clearance			it.	
J. F. Grant 09/10 WALKDOWN TEAM ORIGINATO			A	
Very little relat:	ne part of s ive movement structure) a	tructure in que between condui and the flexible	stion is a light flexib t and hanger are exacte L hanger is not capabl	d (they are
S. Hanusiak 01/16, DISCIPLINE ENGINEER/DO	ATE		E. P. Wollak ENGR. GROUP SUPERVIS	-
S. Harris02/:	17/82		S ENG GC HVAC I&C  L. W. Horn 08/20/8	2
FIELD VERIFICATION BY W		M S	IP PROJECT ENGINEER APP	ROVAL/DATE

[0031A/0084Z-26]

SHEET	1	OF	_1_
-------	---	----	-----

THIERHOITON DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-23-01-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Along crane wall outside @ azimuth 325° above mechanical panel 19.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  2" line off of line S2-4275-3/4 (hot leg SI drain HDR).
TARGET:  Process lines to FT-415 (FT-415 in panel 18). (Reactor coolant coop 1 flow transmitter).
POSTULATED INTERACTION:  Source line deflects laterally and/or longitudinally, which results in source line impacting target instrument line.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add 3-way restraint off of existing dead weight angle support to preclude interaction or verify deflection of source line will not impact target instrument lines.
NOTE: This interation is a result of final sip area walkdown.
S. Skochko 09/14/83 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  No action necessary. Analysis showed piping would not hit tubing. Ref. Calc. by R. Hare dated 09/19/83.
•
C. R. VanNatta 09/22/83 K. M. Krause 09/22/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN
S. E. Traisman 09/15/83 . L. W. Horn 01/18/84

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS CNLY)

<b>&gt;</b>
PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)
TION NO.: 06-25-02-04
LOCATION Containment FLOOR ELEVATION 110'-9"
RE ZONE: nside shield wall near top of RCP1-2.
INTERACTING COMPONENTS
top of RCP1-2.
TARGET CODE: E-KX400-2 where it goes thru grate down to BJX220.
TION:  PHENOMENA CODE: INTERFERE & DEFLECT  tight around conduit.
TION BY WALKDOWN TEAM: ing for clearance.
2/10/81 INATOR/DATE Y RESPONSIBLE DISCIPLINE: n. clearance around the conduit as per ART No. 170.
F. P. Wollak 04/21/81 ER/DATE ENGR. GROUP SUPERVISOR/DATE

FIRE ZONE 1-B	LOCATION Containment	FLOOR ELE	EVATION 110'-9"
LOCATION WITHIN FIRE ZO Elev. 110', inside	NE: shield wall near top of I	RCP1-2.	
JUENTIFICATION OF INTER	ACTING COMPONENTS		
SOURCE: Grating near top of	f RCP1-2.	SOURCE CODE:	C-PLAT-1B
TARGET: Conduit KX400 where	e it goes thru grate down	TARGET CODE: to BJX220.	E-KX400-2
POSTULATED INTERACTION: Grating very tight	around conduit.	PHENOMENA CODE	: INTERFERE & DEFLECT

B. Smith 02/10/81
WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Cut away grating for clearance.

POSTULATED INTERACTION NO.: 06-25-02-04

Provide 2" min. clearance around the conduit as per

<u>S. Hanusiak</u> DISCIPIINE FNGTNFER/DATE

DISCIPITME RESPONSIBLE FOR RESOLUTION: [CE] EF EMS ENG GC HVAC ICC PSE NPO NAN

S. Harris 02/18/82 FIFI.D VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

•
SHEET1 OF1
N PROGRAM
LOOR. ELEVATION 104'-0"
E CODE: NS-CD
CODE: I-TF433A
1-11-1558
NA CODE: HOUSEKEEP
,
,
•
•
ransferred to onsite quality

POSTULATED INTERACTION NO.: 06-27-01-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 104'-0"
LOCATION WITHIN FIRE ZONE: Flev. 106, on loop 3 hot leg piping, 159°.
IDENTIFICATION OF INTERACTING COMPONENTS '
SOURCE:  Construction deficiency.  SOURCE CODE: NS-CD
TARGET: TE 433A.  TE 433A.
POSTULATED INTERACTION:  Instrument has been damaged at the tie-in to the loop 3 hot leg.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Repair and/or replace TE 433A if/as required.
M. Jones 03/17/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  TOS is a result of a construction deficiency. TOS transferred to onsite quality control. Construction deficiency to be corrected during normal course of construction activities.
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPILINE RESPONSIBILE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE NPO NAN [QC]
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

SHEET 1 OF1_	
--------------	--

	THIERHOITON DOG	WENTHIEM ON	El (105)		
POSTULATED INTERACTION	N NO.: 06-27-02-	01	·	•	
FIRE ZONE 1-A	LOCATION Cont	ainment	FLOOR ELEVAT	ION _117'-0	
LOCATION WITHIN FIRE 2 Élev. 117', azimi		"X24			
IDENTIFICATION OF INTE	ERACTING COMPONEN	пѕ		4	
SOURCE: Grating.		\$	SOURCE CODE: C-	-GRATING	
TARGET: Conduit - KX411.		]	TARGET CODE: E-	·KX411-1.50·	<del></del>
POSTULATED INTERACTION  Movement of grat  There exists inse	ing could cause i	mpact with cor	HENOMENA CODE: ]	NTERFERE & luit drops t	<u>DEFLECT</u> hrough.
RECOMMENDED RESOLUTION Modify gratin to	N BY WALKDOWN TEA ensure minimum 2	<u>M</u> : " clearance bo	etween grating a	and conduit.	
A. G. Barta O: WALKDOWN TEAM ORIGINA FINAL RESOLUTION BY RI Required clearan	TOR/DATE ESPONSIBLE DISCIP	<u>LINE:</u> per ART No. '	175.	•	
S. Hanusiak DISCIPLINE ENGINEER/		[CE] EE EMS	E. P. Wollak ENGR. GROUP SUI ENG GC HVAC	PERVISOR/DAT	E IPO NAN
S. Harris	02/17/82	STD	L. W. Horn	09/30/82 FR APPROVAL/	DATE

\$75/54

(FOR MODIFICATIONS ONLY)

[0031A/0084Z-28]

SHEET 1 OF 1 I PROGRAM
LOOR ELEVATION 115'-0"
CODE: P-SPR-3BB
CODE: E-KT064+
NA CODE: SPTFAIL .
d include lateral supports as
23, Rev. 1 & 724, Rev 1

SIP PROJECT ENGINEER APPROVAL/DATE

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION · INTERACTION DOCUMENTATION SHEET (I

POSTULATED INTERACTION NO.: 06-27-02-02
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE:  Elev. 115', area GW, SW corner and hand 15.6.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Fire line 3" diameter.  SOURCE CODE: P-SPR-3BB
TARGET:
POSTULATED INTERACTION:  Fire line fails due to fixed end rod hangers.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Replace fixed end rod hangers with clevis hangers and include lateral supports as required.
B. Worinskey 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added pipe supports. See pipe support DWG No. SPR-723, Rev. 1 & 724, Rev 1 reflects "as-built" condition.
DISCIPI INE ENGINEER/DATE  DISCIPI INE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
M. Baker 08/01/81 L. W. Horn 10/05/83 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-57-02-01
FIRE ZONE 6-A-2 LOCATION Electrical Rooms FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115', near col. 15 <sup>7</sup> and K.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: H-DUCT-6A2  Duct.
TARGET:  K4976 near panel AC PY14  TARGET CODE: E-K4976-0.75
POSTULATED INTERACTION:  Target conduit runs over duct with zero clearance. Vertical movement of duct could damage conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of conduit.
P. Anderson 06/10/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Analysis has demonstrated the integrity of the identified Class I (fireproofed)
ventilation duct in this area. There is no displacement or movement of the duct.

#### P. Anderson 06/10/81 WALKDOWN TEAM ORIGINATOR/DATE

DISCIPLINE ENGINEER/DATE

ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 11/03/82 SIP PROJECT ENGINEER APPROVAL/DATE



PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)			
POSTULATED INTERACTION NO.: 06-59-02-01			
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 112'-11/2"			
Elev. 120, inside reactor pit.			
IDENTIFICATION OF INTERACTING COMPONENTS			
SOURCE: Stainless covers to CRDM equipment (5 places).			
TARGET:  3/4" manual root valve from reactor head.			
POSTULATED INTERACTION:  Covers fall from place, impact manual valve.			
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Secure covers in place by clamps, bolts, etc.			
M. Jones 03/11/82 WALKDOWN TEAM ORIGINATOR/DATE			
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Secure the remaining SS covers which were not completely installed during the initial woalkdwon. This resolves the postulated interaction. See ART 316.			

E. Barna 10/15/82 DISCIPLINE ENGINEER/DATE E. Connell III 10/15/82 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NAN

M. Baker 08/01/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 10/05/83 SIP PROJECT ENGINEER APPROVAL/DATE

118 8/21/84

	•
PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN	IT NO. 1
SEISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTATION	
POSTULATED INTERACTION No.: 06-59-04-01	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 99, under SG 1-3, 175°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Light fixture, near SG 1-4, 7 ft. from shield	SOURCE CODE: E-LF-1B
TARGET: Tubing, to TE 1315.	TARGET CODE: 1-TE315
POSTULATED INTERACTION:  Fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  'Ensure integrity of light fixture.	•
M. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by Civil analysis. Light fixture is Calc. 06-59-04-01.	seismically qualified. See Civil
S. Gaballah 10/01/82 DISCIPLINE ENGINEER/DATE	B. Sarkar 10/04/82 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS	
PISOTATIVE RESEAUSTRIE LOK RESOFRITOR: OF FEFT FUS	EULO OF UAMP TOP ASE ULA UNIA

L. W. Horn 01/04/83

SIP PROJECT ENGINEER APPROVAL/DATE

[00064/00657-17]

KID

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)	
POSTULATED INTERACTION NO.: 06-59-06-01	
FIRE ZONE 1-B LOCATION Containment FLOOR FLEVATION 91'-0"	
LOCATION WITHIN FIRE ZONE: Elev. 95, at reactor shield wall, 170° to 190°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: SOURCE CODE: E-LF-18  Light fixture, mounted to shield wall.	
TARGET: Tubing, from sensor bellows, loop 3.	
POSTULATED INTERACTION:  Fixture falls, impacts tubing.  PHENOMENA CODE: FIXTURE	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	
Ensure integrity of light fixture. Secure hood to fixture socket. (Hood is to to socket).	ped
M. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Fixture qualified by analysis. See Civil Calc. 52.24.52, Rev. 1 & 2.	
A**/	
R. J. Swaim 01/25/83 G. C. Bhatt 01/25/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE	
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EF] EMS ENG GC HVAC ICC PSE NPO NA	N

I. W. Horn 08/12/83 SIP PROJECT ENGINFER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET	1_	OF	_1_
-------	----	----	-----

POSTULATED INTERACTION NO.: 06-59-07-01
FIRE ZONE 3-RR LOCATION Penetration Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE:  Flev. 89, 20 ft. west of col. L, at line 15.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Fluorescent chain-supported light fixture.  SOURCE CODE: E-LF-3RR
TARGET CODE: I-I.IS1310  Level switch LTS-1310.
POSTULATED INTERACTI:XN:  Light fixture falls, impacts level switch.

RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure itegrity of light fixture.

M. .Jones 04/28/82
WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, detail 8 (category I).

Install backup support chain per DCN DCO-EE-5552 Sht. 12 of 13, detail 75.

Resolved by modification. See ART 348.

R. J. Swaim 02/23/83 DISCIPLINE ENGINEER/DATE G. C. Bhatt 02/23/84

ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC ICC PSE NPO NAN

S. E. Traisman 08/30/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

L. W. Horn 09/08/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET1_ OF	1
------------	---

POSTULATED INTERACTION NO.: 06-59-10-05
FIRE ZONE, 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 112, 2' east of Col. L, MID room, area GW.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Pipe support rod to line 1046; SG blowdown tank drain.
TARGET: TARGET CODE: E-KK200-1.50  Conduit KK-200-1 1/2".
POSTULATED INTERACTION:  Longitudinal motion of line 1046 results in pipe support rod impacting conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: relocate pipe support rod 3" east of present location.
M. Jones 06/29/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Relocate hanger No 57S/48R 3" to 6" east of present loc. Relocated per DCN-DC1-SP-13128.
S. Cudiamat 05/17/83 K. M. Krause 07/28/83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC IEC [PSE] NPO NAN

S. E. Traisman 11/02/83
FIFLD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

I.. W. Horn 01/18/84
SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRI DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S	T NO. 1 RACTION PROGRAM
POSTULATED INTERACTION NO.: 06-59-16-01	• •
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 140', over reactor pit, near SG 1-4.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Concrete shield block.	SOURCE CODE: _C-SHIFLD .
TARGET: 3/16" tubing, line 4681.	TARGET CODE: I-4681-0.187
POSTULATED INTERACTION:  Block overtuns, impacts tubing.	PHENOMENA CODE: CIVILFAII
	<b>†</b>
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of shield by simplified analysis.	lysis.
•	v v
M. Jones 03/10/82 . WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Concrete radiation shields have been seismica resolution sheet and referenced Calc. No. O6-	ally qualified by analysis. See -01-01-02.
S. Gaballah 09/22/82 DISCIPLINE ENGINEER/DATE	B. Sarkar 09/23/82 FNGR. GROUP SUPERVISOR/DATE
DISCIPITME RESPONSIBLE FOR RESOLUTION: [CE] EE EMS	S ENG GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-59-16-02
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 114'-11/2 LOCATION WITHIN FIRE ZONE: Elev. 120', inside reactor pit, on south wall.
IDENTIFICATION OF INTERACTING COMPONENTS .
SOURCE:  Underwater light assembly.
TARGET:
POSTULATED INTERACTION:  I ight assembly lower support is mounted below tubing. Attempted installation of the light assembly could damage the Uni-strut around tubing and hence damage the tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove or relocate light assembly lower support, or abondon this location for underwater lighting.
M. Jones 05/05/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  IDS transferred to Gen. Construction. Interaction postulates damage to tubing du to careless installation of a light assembly by Plant Operations which is not a valid concern of the system interaction program. (See DP-1-3846-E with response by C. Kahl/J. Meirdierks dated 06/17/83).
DISCIPLINE FAGTNEER/DATE  C. Kahl 06/17/83  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG [GC] HVAC I&C PSE NPO NAN

L. W. Horn 10/25/83 SIP PROJECT FAGTNEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-59-21-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 89, 20 ft. west of col. L, at line 15.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Fluorescent chain-supported light fixture.  SOURCE CODE: E-LF-388
TARGET:  Level switch LTS-1311.  TARGET CODE: I-LTS1311
POSTULATED INTERACTION:   light fixture falls, impacts level switch.   PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure itegrity of light fixture.
•
M. Jones 04/28/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&F Nwg. 050041, detail 8 (category I).  Install backup support chain per DCN DCO-EE-5552 Sht. 12 of 13, detail 75.  Resolved by modification. See ART 348.
R. J. Swaim 02/23/83  DISCIPLINE ENGINEER/DATE  G. C. Bhatt 02/23/84  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn 09/12/83

SIP PROJECT ENGINEER APPROVAL/DATE

[0029A/0086Z-15]

AUS

S. F. Traisman 08/30/83

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	<u>.</u>	1

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

A.I.E. 8/21/84

# PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 06-59-26-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 112'-11/2"  LOCATION WITHIN FIRE ZONE: Elev. 112', in seal table room.
IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE:  5-path and 10-path drive assemblies over seal table.
TARGET:
POSTULATED INTERACTION:  Drive assemblies fail, fall upon tubing.  PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of drive assembly mountings and the mounting of the individual drive assembly components by simplified analysis. Secure 10-path drive assembly trolley to the I-beam.
M. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Target is not part of RCS pressure boundary. Target is closed capillary tubing which has no accident mitigatining functions, but is only provided for verification. Also, item is not related to achieving or maintaining safe shutdwon. Also, it is not related to fire suppression. No further action required.
T. P. Lee  E. Connell III  DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NAN

[0034A/0085Z-7]

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEFT (IDS)
POSTULATED INTERACTION NO.: 06-59-26-02
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 112'-0"
1.OCATION WITHIN FIRE ZONE: Flev. 112', in Seal Table Room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: NS-CD Platform grating at elev. 125'.
TARGET:
POSTULATED INTERACTION:  Grating is stored loosely on overhead platform, could fall, impact tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove grating before start-up.
M. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE.  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The grating was removed during the normal course of construction.
DISCIPLINE ENGINEER/DATE  J. Townsend ENGR. GROUP SUPERVISOR/DATE
DISCIPILINE RESPONSTBLE FOR RESOLUTION: CE EE EMS ENG [GC] HVAC ICC PSE NPO NAM
S. F. Traisman 11/21/83 L. W. Horn 01/18/84  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.

SHEET \_\_\_\_\_\_ OF \_\_\_\_\_

SHEET 1 OF 1	
I N PROGRAM IDS)	
LEVATION 112'-11/2"	•
E COOE: M-5-10PATH	
ENA CODE: MECHFAIL	
e mounting of the analysis. Secure	
OS 06-01-04-01 for	

POSTULATED INTERACTION NO.: 06-59-27-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 112'-11/2"  LOCATION WITHIN FIRE ZONE: Elev. 112', in seal table room.
IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE:  5-path and 10-path drive assemblies over seal table.
TARGET: TARGET CODE: I-RVLIS Sensor bellows.  POSTULATED INTERACTION: PHENOMENA CODE: MECHFAIL
Prive assemblies fail, fall upon bellows.  RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of drive assembly mountings and the mounting of the individual drive assembly components by simplified analysis. Secure
10-path drive assembly trolley to the I-beam.  M. G. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:
Modification provided per DCN #DCI-E-M-5332. See IDS 06-01-04-01 for modification package.  T. P. Lee 07/07/83  DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC ICC PSE NPO NAN

S. E. Traisman 02/24/84
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 04/20/84 SIP PROJECT ENGINEER APPROVAL/DATE 0.1.8. 8/21/84

DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-59-27-02
FIRE ZONE 1-B LOCATION Containment FLOOR FLEVATION 112'-0"
LOCATION WITHIN FIRE ZONE: Elev. 112', in Seal Table Room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-GRATING  Platform grating at elev. 125'.
TARGET:  Instrument sensor bellows for RVI.IS.  TARGET CODE: I-RVLIS
POSTULATED INTERACTION:  Grating is stored loosely on overhead platform, could fall, impact bellows.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove grating before start-up.
M. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The grating was removed during the normal course of construction.
. J. Townsend
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG [GC] HVAC ICC PSE NPO NA
S. E. Traisman 11/02/83 L. W. Horn 01/18/84  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT FINGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

SHEET 1 OF 1

	SHEET1_ OF1
PACIFIC GAS & ELECTRIC DIABLO CANYON PLANT, UNI	
SEISMICALLY INDUCED SYSTEMS INTE	RACTION PROGRAM
INTERACTION DOCUMENTATION S	HEET (IDS)
POSTULATED INTERACTION NO.: 06-59-30-01	
FIRE ZONE 3-BB LOCATION Penetration Area	FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE:  Elev. 89, 20 ft. west of col. L, at line 15.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:	SOURCE CODE: E-LF-3RB
Fluorescent chain-supported light fixture.	
TARGET:	TARGET CODE: _I-LIS1312
level switch LIS-1312.	<u>.</u>
POSTULATED INTERACTION:	PHENOMENA CODE: FIXTURE
Light fixture falls, impacts level switch.	
	•
•	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	•
Ensure itegrity of light fixture.	
•	•
MJones 04/28/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
The above source light fixture has been field	inspected and verified to be
installed in accordance with PG&E Dwg. 050041 Install backup support chain per DCN DCO-EE-5	552 Sht. 12 of 13, detail 75.
Resolved by modification. See ART 348	
D 7 Sunim 02/23/82	G. C. Bhatt 02/23/84
R. J. Swaim 07/23/83  DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS	ENG GC HVAC I&C PSE NPO N

L. W. Horn 09/12/83 SIP PROJECT ENGINEER APPROVAL/DATE

[00290/00867-16]

S. F. Traisman 08/30/83 FIFI.D VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

pers

PACIFIC GAS & ELECT: DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	NIT NO. 1 TERACTION PROGRAM
POSTULATED INTERACTION NO.: 06-59-34-01	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Elev. 73, in reactor cavity, under RCDT.	
IDENTIFICATION OF INTERACTING COMPONENTS	1
SOURCE: Light fixture.	SOURCE CODE: E-I.F-18
TARGET: Capillary tubing to TE 1317.	TARGET CODE: 1-TF1317
POSTULATED INTERACTION: Fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE .
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	
M. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Fixture qualified by analysis. See Civil Co	alc. 52.24.52, Rev. 1 & 2.
R. J. Swaim 01/25/83	G. C. Bhatt 01/25/83

ENGR. GROUP SUPERVISOR/DATE

SIP PROJECT ENGINEER APPROVAL/DATE

L. W. Horn 08/12/83

DISCIPIINE RESPONSIBLE FOR RESOLUTION: CE [FE] EMS ENG GC HVAC I&C PSE NPO NAN

R. J. Swaim 01/25/83

FIELD VERIFICATION BY WALKDOWN TEAM

DISCIPI INE ENGINFER/DATE

(FOR MODIFICATIONS ONLY)

SHEET	1_	OF	_1_
-------	----	----	-----

POSTULATED INTERACTION NO.: 06-59-36-01
•
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 112'-11/2"
LOCATION WITHIN FIRE ZONE: Elev. 112', in seal table room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  5-path and 10-path drive assemblies over seal table.
TARGET:  3/8" tubing form seal table to 3/4" manual valve.
POSTULATED INTERACTION:  Drive assemblies fail, fall upon valve.  PHENOMENA CODE: MECHFAIL
•
•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of drive assembly mountings and the mounting of the individual drive assembly components by simplified analysis. Secure 10-path drive assembly trolley to the I-beam.
·
M. G. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Modification provided per DCN #DCI-E-M-5332. See IDS 06-01-04-01 for modification package.
T. P. Lee 07/07/83  DISCIPLINE ENGINEER/DATE  E. Connell III 07/07/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NAI

S. E. Traisman 02/24/84 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY) L. W. Horn 04/20/84 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1_	OF	_1_
		•	

SIP PROJECT ENGINEER APPROVAL/DATE

## PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

INICARCITOR DOCOLERINITOR SHEET (IDS)
POSTULATED INTERACTION NO.: 06-59-36-02
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 112'-0"
LOCATION WITHIN FIRE ZONE: Elev. 112, in seal table room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-GRATING Platform grating at elev. 125.
TARGET:  3/8" tubing from seal table to 3/4" manual valve.  TARGET CODE: I-RVLIS
POSTULATED INTERACTION:  Grating stored loosely on overhead platform, could fall, impact tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove grating before start-up.
MALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  No grating stored on upper platform.  This work was done in the course of construction. No design documentation necessary.
K. H. Bych
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC PSE [NPO] NAI
S. E. Traisman 11/02/83 L. W. Horn 01/18/84

[0012A/0073Z-10]

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

DIABLO CANYON PLANT, U SEISMICALLY INDUCED SYSTEMS IN INTERACTION DOCUMENTATION	ITERACTION PROGRAM
POSTULATED INTERACTION NO.: 06-59-38-01	<del></del>
FIRE ZONE 1-B. LOCATION Containment  LOCATION WITHIN FIRE ZONE:  Elev. 112', in seal table room.	FLOOR ELEVATION 112'-11/2"
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: 5-path and 10-path drive assemblies over se	SOURCE CODE: M-5-10PATH al table.
TARGET: 3/4" manual valve.	TARGET CODE: M-RVLIS
POSTULATED INTERACTION: Drive assemblies fail, fall upon valve.	PHENOMENA CODE: MECHFAIL
÷	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of drive assembly mounting: individual drive assembly components by sim 10-path drive assembly trolley to the I-bear	plified analysis. Secure
M. G. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Modification provided per DCN #DCI-E-M-5332 modification package.	. See IDS 06-01-04-01 for
T. P. Lee 07/07/83 DISCIPLINE ENGINEER/DATE	E. Connell III 07/07/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [ET	<u>ms]</u> ENG GC HVAC I&C PSE NPO NAM
S. E. Traisman 02/24/84  FIELD VERIFICATION BY WALKDOWN TEAM  (FOR MODIFICATIONS ONLY)  9A/0101Z-18]	SIP PROJECT ENGINEER APPROVAL/DATE  118 8/28/84

[0039A/0101Z-18]

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-59-38-02
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 112'-0"
LOCATION WITHIN FIRE ZONE: Elev. 112', in Seal Table Room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-GRATING Platform grating at elev. 125'.
TARGET:  3/4" manual valve off of seal table instruments (RVLJS).
POSTULATED INTERACTION:  Grating is stored loosely on overhead platform, could fall, impact valve.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove grating before start-up.
M. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:
The grating was removed during the normal course of construction.
DISCIPLINE ENGINEER/DATE  J. Townsend ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG [GC] HVAC ICC PSE NPO NAN
S. E. Traisman 11/02/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

[0030A/0087Z-13]

SHEET \_\_\_1\_ OF \_\_1\_

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-59-39-01
FIRE ZONE <u>1-B</u> LOCATION <u>Containment</u> FLOOR ELEVATION <u>112'-1<sup>1</sup>/2"</u> LOCATION WITHIN FIRE ZONE: Elev. 112', in seal table room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: M-5-10PATH 5-path and 10-path drive assemblies over seal table.
TARGET:  1" pipe from 3/4" manual valve to sensor bellows.  P-RVI.IS
PHENOMENA CODE: MECHFAIL  Drive assemblies fail, fall upon pipe.
RECOTTENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of drive assembly mountings and the mounting of the individual drive assembly components by simplified analysis. Secure 10-path drive assembly trolley to the I-beam.
M. G. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Modification provided per DCN #DC1-EM-5332. See IDS 06-01-04-01 for modification package.
T. P. Lee 07/07/83 E. Connell III 07/07/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NAN

L. W. Horn 04/20/84 SIP PROJECT ENGINEER APPROVAL/DATE

11.8. 8/21/84

T. E. Traisman 02/24/84
FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHFET (IDS)
POSTULATED INTERACTION NO.: 06-59-39-02
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 112'-0"
LOCATION WITHIN FIRE ZONE: Elev. 112', in Seal Table Room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Platform grating at elev. 125'.
TARGET:  1" pipe from 3/4" manual valve sensor belows for RVLIS  .
POSTULATED INTERACTION:  Grating is stored loosely on overhead platform, could fall, impact valve.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove grating before start-up.
M. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The grating was removed during the normal course of construction.
DISCIPLINE ENGINEER/DATE  J. Townsend  ENGR. GROUP SUPERVISOR/DATE
DISCIPI INE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG [GC] HVAC ICC PSE NPO NAME.

I.. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

S. E. Traisman 11/02/83
FJFID VERIFICATION BY WALKDOWN TEAM

SHEET	1_0	F <u>1</u>
-------	-----	------------

POSTULATED INTERACTION NO.: 06-59-42-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 112'-1-1/2"
LOCATION WITHIN FIRE ZONE: Elev. 116', at missile barrier, 178°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  1" service air line.  SOURCE CODE: P-SA-1B .
TARGET: TARGET CODE: E-KKO74  Conduit KK-074.
POSTULATED INTERACTION:  Lateral deflection of 1" air line results in impact with conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add bilateral support to 1" air line near point of postulated contact.
M. Jones 03/24/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Recommended resolution OK. See hanger DWG 049339 Sht 127 & 127A, Rev. 1 & Calc. by HH dated 02/07/83.
C. R. VanNatta 04/14/83  DISCIPIINE ENGINEER/DATE  K. M. Krause 04/14/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
M. Baker 08/01/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

SHEET	 OF	_1_

POSTULATED INTERACTION NO.: 06-59-42-07	· ·
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Flev. 117, at containment wall 238°.	•
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Platform grating.	SOURCE CODE: C-GRATING
TARGET: Conduit KK-068. Note: KK-068 has been changed to KX425.	TARGET CODE: E-KKO68
POSTULATED INTERACTION: Grating & kickplate contact conduit.	PHENOMENA CODE: INTERFERE/DEFLECT
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Provide min. 2" clearance between grating	g/kickplate and conduit. , <sup>*</sup>
WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Penetration box RTX24E has been detached DCN DC1-EC-3604. This modification elimical CND. and platform grating and/or floor be containment and annulus strucuture. No supercedes any previous resolution of the	inates the possibility of impact between eam due to differential motion between further action necessary. This resolution
R. J. Swaim 06/24/83	S. Auer 08/23/84
DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE]	ENGR. GROUP SUPERVISOR/DATE  ] EMS ENG GC HVAC I&C PSE NPO NAN
S. F. Traisman 11/02/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

ACB

	PACIFIC GAS & ELECTRIC DIABLO CANYON PLANT, UNIT SEISMICALLY INDUCED SYSTEMS INTER INTERACTION DOCUMENTATION SH	CO. TNO. 1 RACTION PRO	HEET _	1	OF.	1	
	POSTULATED INTERACTION NO.: 06-60-04-03						
	FIRE ZONE 3-RB LOCATION Penetration Areas	FLOOR	ELEVAT	ION _	100	<u>'-0"</u>	_
	LOCATION WITHIN FIRE ZONE: Elev. 104, at containment wall, 166°.					,	
	IDENTIFICATION OF INTERACTING COMPONENTS						
	SOURCE: Overhead light fixtures (2).	SOURCE COD	<u>E: _E-</u>	<u>LF-38</u>	18		<del>-</del>
r .	TARGET: line 4685-3/16"-tubing.	TARGET COD	<u>E: P-</u>	4685-	0.18	7	_
1 180	POSTULATED INTERACTION:  Fixtures fall, impact tubing.	PHENOMENA C	ODE:	FIXTU	IRE		<del>_</del>
	RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Finsure intergrity of light fixtures.						
Kers	M. Jones 03/25/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field be installed in accordance with PG&F Dwg. 0500 Install backup support chain per DCN DCO-EE-5! Resolved by modification. See ART 348.	)41, detail	8 (ca	tegor	y I)		
	R. J. Swaim 02/23/83 DISCIPLINE ENGINEER/DATE	G. C. Bh			2/23/ SOR/D		
	DISCIPI INE RESPONSIBLE FOR RESOLUTION: CE [EE] FMS	ENG GC	HVAC	I&C	PSE	NPO	NAI
	•						

L. W. Horn 09/12/83 SIP PROJECT FAGTNEER APPROVAL/DATE

S. F. Traisman 08/30/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN MICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	IT NO. 1 ERACTION PROGRAM	F <u>1</u>
NO.: 06-60-06-01	1 .	
LOCATION Containment	FLOOR ELEVATION 91	' <u>-</u> 0"
ONE: or shield wall, 170° to 19	o°.	
RACTING COMPONENTS		
unted to shield wall.	SOURCE CODE: E-LF-18	- <del></del>
or bellows, loop 4.	TARGET CODE: I-RVLIS	
•	PHENOMENA CODE: FIXTURE	

ENGR. GROUP SUPERVISOR/DATE

### POSTULATED INTERACTION NO.: 06-60-06-01 FIRE ZONE 1-B LOCATION Containment LOCATION WITHIN FIRE ZONE: Elev. 95, at reactor shield wall, 170° to 190°. IDENTIFICATION OF INTERACTING COMPONENTS SOURCE: SOURCE Light fixture, mounted to shield wall.

SEISMICALLY INDUCED SYSTEMS INTERACTION

TARGET: TARGET Tubing, from sensor bellows, loop 4.

POSTULATED INTERACTION: PHENOMEN Fixture falls, impacts tubing.

RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Fnsure integrity of light fixture. Secure hood to fixture socket. (Hood is taped to socket).

M. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE

DISCIPLINE ENGINEER/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINF:

Fixture qualified by analysis. See Civil Calc. 52.24.52, Rev. 1 & 2. KH

R. J. Swaim 01/26/83 G. C. Bhatt 01/26/83

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

l. W. Horn 08/12/83 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

	•	^=	•	
SHEET	1	OF	1	

THIERICITOR DOCUMENTATION SHEET (TRO)
POSTULATED INTERACTION NO.: 06-60-10-04
FIRE ZONE 3-88 LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: EL 110' Nr. cols 15.7 and L
IDENTIFICATION OF INTERACTING COMPONENTS .
SOURCE:  Line 1595-3", reboiler coil drips to ASDR.
TARGET:  Conduit KK385-3"  TARGET CODE: E-KK385-3
POSTULATED INTERACTION:  Pipe impacts conduit, existing clearance 1/2". Pipe free to swing laterally.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add bilateral support to line 1595 approx 3' west of contact point.
S. E. Traisman 07/14/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Recommended resolution - OK. See hanger DWG 049339 SHT 130 in DCN-DCI-EP-3606.
C. R. Van Natta 01/10/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC PSE NPO NAN
S. E. Traisman 08/24/83  FIELD VERIFICATION BY WALKDOWN TEAM  L. W. Horn 08/23/83  SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

. [0010A/0078Z-17]

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-60-10-05
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 120' near containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
Steel platform 74GW, elev. 127'.
TARGET:  Conduit KK385-3".  TARGET CODE: E-KK385-3
POSTULATED INTERACTION:  Platform falls on conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platform by simplified analysis. Verify grating hold down clips are in place.
S. E. Traisman 07/14/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platform 74GW has been checked as a Class I structure due to attachment of Class equipment. The platform has been qualified with modification for Calc. No. 52.15.18.8. For modification, see DCN DC1-EC-13109 RO.
S. Gaballah  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAM
S. E. Traisman 02/24/84  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

ą.	PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
•	POSTULATED INTERACTION NO.: 06-60-10-11
	FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
	LOCATION WITHIN FIRE ZONE: Elev. 102, near containment wall, 155°.
	IDENTIFICATION OF INTERACTING COMPONENTS
	SOURCE: SOURCE CODE: C-104GE Platform 104 GE.
	TARGET: TARGET CODE: E-K3477+  Conduits K3477-2", K3480-2" & KK201-2".
• •	POSTULATED INTERACTION: PHENOMENA CODE: CIVILFAIL Platform falls, impacts conduit.
	RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform by simplified analysis.
	M. Jones 06/29/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The platform has been seismically qualified by analysis. See resolution sheet and referenced Calc. No. 19-04-06-01.
	S. Gaballah 11/18/82  DISCIPLINE ENGINEER/DATE  B. Sarkar  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

34 7121/194 L. W. Horn 02/03/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

		SHEET1 OF1_	
· DIABLO CAR SEISMICALLY INDUC	C GAS & ELECTRIC NYON PLANT, UNI ED SYSTEMS INTE DOCUMENTATION SI	T NO. 1 RACTION PROGRAM	
POSTULATED INTERACTION NO.: 06-60-	11-01		
FIRE ZONE 1-C 1.OCATION CO	<u>ontainment</u>	FLOOR ELEVATION 140'-0"	
LOCATION WITHIN FIRE ZONE: Elev. 140', over reactor pit,	near SG1-4.		
IDENTIFICATION OF INTERACTING COMPOR	NENTS		
SOURCE: Concrete shield block.		SOURCE CODE: C-SHTELD	
TARGET: 3/16" tubing, line 4684.		TARGET CODE: J-4684-0.187	
POSTULATED INTERACTION:  Block overtuns, impacts tubing.		PHENOMENA CODE: CIVILFAII.	_
RECOMMENDED RESOLUTION BY WALKDOWN TEnsure integrity of shield by s		ysis.	
M. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISC  Concrete radiation shields have resolution sheet and referenced	e been seismical		<b>G</b>
S. Gaballah 09/22/82 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION	жи: [CE] EE EMS	B. Sarkar 09/23/82 ENGR. GROUP SUPERVISOR/DATE ENG GC HVAC I&C PSE NPO	- NAN

S 5129114

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 10/25/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

L. W. Horn 09/09/83 SIP PROJECT ENGINFER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

	POSTULATED INTERACTION NO.: 06-60-11-02
	FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
	LOCATION WITHIN FIRE ZONE: Elev. 109, at containment wall, 166°.
	IDENTIFICATION OF INTERACTING COMPONENTS
	SOURCE: SOURCE CODE: E-1.F-388  Overhead light fixtures (2).
	TARGET: TARGET CODE: P-4684-0.187 line 4684-3/16"-tubing.
	POSTULATED INTERACTION:  Fixtures fall, impact tubing.  PHENOMENA CODE: FIXTURE
	RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure intergrity of light fixtures.
keß	M. Jones 03/25/82  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, detail 8 (category I).  Install backup support chain per DCN DCO-EE-5552 Sht. 12 of 13, detail 75.  Resolved by modification. See ART 348.
	R. J. Swaim 02/23/83  DISCIPLINE FNGINFER/DATE  G. C. Bhatt 02/23/84  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] FMS ENG GC HVAC I&C PSE NPO NA

[0029A/0086Z-19]

S. E. Traisman 03/25/87
FIFLD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

	SHEET OF
PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 06-60-11-03	
FIRE ZONE 1-C LOCATION Containment	_ FLOOR ELEVATION114'-11/2"
LOCATION WITHIN FIRE ZONE:  Elev. 170', inside reactor pit, on south wal	1.
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Underwater light assembly.	SOURCE CODE: E-LF-1C
TARGET: 3/16" tubing, line 4684.	TARGET CODE: 1-4684-0.187
POSTULATED INTERACTION:  Light assembly lower support is mounted belothe light assembly could damage the Uni-strutubing.	PHENOMENA CODE: FIXTURE ow tubing. Attempted installation of it around tubing and hence damage the
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove or relocate light assembly lower support underwater lighting.	port, or abandon this location for
M. Jones 05/05/82 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  IDS transferred to General Construction. In due to careless installation of a light asso a valid concern of the SIP (See DP-1-3846-F C. Kahl/J. Meierdierks, dated 06/17/83).	embly by plant operations which is no
	C. Kahl 06/17/83
DISCIPLINE FNGTNEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE ENG	[GC] HVAC I&C PSE NPO NAN
N.	•
FIFLD VERIFICATION BY WALKDOWN TEAM	L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE
(FOR MODIFICATIONS ONLY)	STE FROMES ENGLISEER REFRONDE/DRIE

SHEET _	1	OF		
---------	---	----	--	--

POSTULATED INTERACTION NO.: 06-60-21-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 112'-11/2"
LOCATION WITHIN FIRE ZONE: Elev. 112', in seal table room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  5-path and 10-path drive assemblies over seal table.
TARGET:
POSTULATED INTERACTION:  Drive assemblies fail, fall upon tubing.  PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of drive assembly mountings and the mounting of the individual drive assembly components by simplified analysis. Secure 10-path drive assembly trolley to the I-beam.
M. G. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Target is closed instrument capillary tubing and not part of RCS press.  boundary. Item has no accident mitigating functions, but is only  verification instrumentation. Also, item is not related to achieving  or maintaining safe shutdown; nor is it related to the fire suppression  system. No further action required.
DISCIPLINE ENGINEER/DATE  E. Connell III  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NAT
FIELD VERIFICATION BY WALKDOWN TEAM  (FOR MODIFICATIONS ONLY)  340/0085Z-137

[0034A/0085Z-13]

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 06-60-21-02	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 112'-11/2"
LOCATION WITHIN FIRE ZONE: Elev. 112 in seal table room.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Nitrogen storage bottle.	SOURCE CODE: M-BOTTLE
TARGET: Tubing, line 4686-3/16".	TARGET CODE: 1-4686-0.187
POSTULATED INTERACTION: Bottle overturns, impacts tubing.	PHENOMENA CODE: LOOSE & MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure tht bottle mountings (chain) are a lends of chain to mounting bracket by bold	
M. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
Target is closed instrument capillary tul boundary. Item has no accident mitigation cation instrumentation. Item not related safe shutdown, nor to the manual fire supaction required.	ng functions, but is only verifi- d to initiating or maintaining
	E. Connell III  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE ENGINEER/DATE	
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	L. W. Horn 09/30/82
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALY)	SIP PROJECT ENGINEER APPROVAL/DATE  11 8/28/84
204/01017 017	11.0.

[0039A/0101Z-21]

•
SHEET 1 OF 1 IC CO. IT NO. 1 ERACTION PROGRAM SHEET (IDS)
FLOOR ELEVATION 112'-0"
•
SOURCE CODE: C-GRATING
TARGET CODE: 1-4686-0.187
PHENOMENA CODE: LOOSE m, could fall, impact valve.
•
,
•
rse of construction.
J. Townsend

# PACIFIC GAS & ELECTRI DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S

POSTULATED INTERACTIO	N NO.: 06-60-21-03		\
FIRE ZONE 1-8	LOCATION <u>Containment</u>	FLOOR ELEVATION	ON _112'-0"
LOCATION WITHIN FIRE : Elev. 112', in S			. •
IDENTIFICATION OF INT	ERACTING COMPONENTS	•	
SOURCE: Platform grating	at elev. 125'.	SOURCE CODE: C-G	RATING
TARGET: 	tubing.	TARGET CODE: 1-40	586-0.187
POSTULATED INTERACTION Grating is stored	ዟ: I loosely on overhead pla	PHENOMENA CODE: 1.0 atform, could fall, impa	
RECOMMENDED RESOLUTION Remove grating be			,
M. Jones 03/10/ WALKDOWN TEAM ORIGINAT			•
FINAL RESOLUTION BY RE The grating was r	SPONSIBLE DISCIPLINE: Temoved during the normal	course of construction	ı.
DISCIPITINE ENGINEER/D		J. Townsend	WTOOD (DATE
	FOR RESOLUTION: CF. FE	FNGR. GROUP SUPER	h <sub>k</sub>
S. E. Traisman	11/02/83	L. W. Horn O	1/18/84

(FOR MODIFICATIONS ONLY)

SHEET	1	OF	1

	21.2.11.0.201 2000 21.0.11. (220)
٠.	POSTULATED INTERACTION NO.: 06-60-21-04
	FIRE ZONE 3-BR LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
•	LOCATION WITHIN FIRE ZONE: Elev. 109, at containment wall, 166°.
•	IDENTIFICATION OF INTERACTING COMPONENTS
	SOURCE:  Overhead light fixtures (2).
	TARGET: TARGET/CODE: P-4686-0.187 line 4686-3/16"-tubing.
	POSTULATED INTERACTION:  Fixtures fall, impact tubing.
	RECOMMENNED RESOLUTION BY WALKDOWN TEAM: Ensure intergrity of light fixtures.
	M. Jones 03/25/82 · WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:
Ace	The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, detail 8 (category I).  Install backup support chain per DCN DCO-FF-555? Sht. 12 of 13, detail 75.  Resolved by modification. See ART 348.
	R. J. Swaim 02/23/83 G. C. Bhatt 02/23/84
	DISCIPITNE FNGTNFER/DATE ENGR. GROUP SUPERVISOR/DATE  DISCIPITNE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN
	S. E. Traisman 03/25/82  FIFI D VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)  L. W. Horn 09/09/83  SIP PROJECT ENGINEER APPROVAL/DATE

[0029A/00867-20]

SHEET	1	OF	_1_
-------	---	----	-----

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM

TRIENHOITOR DOCUMENTATION SHEET (TIDS)
POSTULATED INTERACTION NO.: 06-60-22-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 112'-11/2"  LOCATION WITHIN FIRE ZONE: Elev. 112', in seal table room.
IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE:  SOURCE CODE: M-5-10PATH  5-path and 10-path drive assemblies over seal table.
TARGET: TARGET CODE: I-RVLIS Sensor bellows.
POSTULATED INTERACTION:  Drive assemblies fail, fall upon bellows.  PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of drive assembly mountings and the mounting of the individual drive assembly components by simplified analysis. Secure 10-path drive assembly trolley to the I-beam.
M. G. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Modification provided per DCN #DCI-E-M-5332. See IDS 06-01-04-01 for modification package.
T. P. Lee 07/07/83  DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC IEC PSE NPO NAN
S. E. Traisman 02/24/84  FIELD VERIFICATIONS BY MALKDOWN TEAM  (FOR MODIFICATIONS CORLY)  L. W. Horn 04/20/84  SIP PROJECT ENGINEER APPROVAL/DATE  (### 10/10/10/10/10/10/10/10/10/10/10/10/10/1

[0034A/0085Z-15]

PACIFIC GAS & ELECT DIABLO CANYON PLANT, SEISMICH I.Y INDUCED SYSTEMS INTERACTION DOCUMENTATION	UNIT NO. 1 NTERACTION PROGRAM
POSTULATED INTERACTION NO.: 06-60-27-02	/\
FIRE ZONE 1-8 LOCATION Containment	FLOOR ELEVATION 112'-0"
LOCATION WITHIN FIRE ZONE: Elev. 112', in Seal Table Room.	; ;
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platform grating at elev. 125'.	SOURCE CODE: C-GRATING
TARGET: Sensor bellows.	TARGET CODE:
POSTULATED INTERACTION:  Grating is stored loosely on overhead plat	PHENOMENA CODE: 1.00SE form, could fall, impact valve.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove grating before start-up.	
M. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The grating was removed during the normal	course of construction.
	J. Townsend
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	ens eng <u>(gc.)</u> hvac iec pse npo nan
S. E. Traisman 11/02/83 FIFLD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALY)	I. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-60-27-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 81'-6"
LOCATION WITHIN FIRE ZONE: Elev. 88, near reactor cavity.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Reactor coolant drain tank.
TARGET: Capillary tubing to TE-1327.  TARGET CODE: I-TE1327
POSTULATED INTERACTION:  RCDT supports fail, resulting in overturning of tank and subsequent impact with tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of RCDT supports by simplified analysis.
M. Jones 03/10/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Subject target is actually metal-encased electrical conductor for RTD TE- 1327 (vs. capillary tube). See confirmatory telephone memo.  Target function is associated with RVLIS and has no accident mitigating functions-only (visual) verification. Item is not related to initiating or maintaining safe shutdwon; nor is it associated with fire suppression. No further action required.
DISCIPLINE ENGINEER/DATE  E. Connell III  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NA

1.1. 8 8/28/84

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET	1	OF	1

POSTULATED INTE	RACTION NO.: 06-6	0-28-03			
FIRE ZONE 1-B	LOCATION	Containment	FLOOR	ELEVATION 8	1'-6"
LOCATION WITHIN Elev. 88,	FIRE ZONE: near reactor cavi	ty.			
IDENTIFICATION (	OF INTERACTING COM	PONENTS			
SOURCE: Reactor co	olant drain tank.		SOURCE CO	DE: M-TANK	
TARGET: Capillary	tubing to TE-1328.		TARGET CO	DE: <u>I-TE1328</u>	
POSTULATED INTER RCDT support	rts fail, resulting	g in overturning		CODE: SPTFAI d subsequent	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of RCDT supports by simplified analysis.					
M. Jones 03/10 WALKDOWN TEAM 01					
Subject tam 1328 (vs. o Target func functions—o or maintain No further	M BY RESPONSIBLE D rget is actually m capillary tube). ction is associate only (visual) veri ning safe shutdown action required.	etal-encased ele See confirmatory d with RVLIS and fication. Item ; nor is it asso	telephone of has no acc is not rela- ociated with 0.7-01 for con E. Connell	nemo. ident mitigat ted to'initia fire suppress nfimatory phor	ing ting sion. ne memo
DISCIPLINE ENGI DISCIPLINE RESPO	NISIBLE FOR RESOLU	TION: ČE EE [EM			
FIELD VERIFICATION (FOR MODIFICATION	CON BY WALKDOWN TE CAILY)			09/30/82 ENGINEER APPRO	

[0039A/0101Z-23]

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 06-60-32-02
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 81'-6"
LOCATION WITHIN FIRE ZONE: Elev. 97, in reactor cavity sump pump room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Head tank to reactor cavity sump pumps.  SOURCE CODE: M-TANK
TARGET:Conduit KK-079
POSTULATED INTERACTION: PHENOMENA CODE: SPTFAIL  Tank supports fail, tank slides into conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of tank supports by simplified analysis.
M. Jones 03/24/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Per Electrical raceway list-unit 1, dated 12/18/81 page 12, conduit KK-079 is carrying cable to TE-1329 (RTD). Target function is associated with RVLIS and has no accident mitigating functions—only (visual) verifica tion. Item is not related to initiating or maintaining safe shutdown; nor is it associated with fire suppression. No further action required. In addition, a modification to the source tank support is made per DCN DCI-EP-5061 as a result of IDS 29-22-05-02. However, no modification to tank support is necessary for this IDS or any others existing. See IDS file 29-22-05-02 for modification package.  E. Connell III
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC ICC PSE NPO NAM

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SIP PROJECT ENGINEER APPROVAL/DATE

8/28/84

SHEET 1 OF 1  CCTRIC CO.  UNIT NO. 1  INTERACTION PROGRAM  CON SHEET (IDS)
FLOOR ELEVATION 104'-7'
SOURCE CODE: P-4397-2
TARGET CODE: E-KK082-0.75
PHENOMENA CODE: SPTFAIL & PIPEFAIL failure of fixed-end rod hanger & th conduit.
bilateral support.
G. 049339 Sht. 126 in
K. M. Krause 01/25/83 ENGR. GROUP SUPERVISOR/DATE
EMS ENG GC HVAC IEC [PSE] NPO NAN

PACIFIC GAS & ELE DIABLO CANYON PLANT, SEISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTATION

	Television, popularim ton	, (200)
<i>.</i>	POSTULATED INTERACTION NO.: 06-60-32-04	· ·
	FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 104'-7'
•	LOCATION WITHIN FIRE ZONE: Elev. 110, at missile barrier 193°.	
	IDENTIFICATION OF INTERACTING COMPONENTS	
	SOURCE: 2" lube oil drain line from RCP drip pans.	SOURCE CODE: P-4397-2
	TARGET: Conduit KK-082.	TARGET CODE: E-KK082-0.75
	POSTULATED INTERACTION:  Lateral movement of 2" drain line, due to fair victaulic couplings, results in impact with o	
	RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace fixed-end rod hanger at 193° with bi	lateral support.
	M. Jones 03/24/82 WALKDOWN TEAM ORIGINATOR/DATE	
•	FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Recommended resolution OK. See hanger DWG. CDCN DC1-EP-3606.	049339 Sht. 126 in .
•	C. R. VanNatta 01/10/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	K. M. Krause 01/25/83 ENGR. GROUP SUPERVISOR/DATE ENG GC HVAC I&C [PSE] NPO NAN
[003	M. Baker 08/01/83  FIELD VERIFICATION BY WALKDOWN TEAM SI (FOR MODIFICATIONS ONLY) 20/0074Z-17]	L. W. Horn 10/05/83 P PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 06-60-32-05	<u></u> _/ノン <sup>1</sup>
FIRE ZONE 1-R LOCATION Containment	FLOOR ELEVATION 104'-0"
1.OCATION WITHIN FIRE ZONE: Elev. 107, near RCP 1-4, under elev. 110 acc	ess ladder.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Construction deficiency.	SOURCE CODE: NS-CD
TARGET: Conduit KK-083.	TARGET CODE: E-KKO83-0:75
POSTULATED INTERACTION: Condulet cover is missing.	PHENOMENA CODE: HOUSFKEEP
RFCOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace missing condulet cover.	· ·
M. Jones 03/24/82 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  IDS is a result of a construction deficiency control. Construction deficiency to be corr construction activities.	. IDS transferred to onsite quality ected during normal course of

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE NPO NAN [QC]

FIFID VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 07/03/84 SIP PROJECT ENGINEER APPROVAL/DATE

ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE ENGINEER/DATE

TARGET:

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 06-60-32-07
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 99, 6 ft. from shield wall, 190°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Line 3819 - 3/4" - stem leakoff line - loop 4 RTD valve.
TARGET:  Conduit  KK-052.
POSTULATED INTERACTION:  Pipe falls due 'to failure of threaded union, impacts conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install bilateral support to line 3519 on vertical run at 190° to preclude failure of threaded union.
M. Jones 03/24/82 WALKDOWN TEAM ORIGINATOR/DATE .
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Field inspection of target conduit K-082 (to XTE 1325). Reveals conduit was rerouted away from line 3819 - 3/4". Therefore, no action necessary.
C. R. VanNatta 06/02/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 06/02/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [FSE] NPO NAM

L. W. Horn 06/04/84

SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

06/29/83

DIABLO CA SEISMICALLY INDUC	C GAS & ELECTRI NYON PLANT, UNI CED SYSTEMS INTE DOCUMENTATION S	C CO. T NO. 1 RACTION PROGR	RAM	_1_
POSTULATED INTERACTION NO.: 07-04-	-0302	•	•	
FIRE ZONE 1-A · LOCATION C	Containment	FLOOR EL	EVATION 117	-0"
LOCATION WITHIN FIRE ZONE: Elev. 117', Col. 16 PM45, DWG	57685.	•		
IDENTIFICATION OF INTERACTING COMPO	WENTS			
SOURCE: . Floor grating.		SOURCE CODE:	C-GRATING	•
TARGET: KX197 conduit.		TARGET CODE:	E-KX197-1.2	<u>:5                                    </u>
POSTULATED INTERACTION: Grating touches conduit. Coul			E: INTERFERE	& DFFI FCT
•	,			,
RECOMMENDED RESOLUTION BY WALKDOWN Provide separation between gra		t.		
J. F. Grant 09/17/80 WALKDOWN TEAM ORIGINATOR/DATE				
FINAL RESOLUTION BY RESPONSIBLE DIS Minumum 7" clearance around th	<u>CIPLINE</u> : e conduit has b	een provided	<i>,</i> per ART #025.	
S. Hanusiak 01/16/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION	ON: <u>[CF]</u> EE FMS		SUPERVISOR/D	

S. Harris 02/17/82
FIFLD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

I. W. Horn 09/30/82
SIP PROJECT ENGINEER APPROVAL/DATE

,	,
PACIFIC GAS & ELECTRI DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 07-06-01-01	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91, along missile wall, 60°.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: 2" scupper drain (line 4397).	SOURCE CODE: P-4397-2
TARGET: Instrument panel 20 tubing.	TARGET CODE: I-PM20
POSTULATED INTERACTION:  Drain line 4397 runs 2' above tubing. Drain	PHENOMENA CODE: SPTFAIL & PIPEFAIL line falls, impacts tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	,
Perform additional analysis for line 4397 to	ensure integrity of supports.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hanger modified. See IDS file No. 07-12-02-0	1.

LOCATION WITHIN FIRE ZONE: Elev. 91, along missile u	wall, 60°.		
IDENTIFICATION OF INTERACTING	COMPONENTS		
SOURCE: 2" scupper drain (line 43	97).	SOURCE CODE: P	<del>-4397-2</del>
TARGET: Instrument panel 20 tubir	ng.	TARGET CODE: 1-	PM20
POSTULATED INTERACTION: Drain line 4397 runs 2' a	bove tubing. Drai	PHENOMENA CODE: SI n line falls, impact	PTFAIL & PIPEFAIL ts tubing.
		•	
RECOMMENDED RESOLUTION BY WALK Perform additional analys		o ensure integrity o	of supports.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE			
FINAL RESOLUTION BY RESPONSIBL Hanger modified. See IDS		-01.	
DISCIPLINE ENGINEER/DATE	٠	J. A. Ante	
DISCIPLINE RESPONSIBLE FOR RES	OLUTION: CE EE EM	S ENG GC HVAC I	&C <u>[PSE]</u> NPO NAN
S. Harris 02/19/82 FIELD VERIFICATION BY WALKDOWN (FOR MODIFICATIONS ONLY)	TEAM S	L. W. Horn 1 IP PROJECT ENGINEER	1/02/82 APPROVAL/DATE
[0032A/0074Z-19]			· SW

SHEET1_ OF1_	
--------------	--

POSTULATED INTERACTION NO.: 07-06-01-02
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Along ouside of pressurizer wall, near reactor pit.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-STAIR-1C Portable reactor pit access stairway.
TARGET: Target CODE: I-LT457 Tubing to LT-457.
POSTULATED INTERACTION:  Lateral movement of stairway structure results in impact with tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure by simplified analysis that sufficient clearance exists between tubing and stairway structure.
M. Jones 05/12/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Source component was seismically qualified by analysis. See Calc. No. 07-06-01-02 and resolution sheet.
S. Gaballah 10/11/82  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 12/10/82
SIP PROJECT ENGINEER APPROVAL/DATE

S. Harris 02/19/82 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALY)

P. H. Anderson 01/14/81

DISCIPLINE ENGINEER/DATE

L. W. Horn 11/02/82 SIP PROJECT ENGINEER APPROVAL/DATE

J. A. Ante 01/14/81

ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 07-06-02-02
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91', at missile barrier, 60°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: H-E16  Todine removal unit E-16.
TARGET: * TARGET CODE: I-PM20 Instrument panel 20.
POSTULATED INTERACTION:  PHENOMENA CODE: SPTFAIL  Iodine removal unit mounting bolts fail in shear, resulting in unit sliding into panel.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install hold-down clamps to unit mounting skid to preclude movement of unit.
MALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Bolts qualified by analysis. See IDS No. 03-35-02-02.
D. H. Hagstrom  DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 09/10/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	_1_
-------	---	----	-----

: 1	POSTULATED INTERACTION	NO.: _07-07	7-03-03			•		
	FIRE ZONE 1-A	<del></del>	Containment		FLOOR ELEV	ATION <u>117</u>	'-0"	_
1	LOCATION WITHIN FIRE 2 Flev. 117', above		at PM57, DWC	S 57685.				
:	IDENTIFICATION OF INTE	RACTING COMP	PONENTS					
\$	SOURCE: Floor grating.			SOUR	CE CODE: (	C-GRATING		
•	FARGET: KX195 conduit.			TARGE	ET CODE: _1	E-KX195-1	····	_
I	POSTULATED INTERACTION Grating contacts	•	ould damage o		MENA CODE:	INTERFERE	& DEF	LECT
į	RECORMENDED RESOLUTION Provide clearance			duit.				
ĩ	J. F. Grant 09/17 NALKDOWN TEAM ORIGINAT							
<u> </u>	FINAL RESOLUTION BY RE Min. 2" clearance			been provi	ded per AR	RT No. Ö26	•	
-	S. Hanusiak 01/16/				. P. Wolls		,	
	DISCIPLINE ENGINEER/D				R. GROUP SU	•		
Ε	DISCIPLINE RESPONSIBLE	FOR RESOLUT	ION: [CE] EE	EMS ENG	GC HVAC	I&C PSE	NPO	NAN
F	M. Jones O	2/17/82	<del></del>		W. Horn			Ē

**對518**Y

[0031A/0084Z-33]

(FOR MODIFICATIONS ONLY)

ζ,

DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC ICC PSE NPO NAN

FIFID VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY)

I.. W. Horn 06/21/83 SIP PROJECT ENGINEER APPROVAL/DATE

J. P. Meierdierks 05/19/84

ENGR. GROUP SUPERVISOR/DATE

[0028A/0082Z-57]

S. Skochko 05/18/83

DISCIPLINE ENGINEER/DATE

SHEET1 OF1
1 N PROGRAM IDS)
LOOR ELEVATION 140'-0"
E CODE: C-PLAT-1A
T CODE: _I-LT459
1 CODE. 1-11439
ENA CODE: INTERFERE & DEFLECT latform grating. No opening
ing.
vide adequate clearance per ART
^
P. Wollak GROUP SUPERVISOR/DATE
CC UVAC TIC DSF NDO NAN

POSTULATED INTERACTION NO.: 07-08-01-02	
FIRE ZONE 1-A LOCATION Containme	nt FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Approximately elev. 140'.	i e e e e e e e e e e e e e e e e e e e
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Grating.	SOURCE CODE: C-PLAT-1A
TARGET: LT459 tubing.	TARGET CODE: I-LT459
POSTULATED INTERACTION:  LT 459 tubing comes through wall and g provided in grating. Grating moves ar	PHENOMENA CODE: INTERFERE & DEFLECT goes through platform grating. No opening and impacts tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Provide protective barrier thru gratin	ng.
T. deVriarte 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Grating was cut and banded around the No. 027.	tubing to provide adequate clearance per AR
	•
S. Hanusiak 01/16/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CF]	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE  EE EMS ENG GC HVAC I&C PSE NPO NAN
S. Harris 02/18/82 FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY) 5至184 [0031A/0084Z-34]

SHEET	1OF1
PACIFIC GAS & ELECTRIC CO.	
DIABLO CANYON PLANT, UNIT NO. 1	
SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM	•
INTERACTION DOCUMENTATION SHEET (IDS)	•
POSTULATED INTERACTION NO.: 07-08-01-03	
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVA	TION 140'-0"
LOCATION WITHIN FIRE ZONE: Approximate elev. 165' — top of pressurizer.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: SOURCE CODE: P-	-0021-8
Spring hanger can 48-4V on line 21-8" (8010A Disch. to PRT).	
	•
TARGET CARE. T	1.7450
TARGET: TARGET CODE: I.	-L1459
Li 459 - tubing.	
	-
POSTULATED INTERACTION: PHENOMENA CODE:	DEFLECT
Lateral movement of spring can impacts tubing.	
•	
	•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	
Lower spring can to clear tubing (approx. 2").	
•	
S. Harris 02/18/82 WALKDOWN TEAM ORIGINATOR/DATE	
WHILEDOWN TEHT ORIGINATORYDATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
Recommended resolution OK. See hanger DWG 049256, Sht. 8, Report DCN DC1-EP-5060.	/, 3, 1n
DGI	
C. R. VanNatta 02/25/83K. M. Krai	use 02/25/83
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUI	PERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC	IEC [PSE] NPO NAN
A	•
M. Baker 08/01/83 L. W. Horn	
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINE	_
(FOR MODIFICATIONS ONLY)	(4)

		SE	DIABLO C	TIC GAS & ELECTRICANYON PLANT, UNICED SYSTEMS INTE	C CO. T NO. 1 RACTION PRO	HEET <u>1</u> OF <u>1</u>
POST	JLATED	INTERACTI	ON NO.: 07-08	-02-01		
FIRE	ZONE _	1-A	LOCATION _	Containment	_ FLOOR ELE	VATION 91'-0"
LOCAT		THIN FIRE 91', at m	ZONE: nissile barrier	·, 60°.		
IDEN	rificat	ION OF I	ITERACTING COMP	PONENTS	•	
SOUR		removal	unit E-16.		SOURCE COD	E: <u>H-E16</u>
TARG		ment pane	el 22.	•	TARGET COD	E: <u>I-PM22</u>
POST						ODE: SPTFAIL ing in unit sliding into
RECO			CON BY WALKDOWN Own clamps to u		d to prėclu	de movement of unit.
	DOWN TE	UTION BY	NATOR/DATE RESPONSIBLE DI	<u>(SCIPLINE</u> : See IDS No. 03-	35-02-02.	•

DISCIPLINE ENGINEER/DATE

D. H. Hagstrom ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

09/10/82 W. Horn SIP PROJECT ENGINEER APPROVAL/DATE



	_			
SHEET	1	OF	1	

POSTULATED INTERACTION NO.: 07-08-02-02	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Drain line 4397-2.	SOURCE CODE: P-4397-2
TARGET: Instrument panel 22.	TARGET CODE: I-PM22
POSTULATED INTERACTION: Line 4397 could fall on panel.	PHENOMENA CODE: SPTFAIL & PIPEFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Analyze supports for drain line #4397.	
T. de Uriarte 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Resolved by analysis. See RLCA Report No. 6	1.
DISCIPLINE ENGINEER/DATE	J. A. Ante 12/30/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EM	S ENG GC HVAC I&C [PSE] NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM  (FOR MODIFICATIONS ONLY)	I. W. Horn 11/02/82 IP PROJECT ENGINEER APPROVAL/DATE

Sw

SHEET	1	_ OF .	1
ROGRAM			

POSTULATED INTERÁCTION NO.: 07-09-01-01	•
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91, along missile wall, 60°.	•
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: 2" scupper drain (line 4397).	SOURCE CODE: P-4397-2
TARGET: Instrument panel 89 tubing.	TARGET CODE: I-PM89
POSTULATED INTERACTION:  Drain line 4397 runs 2' above tubing.  Drain line falls, impacts tubing.	PHENOMENA CODE: SPTFAIL & PIPEFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional analysis for line 4397 to	o ensure integrity of supports.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hanger modified. See IDS file No. 07-12-02-	-01.
	,
P. H. Anderson 01/14/81 DISCIPLINE ENGINEER/DATE	J. A. Ante 01/14/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EM	is eng gc hvac isc <u>[PSE]</u> npo nan
S. Harris 02/19/82 FIELD VERIFICATION BY WALKDOWN TEAM S (FOR MODIFICATIONS ONLY)	L. W. Horn 11/02/82 IP PROJECT ENGINEER APPROVAL/DATE

Sa

	PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
	POSTULATED INTERACTION NO.: 07-09-01-02
	FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 140'-0"
	LOCATION WITHIN FIRE ZONE: Approx. elev. 140.
	IDENTIFICATION OF INTERACTING COMPONENTS
	SOURCE: SOURCE CODE: C-PI AT-1A Grating.
•	TARGET: Tubing for LT 460.  Tubing for LT 460.
	POSTULATED INTERACTION:  Grating moves and impacts tubing.  PHENOMENA CODE: INTERFFRE & DFFLECT
	RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Provide protection around tubing where it goes thru grating.
	S. Harris WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Grating was cut and clearance provided per ART 029.
	S. Hanusiak 01/16/81 F. P. Wollak DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
	DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS FING GC HVAC I&C PSE NPO NAN
	S. Harris 02/18/82  FIFI D VERIFICATION BY WALKDOWN TEAM  (FOR MODIFICATIONS ONLY)  1 W. Horn 09/30/82  SIP PROJECT ENGINEER APPROVAL/DATE

SHEET _	1	_ OF .	1_
PROGRAM S)			

SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. . DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 07-09-01-03	
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Élev. 162 @ top of pressurizer.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Grating is loose.	SOURCE CODE: C-PLAT-1C
TARGET: LT460 top of root valve close to grating.	TARGET CODE: I-LT460
POSTULATED INTERACTION: Grating impacts top of valve.	PHENOMENA CODE: INTERFERE & DEFLECT
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Provide barrier to protect valve.	
T. deVriarte 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Grating was cut and banded around the valve ART No. 276.	to provide adequate clearance. See
•	•
S. Hanusiak 01/16/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE E	MS ENG GC HVAC IEC PSE NPO NAN
M. Tones OA/28/82	. W Horn 09/30/82

[0031A/0084Z-36]

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET 1 OF 1
--------------

POSTULATED INTERACTION NO.: 07-09-01-04	
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Flev. 140'.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Fire extinguisher FE-C140.02-1.	SOURCE CODE: M-FF
TARGET: Process lines to 1T-460 and PT-456.	TARGET CODE: T-1.T460+
POSTULATED INTERACTION:  Fire extinguisher falls and impacts proc	PHENOMFNA CODF: 100SF cess lines to 1.T-460 and/or PT-456.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Secure extinguisher.	
T. de Uriarte 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE	
The target instrument tubes are associat fire extinguishers will be removed from targets are not necessary to maintain a fuel load or subsequent refueling operat necessary.	containment during operation and the safe shutdown condition during initial
S. Skochko 08/15/83 DISCIPLINE ENGINEER/DATE	J. Meierdierks 08/16/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CF. FE	
FIFLD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	SIP PROJECT ENGINEER APPROVAL/DATE

DIABL ŞEISMICALLY I	CIFIC GAS & ELECTRION CANYON PLANT, UNINDUCED SYSTEMS INTO ION DOCUMENTATION S	IT NO. 1 ERACTION PROGRA	,
POSTULATED INTERACTION NO.: 07	-090105		
FIRE ZONE 1-C LOCATIO	N <u>Containment</u>	FLOOR ELE	VATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 159, near top of pre	ssurizer, along sh	ield wall.	
IDENTIFICATION OF INTERACTING O	OMPONENTS		
SOURCE: Conduit KX581-1".		SOURCE CODE:	E-R-1C
	_	•	
TARGET: Tubing - 3/8", to LT 460.	·	TARGET CODE:	I-LT460
POSTULATED INTERACTION: Conduit has been routed ag	ainst tubing. Motic	PHENOMENA CODE on of conduit d	
RECOTTENDED RESOLUTION BY WALKD Reroute tubing away from o		adoquato cloara	nce
	<b>,</b>		,
M. Jones 04/28/82 WALKDOWN TEAM ORIGINATOR/DATE			
FINAL RESOLUTION BY RESPONSIBLE Modification per ART 284.	DISCIPLINE:		•
,			
E. M. Valeriano 06/04/82		F. Mori	06/29/84

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [I&C] PSE NPO NAN

M. R. Baker for S. E. Traisman 02/14/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

DISCIPLINE ENGINEER/DATE

L. W. Horn 02/16/83 SIP PROJECT ENGINEER APPROVAL/DATE

ENGR. GROUP SUPERVISOR/DATE

SHEET	1	OF	1
-------	---	----	---

POSTULATED INTERACTION NO.: 07-09-02-01	****
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91, along missile wall 60°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: 2" scupper drain (line 4397).	SOURCE CODE: P-4397-2
TARGET: Instrument panel 89 tubing.	TARGET CODE: I-PM89
POSTULATED INTERACTION:  Drain pipe falls, impacts panel.  Drain pipe runs 2' above panel	PHENOMENA CODE: SPTFAIL & PIPEFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional analysis for 2" drain lin	e to ensure integrity of supports.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hanger modified. See IDS file No. 07-12-02-	01.
	•
DISCIPLINE ENGINEER/DATE	J. A. Ante 01/14/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE ÉE EM	S ENG GC HVAC ICC [PSE] NPO NAN
S. Harris 02/19/82 FIELD VERIFICATION BY WALKDOWN TEAM ST	L. W. Horn 11/02/82  EP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRI DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 07-09-02-02	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91', at missile barrier, 60°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Iodine removal unit E-16.	SOURCE CODE: H-E16
TARGET: Instrument panel 89.	TARGET CODE: I-PM89
POSTULATED INTERACTION:  Iodine removal unit mounting bolts fail in shipanel.  .	PHENOMENA CODE: SPTFAIL near, resulting in unit sliding into
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Install hold-down clamps to unit mounting skin	d to preclude movement of unit.
M. Jones 08/12/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Bolts qualified by analysis. See IDS No. 03-	-35-02-02.

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

DISCIPLINE ENGINEER/DATE

L. W. Horn 09/10/82 SIP PROJECT ENGINEER APPROVAL/DATE

ENGR. GROUP SUPERVISOR/DATE

D. H. Hagstrom

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN



	PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SFISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
	POSTULATED INTERACTION NO.: 07-09-03-03
	FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'-0"
	1.OCATION WITHIN FIRE ZONE: Elev. 112', col. 13 near platform at valve 8703, DWG 57685.
	IDENTIFICATION OF INTERACTING COMPONENTS
	SOURCE: SOURCE CODE: C-PLAT-1A Platform structure.
•	TARGET: TARGET CODE: F-KX246-2.50  KX246 conduit.
	POSTULATED INTERACTION:  Platform structure within 1/8" of conduit.  Platform and/or grating could pinch conduit.
	RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Provide clearance between platform and conduit.
	J. F. Grant 09/10/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  It was concluded the part of structure in question is a light flexible angle hanger. Very little relative movement between conduit and hanger are expected (they are attached to same structure) and the flexible 1 hanger is not capable or damaging rigid pipe conduit. Also see resolution sheet.
	S. Hanusiak 01/22/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak  ENGR. GROUP SUPERVISOR/DATE
	DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] FE EMS ENG GC HVAC I&C PSE NPO NAN

FIFID VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SIP PROJECT ENGINEER APPROVAL/DATE

SHEET \_\_\_1\_ OF \_\_1\_

	. DIABLO CA SEISMICALLY INDUC	C GAS & ELECT NYON PLANT, UN ED SYSTEMS INT DOCUMENTATION	RIC CO. HIT NO. 1 TERACTION PRO	SHEET 1 OGRAM .	OF <u>1</u>
POSTULATED INTERA	ACTION NO.: 07-10-	01-01	<del></del>	ı •	
FIRE ZONE 1-C	LOCATION _C	ontainment	FLOOR	ELEVATION	140'-0"
LOCATION WITHIN F Elev. 162 (a	TIRE ZONE: approx.) at top of	pressurizer.			
IDENTIFICATION OF	INTERACTING COMPO	NENTS			
SOURCE: Catwalk grat	ing. (No barrier a	round vent).	SOURCE CON	DE: C-PLAT-1	<u>c</u>
TARGET: Vent above r	root valve LT-461	(very close t	TARGET COX co catwalk gr	DE: <u>I-LT461</u> rating).	<del></del>
POSTULATED INTERACTION Catwalk grat	CTION: ing moves more tha	n 1/4" toward		CODE: INTERFE	RE & DEFLECT
				•	:
	UTION BY WALKDOWN Trier to protect ve				
T. deVriarte					
	BY RESPONSIBLE DIS- cut and banded aro		o provide ad	dequate clear	ance.
S. Hanusiak O1 DISCIPLINE ENGIN				Wollak XVP SUPERVISO	R/DATE
	SIBLE FOR RESOLUTION	XI: [CE] EE EM			-
M. Jones	04/28/82	_	I W. Horn	09/30/9	82

इक्षिराग

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 07-10-01-02
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 148, along outside of pressurizer wall, near reactor pit.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-STATR-1C Portable reactor pit access stairway.
TARGET: Target CODE: I-LT461 Tubing to IT-461.
POSTULATED INTERACTION:  Inateral movement of stairway structure results in impact with tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure by simplified analysis that sufficient clearance exists between tubing & stairway structure.
M. Jones 05/12/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Source component was seismically qualified by analysis. See resolution sheet an referenced Calc. No. 07-06-01-02.
S. Gaballah 10/11/82  DISCIPLINE ENGINEER/DATE  B. Sarkar 10/12/82  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] RE EMS ENG GC HVAC I&C PSE NPO NAN

53/24/34

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALLY)

I.. W. Horn 02/08/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

		•	
POSTULATED INTERACTION	N NO.: 07-11-01-01	•	
FIRE ZONE 1-C	LOCATION Containment	FLOOR ELEVATION 140'-0"	
LOCATION WITHIN FIRE : Élev. 148', alon	ZONE: g outside of pressurizer	wall, near reactor pit.	
IDENTIFICATION OF INT	ERACTING COMPONENTS		•
SOURCE: Portable reactor	pit access stairway.	SOURCE CODE: C-STAIR-1C	
TARGET: Tubing to LT-462		TARGET CODE: I-LT462	
POSTULATED INTERACTIO Lateral movement	원: : of stairway structure re	PHENOMENA CODE: DEFLECT esults in impact with tubing.	,
RECOMMENDED RESOLUTIO Finsure by simpli stairway strucur	fied analysis that suffic	cient clearance exists between tubing	&
Source component	TOR/DATE  ESPONSIBLE DISCIPLINE:	ed by analysis. See resolution sheet	and
S. Gaballah 10/1 DISCIPLINE ENGINEER/ DISCIPLINE RESPONSIBL	DATE	B. Sarkar 10/12/82  ENGR. GROUP SUPERVISOR/DATE  E EMS ENG GC HVAC I&C PSE NPO	NAN
FIELD VERIFICATION BY		L. W. Horn 12/28/82 SIP PROJECT ENGINEER APPROVAL/DATE	

[0031A/0084Z-40]

PACIFIC GAS & ELECTRI DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S	T NO. 1 RACTION PROGRAM
POSTULATED INTERACTION NO.: 07-12-01-01	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91, along missile wall 60°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: 2" scupper drain (line 4397).	SOURCE CODE: P-4397-2
TARGET: Instrument panel 95 tubing.	TARGET CODE: I-PM95
POSTULATED INTERACTION:  Drain line 4397 runs 2' above tubing. Drain	PHENOMENA CODE: SPTFAIL & PIPEFAIL line falls, impacts tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional analysis for line 4397 to	ensure integrity of supports.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE	-
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hanger modified. See IDS file No. 07-12-02-0	ı <b>.</b>
•	
DISCIPLINE ENGINEER/DATE	J. A. Ante 01/14/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	ENG GC HVAC ICC [PSE] NPO NAN

L. W. Horn 09/30/82

SIP PROJECT ENGINEER APPROVAL/DATE

S. Harris 02/19/82

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

SEISMICALI	PACIFIC GAS & ELECTION CANYON PLANT, LY INDUCED SYSTEMS I	UNIT NO. 1 INTERACTION PROGRAM
POSTULATED INTERACTION NO.:	07-12-02-01	
FIRE ZONE 1-A LOCA	ATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91, along missile	e wall 60°.	
IDENTIFICATION OF INTERACTION	NG COMPONENTS	
SOURCE: 2" scupper drain (line	4397).	SOURCE CODE: P-4397-2
TARGET: Instrument panel 95.		TARGET CODE: I-PM95
POSTULATED INTERACTION: Drain line 4397 runs 2	above panel. Drai	PHENOMENA CODE: SPTFAIL & PIPEFAIL n line falls, impacts panel.
RECOMMENDED RESOLUTION BY WA Perform additional anal		to ensure integrity of supports.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DAT	Ē	•
FINAL RESOLUTION BY RESPONSI Hanger modified per RLC	BLE DISCIPLINE: A report No. 6, Rev	. A and ART No. 10.
P. H. Anderson 01/14/81 DISCIPLINE ENGINEER/DATE		J. A. Ante 01/14/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR R	ESOLUTION: CE EE E	ems eng GC hvac iCC [pse] npo ni
S. Harris 02/19/82 FIELD VERIFICATION BY WALKDOO (FOR MODIFICATIONS ONLY)	WN TEAM	L. W. Horn 11/02/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1	
-------	---	----	---	--

POSTULATED INTERACTION NO.: 07-12-02-02
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91', at missile barrier, 60°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: H-E16  Iodine removal unit E-16.
TARGET:  Instrument panel 95.  TARGET CODE: I-PM95
POSTULATED INTERACTION:  Iodine removal unit mounting bolts fail in shear, resulting in unit sliding into panel.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install hold-down clamps to unit mounting skid to preclude movement of unit.
M. Jones 08/12/80
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Bolts qualified by analysis. See IDS No. 03-35-02-02.
D. H. Hagstrom DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

[0013A/0081Z-45]

SHEET		OF	_1_
-------	--	----	-----

POSTULATED INTERACTION NO.: 07-12-03-01	
FIRE ZONE 5A-1 LOCATION ELECTRICAL	FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100 (H,16), 480 switchgear room	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Handrails and scaffolding	SOURCE CODE: C-HANDRAIL
TARGET: TSAB (cable tray)	TARGET CODE: E-TSAB
POSTULATED INTERACTION: Handrails and scaffolding could impact TSAE	PHENOMENA CODE: LOOSE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Secure handrails and scaffolding prior to o	operations.
P. Anderson 06/05/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Handrails to be secured and scaffolding rem	noved per ART No. 189
S. HANUSIAK 07/20/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	E. P. Wollak 07/28/81 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC ICC PSE NPO NAN
S. E. Traisman 08/31/82 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 11/8/82 SIP PROJECT ENGINEER APPROVAL/DATE

1/2/184

SHEET	 OF	_1_

POSTULATED INTERACTION NO.: 07-13-02-04	
FIRE ZONE 1-B LOCATION Containmen	nt FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 139 Az 62°.	
IDENTIFICATION OF INTERACTING COMPONENTS	u <sub>h</sub>
Steam sample line Pressurizer steam sp	SOURCE CODE: NS-CD ace sample line.
TARGET:Conduit KX499	TARGET CODE: E-KX499-0.75
POSTULATED INTERACTION:  Steam sample line could melt wire insinsulated.	PHENOMENA CODE: ENVIRON  de conduit if not properly
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Insure steam sample line is insulated	properly.
A. G. Barta 02/18/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Conduit KX4999 rerouted such that it d Transferred to IDI E-1-748 system for	loes not penetrate the insulation.
•	K. L. Krause 08/18/83
C. R. VanNatta 08/18/83 DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE	EE EMS [ENG] GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 09/28/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

INTERACTION DOCUMENTALION	A SHEE! (IDS)
POSTULATED INTERACTION NO.: 07-14-02-01	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 130'-0"
LOCATION WITHIN FIRE ZONE: Elev. 130 Az. 270.	
DENTIFICATION OF INTERACTING COMPONENTS SOURCE:	SOURCE CODE: E-INCORF DR
Incore instr. drive motors A-F.	
TARGET: Conduit KX498.	TARGET CODE: E-KX498-0.75
POSTULATED INTERACTION:  Theore drive units could tip over and impact.	PHENOMFNA CODE: MECHFAII Ct conduit KX498.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity by analysis of incore driv	ve units.
P. H. Anderson 05/28/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Incore drive units are structurally accepta Calc. No. 07-14-02-01. ART 382. #D1-11669 fillet welds per unit to preclude possible support foundation connection bolts.	2-J-RO issued to add four (4) short
S. Skochko 05/27/83 DISCIPLINE ENGINEER/DATE	J. P. Meirdierks 05/27/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPI INE RESPONSIBLE FOR RESOLUTION: CF. FE	•
P.J.Z. for S. E. Traisman 08/18/83 FIELD VERIFICATION BY WALKDOWN TEAM	I. W. Horn 08/23/83 SIP PROJECT ENGINEER APPROVAL/DATE

[0039A/0101Z-48]

SHEET - 1 OF 1
PROGRAM S)
OR ELEVATION 91'-0"
COOE: P-1135-3
CODE: I-PT458A
A CODE: SPTFAIL d compromise tubing.
ction.
port No. 6, Rev. A.

## PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION SHEET (ID:

POSTULATED INTERACTION NO.: _07-15-01-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 110, near containment wall, 92°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Pipe support beam clamp to line 1135.  SOURCE CODE: P-1135-3
TARGET: Tubing to PT-458A.  Target code: I-PT458A
POSTULATED INTERACTION:  PHENOMENA CODE: SPTFAIL  Tubing runs between beam & clamp. Clamp failure could compromise tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Replace beam clamp support with welded type rod connection.
M. Jones 08/12/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Pipe support added per ART No. 10 & RI.CA Resolution Report No. 6, Rev. A.
P. H. Anderson 01/14/81 J. A. Ante 01/14/81  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN
M. Jones 02/19/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS CNLY)

[000

SHEET 1 OF 1	
--------------	--

DOCTH ATER THEE PACTICAL BIA . O7 16 O1 O1	
POSTULATED INTERACTION NO.: 07-16-01-01	FLOOR ELEVATION 140'-0"
FIRE ZONE 1-C LOCATION Containment	PLOOR ELEVITION 140 -0
LOCATION WITHIN FIRE ZONE: Approx. Flev. 168 top of pressurizer.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Conduits	SOURCE CODE: F-R-1C
TARGET: Accoustic monitor POT 116	TARGET CODE: I-POT116
POSTULATED INTERACTION:  Pipe mounted POT is damaged by impact wit results from seismic and/or thermal motio piping.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Provide flexible conduit connection to PO	T 116.
S. Harms 02/18/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by modification. Remove flexible be exposed. Cable is environmentally quacation.	
J. Swaim 06/14/83 DISCIPLINE ENGINEER/DATE	G. C. Bhatt 06/14/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [FF]	EMS ENG GC HVAC I&C PSE NPO NAN
M Baker 08/01/83 FIFID VERIFICATION BY WALKDOWN TEAM	L. W. Horn 10/20/83 SIP PROJECT ENGINEER APPROVAL/DATE

[00291/00867-21]

(FOR MODIFICATIONS ONLY)

Jess

SHEET 1	OF	1
---------	----	---

POSTULATED INTERACTION NO.: 07-16-01-02
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 165, top of pressurizer.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: NS-CD Environmental effects.
TARGET:  Acoustic Monitor POT116.  TARGET CODE: E-POT116
PHENOMENA CODE: ENVIRON  Signal cable from rigid conduit to POT116 is exposed. Environmental effects in containment could damage cable.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Encase cable to POT116 in flexible conduit.
M. Jones 05/03/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Cable has been qualified per qualification test report 517-TR-03  (file No. 137.014 IH-21) remove flex. conduit per ART #400, which was added per ART #297.
-
R. J. Swaim 06/14/83 S. Auer 06/16/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN

L. W. Horn 09/28/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 07-16-02-02
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, above fuel canal, area G.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Line 2385-4".
TARGET:  KX532 conduit  TARGET CODE: E-KX532-1.50
POSTULATED INTERACTION:  Line 2385 may contain hot fluid, generating temperatures in excess of those allowable for wires in the adjacent conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure line does not contain excessively hot fluid or insulate in vicinity of KX532.
G. Whorisky 06/03/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by analysis described in RLCA Resolution Report #40.
•
S. Motiwalla 08/26/81  DISCIPLINE ENGINEER/DATE  R. L. Cloud 08/28/81  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN
L. W. Horn 11/02/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

SHEET _	1 OF	
OGRAM		•

L. W. Horn 10/20/83 SIP PROJECT FAGINEER APPROVAL/DATE

## PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHFET (IDS)

	POSTULATED INTERACTION NO.: 07-16-03-01
	FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
	LOCATION WITHIN FIRE ZONE: Approx. Flev. 168 top of pressurizer.
	IDENTIFICATION OF INTERACTING COMPONENTS .
	SOURCE: SOURCE CODE: E-R-1C Conduits
	TARGET:  Accoustic monitor POT 117.
	POSTULATED INTERACTION:  Pipe mounted pot is damaged by impact with rigid conduit. Impact motion results from seismic and/or thermal motion of pressurizer and associated piping.
	RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Provide flexible conduit connection to POT 117.
MA	S. Harms 02/18/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by modification. Remove flexible conduit so that the cable will be exposed. Cable is environmentally qualified. See ART 400 for modifi-
ke	J. Swaim 06/14/83  DISCIPLINE ENGINFER/DATE  G. C. Bhatt 06/14/83  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [FE] EMS ENG GC HVAC I&C PSE NPO NAN
-	•

M Baker 08/01/83 FIELD VERIFICATION BY WALKDOWN TEAM

FIRE ZONE 1C LOCATION Containment FLOOR ELEVATION 140'-0"  LOCATION MITHIN FIRE ZONE: Elev. 165, top of pressurizer.  IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE: Environmental effects.  TARGET: Acoustic monitor POT 117.  POSTULATED INTERACTION: Signal cable from rigid conduit POT117 is exposed. Evironmental effects in containment could damage cable.  RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Encase cable to POT117 in flexible conduit.	SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)	<u>ر</u> ز
LOCATION WITHIN FIRE ZONE: Elev. 165, top of pressurizer.  IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE: Environmental effects.  SOURCE CODE: NS-CD  Environmental effects.  TARGET: Acoustic monitor POT 117.  POSTULATED INTERACTION: Signal cable from rigid conduit POT117 is exposed. Evironmental effects in containment could damage cable.  RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Encase cable to POT117 in flexible conduit.  M. Jones 05/03/82 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Refer to I.D.S. 07-16-01-02 for final resolution.  J. Swaim 06/14/83  S. Auer 06/16/83	POSTULATED INTERACTION NO.: 07-16-03-02	
Elev. 165, top of pressurizer.  IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE: SOURCE CODE: NS-CD  Environmental effects.  TARGET: TARGET CODE: E-POT117  Acoustic monitor POT 117.  POSTULATED INTERACTION: PHENOMENA CODE: ENVIRON Signal cable from rigid conduit POT117 is exposed. Evironmental effects in containment could damage cable.  RECOMMENDED RESOLUTION BY MALKDOWN TEAM: Encase cable to POT117 in flexible conduit.  M. Jones 05/03/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Refer to I.D.S. 07-16-01-02 for final resolution.	FIRE ZONE 1C LOCATION Containment FLOOR ELEVATION 140'-0"	
Environmental effects.  TARGET: Acoustic monitor POT 117.  POSTULATED INTERACTION: Signal cable from rigid conduit POT117 is exposed. Evironmental effects in containment could damage cable.  RECOTTENDED RESOLUTION BY MALKDOWN TEAM: Encase cable to POT117 in flexible conduit.  M. Jones 05/03/82 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Refer to I.D.S. 07-16-01-02 for final resolution.  J. Swaim 06/14/83  S. Auer 06/16/83	LOCATION WITHIN FIRE ZONE: Elev. 165, top of pressurizer.	
Environmental effects.  TARGET: TARGET CODE: E-POT117  Acoustic monitor POT 117.  POSTULATED INTERACTION: PHENOMENA CODE: ENVIRON  Signal cable from rigid conduit POT117 is exposed. Evironmental effects in containment could damage cable.  RECONTENDED RESOLUTION BY WALKDOWN TEAM: Encase cable to POT117 in flexible conduit.  M. Jones 05/03/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Refer to I.D.S. 07-16-01-02 for final resolution.  J. Swaim 06/14/83  S. Auer 06/16/83	IDENTIFICATION OF INTERACTING COMPONENTS	
Acoustic monitor POT 117.  POSTULATED INTERACTION: PHENOMENA CODE: ENVIRON  Signal cable from rigid conduit POT117 is exposed. Evironmental effects in containment could damage cable.  RECONTENDED RESOLUTION BY WALKDOWN TEAM:  Encase cable to POT117 in flexible conduit.  M. Jones 05/03/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Refer to I.D.S. 07-16-01-02 for final resolution.  J. Swaim 06/14/83  S. Auer 06/16/83		
POSTULATED INTERACTION:  Signal cable from rigid conduit POT117 is exposed. Evironmental effects in containment could damage cable.  RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Encase cable to POT117 in flexible conduit.  M. Jones 05/03/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Refer to I.D.S. 07-16-01-02 for final resolution.  J. Swaim 06/14/83  S. Auer 06/16/83		
Signal cable from rigid conduit POT117 is exposed. Evironmental effects in containment could damage cable.  RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Encase cable to POT117 in flexible conduit.  M. Jones 05/03/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Refer to I.D.S. 07-16-01-02 for final resolution.  J. Swaim 06/14/83  S. Auer 06/16/83	••	
Encase cable to POT117 in flexible conduit.  M. Jones 05/03/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Refer to I.D.S. 07-16-01-02 for final resolution.  J. Swaim 06/14/83  S. Auer 06/16/83	Signal cable from rigid conduit POT117 is exposed. Evironmental effects	
Encase cable to POT117 in flexible conduit.  M. Jones 05/03/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Refer to I.D.S. 07-16-01-02 for final resolution.  J. Swaim 06/14/83  S. Auer 06/16/83		
WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Refer to I.D.S. 07-16-01-02 for final resolution.  J. Swaim 06/14/83  S. Auer 06/16/83	RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Encase cable to POT117 in flexible conduit.	
Refer to I.D.S. 07-16-01-02 for final resolution.  J. Swaim 06/14/83 S. Auer 06/16/83	M. Jones 05/03/82 WALKDOWN TEAM ORIGINATOR/DATE	
	FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Refer to I.D.S. 07-16-01-02 for final resolution.	
DISCIPLING EMOTNEEKANDHIE EURY. GROOD SOBEKATSONADHIE		
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN		, Jar

L. W. Horn 09/28/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 07-16-05-01
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Approx. Elev. 168 top of pressurizer.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: E-R-1C Conduits
TARGET:  Accoustic monitor POT 118.
POSTULATED INTERACTION:  Pipe mounted pot is damaged by impact with rigid conduit. Impact motion results from seismic and/or thermal motion of pressurizer and associated piping.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Provide flexible conduit connection to POT 118.
S. Harms 02/18/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by modification. Remove flexible conduit so that the cable will be exposed. Cable is environmentally qualified. See ART 400 for modification.
T. Swaim 06/14/83 G. C. Bhatt 06/14/83
J. Swaim 06/14/83  DISCIPITNE ENGINEER/DATE  G. C. Rhatt 06/14/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPITNE RESPONSIBIE FOR RESOLUTION: CE [FE] EMS ENG GC HVAC ICC PSE NPO NA

L. W. Horn 10/21/83 SIP PROJECT ENGINEER APPROVAL/DATE

M Baker 03/18/83 FIFID VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

BCB

SHEET _	1	_ OF _	1	_
ROGRAM				()
KOGKI				10

POSTULATED INTERACTION NO.: 07-16-05-02	<del></del>
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 165, top of pressurizer.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Environmental effects.	SOURCE CODE: NS-CD
TARGET: Acoustic monitor POT118	TARGET CODE: E-POT118
POSTULATED INTERACTION:  Signal cable from rigid conduit to POT118 i effects in containment could damage cable.	PHENOMENA CODE: ENVIRON s exposed. Environmental
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Encase cable to POT 118 in flexible conduit	•
M. Jones 05/03/82 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
Refer to I.D.S. 07-16-01-02 for final resol	ution.
R. J. Swaim 06/14/83 DISCIPLINE ENGINEER/DATE	S. Auer 06/16/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE E	
	L. W. Horn 09/28/83 SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 07-25-06-01
FIRE ZONE 7-A LOCATION Electrical Rooms FLOOR ELEVATION 128'
LOCATION WITHIN FIRE ZONE: Elev. 128', south of Rack #24
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Fire Protection Piping (1-1/2" red)  SOURCE CODE: P-USB-7A
TARGET:  TARGET CODE: E-KT072+  KT072, K5794 (Conduit)
POSTULATED INTERACTION:  Fire protection piping could fail due to threaded joints and excessive span.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of piping either by analysis or by providing support modification.
Paul Anderson 06/04/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: SEE IDS No. 17-25-06-01

C. R. Van Natta 09/21/83 DISCIPLINE ENGINEER/DATE

1

J. Longworth 01/12/83 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN

S. E. Traisman 9/21/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY)

L. W. Horn 10/21/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET1_ OF1_
PROGRAM DS)
OOR ELEVATION 115'-0"
CODE: C.BLAT1P
CODE: C-PLAT-1B
CODE. T DOWATES
CODE: I-PCV455A
IA CODE - CTUTI EATI
A CODE: CIVILFAIL
Y
is. See Calc. No.

POSTULATED INTERACTION NO.: 08-01-03-01	<del></del>
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 118', near PZR and crane wall, azimut	h 20°±.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platform 128F.	SOURCE CODE: C-PLAT-1B
TARGET: Valve PCV-455A.	TARGET CODE: I-PCV455A
POSTULATED INTERACTION: Platform fails and falls onto valve.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of platform by simplified a	analysis.
S. E. Traisman 09/29/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The platform has been seismically qualified 08-01-03-01.	by analysis. See Calc. No.
S. Gaballah 10/22/87 DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EN	B. Sarkar 10/27/82 ENGR. GROUP SUPERVISOR/DATE  S ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY)	L. W. Horn 12/10/82 SIP PROJECT ENGINEER APPROVAL/DATE

55/15/14

SHEET	1	_ OF	_1_

POSTULATED INTERACTION NO.: 08-01-07-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 110'-9"
LOCATION WITHIN FIRE ZONE: Elev. 112, near pressurizer.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead air duct (welded to bracket imbedded in concrete).
TARGET:  Line 14 - Pressurizer Spray Loop 2.  TARGET_CODE: P-0014-4
POSTULATED INTERACTION:  Air duct cantilevered 12' from missile wall, held by 2 rod supports 7' from wall.  Duct falls on line 14.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of duct. Simplified analysis should be adequate.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Calc. HV-48 and EDS Calc. No. 2 show duct will not fall. No field modifications are required.
D. H. Hagstrom 02/04/83  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 02/03/83 SIP PROJECT ENGINEER APPROVAL/DATE



SHEET	1	OF	1

POCTULATED THTEDACTION NO. 00.02.02.01
POSTULATED INTERACTION NO.: 09-02-02-01  FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117'-0".
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-GRATING Grating elev. 117'.
TARGET:  Conduit K1961 where it goes up through grating of shield wall.
POSTULATED INTERACTION:  Grating too close to conduit.  PHENOMENA CODE: INTERFERE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Cut away grating to assure sufficient clearance.
B. Smith 02/10/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Required clearance to be provided per ART No. 127.
S. Hanusiak 03/19/81  DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NA
S. Harris 02/17/82 L. W. Horn 09/10/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS CMLY)

[0031A/0084Z-42]

		~~	•
SHEET	1	OF	1

L. W. Horn 11/02/82 SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 09-02-02								
FIRE ZONE 1-C LOCATION Containment FLOOR ELEVATION 140'-0"								
LOCATION WITHIN FIRE ZONE: Elev. 140, inside steam generator 1-2 first platform up.								
IDENTIFICATION OF INTERACTING COMPONENTS								
SOURCE:  PZR steam space sample line (insulated) 3" od with insulation.								
TARGET:								
POSTULATED INTERACTION:  Postulated heat damage to K1768 by the PZR steam space sample line 3/4"  away.								
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of the conduit by analysis.								
Edward Dennison 07/08/81 WALKDOWN TEAM ORIGINATOR/DATE								
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by analysis described in RLCA Report #40.								
S. Motiwalla 08/26/81 R. L. Cloud 08/28/81  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE								
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC ICC PSE NPO NAN								

[0028A/0082Z-41]

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

	•	s	DIAI EISMICALLY	INDUCED	AS & ELECTR N PLANT, UN SYSTEMS INT UMENTATION	IT NO. 1 ERACTION	l I program	1OF	_1	
POST	JLATED	INTERACT	ION NO.: _	09-03-04-	01		<u> </u>	•		
FIRE	ZONE	1-A	LOCATI	CON Con	tainment	FL	OOR ELEVA	TION11	7 <u>'-0"</u>	•
LOCATION WITHIN FIRE ZONE: Azimuth 40°, elev. 117', against missile wall.										
IDEN	FIFICAT	TION OF I	NTERACTING	COMPONEN	тѕ					
SOUR		ng at ele	v. 117'.			SOURCE		GRATING		-
TARGE		conduit.				TARGET	r code: _E	-KX461-1		-
POST	There				ng where co rted.			INTERFER ugh. The		- no
<u>RECO+</u>		nd band g	ION BY WAL)		<u>M</u> : rotection t	o condui	t. Remov	e sharp e	dge of	
	XOWIN TE . RESOL	AM ORIGI	06/02/81 NATOR/DATE RESPONSIBI be provide							`
DISC	IPLINE	isiak <u>07/</u> ENGINEE RESPONSI	R/DATE	SOLUTION:	(CE) EE EM	ENGR.	GROUP SU	nk <u>07/23</u> PERVISOR/ I&C PSE	DATE	NAN

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

02/17/82

FIELD VERIFICATION BY WALKDOWN TEAM

DISCIPLINE RESPONSIBLE FOR

(FOR MODIFICATIONS ONLY)

S. Harris

		seis	DIAB MICALLY	LO IND	FIC GAS & ELECT CANYON PLANT, U UCED SYSTEMS IN N DOCUMENTATION	INIT NO. ITERACTI	1 ON PROGR		_ OF <u>1</u>
POSTI	ULATED	INTERACTION	NO.: _C	9-0	4-02-03			•	
FIRE	ZONE _	1-A	_ LOCATI	ON	Containment		FLOOR EL	EVATION	117'-0"
LOCAT	TION WI Elev.	ITHIN FIRE Z 117', azimu	ONE: th 28°.						
IDEN	TIFICAT	TION OF INTE	RACTING	COM	PONENTS	•			
SOUR	<u>CE</u> : Grati:	ng.				SOUR	CE CODE:	C-GRAT	TTNG
TARG		conduit.			•	TARG	ET CODE:	F-K172	28–1.50
POST	Movem	INTERACTION ent of grati exists insu	ng could	d ca t cl	use impact with earance.	<u>PHENO</u> n condui	<u>MFNA COO</u> t where	<u>E: TNTE</u> conduit	RFERE & DEFLEC drops through
RECO	MFNDE Modif	D RESOLUTION y grating to	BY WALL ensure	(DOW min	N <u>TEAM</u> : imum 2" clearar	nce betw	een grat	ing and	conduit.
_	DOWN T	EAM ORIGINAT LUTION BY RE	SPONSIBI	<u>.E D</u> pro	<u>ISCIPLINE</u> : vided par ART !	No. 176.		•	•
	. Hanu	siak E ENGINEER/D	ATE				E. P. Wo		04/02/81 ISOR/DATE

S. Harris 02/17/82 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

1

I.. W. Horn 09/10/82 SIP PROJECT ENGINEER APPROVAL/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 09-06-06-01	· · · · · · · · · · · · · · · · · · ·
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 114', near containment wall, azimuth 1	18°.
IDENTIFICATION OF INTERACTING COMPONENTS	• ′
SOURCE: Construction deficiency.	SOURCE CODE: NS-CD
TARGET: Conduit KX457.	TARGET CODE: E-KX457-1
POSTULATED INTERACTION: Conduit KX457 is missing its cover plate.	PHENOMENA CODE: HOUSEKFEP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: - Install coverplate over condulet.	•
P. Anderson 06/02/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Coverplate installed over conduit per ART 15	4.
•	•
DISCIPLINE ENGINEER/DATE	A. G. Barta 09/25/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	ENG [QC] HVAC I&C PSE NPO NAN

l. W. Horn 09/30/82

SIP PROJECT ENGINEER APPROVAL/DATE

[0028A/0082Z-22]

S. Harris 02/19/82

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	1
· · · · · · ·			

	nment FLOOR ELEVATION 91'-0"
FIRE ZONE 1-A LOCATION Contain  LOCATION WITHIN FIRE ZONE:	
Flev. 115 48°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:	SOURCE CODE: E-KX652
KX652 conduit.	•
TARGET:	TARGET CODE: E-K1790-1.25
K1790 conduit.	1111021 0001. 1.11730 1.11
POSTULATED INTERACTION:	PHENOMENA CODE: SPTFAIL
Conduit KX652 is touching (lying actacle)	ross) conduit K1/90 possible inter-
	•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	•
Check seismic qualification of KX652	2.
	-
A. G. Barta 02/18/81 WAI KDOWN TEAM ORIGINATOR/DATE	
<b>'</b>	ue.
Conduit KX652 is class 1 supported.	
Resolved by analysis.	
A. G. Barta 02/18/81	S. Auer 07/10/84
	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE FNGTNFER/DATE	
DISCIPLINE FAGTAFER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE	E [EE] EMS ENG GC HVAC IEC PSE NPO NA
	E [EE] EMS ENG GC HVAC I&C PSE NPO NA

SHEET	1	OF	1

SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 09-07-02-03	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117', 46°.	
IDENTIFICATION OF INTERACTING COMPONENTS .	
SOURCE: . Grating.	SOURCE CODE: C-GRATING .
TARGET: K1790 conduit.	TARGET CODE: E-K1790-1.25
POSTULATED INTERACTION:  Movement of grating could cause impact with of the country that the country is a second cause impact with the country in the countr	PHENOMENA CODE: INTERFERE & DEFLECT conduit where conduit drops through.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Modify grating to ensure minimum 2" clearance	e between grating and conduit.
A. G. Barta 02/18/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Required clearance to be provided per ART No	. 129.
S. Hanusiak 03/19/81  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS	F. P. Wollak 04/02/81 ENGR. GROUP SUPERVISOR/DATE S ENG GC HVAC I&C PSE NPO NAN
S Harris 02/17/82	I W Horn 00/20/82

FIFI.D VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	_1_

POSTULATED INTERACTION NO.: 09-07-02-04	- )
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"
1.OCATION WITHIN FIRE ZONE: Flev. 140', inside the steam generator J-	-2, top platform.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Construction deficiency.	SOURCE CODE: NS-CD
TARGET: Conduit K1752-1.25.	TARGET CODE: E-K1752-1.25
POSTULATED INTERACTION: Loose connection to MPF40.	PHENOMENA CODE: HOUSFKFFP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Tighten the connection.	
E. Denison 07/08/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Tighten loose connection per ART 210.	
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	A. G. Barta 07/22/81 ENGR. GROUP SUPERVISOR/DATE EMS ENG [QC] HVAC IEC PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM	I W. Horn 06/06/83 SIP PROJECT ENGINFER APPROVAL/DATE

SHEET	 OF	1	
			/

POSTULATED INTERACTION NO.: 09-07-02-05	· '
FIRE ZONE 1-C LOCATION Containment	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 140, inside steam generator 1-2, secon	d platform up.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Valve leak off HDR to PRT L89.	SOURCE CODE: NS-CD
TARGET: K1752-1.25.	TARGET CODE: E-K1752-1.25
POSTULATED INTERACTION:  Postulated heat damage to K1752 by the HDR 1	PHENOMENA CODE: ENVIRON 1/2" away.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure the integrity of K1752 by analysis.	•
Edward Dennison 07/08/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Resoved per analysis in RLCA Report #41.	
S. Motiwalla OR/26/81 DISCIPILINE ENGINFER/DATE  DISCIPILINE RESPONSIBLE FOR RESOLUTION: CF. EE EMS	R. L. Cloud 08/28/81 ENGR. GROUP SUPERVISOR/DATE S [FNG] GC HVAC I&C PSE NPO NAN
	. W. Horn 11/11/82 IP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 09-09-04-01	<del></del>
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, near containment wall, 135°.	
IDENTIFICATION OF INTERACTING COMPONENTS	P.
SOURCE: Light fixture.	SOURCE CODE: E-LF-1A
TARGET: Air supply tubing to valve 8034A.	TARGET CODE: I-8034A
POSTULATED INTERACTION:  Fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	•
M. Jones 11/12/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Fixture qualified by analysis. See Civil C.	alc. 52.24.52, Rev. 1 & 2.
keti	•
R. J. Swaim 01/26/83 DISCIPLINE ENGINFER/DATE	G. C. Bhatt 01/26/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] E	MS ENG GC HVAC IEC PSE NPO NAN
	I. W. Horn 08/12/83
FIELD VFRIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	SIP PROJECT ENGINEER APPROVAL/DATE

••
SHEET1_ OF1_
PROGRAM DS)
ELEVATION 100'-0"
CODE: C-11GE
CODE: 1-8045
NA CODE: CIVILFAIL
•
solution sheet and referenced

POSTULATED INTERACTION NO.: 09-11-02-01	
FIRE ZONE 3-BB LOCATION Penetration	on Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, near containment wall, 139°	•
. IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platform 11 GE.	SOURCE CODE: C-11GE
TARGET: Valve 8045.	TARGET CODE: 1-8045
POSTULATED INTERACTION: Platform falls, impacts valve.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform by simplify	fied analysis.
M. Jones 07/15/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The platform has been qualified by anactalc. No. 05-27-03-01.	lysis. See resolution sheet and reference
S. Hanusiak 02/19/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE]	EE EMS ENG GC HVAC ISC PSE NPO NAI
ETELD NEDTETOATION BY HALVOUR TEAM	L. W. Horn 08/23/83
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALY)  1A/0072Z-22]	SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1_	OF	1

POSTULATED INTERACTION NO.: 09-12-04-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 105, at containment wall, 139°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-11GE Platform/ladder 11 GE.
TARGET: TARGET CODE: I-8045 Air supply tubing to valve 8045.
POSTULATED INTERACTION:  Platform/ladder fall, impact tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform/ladder by simplified analysis.
M. Jones 11/12/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Sources have been seismically qualified by analysis. See resolution sheet and referenced Calc. No. 05-27-03-01 and No. 25-14-01-02.
S. Hanusiak 03/30/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak 03/31/81  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
L. W. Horn 08/23/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

新约红

[0011A/0072Z-23]

(FOR MODIFICATIONS ONLY)

į,

PACIFIC GAS & ELECT DIABLO CANYON PLANT, U SEISMICALLY INDUCED SYSTEMS IN INTERACTION DOCUMENTATION	UNIT NO. 1 ITERACTION PROGRAM
POSTULATED INTERACTION NO.: 09-13-02-01	··.
FIRE ZONE 3-BB LOCATION Penetration Ar	ea FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, near containment wall, 139°.	
IDENTIFICATION OF INTERACTING COMPONENTS	e <sup>e</sup>
SOURCE: Platform 11 GE.	SOURCE CODE: C-11GE
TARGET: Valve 8029.	TARGET CODE: 1-8029
POSTULATED INTERACTION: Platform falls, impacts valve.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platform by simplified	analysis.
M. Jones 07/15/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The platform has been seismically qualified referenced Calc. No. 05-27-03-01.	by analysis. See resolution sheet and
S. Hanusiak 02/19/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak 03/31/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	EMS ENG GC HVAC IGC PSE NPO NAN
	1. W Horn 08/23/83

SIP PROJECT ENGINEER APPROVAL/DATE

57/28/8Y

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

* *
SHEET1_ OF1_
PROGRAM DS)
ELEVATION 110'-0"
•
•
CODE: C-11GE
ş .
CODE: 1-8029
ÿ
NA CODE: CIVILFAIL
- 9 1
alysis.
•
See resolution sheet and
No. 09-12-04-01.

POSTULATED INTERACTION NO.: 09-14-04-01	•
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEV	ATION 110'-0"
LOCATION WITHIN FIRE ZONE: Elev. 105, at containment wall, 139°.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Platform/ladder 11 GE.  SOURCE CODE	E: <u>C-11GE</u>
TARGET:  Air supply tubing to valve 8029.	: <u>I-8029</u>
POSTULATED INTERACTION: Platform/ladder fall, impact tubing.	DOE: CIVILFAIL
. <u>RECOMMENDED RESOLUTION BY WALKDOWN TEAM</u> : Ensure integrity of platform/ladder by simplified analysi	S.
M. Jones 11/12/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Sources have been seismically qualified by analysis. See referenced Calc. No. 05-27-03-01. Also see IDS file No.	
	Wollak 03/09/81 P SUPERVISOR/DATE HVAC ICC PSE NPO NAN
	n 08/23/83 GINEER APPROVAL/DATE

[0011A/0072Z-25]

•
SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 09-14-05-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 105, at containment wall, 139°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Platform/ladder 11 GE.  SOURCE CODE: C-11GE
TARGET:  Mechanical panel 123.  TARGET CODE: I-PM123
POSTULATED INTERACTION:  Platform/ladder fall, impact mechanical panel.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platform/ladder by simplified analysis.
M. Jones 11/12/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Sources have been seismically qualified by analysis. See resolution sheet and referenced Calc. No. 05-27-03-01. Also see IDS file No. 09-12-04-01.
S. Hanusiak 03/06/81 E. P. Wollak 03/09/81 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 08/23/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET1 OF1
l PROGRAM TDS)
R ELEVATION 100'-0"
COOE: C-105GE
CODE: P-2999-4
NA CODE: CIVILFAIL
•
•

	. ,
POSTULATED INTERACTION NO.: 09-15-01-01	
FIRE ZONE 3-BB LOCATION Penetration 6	Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, near containment wall, 170°.	
. IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platform 105 GE.	SOURCE COOE: C-105GE
TARGET: Line 2999-4" - ECCS relief header.	TARGET CODE: P-2999-4
POSTULATED INTERACTION: Platform falls, impacts pipe.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform by simplified	d analysis.
M. Jones 07/15/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform qualified by analysis. See resol Calc. No. 09-15-01-01.	lution sheet and referenced
S. Hanusiak 08/14/80 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	V. J. Ghio 08/15/80 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO NAN
ETELD VEDTETCATTON BY HALVOOR TEAM	L. W. Horn 08/23/83

निष्ठारुप

F0011A/0072Z-27]

SHEET	1	OF	1
-------	---	----	---

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 09-15-01-05
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 107, at containment wall, 155°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-103GE Platform 103 GE.
TARGET:  TARGET CODE: PA-2999-4  Snubber 15-35SL to line 2999-4"; ECCS relief header.
POSTULATED INTERACTION:  Scubber is connected to Class II platform 103GE.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify that platform has been seismically qualified.
M. Jones 11/18/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platform qualified by analysis. See resolution sheet and referenced Calc. No. 09-01-04-01.
S. Hanusiak 03/06/81 E. P. Wollak 03/09/81  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
L. W. Horn 08/23/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

SHEET .	_1	_ OF _	3
ROGRAM )			

POSTULATED INTERACTION	NO.: 09-15-02-01	
FIRE ZONE 1-A	LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZO	ONE: ntainment wall, 146°.	•
IDENTIFICATION OF INTE	RACTING COMPONENTS	
SOURCE: Line 1043-4"; stea	am generator 1-4 blowdown.	SOURCE CODE: P-1043-2.50
TARGET: Vent connection to	o line 2998-4".	TARGET CODE: PA-2998-4
POSTULATED INTERACTION: Lateral deflection 2998.		PHENOMENA CODE: DEFLECT mpact with vent connection to line
RECOMMENDED RESOLUTION  Add vertical membe reduce lateral def	BY WALKDOWN TEAM: rs to existing pipe suppor lection of line 1043.,	ts, each side of point of contact, to
M. Jones 07/15 WALKDOWN TEAM ORIGINATO		•
FINAL RESOLUTION BY RES	PONSIBLE DISCIPLINE: routed to provide adequate	clearance per ART 004.
R. W. Eschenburg 10,	<u>/24/80</u>	S. Chitnis 07/24/84
DISCIPLINE ENGINEER/DAT		ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE P	FOR RESOLUTION: CE EE EMS	ENG GC HVAC I&C [PSE] NPO NAN
•		

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

M. Jones

02/23/82

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET 1 OF 1		1	OF	1	
--------------	--	---	----	---	--

`	THIERHCITON DOCUMENTS	HITOM SHEET (IDS)
POSTULATED INTERACTION	NO.: <u>09-15-02-02</u>	
FIRE ZONE 1-A	LOCATION Containmen	nt FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZO Elev. 104, at cont	NE: ainment wall, 146 <sup>0</sup> .	
IDENTIFICATION OF INTER	ACTING COMPONENTS	
SOURCE: Line 1043-2 1/2; s	team generator 1-4 b	SOURCE CODE: P-1043-2.50
TARGET: Test connection to	line 2998-4".	TARGET CODE: P2998-4
POSTULATED INTERACTION:  !.ateral deflection connection manual containment wall.	of line 1043 results	PHENOMENA CODE: DEFLECT  s in impact with handwheel of test ce is 1 3/4", horizontal away from
RECOMMENDED RESOLUTION  Verify that hot co contact.		lacement is less than that required for
than that required	PONSIBLE DISCIPLINE: ied by H. Hohmann of	O.S.E.G. that seismic displacement is le ME101 Anal. 1-100 R.1 & Calcs. by H.H. ecessary.
C. R. VanNatta 01/12/8 DISCIPLINE ENGINEER/DA  DISCIPLINE RESPONSIBLE	TE	J. A. Longworth 01/12/83 ENGR. GROUP SUPERVISOR/DATE EE EMS ENG GC HVAC I&C [PSE] NPO NAME
FIELD VERIFICATION BY WA		L. W. Horn 06/16/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1	_ OF	1
---------	------	---

POSTULATED INTERACTION NO.: 09-15-04-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 108 at containment wall, 152°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Railing and ladder to platform.  SOURCE CODE: C-LADDER
TARGET:  Relief valve 8853B.  TARGET CODE: 1-8853B
POSTULATED INTERACTION:  Ladder and railing supports fail, resulting impact with valve 8853B.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of ladder and railing supports by analysis.
M. Jones 07/15/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The platform and railing supports have been seismically qualified by analysis. See resolution sheet and referenced Calc. No. 09-01-04-01.
S. Hanusiak 02/19/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
L. W. Horn 08/23/83

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 08/23/83
SIP PROJECT ENGINEER APPROVAL/DATE



PACIFIC GAS & ELECT DIABLO CANYON PLANT, U SEISMICALLY INDUCED SYSTEMS IN INTERACTION DOCUMENTATION	NIT NO. 1 TERACTION PROGRAM
POSTULATED INTERACTION NO.: 09-15-06-01	
FIRE ZONE 3-BB LOCATION Penetration Ar	ea FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 108, near containment wall, 161°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Handrails (3) to platform.	SOURCE CODE: C-HANDRAIL
<u>TARGET</u> : Line 2061-1"	TARGET CODE: P-2061-1
POSTULATED INTERACTION: Railings fall, impact line 2061.	PHENOMENA CODE: LOOSE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of railings by simplified	analysis.
J. Jones 07/15/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Handrails qualified by analysis. See Calc. I	No. 19-04-06-01.
S. Hanusiak 02/19/91  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

35 778114

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 09-15-07-02	
FIRE ZONE 3-BB LOCATION Penetration Are	a FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, near containment wall, 170°.	,
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platform 105GE.	SOURCE CODE: C-105GE
TARGET: Line 2004-3".	TARGET CODE: P-2004-3
POSTULATED INTERACTION: Platform falls, impacts pipe.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platform by simplified a	nalysis.
M. Jones 07/16/80 WALKDOWN TEAM ORIGINATOR/DATE	,
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The platform has been seismically qualified I referenced Calc. No. 09-15-01-01.	by analysis. See resolution sheet and
S. Hanusiak 02/19/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALY)

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAN

PACIFIC GAS & EL DIABLO CANYON PLANT SEISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTAT	T, UNIT NO. 1 S INTERACTION PROGRAM
POSTULATED INTERACTION NO.: 09-15-08-01	
FIRE ZONE 3-88 LOCATION Penetration	n Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, near containment wall, 170°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platform 105GE.	SOURCE CODE: C-105GE
<u>TARGET</u> : Line 1459-1".	TARGET CODE: P-1491-1
POSTULATED INTERACTION: Platform falls, impacts pipe.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform by simplify	ied analysis.
M. Jones 07/16/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The platform has been seismically qualif referenced Calc. No. 09-15-01-01.	Fied by analysis. See resolution sheet an
S. Hanusiak 02/19/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] E	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE EE EMS ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

5:50 1/12/21/21

SEISMICA	PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN LLY INDUCED SYSTEMS INT ERACTION DOCUMENTATION	IC CO. IT NO. 1 ERACTION PROGRAM	OF
POSTULATED INTERACTION NO.	: _09-15-09-01		p.
FIRE ZONE 3-88 LO	CATION Penetration Are	a_ FLOOR ELEVATION	100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, near conta	inment wall, 170°.	•	
IDENTIFICATION OF INTERACT	ING COMPONENTS		
SOURCE: Platform 105GE.	,	SOURCE CODE: C-1	O5GE
TARGET: Line 3852-1".		TARGET CODE: P-	-3852-1
POSTULATED INTERACTION: Platform falls, impac	ts pipe.	PHENOMENA CODE: C	IVILFAIL
RECOMMENDED RESOLUTION BY DESIGN OF P	WALKDOWN TEAM: latform by simplified a	nalysis.	•
M. Jones 07/16/80 WALKDOWN TEAM ORIGINATOR/DO	SIBLE DISCIPLINE:		
The platform has been referenced Calc. No.	seismically qualified   19-15-01-01.	by analysis. See r	resolution sheet and

POSTULATED INTERACTION:		PI	HENOMENA C	ODE:	CIVIL	FAIL		
Platform falls, impacts pipe.								
								4
•								•
RECOMMENDED RESOLUTION BY WALKDOWN TEA	<del></del>							
Ensure integrity of platform by s	implified	ana	lysis.	,				
•								
M. Jones 07/16/80 WALKDOWN TEAM ORIGINATOR/DATE								
FINAL RESOLUTION BY RESPONSIBLE DISCIPTION The platform has been seismically referenced Calc. No. 19-15-01-01.	qualified	d by	analysis.	See	resol	ution	shee	et and
					•			
S. Hanusiak 02/19/81			_E P.	Wollak				
DISCIPLINE ENGINEER/DATE			ENGR. GRO			OR/DA	TE	
DISCIPLINE RESPONSIBLE FOR RESOLUTION:	[CE] EE	ems	ENG GC	HVAC	I&C	PSE	NPO	NAN
	•						_	
FIELD VERIFICATION BY WALKDOWN TEAM		SIP	L. W. H					
(FOR MODIFICATIONS ONLY)	3.5 7/28/84							
A/0072Z-33]	•							
	•					•		

[0011

SHEET	1	OF .	1

INICKACITOR DOCKERINITOR SHEET (IDD)
POSTULATED INTERACTION NO.: 10-01-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 107, near containment wall, 320°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Line 3900-1", aux. steam line.  SOURCE CODE: P-3900-1
TARGET:  Line 1495 - 3/4"; RCP seal water bypass.
POSTULATED INTERACTION:  Lateral deflection of line 3900 results in impact with line 1495.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add bracket, clamp & shoe to line 3900 to reduce lateral deflection.
M. Jones 08/06/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Added & modified pipe supports per field verification report walkdown No. 39,  March 4, 1982, which is corrected by hanger DWG 049339 Sht. 61, Rev. 1 & 298, Rev.  1 on generic DCN DC1-EP-5061-RO.
C. R. VanNatta 05/13/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 05/13/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 09/21/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

[0016A/0074Z-26]

SHEET	1	OF	1
-------	---	----	---

POSTULATED INTERACTION NO.: 10-02-01-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'
LOCATION WITHIN FIRE ZONE: Elev. 100, overhead, near pressurizer rel. tank.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  3" air supply line (service air header).  SOURCE CODE: P-SA-1A
TARGET:  2" seal water line 1479.  TARGET CODE: P-1479-2.
POSTULATED INTERACTION:  Lateral movement of source line could impact SW line.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add additional restraint at or near 90° elbow of source line to limit lateral deflection.
M. G. Jones 04/02/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Pipe supports were added per RLCA Resolution Report No. 6, Rev. A & ART #41 in approximate locations recommended.
P. H. Anderson 01/14/81  DISCIPLINE ENGINEER/DATE  J. A. Ante  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC! I&C [PSE] NPO NAN
M. G. Jones 02/25/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

	GAS & ELECTRI ON PLANT, UNI SYSTEMS INTE CUMENTATION S	ET NO. 1 ERACTION	PROGRAM	1 Of	11_	
POSTULATED INTERACTION NO.: 10-02-02	-01		<del></del> ·			
FIRE ZONE 1-B LOCATION Con	tainment	FL	OOR ELEVA	TION110	0'-9"	-
LOCATION WITHIN FIRE ZONE: RCPP1-1, Elev. 117						,
IDENTIFICATION OF INTERACTING COMPONE	INTS					
SOURCE: Overhead light fixture.		SOURCE	<u> </u>	, _1 F—1B	-	_
TARGET: Air supply lines (copper), rubbe	er tube to CV		CODE: I		<u>.                                    </u>	-
POSTULATED INTERACTION:  Fixture falls, impacts tubing.		PHENOME	NA CODE:	FIXTURE		_
RECOMMENDED RESOLUTION BY WALKDOWN TE Ensure integrity of fixture mour should be sufficient.	EAM: nt. A review	of the d	esign and	simplif	ied ana	lysis
M. Jones 04/02/80						
WALKDOWN TEAM ORIGINATOR/DATE						I
Fixture qualified by analysis.	<u> </u>	lc. 52.2	.4.52, Rev	. 1 & 2.	v	
ıţ			•			
R. J. Swaim 01/26/83 DISCIPLINE ENGINEER/DATE		ENGR.	G. C. Bha GROUP SU			
DISCIPLINE RESPONSIBLE FOR RESOLUTION	N: CE [EE] E	is eng	GC HVAC	I&C PS	E NPO	NAN
		L. W. 1	<u> 1orn</u> 08/	/12/83	1	_

SIP PROJECT ENGINEER APPROVAL/DATE

per

(FOR MODIFICATIONS ONLY)

FIFID VERIFICATION BY WALKDOWN TEAM

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  LLY INDUCED SYSTEMS INTERACTION PROGRAM  ERACTION DOCUMENTATION SHEET (IDS)
: 10-03-01-01
CATION Penetration Area FLOOR ELEVATION 100'-0"
ear containment wall, 130°.
ING COMPONENTS
SOURCE CODE: C-PLAT-3BB
TARGET CODE: P-0054-2 er to RCP.
PHENOMENA CODE: CIVILFAIL ts pipe.
WALKDOWN TEAM: latform by simplified analysis.

#### SEISMICALLY INDUCED SYSTEMS INTERACTION INTERACTION DOCUMENTATION SHEET (I POSTULATED INTERACTION NO.: 10-03-01-01 FIRE ZONE 3-BB LOCATION Penetration Area FLOOR LOCATION WITHIN FIRE ZONE: Elev. 100, GE area, near containment wall, 130°.

IDENTIFICATION OF INTERACTING COMPONENTS

SOURCE: Overhead platform.

TARGET: Line 54-2" - Seal water to RCP.

POSTULATED INTERACTION: Platform falls, impacts pipe.

RECOMMENDED RESOLUTION BY WALKDOWN TEAM:

Ensure integrity of platform by simplified analysis.

M. Jones 05/14/80 WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

The platform has been seismically qualified by analysis. See resolution sheet and referenced Calc. No. 05-27-03-01.

08/08/80 S. Hanusiak DISCIPLINE ENGINEER/DATE

V. J. Ghio 08/08/80 ENGR. GROUP SUPERVISOR/DATE

discipline responsible for resolution: [CE] EE EMS EMG GC HVAC ICC PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

09/30/82 L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

THIERHOITON DOCUMENTHIT	ON SHEET (IDS)
POSTULATED INTERACTION NO.: 10-06-01-01	
FIRE ZONE 3-BB LOCATION Penetration	Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, GE area, near containment wal	1, 130°.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead platform.	SOURCE CODE: C-PLAT-3BB
TARGET: Sealwater to RCP, line 55-2".	TARGET CODE: P-0055-2
POSTULATED INTERACTION: Platform falls, impacts pipe.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform by simplifie	d analysis.
M. Jones 05/14/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The platform has been seismically qualification referenced Calc. No. 05-27-03-01.	ed by analysis. See resolution sheet ar
S. Hanusiak 08/08/80 DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	V. J. Ghio 08/08/80 ENGR. GROUP SUPERVISOR/DATE  EMS ENG GC HVAC I&C PSE NPO NAN
•	L. W. Horn 09/30/82

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 10-07-01-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 110'-9"
LOCATION WITHIN FIRE ZONE: Elev. 116, near RCP 1-3.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead air register.  SOURCE CODE: H-DUCT-18
TARGET:  TARGET CODE: P-1497-0.75  3/4" seal water bypass line to RCP 1-3 (line 1497).
POSTULATED INTERACTION:  Register falls on line 1497.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of register.
M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Register qualified by analysis. See IDS No. 03-29-01-04.
D. H. Hagstrom 09/08/82 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 10-09-01-01	
FIRE ZONE 3-BB LOCATION Penetration Are	a FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, GE area, near containment wall, 1	30°.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead platform.	SOURCE CODE: C-PLAT-3BB
TARGET: Sealwater to RCP, line 56-2".	TARGET CODE: P-0056-2
POSTULATED INTERACTION:  Platform falls, impacts pipe.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform by simplified a	nalysis.
M. Jones 05/14/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The platform has been seismically qualified in referenced Calc. No. 05-27-03-01.	by analysis. See resolution sheet and
S. Hanusiak 08/08/80 DISCIPLINE ENGINEER/DATE	V. J. Ghio 08/08/80 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE E	MS ENG GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

09/30/82 L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE

SHEET1_ OF1
PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 10-11-02-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 110'-9"
LOCATION WITHIN FIRE ZONE:  RCP 1-4, elev. 115.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: E-LF-18  Overhead light fixture.
TARGET:  Copper/rubber instrument tube (air supply) to CV 8141D.
POSTULATED INTERACTION PHENOMENA CODE: FIXTURF  Fixture falls, impacts tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM.  Ensure integrity of fixture mount.
M. Jones 04/02/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Fixture qualified by analysis. See Civil Calc. 52.24.52, Rev. 1 & 2.
•
R. J. Swaim 01/26/83 G. C. Bhatt 01/26/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPILINE ENGINEER/DATE  DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

I. W. Horn 08/17/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIFID VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

Act

•
SHEET1 OF1_
1 N PROGRAM IDS) ·
R ELEVATION 100'-0"
E CODE: C-PLAT-3BB
r code: _P-0057-2
ENA CODE: CIVILFAIL
•
ysis. See resolution sheet an

210121111		0 (250)	
POSTULATED INTERACTION NO.: _	10-12-01-01	<del></del>	
FIRE ZONE 3-88 LOCAT	ION Penetration Are	ea FLOOR ELEVATION	W 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, GE area, near	containment wall, 1	130°.	
IDENTIFICATION OF INTERACTING	COMPONENTS		
SOURCE: Overhead platform.		SOURCE CODE: _C	C-PLAT-3BB
TARGET: Sealwater to RCP, line 5	7–2".	TARGET CODE: P	P-0057-2
POSTULATED INTERACTION: Platform falls, impacts	pipe.	PHENOMENA CODE:	CIVILFAIL
RECOMMENDED RESOLUTION BY WAL Ensure integrity of plat		nnalysis.	
M. Jones 05/14/80 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIB The platform has been se referenced Calc. No. 05-	LE DISCIPLINE: ismically qualified	by analysis. See	resolution sheet an
S. Hanusiak 08/08/80 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RES	SOLUTION: [ <u>CE</u> ] EE E	V. J. Ghio ENGR. GROUP SU MS ENG GC HVAC	PERVISOR/DATE
,		,	

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET1 OF 1
-------------

POSTULATED INTERACTION NO.: 10-12-01-02
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 101, near containment wall, 146°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Line 1134 - 3/4" - RCP Primary water supply.  SOURCE CODE: P-1134-0.75
TARGET:  Line 57 - 2" - RCP seal insection.  TARGET CODE: P-0057-2
POSTULATED INTERACTION:  Lateral deflection of line 1134 results in impact with line 57.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install bracket/U-bolt assembly to existing beam below line 1134 near contact point.
M. Jones 07/29/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Pipe support added per ART 10 & RLCA Resolution Report No. 6, Rev. A, in approximate location recommended.
P. H. Anderson 01/14/81  DISCIPLINE ENGINEER/DATE  J. A. Ante 01/14/81  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

M. Jones 02/23/82
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)
[0007A/0067Z-28]

L. W. Horn 01/03/82 SIP PROJECT ENGINEER APPROVAL/DATE

Sand

SHEET 1	OF 1
---------	------

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 10-13-01-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, GE area, near containment 133°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-1041-2.50  Tension rods to whip restraint for SG line 1041 (Class E).
TARGET:  Vent valve and pipe to line 746.  TARGET CODE: P-0746-3
POSTULATED INTERACTION:  Lateral movement of whip restraint causes contact with vent pipe and valve to line 746.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Plug elongated holes (2) in hanger steel 4" downstream from vent to preclude lateral movement of tension rods.
M. Jones 05/14/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:
The max. distance between the tension rods, in extreme position and vent valve & pipe is 0.25 inch. With the movement of tension rods, this gap would decrease in +Z direction and increase in -Z direction. The displacements in +Z direction are less than 0.25 inch as per memo by R. Klimczak and V. Jose, data 01-15-83. Therefore, there will not be any contact between the tension rods and vent pipe & valve as a result of its lateral movement & the damage is not foreseen.
S. Burney 04/04/83 E. Epstein 04/12/83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

L. W. Horn 08/12/83 SIP PROJECT ENGINEER APPROVAL/DATE



PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 10-13-01-03
FIRE ZONE 3-BR LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE:  Elev. 110', GE area, 10' from containment, 134°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Class I supports 15-30 SI, 575-188R. Pipe rupture restraint to line 1042 (#1042-R1).
TARGET:  Line 746-3", RCP Seal Insection.  TARGET CODE: P-0746-3
POSTULATED INTERACTION:  Pipe is located 1/4" from these supports & rupture restraint. Contact from seismic and operating dynamic loads will occur.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify that clearances are adequate to accompdate seismic & dynamic movements.  Provide additional clearance if/as required.
MALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Trim corner to provide 1-1/2" clearance between plate & conflicting 3" line 746  See DCN DCO-EG-5486 SK #1-1042-R1 and item #1 of the telephone call form OPGC  (piping) to SFHO (Civil) Chron #030561 dated 08/31/83.
M. Michail  DISCIPLINE ENGINEER/DATE  A. Appleford 09/16/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

SS, 1/87

I. W. Horn 04/20/84 SIP PROJECT ENGINEER APPROVAL/DATE

G. 7aharoff 02/10/84
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

•		
SEISMICALL	PACIFIC GAS & FLECTI ABLO CANYON PLANT, UN Y INDUCFD SYSTEMS IN ACTION DOCUMENTATION	NIT NO. 1 TERACTION PROGRAM
POSTULATED INTERACTION NO.:	10-13-03-03	<del></del>
FIRE ZONE 1-A LOCA	TION <u>Containment</u>	FLOOR FLEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91, near containment	ent wall.	•
IDENTIFICATION OF INTERACTING	G COMPONENTS	
SOURCE: 3" service air header.		SOURCE CODE: P-SA-1A
TARGET: 3/4" line 1500 seal wate	er bypass return head ,	TARGET CODE: P-1500-0.75 der.
POSTULATED INTERACTION: 3" service air header mo 22-142-Sl.	oves horizonatally, i	PHENOMENA CODE: DFFLECT impacts line 150 near snubber
RECOMMENDED RESOLUTION BY WAI Add U-bolt clamps to supment of 3' service air h	oports 40-48R and 40-	-50R to preclude lateral move-
M. Jones 04/08/80 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSTE Pipe supports added per except bilats added in ladded near contact point	BLE DISCIPIINE: RICA Resolution Repo	ort No. 6 Rev. A & ART 10 e additional bilat ate. 02/25/82.
P. H. Anderson 01/14/81 DISCIPITNE ENGINFER/DATE		J. A. Ante ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RE	ISOLUTION: CF. EE. EM	4s Eng GC HVAC I&C [PSE] NPO N

I. W. Horn 09/30/82

SIP PROJECT ENGINEER APPROVAL/DATE

[0040A/01067-54]

M. Jones 02/25/82

(FOR MODIFICATIONS CNLY)

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1_	OF	_1_

POSTULATED INTERACTION NO.: 10-13-03-04
FIRE ZONE 1-A LOCATION Containment . FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: 110°, elev. 91'.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-3263-4  Hanger rod to drain line (containment fan cooler drain header).
TARGET:  1.ine 1500, 3/4" seal water header.  TARGET CODE: P-1500-0.75
POSTULATED INTERACTION: Hanger rod movement causes impact with line 1500.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add horizontal restraint to drain line near hanger rod in question.
M. Jones 04/08/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Pipe support modified per RLCA Resolution Report No. 3, Rev. 1. See DCN DC1-EM-702. Support detailed without U-bolt per Report 3 judged acceptable. See IDS No. 15-02-03-01.
DISCIPLINE ENGINEER/DATE  J. A. Ante 12/16/81  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

l. W. Horn

10/25/82

SIP PROJECT ENGINEER APPROVAL/DATE

52

S. Harris

(FOR MODIFICATIONS ONLY)

02/19/82

FIELD VERIFICATION BY WALKDOWN TEAM

•	INTERACTION DOCUMENT	ATION SHEET (IDS)	
POSTULATED INTERACTION	NO.: 10-13-03-05	•	
FIRE ZONE 1-A	_ LOCATION _ Contains	ent FLOOR ELEVA	TION 91'-0"
LOCATION WITHIN FIRE Z 110°, elev. 91, n			
IDENTIFICATION OF INTE	RACTING COMPONENTS -		
SOURCE: 2" drain line, 1	rod support (fan cool	SOURCE CODE: Fer 1-4 drain line).	9-3126-2
TARGET: Line 1500.		TARGET CODE: P	2-1500-0.75
POSTULATED INTERACTION Rod support failu (10-13-04)		PHENOMENA CODE: o whip into line 1500 o	
RECOMMENDED RESOLUTION Add support to 2" FCV-8142.		de horizontal whip. Ad	d near
M. Jones 04/08 WALKDOWN TEAM ORIGINATE FINAL RESOLUTION BY RE Support qualified	OR/DATE  SPONSIBLE DISCIPLINE:	solution Report. No. 5.	
DISCIPLINE ENGINEER/D DISCIPLINE RESPONSIBLE		J. A. Ante ENGR. GROUP SU EE EMS ENG GC HVAC	PERVISOR/DATE
FIELD VERIFICATION BY (FOR MODIFICATIONS CAL		L. W. Horn SIP PROJECT ENGINE	09/30/82 ER APPROVAL/DATE

SHEET	1	OF	1

POSTULATED INTERACTION	NO.: _10-13	3-03-06		
FIRE ZONE 1-A	_ LOCATION _	Containment	FLOOR ELEVATION	₩ <u>91'-0"</u>
LOCATION WITHIN FIRE Z		wall.		
IDENTIFICATION OF INTE	RACTING COM	PONENTS		
SOURCE: Line 3243-3" - se	rvice air he	eader.	SOURCE CODE: P-32	243-3
TARGET: Misc. Class I pip	e (SIS pipe	and line 1500)	TARGET CODE: P~15	000-0.75
	ongside of C		PHENOMENA CODE: DEF various areas around act with these lines.	fire zone 1A.
RECOMMENDED RESOLUTION Install additiona lines.			ne 3243 to preclude i	mpact with Class :
M. Jones 04/15/8 WALKDOWN TEAM ORIGINAT				
FINAL RESOLUTION BY RE Recommended resol DCN DC1-EP-3608.			99339 Sht 77 & 73 in	
C. R. VanNatta 01/21 DISCIPLINE ENGINEER/D			K. M. Krause ENGR. GROUP SUPER	
DISCIPLINE RESPONSIBLE	FOR RESOLUT	ION: CE EE EM	IS ENG GC HVAC I	C [PSE] NPO NAN

S. E. Traisman 03/24/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)
CHECKED AUG 0 9 1984
[0014A/0079Z-16]

L. W. Horn 08/23/83
SIP PROJECT ENGINEER APPROVAL/DATE



SHEET	1	OF _	1

BOOTH ATER THEFER ASSESSED			
POSTULATED INTERACTION	NO.: 10-13-03-07		
FIRE ZONE 1-A	1.OCATIONContainment	FLOOR ELEVATION 91'	
LOCATION WITHIN FIRE Z Flev. 101, 320°,	OWE: near containment wall.		
IDENTIFICATION OF INTE	RACTING COMPONENTS		
SOURCE: Line 3209-12", CF	C 103 drain to sump.	SOURCE CODE: P-3209-12	, •
TARGET: line 1499-3/4"; s	eal water bypass return h	TARGET CODE: P-1499-0.75	•
		PHENOMENA CODE: DFFLFCT n impact with line 1499. Current	
RECOMMENDED RESOLUTION  Determine deflect required.	BY WALKDOWN TEAM: ion of line 3209. Provid	de additional restraints if/as	
_M. G. Jones 02/25/82 WALKDOWN TEAM ORIGINATO	•		
Per DCN_DC1-E-P-9	4" has been rerouted.	ed Tso mark-ups. See HGR. 339/281R, PRO.	
B. Abella 03/22/83 DISCIPLINE ENGINFER/DA	ATE	K. M. Krause 03/22/83 ENGR. GROUP SUPERVISOR/DATE	
DISCIPLINE RESPONSIBLE	FOR RESOLUTION: CE EE	EMS ENG GC HVAC I&C [PSE] NPO I	IAN

L. W. Horn 10/24/83

SIP PROJECT ENGINFER APPROVAL/DATE

[0040A/01067-55]

S. E. Traisman 10/14/83

(FOR MODIFICATIONS ONLY)

FIFID VERIFICATION BY WALKDOWN TEAM

SHEET 1 OF 1	
--------------	--

POSTULATED INTERACTION NO.: 10-13-04-01	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91', near containment wall, 110°.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: 2" drain pipe; fan cooler 1-4 drain line.	SOURCE CODE: P-DRAIN-1A
TARGET: Valve FCV-8142.	TARGET CODE: M-8142
POSTULATED INTERACTION:  Failure of fixed rod support of 2" drain lir valve FCV-8142.	PHENOMENA CODE: SPTFAIL & PIPEFAIL ne could result in pipe whipping into
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add support to 2" drain line to preclude hor FCV-8142.	rizontal pipe whip. Add near
M. Jones 04/08/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Supports qualified by analysis. For analysis Resport No. 5.	s & technical review see Resolution
M. G. Jones 10/24/80 DISCIPLINE EMGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EM	S. Chitnis 08/01/84 ENGR. GROUP SUPERVISOR/DATE ES ENG GC HVAC I&C [PSE] NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM S	L. W. Horn 09/30/82 IP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

SHFFT	1	OF	1

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 10-15-01-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'
LOCATION WITHIN FIRE ZONE: Azimuth 210°, adjacent to missile barrier.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Hanger support for line K-1043-2 1/2" (S. G. 1-4 blowdown).
TARGET: TARGET CODE: P-1490-0.75 S6-1490-3/4", RCP 4 seal 1 flow element In.
PHENOMENA CODE: DFFLFCT  Existing clearance between target line and support attachment to line K-1043-2 1/2" is 1 1/4". Thermal growth of line K-1043-2 1/2" radially outward (longitudinal), coupled with seismic excitation causes line S6-1490-3/4 to be impacted by source hanger.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify by engineering evaluation that thermal growth coupled with seismic motion of line K-1043-2 1/2" does not exceed existing clearance. Alternatively, relocated to preclude interaction.
S. Chestnut 09/15/83 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Modified pipe support per DCN DCJ-EP-5060, HGR DWG. 049263-57N/136V, Rev. 5.
C. R. VanNatta 10/13/83  DISCIPILINE ENGINEER/DATE  M. M. Krause 10/13/83  ENGR. GROUP SUPERVISOR/DATE  DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EES EMG GC HVHC 16C [PSE] NPO NAME

SW

SIP PROJECT ENGINEER APPROVAL/DATE

FIFLD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS CALY)

SHEET 1 OF 1 CO. NO. 1 CTION PROGRAM ET (IDS)	<b>5</b> 1
FLOOR ELEVATION _104'-0"	
OURCE CODE: M-HOIST-3X	
ARGET CODE: M-83848	
ENOMENA CODE: MECHFAIL	
hoist to monorail at the end o	f
eet and Calc's. No.	

### PACIFIC GAS & ELECTRIC DIABLO CANYON PLANT, UNIT I SEISMICALLY INDUCED SYSTEMS INTERAC INTERACTION DOCUMENTATION SHE

POSTULATED INTERACTION NO.: 10-19-02-01	
FIRE ZONE 3-X LOCATION Aux./Fuel Har	ndling FLOOR ELEVATION 104'-0"
LOCATION WITHIN FIRE ZONE: Elev. 104, CVCS filter area	,
IDENTIFICATION OF INTERACTING COMPONENTS	,
SOURCE: Overhead electric hoist.	SOURCE CODE: M-HOIST-3X
TARGET:  Remote manual operator to valve 8384B.	TARGET CODE: M-83848
POSTULATED INTERACTION: Hoist falls, impacts manual operator.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of hoist by analysis or sthe CVCS filter area away from the manual	
M. Jones 01/08/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
Hoist qualified by <u>analysis</u> . See resoluti 10-19-02-01.	ion sheet and Calc's. No.
S. Hanusiak 03/16/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	V. J. Ghio ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC IEC PSE NPO NA
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

INTERACTION DOCUMENTATION	SHEET (IDS)
POSTULATED INTERACTION NO.: 10-19-06-01	
FIRE ZONE 3-X LOCATION Aux./Fuel Handl	ing FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 104, CVCS filter area	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead electric hoist.	SOURCE CODE: M-HOIST
TARGET:  Remote manual operator to valve 8382B.	TARGET CODE: M-8382B
POSTULATED INTERACTION: Hoist falls, impacts manual operator.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of hoist by analysis or sec the CVCS filter area away from the manual op	
M. Jones 01/08/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hoist qualified by analysis. See resolution 10-19-02-01.	n sheet and calc's. No.
S. Hanusiak 03/16/81	, V. J. Ghio
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EM	S ENG GC HVAC ICC PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM S	L. W. Horn 08/23/82 IP PROJECT ENGINEER APPROVAL/DATE

[0005A/0064Z-3]

	SHEET1 OF1
PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	IT NO. 1
POSTULATED INTERACTION NO.: 10-20-02-01	
FIRE ZONE 3-X LOCATION Aux./Fuel Handl	ing FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 104, CVCS filter area	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Overhead electric hoist.	SOURCE CODE: M-HOIST-3X
TARGET:  Remote manual operator to valve 8384B.	TARGET CODE: M-8384A
POSTULATED INTERACTION: Hoist falls, impacts manual operator.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of hoist by analysis or section the CVCS filter area away from the manual of	cure hoist to monorail at the end of perator.
M. Jones 01/08/81 WALKDOWN TEAM ORIGINATOR/DATE .  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
Hoist qualified by analysis. See resolution 10-19-02-01.	n sheet and calc's. No.
S. Hanusiak 03/16/81 DISCIPLINE ENGINEER/DATE	V. J. Ghio ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn 09/30/82

SIP PROJECT ENGINEER APPROVAL/DATE

M. Jones 01/08/81 FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET	1	<b>OF</b>	1

	INTERACTION DOCUMENTATION	SHEET (IDS)	•
POSTULATED INTERACTION	NO.: 10-20-06-01		
FIRE ZONE 3-X	LOCATION Aux./Fuel Hand	ling FLOOR EL	EVATION 100'-0"
LOCATION WITHIN FIRE ZO Elev. 104, CVCS f:			* <b>x</b>
IDENTIFICATION OF INTER	RACTING COMPONENTS		
SOURCE: Overhead electric	hoist.	SOURCE CODE:	M-HOIST-3X
TARGET: Remote manual open	rator to valve 8382A	TARGET CODE:	M-8382A
POSTULATED INTERACTION: Hoist falls, impac	: cts manual operator.	PHENOMENA CODE	E: MECHFAIL
RECOMMENDED RESOLUTION  Ensure integrity of the CVCS filter are	BY WALKDOWN TEAM: of hoist by analysis or sec rea away from the manual op	cure hoist to mo perator.	onorail at the end of
M. Jones 01/08/81 WALKDOWN TEAM ORIGINATO	DR/DATE		
FINAL RESOLUTION BY RES		•	
Hoist qualified by 10-19-02-01.	/ <u>analysis</u> . See attached r	resolution sheet	and calc's. No.
S. Hanusiak 03/16/81 DISCIPLINE ENGINEER/DAT		V. J.	Ghio SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE	FOR RESOLUTION: [CE] EE EM	IS ENG GC HVA	C I&C PSE NPO NA
•		,	

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 08/23/82
SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	<u>ı.</u>
-------	---	----	-----------

POSTULATED INTERACTION NO.: 10-21-04-01	•••
FIRE ZONE 3-X LOCATION Aux./Fuel Handl	ing FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 104, CVCS filter area.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead electric hoist.	SOURCE CODE: M-HOIST-3X
TARGET:  Remote manual operator to valve 8387A.	TARGET CODE: M-8387A
POSTULATED INTERACTION: Hoist falls, impacts manual operator.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of hoist by analysis or section the CVCS filter area away from the manual open	
M. Jones 01/08/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hoist qualified by analysis. See resolution 10-19-02-01.	sheet and referenced calc. No.
S. Hanusiak 03/16/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EM	V. J. Ghio ENGR. GROUP SUPERVISOR/DATE S ENG GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)
FINAL - 0064Z/68

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRIC CO DIABLO CANYON PLANT, UNIT NO SEISMICALLY INDUCED SYSTEMS INTERAC INTERACTION DOCUMENTATION SHEE	O. 1 TION PROGRAM
POSTULATED INTERACTION NO.: 10-22-03-01	<u> </u>
FIRE ZONE 3-X LOCATION Aux./Fuel Handling	FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 104 CVCS filter area.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Overhead electric hoist.	URCE CODE: M-HOIST-3X
TARGET:  Remote manual operator to valve 8396B.	RGET CODE: M-8396A
POSTULATED INTERACTION:  Hoist falls, impacts manual operator.	NOMENA CODE: MECHEAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of hoist by analysis or secure the CVCS filter area away from the manual operate	
M. Jones 01/08/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hoist qualified by analysis, see resolution shee No. 10-19-02-01.	t and referenced calc.
S. Hanusiak 03/16/81  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS EN	V. J. Ghio NGR. GROUP SUPERVISOR/DATE NG GC HVAC I&C PSE NPO NAM

512414

L. W. Horn 08/23/87 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET1_ OF1	
ogram _	
ELEVATION 100'-0"	

POSTULATED INTERACTION NO.: 10-22-05-01	
FIRE ZONE 3-X LOCATION Aux./Fuel Hand	dling FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 104 CVCS filter area	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead electric hoist.	SOURCE CODE: M-HOIST-3X
TARGET: Remote manual operator to valve 8396B.	TARGET CODE: M-83968
POSTULATED INTERACTION: Hoist falls, impacts manual operator.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of hoist by analysis or set the CVCS filter area away from the manual of	
M. Jones 01/08/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hoist qualified by analysis, see resolution 10-19-02-01.	sheet and referenced Calc. No.
c Wangsiak 02/16/01	V I Ghio
S. Hanusiak 03/16/81 DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE E	THS ENG GC HVAC ICC PSE NPO NAN
•	•
FTELD VERTETCATTON BY WALKDOWN TEAM	L. W. Horn 08/23/82

(FOR MODIFICATIONS ONLY)

SHEET	1	OF	1.

POSTULATED INTERACTION NO.: 10-22-08-01
FIRE ZONE 3-X LOCATION Aux./Fuel Handling FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 104, CVCS filter area.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: M-HOIST-3X  Overhead electric hoist.
TARGET:  Remote manual operator to valve 8380.  TARGET CODE: M-8380
POSTULATED INTERACTION:  Hoist falls, impacts manual operator.  PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of hoist by analysis or secure hoist ot monorail at the end of the CVCSs filter area away from the manual operator.
M. Jones 01/08/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hoist qualified by analysis, see resolution sheet and referenced calc. No. 10-19-02-01.
S. Hanusiak 03/16/81  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM  (FOR MODIFICATIONS ONLY)  L. W. Horn 08/23/82  SIP PROJECT ENGINEER APPROVAL/DATE

[0005A/0064Z-7]

SHEET	1	OF	_1
-------	---	----	----

POSTULATED INTERACTION NO.: 10-24-06-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 113. 17 between K and L.
. IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: F-LF-3RR Hanging light fixture (hangin by rusted chain).
TARGET:  Cable tray.
POSTULATED INTERACTION:  Light falls, impacts tray.  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM.  Ensure fixture is adequate to support light or replace light support.
T. Werinski 05/08/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PGSE Dwg. 050041, detail 8 (category I).  Install backup support chain per DCN DCO-EF-5552 Sht. 12 of 13, detail 75.  Resolved by modification. See ART 348.
R. J. Swaim 02/23/83  DISCIPI INF. ENGINEER/DATE  G. C. Bhatt 02/23/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NA
S. F. Traisman 08/18/83 I. W. Horn 09/09/83 FIFI.D VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

[00291/00867-25]

(FOR MODIFICATIONS ONLY)

Kers

SHEET	1_	OF	_1_
-------	----	----	-----

		INTERACTIO	N DOCUMENTAT	ION SH	EET (IDS)				
POSTULATED	INTERACTION	NO.: _10-2	4-06-02		<del></del>				
FIRE ZONE	3-88	LOCATION	Penetration	Areas	FLOOR EL	EVATIO	N10	0'-0"	_ `
	ITHIN FIRE Z 100', near		between K a	ind L.					
IDENTIFICAT	TION OF INTE	RACTING COM	PONENTS				•		
SOURCE:	rinkler line			<u> </u>	SOURCE CO	<u>OE</u> :	P-SPR-	388	<del></del>
TARGET: Cable	tray JNK.		•	:	TARGET CO	<u>OE</u> :	E-JNK		
	INTERACTION kler line fa		being suppor		HENOMENA fixed-en				<u>*</u>
	O RESOLUTION by analysis		<u>N'TEAM</u> : ity of tray (	will no	ot be dam	aged.	-		
	insky 05/0 AM ORIGINAT								r
Modifi	UTION BY RE led pipe sup C1-EP-5061.		<u>ISCIPLINE</u> : hanger SWG (	049339	Sht. 287	thru :	292 in		
	nNatta 03/				K. M	. Krau: OUP SUI			
DISCIPLINE	RESPONSIBLE	FOR RESOLUT	TION: CE EE	EMS	ENG GC	HVAC	IEC	[PSE]	NPO NAI
FIELD VERIF	Traisman ICATION BY I		₩	SIP	L. W. H				DATE

[0032A/0074Z-27]

SHEET1_ OF1
Program DS)
·
FLEVATION 100'-0"
CODE: P-SPR-388
CODE: F-JNK
NA CODE: FIXTURE fixed-end rod hangers.
•

POSTULATED INTERACTION NO.: 10-24-06-03
FIRE ZONE 3-88 LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100', near col. 15 & L.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-SPR-388  Fire protection piping (2" red).
TARGET:  Cable tray JNK, INFF.
POSTULATED INTERACTION:  Fire protection piping could fall due to failure of fixed-end rod hangers.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Replace fixed-end rod hangers with clevis-ends.
P. Anderson 06/09/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Refer to TDS 10-24-06-02.
C. R. VanNatta 03/03/83  DISCIPLINE ENGINEER/DATE  BISCIPLINE RESPONSIBLE FOR RESOLUTION: CE FE EMS ENG GC HVAC I&C [PSE] NPO NAN
S. F. Traisman 10/14/83 L. W. Horn 10/24/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

SHEET 1 OF 1  PACIFIC GAS & FIECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SETSMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 11-01-01
FIRE ZONE 3-R-1 LOCATION Safety Related Pump FLOOR FIFVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Flev. 73', RHR HX 1-1 room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-3B1  Overhead platform.
TARGET:    TARGET CODE: P-0042-6
POSTULATED INTERACTION: Platform falls, impacts line 42.
RECOMMENDED RESOLUTION BY WAIKDOWN TEAM: Finsure integrity of platform. Simplified analysis should be adequate.
M. Jones 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPITNE:  Platform is qualified by analysis. See resolution sheet and Calc. No. 11-01-01-01.
S. Hanusiak 02/18/81  DISCIPITNE FNGTNFER/DATE  DISCIPITNE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO N

1. W. Horn 07/07/81

SIP PROJECT FNGTNFER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECT DIABLO CANYON PLANT, U SEISMICALLY INDUCED SYSTEMS II INTERACTION DOCUMENTATION	UNIT NO. 1 NTERACTION PROGRAM
POSTULATED INTERACTION NO.: 11-01-06-01	•
FIRE ZONE 3H1 LOCATION Safety Related	Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Elev. 73, over charging pump 1-1	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead Light fixtures	SOURCE CODE: E-LF-3H1
	•
TARGET: Charging pump 1-1 and associated piping tu	TARGET CODE: M-CHGPP1-1 bing and instruments.
	•
POSTULATED INTERACTION:  Fixtures falls, impacts pump, etc.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  • Ensure integrity of existing fixture mount analysis.	s, possibly by simplified
M. Jones 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been fi be installed in accordance with PG&E DWG. has been qualified by analysis per calcula No further action necessary. Resolved by	O50041, Detail 6. This fixture ation 52.24.52.
R. J. Swain 03/28/83 DISCIPLINE ENGINEER/DATE	G. Bhatt 03/28/83 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

Lee Horn

05/25/83

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

ACR 7/25/84

SHEET	1_	OF	1
-------	----	----	---

POSTULATED INTERACTION NO.: 11-01-07-01
FIRE ZONE 3-88 LOCATION Penetration Area FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, GE area, NE chamber by containment.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: . SOURCE CODE: C-LADDER Ladder 24GE.
TARGET: TARGET CODE: P-1474-3 Line 1474-3".
POSTULATED INTERACTION:  Ladder falls, impacts line 1474.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of ladder by simplified analysis.
M. Jones 05/21/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The ladder qualified by analysis. See Calc. No. 11-01-07-01.
S. Hanusiak 08/08/80 DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NA
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)  L. W. Horn 09/30/82  SIP PROJECT ENGINEER APPROVAL/DATE  3.4  7/29/87

[0011A/0072Z-38]

PACIFIC GAS & FIECTE DIABLO CANYON PLANT, UN SFISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	ERACTION PROGRAM
POSTULATED INTERACTION NO.: 11-01-07-02	
FIRE ZONE 3-R-1 LOCATION Safety Related	Pump FLOOR FI EVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Flev. 73, RHR HX1-1 room.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Overhead platform.	SOURCE CODE: C-PLAT-3R1
TARGET: Line 1474-3" - charging pump 1-1 bypass.	TARGET CONE: P-1474-3
POSTULATED INTERACTION: Platform falls, impacts line 1474.	PHENOMENA CODE: CTVTLFATI.
RECOMMENDED RESOLUTION BY WAI KDOWN TEAM:  Finaure integrity of platform by simplified as	nalysis.
M. Jones 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The platform has been qualified by analysis. referenced Calc. No. 11-01-01-01.	See resolution sheet and
_S. Hanusiak 02/19/8]	F. P. Wollak

FIFI D VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

DISCIPITME FNGTNFER/DATE

I. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

FNGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] FE EMS ENG GC HVAC I&C PSE NPO NAN

PACIFIC GAS & ELECTRIC DIABLO CANYON PLANT, UNIT SEISMICALLY INDUCED SYSTEMS INTER INTERACTION DOCUMENTATION SE	T NO. 1 RACTION PROGRAM
POSTULATED INTERACTION NO.: 11-02-03-01	•
FIRE ZONE 3H1 LOCATION Safety Related Pur	p FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Elev. 73, over charging pump 1-2	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Overhead Light fixtures	SOURCE CODE: E-LF-3H1
TARGET: Charging pump 1-2 and associated piping tubing	TARGET CODE: M-CHGPP1-2  and instruments.
POSTULATED INTERACTION:  Fixtures falls, impacts pump, etc.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of existing fixture mounts, panalysis.	possibly by simplified
M. Jones 5/20/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field be installed in accordance with PG&E DWG. 0500 has been qualified by analysis per Calculation No further action necessary. Resolved by analysis	041, Detail 6. This fixture n 52.24.52.
R. J. Swaim 03/28/84 DISCIPLINE ENGINEER/DATE	G. Bhatt 3/28/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS	ENG GC HVAC IGC PSE NPO NAM

SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

AeB

1/25/64

SE	PACIFIC GAS & DIABLO CANYON PLA ISMICALLY INDUCED SYSTE INTERACTION DOCUMENT	NT, UNIT NO. 1 MS INTERACTION PROGRAM
POSTULATED INTERACTION	ON NO.: 11-02-07-01	
FIRE ZONE 3-B-1	LOCATION _Safety Re	lated Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE Elev. 73, RHR H		•
IDENTIFICATION OF IN	TERACTING COMPONENTS	
SOURCE: Overhead platfo	rm ,	SOURCE CODE: C-PLAT-3B1
<u>TARGET</u> : Line 1475-3", C	harging Pump 1—2 Bypass	TARGET CODE: P-1475-3
POSTULATED INTERACTION Platform Falls,	ON: impacts line 1475.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION Ensure integrit	<u>ON BY WALKDOWN TEAM</u> : y of platform by simpli	fied analysis.
M. Jones OS WALKDOWN TEAM ORIGIN	/20/80 ATOR/DATE	
FINAL RESOLUTION BY Platform qualif		solution sheet and Calc.
		•
S. Hanusiak 02/19 DISCIPLINE ENGINEER		E. P. Wollak  ENGR. GROUP SUPERVISOR/DATE
		EE EMS ENG GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1
-------	---	----	---

POSTULATED INTERACTION I	WO.: <u>11-03</u>	<u>-01-01</u>		<del> </del>		,		
FIRE ZONE 3-H-2	LOCATION _	Safety	Related	Pump	_FLOOR	ELEVATION	<u>73'-0"</u>	
LOCATION WITHIN FIRE ZO Elev. 73' Charging		com						
IDENTIFICATION OF INTER	ACTING COMP	ONENTS						
SOURCE: Overhead Crane Tro	lley			SOURCE .	CODE:	C-CRANE-	-3H2	<del></del>
<u>TARGET</u> : Line 44-6", Chargi	ng Pump 1—3	Suction	on	TARGET	CODE:	P-0044-6		
POSTULATED INTERACTION: Trolley falls, imp	acts line 4	4.		PHENOME	NA CODE	: MECHFAT	:L	<del>-</del>
RECOMMENDED RESOLUTION I Ensure integrity of			fied and	alysis sho	ould be	adequate	·.	•
M. Jones O5, WALKDOWN TEAM ORIGINATOR  FINAL RESOLUTION BY RESI  Source component had modifications to make the solution sheet as	PONSIBLE DI as been sei onorail as	smicall	ly qualinon DWG.	fied by a #59652 and	nalysi: 1 59654	s subject ). See	to .	
S. Hanusiak 04/06/2 DISCIPLINE ENGINEER/DATED TO SCIPLINE RESPONSIBLE I	TE .	ION: [CE	:] EE B		GROUP	SUPERVISO		- Nan
S. E. Traisman FIELD VERIFICATION BY WA				. W. Hori		O1/ NEER APPR	03/83 OVAL/DAT	ΓE

SHEET	1	OF	1
-------	---	----	---

1	·
POSTULATED INTERACTION NO.: 11-03-03-01	
FIRE ZONE 3-H-2 LOCATION Safety Relat LOCATION WITHIN FIRE ZONE: Elev. 73' Charging Pump room 1-3	ed Pump FLOOR ELEVATION 73'-0"
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead Crane Trolley	SOURCE CODE: C-CRANE-3H2
TARGET: Charging Pump 1-3 and associated instrument	TARGET CODE: M-CHGPP1-3
POSTULATED INTERACTION: Trolley falls, impacts pump	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of trolley. Simplified an	nalysis should be adequate.
WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Source component has been seismically quali and referenced Calc. # 11-03-01-01, rev. 1.	ified by analysis. See resolution shee
S. Hanusiak 04/06/81 DISCIPLINE ENGINEER/DATE	E. W. Wollak 06/02/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	EMS ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 01/03/83 SIP PROJECT ENGINEER APPROVAL/DATE

•
PACIFIC GAS & FLECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMTCALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 11-03-03-02
FIRE ZONE 382 LOCATION Safety Related Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Elev. 73, over charging pump 1-3
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: E-LF-3H2 Overhead Light fixtures (3)
TARGET:  Charging pump 1-3 and associated piping tubing and instruments.
POSTULATED INTERACTION:  Fixtures falls, impact pump, etc.  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of existing fixture mounts. These mounts are fairly rigid and could be qualified by analysis.
M. Jones 5/20/80 WALKDOWN TEAM ORIGINATOR/DATE
The above source light fixture has been field inspected and verified to be installed in accordance with PGAE DWG. 050041, Detail 6. This fixture has been qualified by analysis per Calculation 52.24.52.  No further action necsessary.
R. J. Swaim 03/28/83 G. C. Rhatt 03/28/83
DISCIPLINE FNGTNEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC IGC PSE NPO NAN

Lee Horn

05/25/83

SIP PROJECT FNGTNFER APPROVAL/DATE

KSB

FIFI.D VERTFICATION BY WAI KDOWN TEAM

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 11-03-03-03	
FIRE ZONE 3-H-2 LOCATION Safety Rela	ted Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Elev. 73, Outside Charging Pump 1-3 Room	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Chag. Pump 1-3 Room Security Barrier .	SOURCE CODE: C-SB
TARGET: Charging Pump 1-3	TARGET CODE: M-CHGPP1-3
POSTULATED INTERACTION: Security Barrier falls, impacts Pump	PHENOMENA CODE: CIVILFAIL .
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of security Barrier by	simplified analysis.
M. Jones : 10/27/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Barrier qualified by analysis. See resolution 11-03-03-03.	ution sheet and Calc.
S. Hanusiak 03/12/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	E. P. Wollak 03/12/81 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 08/23/82 SIP PROJECT ENGINEER APPROVAL/DATE

5.G 7/28/24

	•
SHEET <u>1</u> OF <u>1</u> O. O. 1	
TION PROGRAM T (IDS)	
FLOOR ELEVATION 73'-0"	
OURCE CODE: C-CRANE-3H2	
RGET CODE: P-0047-3	
NOMENA CODE: MECHFAIL	
•	
- is should be adequate.	
by analysis. See resolution	
P. Wollak 03/09/81 ENGR. GROUP SUPERVISOR/DATE	
ENG GC HVAC ICC PSE NPO N	AN
Horn 01/03/83	

•
POSTULATED INTERACTION NO.: 11-03-04-01
FIRE ZONE 3-H-2 LOCATION Safety Related Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZCNE: Elev. 73' Charging Pump 1-3 Room
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-CRANE-3H2 Overhead Crane Trolley
TARGET:  Line 47-3"  TARGET CODE: P-0047-3
POSTULATED INTERACTION:  Trolley falls, impacts line 47.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of trolley. Simplified analysis should be adequate.
M. Jones 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Source component has been seismically qualified by analysis. See resolution sheet for Calc. 11-03-01-01.
S. Hanusiak 02/19/81 DISCIPLINE ENGINEER/DATE  E. P. Wollak 03/09/81 ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
S. E. Traisman 02/14/83 L. W. Horn 01/03/83  FIELD VERIFICATIONS CALY)  SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS CALY)

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 11-04-01-01
FIRE ZONE 3-B-2 LOCATION Safety Related Pump FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100', RHR HX 1-2 room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-3B2 Overhead platforms(2) and ladder.
- <u>TARGET</u> : Line 41-4".  TARGET CODE: P-0041-4
POSTULATED INTERACTION:  Platforms and ladder fall on line 41.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platforms and ladder. Simplified analysis should be adequate.
•
M. Jones 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platform qualified by analysis. See resolution sheet and referenced Calc. iNo. 11-01-01-01.
·
S. Hanusiak 01/29/81 V. J. Ghio 08/08/80 DISCIPLINE FAGINFER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

3.5

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

FIFI.D VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET	1	OF	_1_

POSTULATED INTERACTION NO.: 11-04-03-01
FIRE ZONE 3-X LOCATION Aux./Fuel Handling FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, VCT and Blender Room
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead Light fixture, chain supported  SOURCE CODE: E-LF-3X
TARGET:  Actuator to valve LCV-112B
POSTULATED INTERACTION:  PHENOMENA CODE: FIXTURE  Fixture falls, impacts actuator and associated power and control cable.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture. Modifications will be required
M. Jones 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE
The above source light fixture has been field inspected and verified to be installed in accordance with PG&E DWG. 050041, Detail 8. Install back-up support chain per DCN-DCO-EE-5552 Rev. 1, Sheet 9 of 9, detail 75. Resolved by modification. See ART 353.
R. J. Swaim 03/21/83  DISCIPLINE ENGINFER/DATE  G. C. Bhatt 03/21/83  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [FE] EMS ENG GC HVAC I&C PSE NPO NA
S. E. Traisman 08/18/83 Lee Horn 09/09/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 11-04-04-01
FIRE ZONE 3-X LOCATION Aux./Fuel Handling FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, VCT and Blender Room
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead Light fixture, chain supported .
TARGET:  Actuator to valve LCV-112C.  TARGET CODE: M-LCV112C.
POSTULATED INTERACTION:  Fixture falls, impacts actuator and associated power and control cable
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture. Modifications will be required
M. Jones 5/20/80 WALKDOWN TEAM ORIGINATOR/DATE
The above source light fixture has been field inspected and verified to be installed in accordance with PG&F DWG. 050041, Detail 8. Install back-up support chain per DCN-DCO-EF-5552 Rev. 1, sheet 9 of 9, detail 75.  Resolved by modification. See ART 353.
R. J. Swaim 03/21/83  DISCIPILINE ENGINEER/DATE  G. C. Bhatt 03/21/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EF] EMS ENG GC HVAC ICC PSE NPO NAN

S. E. Traisman 08/18/83
FIELD VERIFICATION BY WALKDOWN TEAM

SHEET . 1 OF 1
PROGRAM DS)
OOR ELEVATION 100'-0"
CODE: C-PLAT-382
CODE: P-1452-1
NA CODE: CTVTLFATI.
l analysis should be
on sheet and referenced Calc
P. Wollak GROUP SUPERVISOR/DATE

THE PRODUCTION DOOR WELLINTON CHILLY (TOO)
POSTULATED INTERACTION NO.: 11-04-07-02
FIRE ZONE 3-8-2 LOCATION Safety Related Pump FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Flev. 100', RHR HX 1-2 room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead platform and ladder.  SOURCE CODE: C-PLAT-382
TARGET: TARGET CODE: P-1452-1  Line 1452-1".
Platform and ladder fall on line 1452.  Platform and ladder fall on line 1452.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platform and ladder. Simplified analysis should be adequate.
M. Jones 05/20/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform/ladder qualified by analysis. See resolution sheet and referenced Calc. No. 11-01-01-01.
S. Hanusiak 02/19/81  DISCIPLINE FNGTNEER/DATE  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
I. W. Horn 08/23/82  FIFLD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINFER APPROVAL/DATE  '(FOR MODIFICATIONS ONLY)  S.G.

SHEET		OF1	
-------	--	-----	--

POSTULATED INTERACTION NO.: 11-05-07-01	
FIRE ZONE 3-BB LOCATION Penetration Are	FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, GE area, NE chamber by containment	<b>:.</b>
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:	SOURCE CODE: C-LADDER
TARGET: Line 48-3", charging pump discharge.	TARGET CODE: P-0048-3
POSTULATED INTERACTION:  Ladder falls, impacts line 48.	PHENOMENA CODE: SPTFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of ladder by simplified and	alysis.
M. Jones 05/21/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Ladder has been qualified by analysis. See No. 11-01-07-01.	resolutin sheet and referenced Calc.
S. Hanusiak 02/19/81 DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EM	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE IS ENG GC HVAC IEC PSE NPO NAN

S.G 8/14/84

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALLY)

L. W. Horn 09/30/82
SIP PROJECT ENGINEER APPROVAL/DATE

ţ

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 11-05-07-02
FIRE ZONE 3-B-2 LOCATION Safety Related Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Elev. 73, RHR HX1-2 room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: Overhead platforms (2).
TARGET:  1.ine 48-3" - charging pump discharge.  TARGET CODE: P-0048-3
POSTULATED INTERACTION: Platforms fall, impact pipe.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platforms by simplified analysis. See resolution sheet an Calc. No. 11-01-01-01.
M. Jones 05/21/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platforms qualified by analysis. See resolution sheet and Calc. No: 11-01-01-01.
S. Hanusiak 02/19/81  DISCIPLINE FNGTNFER/DATE  E. P. Wollak  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] FF. EMS ENG GC HVAC I&C PSE NPO NA

L. W. Horn

08/23/82

SIP PROJECT FNGTNEER APPROVAL/DATE

FIFI.D VERTFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY)

SHEET		OF	_1_
SHEET	1	OF	1

POSTULATED INTERACTION NO.: 11-05-08-01
FIRE ZONE 382 LOCATION Safety Related Pump FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, VCT and Blender Room
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: E-LF-3R? Overhead Light fixtures.
TARGET:  TARGET CODE: I-FT128  FT-128 and associated tubing to FE 128.
POSTULATED INTERACTION:  Fixtures fall, impact FT-128 tubing and root valves to FE-128.
RFCOMMENDED RESOLUTION BY WALKDOWN TEAM:  Construct protective shielding box around FT-128, tubing and FE 128.  This box will also serve as protection from personnel moving through the area.
M. Jones 05/21/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&F DWG. 050041, Detail 8. Install back—up support chain per DCN-DCO-EE-5552 Rev. 1 SH. 9 of 9, detail 75. See ART 377.
R. J. Swaim 05/17/83  DISCIPLINE ENGINFER/DATE  G. C. Bhatt 05/18/83  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NA
S. F. Traisman 11/02/83 L. W. Horn 01/18/84 FIFI.D VERIFICATION BY WALKDOWN TEAM SIP PROJECT FNGTNFER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

(FOR MODIFICATIONS ONLY)

Acts

SHEET 1 OF 1	
PROGRAM S)	
OR ELEVATION 85'	
CODE: E-R-388	
CODE: I-HCV142	
A CODE: SPTFATI.	
ips. s possible.	
	•

POSTULATED INTERACTION NO.: 11-05-10-01	· · · · · · · · · · · · · · · · · · ·
FIRE ZONE 3-BB LOCATION Penetration	Area FLOOR ELEVATION 85'
LOCATION WITHIN FIRE ZONE: Elev. 85, GE area, NE corner by containme	nt.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead small conduit.	SOURCE CODE: E-R-388 .
TARGET: Tubing to HCV-142.	TARGET CODE: I-HCV142
POSTULATED INTERACTION:  Conduit falls due to lack of support.  (9.5' between clips)	PHENOMENA CODE: SPTFATI.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add support clips to conduit as follows:  1. Over HCV-142 midway between existing as close to south wall of the so	
M. G. Jones WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Add conduit supports. See DCN no. DC1-EE	-699.
	1
R. Parodi 07/07/80 DISCIPLINE ENGINEER/DATE	R. Young 07/11/80 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE]	EMS ENG GC HVAC I&C PSE NPO NAN
<i>•</i>	
Mark Barker FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 09/19/08 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	_1_
-------	---	----	-----

THIERHOITON DOCOURAIN	ITOM SHEET (IDS)
POSTULATED INTERACTION NO.: 11-06-05-01	
FIRE ZONE 3-J-2 LOCATION Safety Rela	ated Pump FLOOR ELEVATION 75'-0"
LOCATION WITHIN FIRE ZONE: Elev. 75, Near CCW PP1-2	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: CCW Supply header A L95 K-95-30	SOURCE CODE: P-0095-30
TARGET:	TARGET CODE: E-K7507+
POSTULATED INTERACTION:  Conduits pass over source line with 1/2 line could crush conduits. 30" line is is expected.	PHENOMENA CODE: DEFLECT "clearance. Vertical mvt. of 30" snubber supported so thermal movement
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of conduits by install limiting the source pipe to no upward m such a support on the thermal analysis provide local reroute for conduits.	ovement. Also check the impact of
P. Anderson 06/04/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Review of seismic and thermal expansion and Bechtel show that the postulated in	nteraction will not occur. Therefore
no action necessary. Refer to Cloud Re  C. R. VanNatta 06/22/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE	K. M. Krause 06/22/83  ENGR. GROUP SUPERVISOR/DATE
FIELD VERIFICATION BY WALKDOWN TEAM	Lee Horn 07/08/83 SIP PROJECT ENGINEER APPROVAL/DATE

[0018A/0058Z-12]

SHEET	1	OF _	1	( \
				)~

INTERNACION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 11-06-05-02
FIRE ZONE 3-H-1 LOCATION Safety Related Pump FLOOR ELEVATION 73'-0"
1.OCATION WITHIN FIRE ZONE: Flev. 73, 4' from chg. pp. 1-1, on wall below panel Aux 10 PP.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  2" stainless (schedule 80) coming off a 3" bypass to tcg 128-line 1474.
TARGET:  K7054 conduit.  TARGET CODE: F-K7054-0.75
POSTULATED INTERACTION:  Postulated heat damage between K7054 and the uninsulated pipe 1/2" away.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of the conduit by analysis or reroute K7054.
Edward Dennison 06/04/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSTBLE DISCIPLINE:  Resolved ber analysis described in RICA Report #42.
S. Motiwalla O8/26/81  DISCIPLINE ENGINEER/DATE  R. L. Cloud O8/28/81  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN
FIFLD VFRIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

[0039A/01027-35]

SHEET 1 OF 1  OO.  IO. 1  CITION PROGRAM  ET (IDS)
FLOOR ELEVATION 100'-0"
OURCE CODE: M-FE
ARGET CODE: E-GNJA
ENOMENA CODE: LOOSE
ide more distance to GNJA.
construction and will be for ART 373.

### PACIFIC GAS & ELECTRIC C DIABLO CANYON PLANT, UNIT N SEISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTATION SHEE

THI THIS TOUR DOGG WITH A COURT ( 1-2-2)
POSTULATED INTERACTION NO.: 11-07-05-01
FIRE ZONE 5-A-3 LOCATION Electrical Rooms FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE:  DC switchgear room 1-3, elev. 115'-0.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: Source Cooe: M-FE  Fire Station 250
TARGET:  GNJA (cable tray)  TARGET CODE: E-GNJA
POSTULATED INTERACTION:  Entire fire station could fall and impact tray.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure stability of mobile fire station or provide more distance to GNJA.
Edward Dennison 06/05/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Fire station 250 with fire extinguisher is for construction and will be removed per ART 373. See IDS 01-19-02-07 file for ART 373.
J. Haake 05/02/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NAME
S. E. Traisman 02/24/84 L. W. Horn 04/20/84 '

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SIP PROJECT ENGINEER APPROVAL/DATE DJ.S. 8/21/84

[0034A/0085Z-19]

SHEET		OF	_1_
-------	--	----	-----

annament addition	1112011 011111 (200)
POSTULATED INTERACTION NO.: 11-07-05-02	
FIRE ZONE 5-A-3 LOCATION Flectrics	al Rooms FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, DC switchgear room 1-3.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Extinguisher on fire station 250.	SOURCE CORF: M-FF
TARGET: GNJA (cable tray)	TARGET CODE: E-GNJA
POSTULATED INTERACTION: Extinguisher falls and impacts tray.	PHENOMENA CODE: LOOSF
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Finsure stability of fire extinguisher to cannister on the fire station mount.	by providing mechanism to keep
F. Dennison 01/05/81 WALKDOWN TEAM ORIGINATOR/DATE	,
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Fire station 250 with fire extinguisher removed per ART 373. See INS 01-19-02-	
J. Haake 05/02/83 DISCIPITHE FNGTNFER/DATE	J. Longworth 05/03/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPITNE RESPONSIBILE FOR RESOLUTION: CE	e <u>[ems]</u> <b>eng gc hvac ic</b> c pse npo <b>n</b> an
S. F. Traisman 02/24/84 FIFLD VFRIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 06/12/84 SIP PROJECT FACTINFER APPROVAL/DATE  AJS 8/31/84

SHEET	 · 05	2	
SHEET	 <b>UT</b>	. 4	

POSTULATED INTERACTION NO.: 11-07-05-03	
FIRE ZONE 4-A LOCATION Aux./F	uel Handling FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, Chem lab area, NW cable s	preading room through door #146.
IDENTIFICATION OF INTERACTING COMPONENTS	<b>3</b>
SOURCE: Class II wall.	SOURCE CODE: C-WALL
TARGET:  K6946, K6953, K6955, K6939 and tray	TARGET CODE: E-K7057+
	x
POSTULATED INTERACTION: Class II wall could fall and impact	PHENOMENA CODE: CIVILFAIL targets.
	•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of class II wall.	• •
Paul Anderson 06/05/81 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLY	· ·
Wall qualified by analysis. See re	esolution sheet and IDS file No.
•	•
S. Hanusiak 09/21/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak 09/24/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION:[	CE] EE EMS ENG GC HVAC IEC PSE NPO NAM

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY) 0064Z/24

SIP PRO

L. W. Horn 01/03/83
SIP PROJECT ENGINEER APPROVAL/DATE

SHEET1	OF	_1_
--------	----	-----

	•	(200)		
POSTULATED INTERACTION	NO.: <u>11-07-05-05</u>		•	•
FIRE ZONE 12-B	LOCATION Electrical Room	FLOOR	ELEVATION 100'	
El. 112' east end	CONE: i of G bus 4 kv cable spr.	room	•	
IDENTIFICATION OF INTE	RACTING COMPONENTS		,	
SOURCE: Distribution bus 4.16 KV swgr.	duct from standby startup		DE: E-BUS DUCT to vital	
TARGET: Cable tray GDA		TARGET CO	DE: E-GDA	
	ct fixed end rod hangers c E: bus duct running throug	auses bus du		<del> </del>
RECOMMENDED RESOLUTION Add supports to b	BY WALKDOWN TEAM: us duct as required to eli	, minate inter	action.	
S. E. Traisman 7/20/8 WALKDOWN TEAM ORIGINAT				
گر.	SPONSIBLE DISCIPLINE:  1 support to bus duct per	DCN #DCI-5-E	-11493 Rev.O.	
N. Barangan DISCIPLINE ENGINEER/D			OUP SUPERVISOR/D	
DISCIPLINE RESPONSIBLE	FOR RESOLUTION: CE EE E	TS ENG GC	HVAC IEC PSE	NPO MAN

S. E. Traisman
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS CALY)
0047Z/0010Z-52

L. W. Horn 1/26/84 SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECIKIC CO.	
DIABLO CANYON PLANT, UNIT NO. 1	
SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)	
INTERNCTION DOCUMENTATION SHEET (IDS)	
POSTULATED INTERACTION NO.: 11-09-01-01	
FIRE ZONE 3-X LOCATION Aux./Fuel Handling FLOOR ELEVATION 100'-0"	
LOCATION WITHIN FIRE ZONE: Flev. 100, VCT and Blender Room	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: SOURCE CODE: E-LF-3X	
Overhead Light fixture, chain supported	
TARGET: TARGET CODE: M-I.CV112B	
Actuator to valve ICV-112B	
POSTULATED INTERACTION:  PHENOMENA CODE: FIXTURE  Fixtures falls, impacts actuator and associated power and control cable	
•	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	
Ensure integrity of fixture. Modifications will be required	
M. Jones 05/20/80	
WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
The above source light fixture has been field inspected and verified to	
be installed in accordance with PGSE DWG. 050041, Detail 8. Install back-	
up support chain per DCN-DCO-EF-5552 Rev. 1, sheet 9 of 9, detail 75.	
Resolved by modification. See ART 353.	
•	
R. J. Swaim 03/21/83 G. C. Bhatt 03/21/83	
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE	
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO N	ŻŅ.
DISCILLTUE VESCOUSTREE LOW VESCOUSTOM! OF TEET EN TWO OF HALL THE LOC WILL	

Lee Horn

SIP PROJECT ENGINEER APPROVAL/DATE

SHEET \_\_\_1\_ OF \_\_1\_

[0006A/00667-49]

S. E. Traisman 08/18/83
FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1 .	OF	1	

POST	ULATED INTERACTION	NO.: <u>11-10-01-01</u>		
FIRE	ZONE 3-X	LOCATION Aux./Fuel	Handling FLOOR ELE	VATION 100'-0"
LOCA	TION WITHIN FIRE ZO Elev. 100, VCT an			
IDEN	TIFICATION OF INTE	RACTING COMPONENTS		
SOUR		xture, chain supporte	SOURCE CODE:	E-LF-3X
TARG	<u>ET</u> : Actuator to valve	LCV-112C	TARGET CODE:	M-LCV112C
POST	ULATED INTERACTION Fixture falls, im	: pacts actuator and as	PHENOMENA CODE sociated power and co	
RECO	MMENDED RESOLUTION Fosure integrity	BY WALKDOWN TEAM: of fixture. Modificat	ions will be required	•
	ones 05, DOWN TEAM ORIGINATO	/20/80 DR/DATE	,	
<u>Fina</u> W/>	The above source be installed in acup support chain	SPONSIBLE DISCIPLINE: light fixture has bee ccordance with PG&E D per DCN-DCO-EE-5552 R ication. See ART 353	WG. 050041, Detail 8. ev. 1 Sheet 9 of 9, d	Install back-

R. J. Swaim 08/18/83
DISCIPLINE ENGINEER/DATE

G. C. Bhatt 08/18/83
ENGR. GROUP SUPERVISOR/DATE.

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

S. E. Traisman 08/18/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

Lee Horn 09/09/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 11-12-02-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 110, GW area, SW corner.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Motion due to postulated HOSGRI event.
TARGET:  Signal tubing to HCV-142 is unsupported from junction box to south wall penetration at ceiling (8' of tubing).
POSTULATED INTERACTION:  Tubing fails due to lack of support.  PHENOMENA CODE: HOUSEKEEP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify adequacy of existing tubing support. Add supports as required.
M. Jones 06/03/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Modification per ART #277. Also memo attached from G. H. Moore to R. D. Etzler July 10, 1980.
E. M. Valeriano 07/10/80  DISCIPLINE ENGINEER/DATE  BORR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN

S. E. Traisman 02/14/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

L. W. Horn 04-22-83 SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & FLECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 11-12-02-02	
FIRE ZONE 5-A-4 LOCATION Electrical Area	s FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 110', 480V vital bus 1F room, north wa	n
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Construction deficiency (target has missing	SOURCE CODE: NS-CD support clips).
TARGET: Signal tubing to HCV-142.	TARGET CODE: I-HCV142
POSTULATED INTERACTION: Tubing fails due to lack of support.	PHENOMENA CODE: HOUSEKEEP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace missing support clips.	•
M. Jones 06/03/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Support clips installed per ART 272.	
E. M. Valeriano 07/10/80 DISCIPI INF. ENGINFER/DATF	G. H. Moore 07/10/80 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	ENG [QC] HVAC ICC PSE NPO NAN
S. E. Traisman 08/31/82  FIFI.D VERIFICATION BY WALKDOWN TEAM S	L. W. Horn 10/29/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1 OF 1	
--------------	--

POSTULATED INTERACTION NO.: 11-12-02-03
FIRE ZONE 3-BR LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Flev. 100, at GW area, near SW wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixtures, chain supported.  SOURCE CODE: F-LF-388
TARGET:  Signal tubing from HCV142  TARGET CODE: I-HCV142
POSTULATED INTERACTION:  Fixture falls, impacts tubing.  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure intergrity of fixture mount: Modifications will be required.
M. Jones 06/25/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PGAE Dwg. 050041, detail 8 (category I).  Install backup support chain per DCN DCO-EF-5552 Sht. 12 of 13, detail 75.  Resolved by modification. See ART 348.
R. J. Swaim 02/23/83  DISCIPLINE FNGTNFER/DATE  G. C. Rhatt 02/23/84  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] FMS ENG GC HVAC I&C PSE NPO NE

L. W. Horn 09/09/83

SIP PROJECT FNGTNFFR APPROVAL/DATE

S. F. Traisman 08/30/83
FIFLD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

AC15

SHEET	1 _	OF	1

L. W. Horn 10-29-82 SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

	ſ
f	١.
٠.	1
ノ	J

POSTULATED INTERACTION NO.: 11-14-02-01	
FIRE ZONE 3-RR LOCATION Penetration	Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Flev. 85, area GF @ 11 and T.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Motion due to postulated HOSGRT event.	SOURCE CODE: NS-CD
TARGET: Conduit K6101.	TARGET CODE: E-K6101-1.25
POSTULATED INTERACTION: K6101 does not have class I supports.	PHENOMENA CODE: SPTFAII
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Upgrade supports to class I or determine supports.	that K6101 does not require class I
P. Worisky 06/09/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Class I supports installed per ART 200	•
	w 1
A. G. Barta 07/20/81 DISCIPI.INE ENGINEER/DATE	S. Auer 06/25/84 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	EMS [ENG] GC HVAC ICC PSE NPO NA

[0039A/01027-40]

FIELD VERIFICATION BY WALKDOWN TEAM

	_		
SHEET	1	OF	1

SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & FILECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHFET (IDS)

POSTULATED INTERACTION NO.: 11-21-02-01	· ·
FIRE ZONE 3-B-2 LOCATION Safety Related Po	ump FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100', RHR HX1-2 room.	
IDENTIFICATION OF INTERACTING COMPONENTS	·
SOURCE: Overhead platforms (2) and ladder.	SOURCE CODE: C-PLAT-3B2
TARGET: line 53-3" - charging pump bypass.	TARGET CODE: P-0053-3
POSTULATED INTERACTION: Platforms and ladder fall on line 53.	PHENOMENA CODE: CIVII FAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Finance integrity of platforms and ladder. Sin adequate.	nplified analysis should be
M. Jones 05/20/80 WAI KDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform/ladder qualified by analysis. See re No. 11-01-01-01.	esolution sheet and referenced Calc.
S. Hanusiak 02/19/81	E. P. Wollak
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS	ENG GC HVAC ICC PSE NPO NAN
	L. W. Horn 08/23/82

FIELD VERTFICATION BY WALKDOWN TEAM

DIABLO CANY SEISMICALLY INDUCED	GAS & ELECTRIC CO. ON PLANT, UNIT NO. 1 O SYSTEMS INTERACTION PROGRAM COMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 12-01-01	<b>~</b> 01
FIRE ZONE 1-B LOCATION Con	tainment FLOOR ELEVATION 91'-0" ^
1.OCATION WITHIN FIRE ZONE: Flev. 91', near missile barrier.	
IDENTIFICATION OF INTERACTING COMPONE	NTS
SOURCE: Construction deficiency.	SOURCE CODE: NS-CD
TARGET: Hanger rod to line 48-3", RCS le	TARGET CODE: PS-0048-3 tdown line, inlet.
POSTULATED INTERACTION: Hanger rod is bent, could compro	PHENOMENA CODE: SPTFAII mise pipe integrity.
RECOMMENDED RESOLUTION BY WALKDOWN TER Replace bent hanger rod.	<u>AM</u> :
M. Jones 04/08/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCI IDS is a result of a construction control. Construction deficienc construction activities. Rent ha	n deficiency. IDS transferred to onsite quality y was corrected during normal course of
E. M. Valeriano 08/19/80 DISCIPLINE ENGINEER/DATE	V. I Killpack 08/19/80
DISCIPLINE RESPONSIBLE FOR RESOLUTION .	: CE EE EMS ENG [QC] HVAC I&C PSE NPO·NAN
M. Jones 02/23/82  FIFLD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)  00288/0082Z-25]	L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)			
POSTULATED INTERACTION NO.: 12-01-03-01			
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 129'-0"			
LOCATION WITHIN FIRE ZONE: Elev. 130, near missile wall, by pressurizer.			
IDENTIFICATION OF INTERACTING COMPONENTS			
SOURCE:  Air register against missile wall.  SOURCE CODE: H-DUCT-18 ·			
TARGET:  Line 51-2" stainless charging line.  TARGET CODE: P-0051-2			
POSTULATED INTERACTION:  Register falls, impacts line 51.			
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of register.			
M. Jones 04/09/80			

M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Register qualified by analysis. See IDS No. 03-29-01-04.

DISCIPLINE ENGINEER/DATE

D. H. Hagstrom 09/08/82 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC [HVAC] I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 09/08/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	<u>.                                    </u>	1	_ OF	1

POSTULATED INTERACTION NO.: 12-01-04-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91', azimuth 110°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: Seismic motion induced by postulated Hosgri event.
TARGET:  FCV 8148 on excess letdown HX bypass.  TARGET CODE: I-8148
POSTULATED INTERACTION:  The valve upper structure is somewhat flexible. An identical valve 8145, in a similar piping layout is snubber supported.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Check the seismic qualification of valve FCV 1848 to see if a snubber is required.
P. Anderson 06/18/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Valve qualified by seismic analysis 9-11, Rev. 9, dated 12/02/81.
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG. GC HVAC I&C [PSE] NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

•	
PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SFISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)	ſ
POSTULATED INTERACTION NO.: 12-02-05-01	į
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 91'-0"	
LOCATION WITHIN FIRE ZONE: Elev. 115, near missile barrier.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Spring hanger can deflects excessively, could result in malfunction of hanger.	-
TARGET:  Spring hanger can to a line (No. 25 possibly) which is attached to hanger 63-4V.	
POSTULATED INTERACTION:  Spring hanger can deflects excessively, could result in malfunction of hanger.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add lateral support to hanger can te reduce lateral deflection.	
M. Jones 04/08/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Resoved per analysis described in RCLA Resolution Report #13.	
Paul H. Anderson 02/25/81  DISCIPLINE ENGINEER/DATE  R. I. Cloud 02/28/81  ENGR. GROUP SUPERVISOR/DATE	
DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [FNG] GC HVAC I&C PSE NPO F	IAN

L. W. Horn 09/30/82

SIP PROJECT ENGINEER APPROVAL/DATE

[0039A/0102Z-41]

M. Jones 02/23/82

(FOR MODIFICATIONS ONLY)

FIFI.D VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 12-03-01-02
FIRE ZONE 1-B LOCATION Containment FLOOR FLEVATION 104'-7"
LOCATION WITHIN FIRE ZONE:  Loop 4 at missile wall at elev. 110'.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-4397-2 2" scupper drain line.
TARGET:  Letdown line attached to support 56N/36R, vent (line 63).
POSTULATED INTERACTION:  Lateral deflection of drain line causes impact with vent piping.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install lateral support to drain line, 2 places, near missile wall, between ver location to limit lateral deflection.
M. Jones 04/09/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Bilat installed near postulated contact point per ART No. 006.
R. W. Eschenburg 11/12/80  S. Chitnis 07/24/84  DISCIPITNE ENGINFER/DATE  ENGR. GROUP SUPERVISOR/DATE
DISCIPITNE RESPONSIBLE FOR RESOLUTION: CE FE FMS ENG GC HVAC I&C [PSE] NPO NA
M. Jones 02/24/82 L. W. Horn 01/03/82  ETELD VERTECATION BY NO VIOLENTE APPROVAL DATE

(FOR MODIFICATIONS ONLY)

SHEET	1	OF	1	

POSTULATED INTERACTION NO.: 12-03-06-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 112'-1-1/2"
LOCATION WITHIN FIRE ZONE: Elev. 114, inside of missile wall, 110°.
IDENTIFICATION OF INTERACTING COMPONENTS .
SOURCE:  BU air accumulator for 9351A & 9351B RCS sample valves — wall mounted via bolted brackets.
TARGET: TARGET CODE: 1-8143  FCV-8143.
POSTULATED INTERACTION:  Mounting fails (accumulator), source impacts FCV-8143.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Check qualification of accumulator mount. Qualify as required. Also, check qualification of similar accumulators mounted elsewhere in the plant.
M. Jones 04/08/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The accumulator in question, and all similar accumulators, are seismically qualified by analysis. See RLCA Report No. 5.
J. A. Ante 10/31/80 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALLY)

CHECKED AUG 0 9 1984
[0014A/0079Z-17]

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE



PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)	(
POSTULATED INTERACTION NO.: 12-07-06-01	
FIRE ZONE 1-A LOCATION Containment FLOOR FLEVATION 117'-0"	
LOCATION WITHIN FIRE ZONE:  Elev. 117', azimuth 108° against containment wall.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Service air header, 3-1/2" green line.	
TARGET:  Conduit KX551.  TARGET CODE: E-KX5510-1.50	
POSTULATED INTERACTION:  Service air header is poorly supported and lateral movement could impact the conduit.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install a bilateral support to the service air header to ensure no contact with the conduit.	
P. Anderson 02/04/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved per NPPR DCO-83-NO-POOL7.	
J. Vranicar 09/23/83  DISCIPITINE ENGINEER/DATE.  DISCIPITINE RESPONSIBLE FOR RESOLUTION: CF. FF. EMS. ENG. [GC] HVAC. I&C. PSE. NPO. NA.	N
S. Harris 02/19/82 L. W. Horn 04/20/84  FIFLD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)	

4.					
	SEIS	DIABLO MICALLY IND	FIC GAS & ELECTR CANYON PLANT, UN UCED SYSTEMS INT N DOCUMENTATION	IC CO. IT NO. 1 ERACTION PROGRAM :	
POSTULATED	INTERACTION	N NO.: 12-0	7–06–02	·	•
FIRE ZONE	1-A	LOCATION	Containment	FLOOR ELEVAT	ION 117'-0"
	ITHIN FIRE : 117', betw		2, against cont	ainment wall.	
IDENTIFICA	TION OF INT	ERACTING COM	PONENTS		
SOURCE: Grati	ng supported	i to interio	r concrete.	SOURCE CODE: _C-	GRATING
TARGET: Condu	it KX551 at	tached to co	ntainment wall.	TARGET CODE: E-	KX551-1.50
Diffe	INTERACTIO rential sei s 1/4" clea	smic motion	between grating	PHENOMENA CODE: I and conduit could	NTERFERF & DEFLECT cause impact. The
Ensur	D RESOLUTIO e integrity ance.	N BY WALKDOW of conduit	N <u>TEAM</u> : by analysis or m	nodify grating to p	rovide sufficient
WALKDOWN T	derson 02/ EAM ORIGINA LUTION BY R de 2" minim	TOR/DATE ESPONSIBLE D	<u>PISCIPLINE</u> : around the cond	duit per ART No. 18	0.
S. Hanu	ısiak E ENGINEER/	DATE .		E. P. Wollak ENGR. GROUP SUF	

04/28/82 M. Jones FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY)

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAN

SHEET	1	OF	1

SIP PROJECT ENGINEER APPROVAL/DATE

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 12-10-04-01	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 105, near missile barrier 110°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: ` Light fixture at elev. 116.	SOURCE CODE: E-I.F-1A
TARGET: Air supply tubing to valve 8145.	TARGET CODE: 1-8145
POSTULATED INTERACTION:  Light fixture falls, impacts tubing.	PHENOMENA CODE: FTXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	•
M. Jones 03/11/82 WALKDOWN TEAM ORIGINATOR/DATE	•
Final RESOLUTION BY RESPONSIBLE DISCIPLINE:  Fixture qualified by analysis. See Civil Ca  A	lc. No. 52.24.52.
R. J. Swaim 01/26/83 DISCIPLINE ENGINFER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] E	G. C. Bhatt 01/28/83 ENGR. GROUP SUPERVISOR/DATE  MS ENG GC HVAC I&C PSE NPO NAM
·	l. W. Horn 08/12/83

[0006A/0066Z-51]

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

•	·
PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 12-11-02-01	•
FIRE ZONE · 1-A LOCATION, Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 105, near missile barrier 110°.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Light fixture at elev. 116.	SOURCE CODE: E-LF-1A
TARGET: Air supply tubing to valve 8146.	TARGET CODE: 1-8146
POSTULATED INTERACTION: Light fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of light fixture.	
M. Jones 03/11/82 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  See Civil Calc. No. 52.24.52. Fixture qualication.	ified by analysis.
R. J. Swaim 01/26/83 DISCIPLINE ENGINEER/DATE	G. C. Bhatt 01/28/83 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn 08/12/83 SIP PROJECT ENGINEER APPROVAL/DATE

[0006A/0066Z-52]

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

Kerts .

PACIFIC GAS & ELECTE DIABLO CANYON PLANT, UP SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	NIT NO. 1 TERACTION PROGRAM
POSTULATED INTERACTION NO.: 12-12-04-01	·
FIRE ZONE 1-A LOCATION Containment	FLOOR FI EVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Flev. 105, near missile barrier 110°.	
IDENTIFICATION OF INTERACTING COMPONENTS .	
SOURCE: Light fixture at elev. 116.	SOURCE CODE: E-LF-1A .
TARGET: Air supply tubing to valve 8147.	TARGET CODE: _I-8147
POSTULATED INTERACTION: light fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	
M. Jones 03/11/82 WALKDOWN TEAM ORIGINATOR/DATE	,
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been site installed in accordance with PG&F DWG. 05004 qualified by analysis per Civil calculation	1, detail 5. This fixture has been
R. J. Swaim 04/19/83 DISCIPITNE ENGINEER/DATE	S. Auer 08/29/84 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [FE] EM	S ENG GC HVAC I&C PSE NPO NAI

1.. W. Horn 05/25/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIFI.D VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

Aers

SHEET 1 OF 1	
SHEET 1 OF 1	

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 12-13-01-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 103, at containment wall, northeast corner of area GE.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Motion due to pastulated HOSGRI event.
TARGET:  Actuator to valve 8152; regen. HX discharge line ISO. valve, line no. 26-2."
POSTULATED INTERACTION:  Upperstructure of valve 8152 is tall and unsupported. Low resonant frequency frequency of upperstructure could result in overstress of valve bonnet piping.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Check piping analysis for proper modelling of valve 8152, and verify that proper geometry was assumed in the valve seismic qualification.
M. Jones 05/03/82 WALKDOWN TEAM ORIGINATOR/DATE
Stress calculation 10-301 provides two snubbers on valve top works. Modification to be made prior to fuel load. Snubbers required on this S.C.I. line will be completed during the normal course of construction as required by the calculations. The modification described above was provided as a result of the Seismic Reverification program, not the SIP.
J. A. Longworth 12/16/82  DISCIPLINE ENGINEER/DATE  BNGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 03/23/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1_ OF 1_
----------------

FIRE ZONE 3-BB LOCATION Penetratio	on Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100' near penetration 35 (Azimuth	n 98°).
IDENTIFICATION OF INTERACTING COMPONENTS	
Source: Spring support near tubing.	SOURCE CODE: PS-3BB
TARGET: Actuating air tubing from SV-82 to valv	TARGET CODE: 1-8152
POSTULATED INTERACTION:  Spring support impacts tubing during se fitting. Differential movement of value port may also damage tubing or fitting.	ve actuator relative to tubing sup-
DECOMMENDED DECOLUTION DV MAI VOMIN TEAM.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Reroute tubing to prevent damage from s must allow for 2.7° twist of the valve (3.2" peak-to-peak) at the level of the not be cross-spanned between the contain	or an amplitude of 1.6 inches tubing connection. Tubing should
Reroute tubing to prevent damage from s must allow for 2.7° twist of the valve (3.2" peak-to-peak) at the level of the	or an amplitude of 1.6 inches tubing connection. Tubing should
Reroute tubing to prevent damage from s must allow for 2.7° twist of the valve (3.2" peak-to-peak) at the level of the not be cross-spanned between the contai	or an amplitude of 1.6 inches tubing connection. Tubing should
Reroute tubing to prevent damage from s must allow for 2.7° twist of the valve (3.2" peak-to-peak) at the level of the not be cross-spanned between the contai  G. B. Page 10/27/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	or an amplitude of 1.6 inches tubing connection. Tubing should
Reroute tubing to prevent damage from somust allow for 2.7° twist of the valve (3.2" peak-to-peak) at the level of the not be cross-spanned between the containable of the not between the containable of the not be cross-spanned between the containable of the not be cross-spanned between the containable of the not be cross-spanned	er an amplitude of 1.6 inches tubing connection. Tubing should inment and aux. building.  E. C. Connell III  ENGR. GROUP SUPERVISOR/DATE

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 12-13-03-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100', penetration 35, azimuth 98°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Air operated valve #8152.
TARGET: Conduit K6266.  TARGET CODE: E-K6266-1
POSTULATED INTERACTION:  Softly supported low frequency, valve interacts with conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Check qualification of valve & operator.
R. L. Cloud 06/09/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Valve 8152 is qualified by analysis per DCM-M-58, Rev. 7, and plant design piping analysis 10-301. The valve actuator can move without damaging the conduit. This was determined by physically shaking the valve and noting the amplitude of the deflection. This was done to the extent necessary to discount the postulated interaction. In addition, piping analysis 10-301, dated 09/15/83, indicates movement of piping near valve and movement at bilateral snubber attachment to valve 8152 actuator will not exceed 1" for any analyzed case or combination of cases including the Hosgri earthquake. Per telecon between D Esken and S. Chesnut, dated 08/01/84, file 4.75, clearance between source valve and actuator and target conduit is 14". Conclusion: no modification necessary.
DISCIPLINE ENGINEER/DATE  E. Connell III  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NAN
•

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SIP PROJECT ENGINEER APPROVAL/DATE

ALS. 8/25/84

PACIFIC GAS & ELECT DIABLO CANYON PLANT, SEISMICALLY INDUCED SYSTEMS I INTERACTION DOCUMENTATION	UNIT NO. 1 NTERACTION PROGRAM
POSTULATED INTERACTION NO.: 12-14-02-01	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 105, near missile barrier 110°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: light fixture at elev. 116.	SOURCE CODE: F-LF-1A
TARGET: Air supply tubing to valve 8148.	TARGET CODE: J-8148
POSTULATED INTERACTION: Light fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	
M. Jones 03/11/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Fixture qualified by analysis. See Civil	Calc. No. 52.24.52, Rev. 1 & 2.
R. J. Swaim 01/26/83 DISCIPLINE ENGINEER/DATE	G. C. Bhatt 01/26/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE]	L. W. Horn 08/12/83 SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELE DIABLO CANYON PLANT,	
SEISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTATI	
POSTULATED INTERACTION NO.: 12-15-02-01	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 105, near missile barrier 110°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Light fixture at elev. 116.	SOURCE CODE: E-LF-1A
•	C.
TARGET: Air supply tubing to valve 8149A.	TARGET CODE: I-8149A
POSTULATED INTERACTION: Light fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE
· ·	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	,
	•
M. Jones 03/11/82 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Fixture qualified by analysis. See Civil	Calc. No. 52.24.52, Rev 1 & 2.
R. J. Swaim 01/26/83 DISCIPLINE ENGINEER/DATE	G. C. Bhatt 01/26/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE]	EMS ENG GC HVAC I&C PSE NPO NAI
	L. W. Horn 08/12/83
FIELD VERIFICATION BY WALKDOWN TEAM	SIP PROJECT ENGINEER APPROVAL/DATE

SHEET \_\_\_1\_ OF \_\_1\_

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET 1 OF 1  ON PROGRAM (IDS)	
FLOOR ELEVATION 91'-0"	
RCE CODE: E-I.F-1A	
GET CODE: I-8149B	
MENA CODE: FIXTURE	

POSTULATED INTERACTION NO.: 12-16-02-01	<u> </u>
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 105, near missile barrier 110°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Light fixture at elev. 116.	SOURCE CODE: E-I.F-1A
TARGET: Air supply tubing to valve 81498.	TARGET CODE: I-8149B
POSTULATED INTERACTION:  Light fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE
•	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	- -
M. Jones 03/11/82 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
Fixture qualified by analysis. See Civil	Calc. No. 52.24.52, Rev. 1 & 2.
R. J. Swaim 01/26/83 DISCIPLINE ENGINFER/DATE	G. C. Bhatt 01/28/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE]	EMS ENG GC HVAC ICC PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 08/12/83 SIP PROJECT ENGINEER APPROVAL/DATE
(FOR MODIFICATIONS ONLY)	

SHEET	1	<b>OF</b>	1

POSTULATED INTERACTION NO.: 12-17-02-01	
FIRE ZONE 1-A LOCATION Containmen	t FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE:  Elev. 105, near missile barrier 110°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Light fixture at elev. 116.	SOURCE CODE: F-LF-1A
TARGET:  . Air supply tubing to valve 8149C.	TARGET CODE: 1-8149C
POSTULATED INTERACTION: Light fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURF
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	
• •	
M. Jones 03/11/82 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Fixture qualified by analysis: See Civ	vil Calc. No. 52.24.52, Rev. 1 & 2.
R. J. Swaim 01/26/83 DISCIPLINE ENGINEER/DATE	G. C. Bhatt 01/26/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [	
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 08/12/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1
-------	---	----	---

THICKING DOOR STRING COMES (SEE)
POSTULATED INTERACTION NO.: 13-01-13-01
FIRE ZONE 3-AA LOCATION Aux/Fuel Handling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 127, near BA storage tank 1-1
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Primary water line 1569-2"  SOURCE CODE: P-1596-2
TARGET:  TARGET CODE: P-2086-2  Line 2086-2"; BA storage tank 1-1 recirc. line.
POSTULATED INTERACTION:  Lateral movement of primary water line results in impact with line 2086.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install lateral restraint to line 1569 by attaching restraint to col. 17.4.
M. Jones 06/03/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Recommended resolution - OK. See generic DCN-DCI-EP-5061 HGR. No. 049339 SHT. 333.
C.FR. Van Natta 08/03/83  DISCIPLINE ENGINEER/DATE  K. M. Krause _ 08/03/83  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE NPO NAME
S. E. Traisman 09/21/83 L. W. Horn 10/21/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS CNLY)

Sn√

SHEET	1	OF	1

L. W. Horn 11/08/82

SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman

(FOR MODIFICATIONS CNLY)

FIELD VERIFICATION BY WALKDOWN TEAM

09/01/82

SHFET	1_	OF	2
-------	----	----	---

POSTULATED INTERACTION NO.: 13-03-09-01	· ·
FIRE 70NE 3X LOCATION Aux/Fuel Han	dling FLOOR FLEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Flev. 100', Boric Acid Transfer Area	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Heat Tracing Cable (Misc.)	SOURCE CODE: M-BATPP1-1
TARGET:  Boric Acid Transfer Pump 1-1	TARGET CODE: E-R-3X
POSTULATED INTERACTION:  Tracing cable not supported away from pum lube oil storage glass, causing loss of l bearing damage.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Tie cable in bundles away from pump.	
M. Jones 06/03/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSTRIE DISCIPITINE:  ALC See ART #040. Resolved by Modification.	
J. E. Herbst 01/20/81 DISCIPITME FMGTMFFR/DATE	S. Auer 09/13/84 FNGR. GROUP SUPERVISOR/DATE
DISCIPITME RESPONSIBLE FOR RESOLUTION: CE [FE]	EMS ENG GC HVAC I&C PSE NPO NAM
S. E. Traisman 09/01/82  FIFLD VFRIFTCATION BY WALKDOWN TEAM  (FOR MODIFICATIONS CALY)	1 W. Horn 08/24/83 SIP PROJECT FAGTNEER APPROVAL/DATE

[0022A/0077Z-20]

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTICAL BO.: 13-03-09-02
FIRE ZONE 3-X LOCATICM Auxiliary Building FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZOME: Elev. 105', col. 17.4 between T and U.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-GRATING Equipment hatch grating.
TARGET:  BA transfer pump 1-1 motor.  TARGET CODE: M-BATPP
POSTULATED INTERACTION:  Hatch cover falls through opening and impacts target.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify Hosgri seismic event not capable of moving hatch cover out of its normal position.
S. E. Traisman 08/03/82  MALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hatch cover has been seismically qualified. See resolution sheet and Calc. No. 13-03-09-02.
S. Gaballah 12/22/82  DISCIPLINE ENGINEER/DATE  S. Sarkar 12/22/82  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE ENG GC HVAC IEC PSE MPO MAI

L. W. Horn 02/03/83 SIP PROJECT ENGINEER APPROVAL/DATE

١.

FIELD VERIFICATION BY MALKDOWN TEAM
(FOR MODIFICATIONS CHLY)
[00124/00737-14]

SHEET	1.	OF	1
-------	----	----	---

INTERHOLION DOCUMENTATION SHEET (IDS)				
POSTULATED INTERACTION NO.: 13-03-09-03 INTERCOMP				
FIRE ZONE 3-X LOCATION Aux./Fuel Handling FLOOR ELEVATION 100'-0"				
LOCATION WITHIN FIRE ZONE: EL 100' Col 18 Between T and U.				
IDENTIFICATION OF INTERACTING COMPONENTS				
SOURCE:  SOURCE CODE: M-TANK  Acid, caustic day tanks; makeup mixed bed demins (EL 115 fire zone 3-AA)				
TARGET: BA transfer pump 1-1 motor. TARGET CODE: M-BATPP1-1				
PHENOMENA CODE: SPTFAIL  Tank supports fail, tank ruptures and/ or flanges at nozzles fail resulting in water/acid/caustic impingement on motor one elevation below. The two elevations communicate via equip hatch with grating.				
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify motor can withstand the postulated liquid impingement.				
S. E. Traisman 08/04/82 WALKDOWN TEAM ORIGINATOR/DATE				
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Source component has been protected and qualified by analysis. See resolution sheet and Calc. #13-03-09-03.				
S. Gaballah 02/12/83  DISCIPLINE ENGINEER/DATE  B. Sarkar 02/22/83  ENGR. GROUP SUPERVISOR/DATE				
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN				

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALLY)

L. W. Horn 03/17/83 SIP PROJECT ENGINEER APPROVAL/DATE

5 Cg 7/28/84

	SHEET 1 OF 1
	PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
an ji dir	POSTULATED INTERACTION NO.: 13-03-10-01 INTERCOMP
	FIRE ZONE 3-X LOCATION Aux./Fuel Handling FLOOR ELEVATION 100'-0"
	LOCATION WITHIN FIRE ZONE: EL 105' col. 17.4 between T and U.
	IDENTIFICATION OF INTERACTING COMPONENTS
	SOURCE: SOURCE CODE: C-GRATING Equipment hatch grating.
amb is	TARGET: TARGET COOE: P-0071-2  Transfer pump 1-1 disc. to BA filter, line 71-2".
	POSTULATED INTERACTION:  Hatch cover falls through opening and impacts target.
	RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify Hosgri seismic event not capable of moving hatch cover out of its normal position.
	S. E. Traisman 08/03/82 WALKDOWN TEAM ORIGINATOR/DATE
	FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hatch covers have been seismically qualified. See resolution sheet and IDS fil #13-03-09-02.
	S. Gaballah 12/22/82  DISCIPLINE ENGINEER/DATE  B. Sarkar 12/22/82  ENGR. GROUP SUPERVISOR/DATE
	DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NA

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALLY)

315124

SHEET	1	OF	. 1

POSTULATED INTERACTION	NO.: 13-03-13-01 INTER	COMP	
FIRE ZONE 3-X	LOCATION Aux./Fuel Ha	indling FLOOR ELEVATION 100'-0"	_
LOCATION WITHIN FIRE Z EL 105' col. 17.4	CONE: A between T and U.		
IDENTIFICATION OF INTE	RACTING COMPONENTS		
SOURCE: Equipment hatch g	grating.	SOURCE CODE: C-GRATING .	-
TARGET: Conduit K9440-2".		TARGET CODE: E-K9440-2	-
POSTULATED INTERACTION Hatch cover falls	i: through opening and imp	PHENOMENA CODE: LOOSE acts target.	-
RECOMMENDED RESOLUTION Verify Hosgri sei position.		f moving hatch cover out of its nor	mal
S. E. Traisman 08/0			
FINAL RESOLUTION BY REHATCH covers have #13-03-09-02.		ied. See resolution sheet and IDS	file
S. Gaballah 12/22/ DISCIPLINE ENGINEER/D		B. Sarkar 12/22/82 ENGR. GROUP SUPERVISOR/DATE	
			NAN
		L. W. Horn 02/03/83	

\$\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS CNLY)

•	SHEET1_ OF1
PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION S	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 13-04-07-02 INTERCO	мр
FIRE ZONE 3-AA LOCATION Aux./Fuel Handl	ing FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: El 100' col 18 between T and U.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Handrails over drum hoist and pipe trench.	SOURCE CODE: C-HANDRAIL .
: TARGET: BA transfer pump motor 1-2.	TARGET CODE: M-BATPP1-2
POSTULATED INTERACTION: Handrails come lose, impact motor.	PHENOMENA CODE: LOOSE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of handrail by simplified a	nalysis.
S. E. Traisman 08/04/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Handrails have been seismically qualified by calc. #13-04-07-02.	analysis. See resolution sheet and
S. Gaballah 02/10/83 DISCIPLINE ENGINEER/DATE	B. Sarkar 02/22/83 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

555/8Y

L. W. Horn 03/17/83

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 13-04-11-01 INTERCOMP
FIRE ZONE 3-X LOCATION Aux./Fuel Handling FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: EL 105' col. 17.4 between T and U.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-GRATING Equipment hatch grating.
TARGET: Conduit K9441-2".  TARGET CODE: E-K9441-2
POSTULATED INTERACTION:  Hatch cover falls through opening and impacts target.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify Hosgri seismic event not capable of moving hatch cover out of its normal position.
S. E. Traisman 08/03/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Hatch covers have been seismically qualified. See resolution sheet and IDS fil #13-03-09-02.
S. Gaballah 12/22/82  DISCIPLINE ENGINEER/DATE  B. Sarkar 12/22/82  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NA

SHEET \_\_ 1 OF \_\_1\_

35 7/28/87 L. W. Horn 02/03/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET	1	OF	_1_
-------	---	----	-----

POSTULATED INTERACTION NO.: 13-09-01-02 INTERCOMP
FIRE ZONE 3-S LOCATION Aux./Fuel Handling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: EL 130' between cols. 16.8/17.4 and T/U.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Equipment hatch cover in hot shop, EL 140'.
TARGET: TARGET CODE: M-BAT1-1  BA tank 1-1.
POSTULATED INTERACTION:  Equipment hatch falls through opening and impacts BA tank nearby.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify Hosgri Seismic Event not capable of moving hatch cover out of its normal position.
S. E. Traisman 08/05/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Equipment hatch cover has been seismically qualified by analysis. See attached Calc. 13-09-01-02, Rev. 1.
S. Gaballah 01/24/83  DISCIPLINE ENGINEER/DATE  B. Sarkar 01/27/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO HAN

L. W. Horn 08/12/83

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS CNLY)

SHEET1_ OF1
1 CON PROGRAM (IDS)
FLOOR ELEVATION 100'-0"
terior cavity through
CE CODE: E-K9736-1
ET CODE: F-R-3X
MENA CODE: DEFIECT
t, or support the free end.

A Property

POSTULATED INTERACTION DO.: 13-09-02-01	<del></del>
FIRE ZONE .3X LOCATION Aux/Fuel Ha	andling FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZOWE: Flev. 100', Area K, (T, 16 <sup>8</sup> ), on ceiling narrow passageway.	inside interior cavity through
JIDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Empty conduit coming through ceiling.	SOURCE CODE: E-K9736-1
TARGET: K9736 conduit.	TARGET CODE: F-R-3X
POSTULATED INTERACTION:  The free end of the empty conduit will i	PHENOMENA CODE: DEFLECT mpact K9736.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of K9736, remove the em	pty conduit, or support the free end.
Fdward Denison 06/10/81 WALKDOWN TEAM ORIGINATOR/DATE	
FIMAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Secure as required free end of empty condition.  See ART #214. Resolved by Modification.	duit to prevent damage to K9736.
A. G. Barta 07/23/81 DISCIPITME FMGTNFER/DATE	S. Auer 09/13/84 FMGR. GROUP SUPERVISOR/DATE
DISCIPITME RESPONSTRIE FOR RESOLUTION: CE [FE	FINS FING GC HVAC ILC PSE NPO NAN
FIFID VERTEICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CON.Y)	A. B. Barta 07/23/81 SIP PROJECT FARTHER APPROVAL/DATE

SHEET	11	OF	1
-------	----	----	---

TWIENHCITOM DOCOLEMINITOM SHEET (TO2)
POSTULATED INTERACTION NO.: 13-09-02-02
FIRE ZONE 3X LOCATION Aux./Fuel Handling FLOOR FLEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, (S-T, 163 - 174), on ceiling.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  5" od (w/insulation) pipe and 7" od (w/insulation) pipe, both going to the BA PP 1-1.
TARGET:  K9737 1" conduit
POSTULATED INTERACTION  Postulated heat damage to the conduit K9737 is touching the 7" pipe and slightly cuts the insulation of the 5" pipe.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM  Finaure integrity of the conduit by analysis.
Fdward Dennison 07/08/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by analysis described in RICA Report #50.
S. Motiwalli 09/30/81  DISCIPLINE FNGINFER/DATE  R. L. Cloud 10/27/81  FNGR. GROUP SUPERVISOR/DATE
DISCIPITAT RESPONSIBILE FOR RESOLUTION: CF. FF. FMS [ENG] GC. HVAC IEC PSE NPO NAN
FIFI D VFRIFICATION BY WAI KNOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

F0039A/01027-407

(FOR MODIFICATIONS CALY)

SHEET 1 OF 1  O. 1  FION PROGRAM  F (IDS)
FLOOR ELEVATION 125'-0"
JRCE CODE: P-ULB-3AA
RGET CODE: M-BAT1-2 strumentation
NOMENA CODE: SPTFAIL & PIPEFAIL ailure of existing
BA batch tank.
vill be removed by
1. Krause 02/15/83  IGR. GROUP SUPERVISOR/DATE

•
POSTULATED INTERACTION NO.: 13-10-01-03
FIRE ZONE 3AA LOCATION Auxiliary Bldg. FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125', Near BA Storage Tank 1-2
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  4" Boric Acid Batch tank solids fill pipe  SOURCE CODE: P-ULB-3AA
TARGET:  BA storage tank 1-2 and assoicated piping and instrumentation
POSTULATED INTERACTION:  Large lateral deflection of 4" pipe results in failure of existing supports and subsequent collapse of the pipe.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add lateral support at free end of pipe over the BA batch tank.
M. Jones 06/03/83 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Existing Boric Acid batch tank solids fill pipe will be removed by ART 345.
C. R. Van Natta 02/11/83 DISCIPLINE ENGINEER/DATE  K. M. Krause 02/15/83 ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE NPO NAN
S. E. Traisman 10/14/83 L. W. Horn 01/18/84 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS CALY)

SHEET1_ OF1	
rogram ) -	
R ELEVATION 115'-0"	

	FIRE ZONE 3-AA	LOCATION _Aux./Fuel H	andling FLOOR ELEVATION 115'-0"
SOURCE: Platform (elev. 122), overhead hoist.  TARGET: BA storage tank 1-2.  POSTULATED INTERACTION: Platform falls, impacts tank due to hoist falling on platform or platform due to its own weight.  RECOMMENDED RESOLUTION BY MALKDOWN TEAM: 1. Ensure integrity of platform by simplified anlysis. Include pipe supp loads imposed on the platform in the analysis. 2. Store hoist away from boric acid storage tank area.  M. Jones 12/18/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform has been qualified by analysis and hoist to be stored away as per #083. See resolution sheet and referenced calc. #13-01-01-01.  S. Hanusiak 04/02/81 DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE			•
Platform (elev. 122), overhead hoist.  TARGET: BA storage tank 1-2.  POSTULATED INTERACTION: Platform falls, impacts tank due to hoist falling on platform or platform due to its own weight.  RECOTTENDED RESOLUTION BY WALKDOWN TEAM: 1. Ensure integrity of platform by simplified anlysis. Include pipe supp loads imposed on the platform in the analysis. 2. Store hoist away from boric acid storage tank area.  M. Jones 12/18/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform has been qualified by analysis and hoist to be stored away as per #083. See resolution sheet and referenced calc. #13-01-01-01.  S. Hanusiak 04/02/81 DISCIPLINE ENGINEER/DATE  E. P. Wollak ENGR. GROUP SUPERVISOR/DATE	IDENTIFICATION OF I	NTERACTING COMPONENTS	
POSTULATED INTERACTION:  Platform falls, impacts tank due to hoist falling on platform or platform due to its own weight.  RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Ensure integrity of platform by simplified anlysis. Include pipe supp loads imposed on the platform in the analysis.  2. Store hoist away from boric acid storage tank area.  M. Jones 12/18/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform has been qualified by analysis and hoist to be stored away as per #083. See resolution sheet and referenced calc. #13-01-01-01.  S. Hanusiak 04/02/81  DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE		. 122), overhead hoist.	SOURCE CODE: M-HOIST-3AA
Platform falls, impacts tank due to hoist falling on platform or platform due to its own weight.  RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Ensure integrity of platform by simplified anlysis. Include pipe supp loads imposed on the platform in the analysis.  2. Store hoist away from boric acid storage tank area.  M. Jones 12/18/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform has been qualified by analysis and hoist to be stored away as per #083. See resolution sheet and referenced calc. #13-01-01-01.  S. Hanusiak 04/02/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak ENGR. GROUP SUPERVISOR/DATE	<del>*************************************</del>	<b>k 1–2.</b>	TARGET CODE: M-BAT1-2
1. Ensure integrity of platform by simplified anlysis. Include pipe supp loads imposed on the platform in the analysis.  2. Store hoist away from boric acid storage tank area.  M. Jones 12/18/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform has been qualified by analysis and hoist to be stored away as per #083. See resolution sheet and referenced calc. #13-01-01-01.  S. Hanusiak 04/02/81 DISCIPLINE ENGINEER/DATE  E. P. Wollak ENGR. GROUP SUPERVISOR/DATE	Platform falls	, impacts tank due to hois	
#ALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform has been qualified by analysis and hoist to be stored away as per #083. See resolution sheet and referenced calc. #13-01-01-01.  S. Hanusiak 04/02/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak ENGR. GROUP SUPERVISOR/DATE			
Platform has been qualified by analysis and hoist to be stored away as per #083. See resolution sheet and referenced calc. #13-01-01-01.  S. Hanusiak 04/02/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak ENGR. GROUP SUPERVISOR/DATE	1. Ensure into	egrity of platform by simpon the platform in the ana	lysis.
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE	1. Ensure into loads imposed of 2. Store hoist	egrity of platform by simp on the platform in the ana t away from boric acid sto	lysis.
	1. Ensure into loads imposed of 2. Store hoist  M. Jones 12/2 WALKDOWN TEAM ORIGINAL RESOLUTION BY Platform has be	egrity of platform by simple on the platform in the analytic acid storm to the second storm by simple second storm by simple second storm by simple second storm by simple second	lysis. rage tank area.  and hoist to be stored away as per AF
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO	1. Ensure into loads imposed of 2. Store hoist M. Jones 12/2 WALKDOWN TEAM ORIGIN FINAL RESOLUTION BY Platform has be #083. See reso	egrity of platform by simple on the platform in the analytic and stock and from boric acid stock and reference of the stock and stock an	lysis. rage tank area. and hoist to be stored away as per AF ed calc. #13-01-01-01.

(FOR MODIFICATIONS CALY)

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 13-10-01-05
FIRE ZONE 3-AA LOCATION Aux/Fuel Handling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115', near BA storage tank 1-2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: M-TANK Boric acid batch tank.
TARGET:  Boric acid batch tank.  TARGET CODE: M-BAT1-2
POSTULATED INTERACTION:  Batch tank overturns, impacts storage tank, etc.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure that batch tank will not overturn (by analysis).
M. Jones 12/17/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Support legs of tank and pedestal have to modified as shown in DCN DC1-SC-13454 See Calc. No. 13-10-01-05.
N. Makam 07/28/83 F. Morsy 07/28/83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NA

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

01/26/84

S. E. Traisman

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

01/19/84

SHEET	1	OF	1
-------	---	----	---

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM

INTERACTION DOCUMENTAT	TION SHEET (IDS)
POSTULATED INTERACTION NO.: 13-10-01-06 INTE	ERCOMP
FIRE ZONE 3-S LOCATION Aux./Fuel H	landling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: EL 130' between cols. 16.8/17.4 and T/U.	, ,
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Equipment hatch cover in hot shop, EL 14	SOURCE CODE: C-COVER
TARGET: BA tank 1-2.	TARGET CODE: M-BAT1-2
POSTULATED INTERACTION: Equipment hatch falls through opening an	PHENOMENA CODE: LOOSE  Ind impacts BA tank nearby.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify Hosgri Seismic Event not capable position.	of moving hatch cover out of its normal
S. E. Traisman 08/05/82 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Equipment hatch cover has been seismical sheet, and IDS file #13-09-01-02.	ly qualified by analysis. See resolution
S. Gaballah 01/24/83 DISCIPLINE ENGINEER/DATE	B. Sarkar 01/27/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	•
FIELD 'VERIFICATION BY WALKDOWN TEAM	L. W. Horn 10/25/83 SIP PROJECT ENGINEER APPROVAL/DATE

SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS CALY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SFISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 13-10-02-01
FIRE ZONE 3-AA LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115', (S-T, 17' - 18).
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: NS-CD  Temporary air lift scaffolding.
TARGET:  Conduit K9738-1" (off the RA storage tank 1-2).
POSTULATED INTERACTION:  Rolling scaffold impacts the conduit.  PHENOMENA CODE: HOUSEKEEP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove the scaffold prior to start-up.
E. Denison 07/08/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Scaffold will be removed as directed by NPPR #DC1-83-NO-PO011.
DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE FF. EMS FMG [GC] HVAC I&C PSE NPO NAN
L. W. Horn 08/24/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

PACIFIC GAS & DIABLO CANYON PL SEISMICALLY INDUCED SYST INTERACTION DOCUMEN	ANT, UNIT NO. 1 EMS INTERACTION PROGRAM
POSTULATED INTERACTION NO.: 13-11-02-01	<del></del>
FIRE ZONE 3AA LOCATION Aux./Fue	1 Handling 'FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 119, Near BA Storage Tank 1-2.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead Light fixtures (2)	SOURCE CODE: H-LF-3AA
TARGET: Air supply tubing to HCV-104	TARGET CODE: T-HCV104
POSTULATED INTERACTION: Fixtures fall, impact tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixtures.	•
M. Jones 11/18/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPIINE  The above source light fixture has be be installed in accordance with PG&E qualified by analysis per Calc. No. 5 Resolved by analysis.	en field inspected and verified to DWG. 050041, Detail 5. This fixture has been
J. Swaim 03/28/83 DISCIPLINE ENGINEER/DATE	G. C. Bhatt 03/28/83 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC ICC PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY) [0006A/0066Z-58]

Aco

05/25/83 Lee Horn SIP PROJECT ENGINEER APPROVAL/DATE

· · · · · · · · · · · · · · · · · · ·	SHEET	1	OF	1
---------------------------------------	-------	---	----	---

POSTULATED INTERACTION NO.: 13-11-02-02
FIRE ZONE 3-AA LOCATION Aux./Fuel Handling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 119', near BA storage tank 1-2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Boric acid batching tank acid fill line, 3".
TARGET:  Air supply tubing to HCV-104.
POSTULATED INTERACTION:  Fill line falls due to lack of support, impacting tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add restraint to fill line near top of BA batching tank.
M. Jones 11/18/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  IDS's 13-10-01-03, 13-11-02-02, and 13-12-02-01 have a common source. Their common source is the 4" boric acid batch tank solids fill line. IDS's 13-11-02-02 and 13-12-02-01 incorrectly identified their source line as a 3" boric acid batching tank fill line. The source line associated with IDS's 13-10-01-03, 13-11-02-02, and 13-12-02-01, 4" boric acid batch tank solids fill pipe, has been removed per ART-345. Therefore IDS 13-12-02-01 has been resolved per ART 345.
S. Skochko 06/18/84  DISCIPLINE ENGINEER/DATE  S. Chitnis 07/24/84  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN
S. E. Traisman 01/19/84  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

[0038A/0100Z-4]

SHEET	1	OF	1

L. W. Horn 06/10/83 SIP PROJECT ENGINEER APPROVAL/DATE

### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 13-11-06-01
FIRE ZONE 3-AA LOCATION Aux./Fuel Handling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 119', near BA storage TK1-1.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: NS-CD
TARGET:  1/4" stainless steel tubing to LT 102.  TARGET CODE: I-1.T102
POSTULATED INTERACTION:  Tubing is very exposed to a high traffic area. Practically any object hitting tubing could damage it.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Since tubing is very fragile and exposed, it is recomended that the tubing be shielded from any possible impact.
P. Anderson 06/17/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Resolved per ART 227.
DISCIPLINE ENGINEER/DATE  E. M. Valeriano 01/29/82  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN

[0039A/0102Z-21]

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET	1_	OF	_1_

POSTULATED INTERACTION NO.: 13-12-01-01	·
FIRE ZONE 3-AA LOCATION Aux./Fuel Har	ndling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, near BA storage tank 1-2.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platform (elev. 122), overhead hoist.	SOURCE CODE: M-HOIST-3AA
TARGET: Actuator to HCV-105.	TARGET CODE: I-HCV105
POSTULATED INTERACTION:  Platform falls, impacts actuator due to he failing due ot its own weight.	PHENOMENA CODE: MECHFAIL  pist falling on platform or platform
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Ensure integrity of platform by simplificated imposed on the platform in the analy  2. Store hoist away from boric acid store	sis.
M. Jones 12/18/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform has been qualified by analysis an O81. See resolution sheet and referenced	
S. Hanusiak 03/30/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak 03/31/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	EMS ENG GC HVAC I&C PSE NPO NAI
S. E. Traisman 08/31/82	L. W. Horn 10/28/82

(FOR MODIFICATIONS ONLY)

POSTULATED INTERACTION NO.: 13-12-02-01
FIRE ZONE 3-AA LOCATION Aux./Fuel Handling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 119', near BA storage tank 1-2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Boric acid batching tank acid fill line, 3".  SOURCE CODE: P-ULB-3AA
TARGET:  Air supply tubing to HCV-105.
POSTULATED INTERACTION:  Fill line falls due to lack of support, impacting tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add restraint to fill line near top of BA batching tank.
M. Jones 11/18/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  IDS's 13-10-01-03, 13-11-02-02, and 13-12-02-01 have a common source. Their common source is the 4" boric acid batch tank solids fill line. IDS's 13-11-02-02 and 13-12-02-01 incorrectly identified their source line as a 3" boric acid batching tank fill line. The source line associated with IDS's 13-10-01-03, 13-11-02-02, and 13-12-02-01, 4" boric acid batch tank solids fill pipe, has been removed per ART-345. Therefore IDS 13-12-02-01 has been resolved per ART 345.
S. Skochko 06/18/84  DISCIPLINE ENGINEER/DATE  S. Chitnis 07/24/84  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

ζ',

L. W. Horn 01/26/84 SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman 01/19/84
FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS CALY)

SHEET	1	OF	1
SHEET	1	UT-	1

•	
POSTULATED INTERACTION NO.: 13-12-02-02	
FIRE ZONE 3AA LOCATION Aux./Fuel Har	ndling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 119, Near BA Storage Tank 1-2 Area	•
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Overhead Light fixtures (2)	SOURCE CODE: E-LF-3AA
TARGET: Air supply tubing to HCV-105	TARGET CODE: I-HCV105
POSTULATED INTERACTION: Fixtures fall, impact tubing.	PHENOMENA CODE: FIXTURF
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixtures.	
M. Jones 11/18/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been fine the installed in accordance with PG&F DWG.  AGE qualified by analysis per Calc. No. 52.24.  Resolved by analysis.	050041, Detail 5. This fixture has been
J. Swaim 03/28/83 DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE]	G. C. Bhatt 03/28/83  ENGR. GROUP SUPERVISOR/DATE  EMS ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	Lee Horn 05/25/83 SIP PROJECT ENGINEER APPROVAL/DATE

[0006A/0066Z-59]

SHEET 1 OF 1
--------------

Lee Horn 05/25/83 SIP PROJECT ENGINEER APPROVAL/DATE

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 13-12-07-01
FIRE ZONE 3AA LOCATION Aux./Fuel Handling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, BA Storage Tank 1-1 Area
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: E-LF-3AA  Overhead Light fixture, (ball & socket joint).
TARGET: Tubing to Lt 104  Tubing to Lt 104
POSTULATED INTERACTION:  Fixture falls, impacts tubing near instrument panel 117
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly by Analysis
M. Jones 06/03/80_ WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E DWG. 050041, Detail 5. This fixture has been qualified by analysis per Calc. No. 52.24.52. No further action necessary. Resolved by analysis.
J. Swaim 03/28/83 G. C. Bhatt 03/38/83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [FE] EMS ENG GC HVAC I&C PSE NPO NAN

[0006A/0066Z-60]

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	_1_
-------	---	----	-----

POSTULATED INTERACTION NO.: 15-01-07-01	
FIRE ZONE 3-BB LOCATION Penetrati	on Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, mid-room.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE:	SOURCE CODE: SQ .
None.	
TARGET:	TARGET CODE: M-8923A+
Valves 8923A, FCV-356, 363.	, , , , , , , , , , , , , , , , , , ,
POSTULATED INTERACTION:	PHENOMENA CODE: MECHFAIL
Valve upperstructure is slender and uns loads.	upported, could fail under seismic
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	
Check qualification of valve 8923A, etc	. to ensure structural integrity.
M. Jones 04/29/80 WALKDOWN TEAM ORIGINATOR/DATE	,
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Upperstructure qualified by analysis.	See Resolution Report No. 16 and Calc's.
	•
	J. A. Ante 03/18/81
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE E	E EMS ENG GC HVAC ICC [PSE] NPO NAN
	L. W. Horn 09/30/82
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	SIP PROJECT ENGINEER APPROVAL/DATE

Chil

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 15-01-09-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, near containment penetration 50.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: Source CODE: P-2570-0.75 Spring hanger B268
TARGET: TARGET CODE: P-2570-0.75 Line 2570-3/4", SIS pump 1-1 Disch. test line.
POSTULATED INTERACTION:  Lateral deflection of spring hanger results in impact with line 2570.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add lateral support to spring hanger can by attaching to nearby steel to preclud impact with line 2570.
M. Jones 04/29/80 NALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Adding lateral support to spring hanger is not possible. Therefore the target (line 2570-3/4") is shield by modify of existing support DWG. 161-03 Rev. 3 and DWG. 049339 SHT. 129., which will resolve the interaction.
C. R. VanNatta 02/10/83  DISCIPLINE ENGINEER/DATE  J. A. Longworth 02/10/83  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAM

SW

, L. W. Horn 10/25/83 SIP PROJECT ENGINEER APPROVAL/DATE

M. Baker 08/02/83
FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS CNLY)

Í.

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 15-01-22-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Near wall 15.7, col. R, elev. 100
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead 3" pipe, rod supports 13 ft. OC, L1595 not insulated. 1/2" rods on U-Bolt, 1/2" hanger rod.
TARGET: Line 735, SI pump suction.  TARGET CODE: P-0735-8
POSTULATED INTERACTION:  Rod supports fail — do not meet B31.1 spacing requirements.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Analyze span to verify integrity of supports and/or piping.
M. Jones 04/29/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Rod supported qualified by <u>analysis</u> , see attached <u>Resolution Report No. 5</u>
A: Ante 10/24/80 A. Ante DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC PSE NPO NAN
L. W. Horn 09/30/82

FINAL - 0064Z/80

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS CNLY)

SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1_	OF	_1

POSTULATED INTERACTION NO	0.: 15-01-23-01	-
FIRE ZONE 3-BB 1	LOCATION Penetration Ar	reas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE .Elev. 100, between o		
IDENTIFICATION OF INTERAC	CTING COMPONENTS	
SOURCE: N <sub>2</sub> supply pipe.		SOURCE CODE: P-4082-1
TARGET: Valve 8804B.		TARGET CODE: 1-8804B
POSTULATED INTERACTION: N2 pipe falls on val removed.	lve 8804B due to absence	PHENOMENA CODE: SPTFAIL & PIPEFAI of U-bolt pipe supports which were
RECOMMENDED RESOLUTION BY Replace missing U-bo	Y WALKDOWN TEAM: olts to N <sub>2</sub> supply pipe.	
M. Jones 04/29/8 WALKDOWN TEAM ORIGINATOR/	/DATE	
FINAL RESOLUTION BY RESPO Supports 339-282R & interaction.		DCN DC1-SP-17700 to resolve this
E. L. Green 02/23/84 DISCIPLINE ENGINEER/DATE		K. M. Krause 03/20/84 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FO	OR RESOLUTION: CE EE EMS	s eng gc hvac isc [ <u>PSE]</u> npo na

Sini

L. W. Horn 05/15/84 SIP PROJECT ENGINEER APPROVAL/DATE

S. G. Chesnut 04/17/84
FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET	1	0F	1
V	•	•	•

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 15-01-29-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR FLEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Flev. 100, mid-room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: M-FCV363 Actuator to valve FCV-363.
TARGET: TARGET CODE: P-3849-4 Saf. Inj. line 3849-4".
PHENOMENA CODE: DFFLECT Actuator is touching line 3849, could damage pipe during seismic event.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Rotate valve or actuator away from line 3849.
M. Jones 04/29/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPIINE:  Valve FCV-363 rotated up 45°. Refer to sketch and Iso. Dwg. 14-13 mark-up, per DCN DC1-EP-5547, Rev. 1. Also see RLCA #10.
•
C. R. VanNatta 01/18/83 K. M. Krause 01/19/83  DISCIPI INE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPILINE RESPONSIBILE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAM
S. F. Traisman 08/24/83  FIELD VERIFICATION BY WALKDOWN TEAM  L. W. Horn 01/18/84  SIP PROJECT ENGINEER APPROVAL/DATE

and

(FOR MODIFICATIONS ONLY)

			•
SHEET	1	OF	1

POSTULATED INTERACTION NO · 15-01-101-01
POSTULATED INTERACTION NO.: 15-01-101-01
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Inside missile shield, elev. 91', loop 1-2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  2" drain line-overhead, socket welded (scupper drain from RCP drip pans).
<u>TARGET</u> :  Line 2000-3/4" S1 test line.  TARGET CODE: P-2000-0.75
POSTULATED INTERACTION:  2" line falls on line 2000 due to failure of hangers or mechanical couplings.  .
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add vertical support bracket to structural steel to preotect line 2000 from overhead falling pipe.
M. Jones 04/08/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Bilat support added over line 2000 to secure scupper drain pipe per ART 006.
R. W. Eschenburg 11/12/80  DISCIPLINE ENGINEER/DATE  S. Chitnis 07/24/84  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
M. Jones 02/24/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

SHEET	1	OF	1_

POSTULATED INTERACTION NO.: 15-01-101-02
FIRE ZONE 1-B LOCATION Containment FLOOR ELEVATION 104'-7"
LOCATION WITHIN FIRE ZONE: Elev. 110', near pressurizer.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Hanger rod clevis and attaching lugs of Class I hanger 52-3B.
TARGET:  Line 2000-3/4" - SIS accum. 2 test line.  TARGET CODE: P-2000-0.75
POSTULATED INTERACTION:  Clevis and lugs impact line 2000 due to close proximity.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Relocate line 2000 to preclude contact with hanger clevis and lugs.
M. Jones 04/08/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hanger rod has been modified where clevis & lug are no longer in contact with pipe. See ART 002.
R. W. Eschenburg 10/22/80 DISCIPLINE ENGINEER/DATE S. Chitnis 07/24/84 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
M. Jones 02/19/82  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS CALLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)					
POSTULATED INTERACT	ON NO.: 15-01-101-03	•			
FIRE ZONE 1-8	LOCATION <u>Containment</u>	FLOOR ELEVATION 110'-9"			
LOCATION WITHIN FIRE Elev. 110', nea					
IDENTIFICATION OF IN	ITERACTING COMPONENTS	•			
SOURCE: None.		SOURCE CODE: NS-MISC			
TARGET: Spring hanger N	Jo. 2180-7 to line 2000.	TARGET CODE: PS-2000-0.75			
POSTULATED INTERACTI Spring hanger i integrity.		PHENOMENA CODE: HOUSEKEEP t load, could compromise pipe			
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Set spring hanger to accomodate deadweight load.					
M. Jones 04/08/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Spring can hangar correctly set (see SIP walkdown No. 38 notes).					
		S. Harris 02/19/82			
DISCIPLINE ENGINEER	R/DATE	ENGR. GROUP SUPERVISOR/DATE			
DISCIPLINE RESPONSIE	BLE FOR RESOLUTION: CE EE	EMS [ENG] GC HVAC I&C PSE NPO NAN			

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

S. Harris 02/19/82
FIELD VERIFICATION BY WALKDOWN TEAM

' (FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELE DIABLO CANYON PLANT, SFISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTATI	UNIT NO. 1 INTERACTION PROGRAM
POSTULATED INTERACTION NO.: 15-01-112-01	<u> </u>
FIRE ZONE 1-A 1.OCATION Containment	FLOOR FLEVATION 91'-0"
I.OCATION WITHIN FIRE ZONE: Elev. 91', 315°, near containment wall.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Overhead copper tube, loosely supported ( apparatus).	SOURCE CODE: P-IAH-1A abandoned containment test pressure
TARGFT: 1.ine 249.	TARGET CODE: P-0249-0.75
POSTULATED INTERACTION: Tube lateral movement impacts pipe (line	PHENOMENA CODE: DEFLECT 249).
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Tube of insufficient mass to damage pipe completeness.	, however remove tube for
M. Jones 04/08/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Tube removed per work request No. C-443.	
B. Gragg 05/12/80 DISCIPLINE ENGINEER/DATE	F. Russel 05/13/80 ENGR. GROUP SUPERVISOR/DATE
DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE EE	
C F Tuniors - 00/10/00	I II Now- 00/20/20
S. F. Traisman 02/19/82  FIFID VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	SIP PROJECT ENGINEER APPROVAL/DATE

SHEET \_\_\_\_1 OF \_\_1

		Ĺ	DIABLO SEISMICALLY II	CIFIC GAS & ELEC CANYON PLANT, WOUCED SYSTEMS I CON DOCUMENTATION	TRIC CO. UNIT NO. 1 NTERACTION PROG	EFT1 OF1
POST	ULATED	INTERACT	TON NO.: 15-	-0111601		•
FIRE	ZONE	1-A	LOCATION	Containment	FLOOR ELEV	ATION 91'-0"
LOCA		THIN FIR 110, 180	RE <b>ZONE:</b> O, near pene	tration 51.		
IDEN	TIFICAT	TION OF I	INTERACTING C	OMPONENTS		·
SOUR		line, su	pported by 57	7N/127R hanger.	SOURCE CODE	: P-USB-1A
TARG		524 <b>–</b> 3/4	<u>'</u> .		TARGET CODE	: <u>P-0524-0.75</u>
POST	l.atera			ine impacts test 	PHENOMENA CON connection to	
RECO			ION BY WALKDO to 57N/9R har	DWN TEAM: nger to preclude	lateral movemen	nt of 1" line.
	DOWN TE L RESOL Pipe :	UTION BY	NATOR/DATE  **RESPONSIBLE dded per RICA	DISCIPLINE: Resolution Rep preclude impac	ort No. 4 and AF t with 1" N <sub>2</sub> pi	RT No. 135. Test pe.
DIS	CIPLIN	nes 07/1 E ENGINEE RESPONSI	R/DATE	LUTION: CE EE :		nte 07/14/80 P SUPERVISOR/DATE  VAC I&C [PSE] NPO NAN

02/23/84 M. Jones FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CALY)

I.. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	_1_
-------	---	----	-----

POSTULATED INTERACTION NO.: 15-01-116-02
FIRE ZONE 1-A LOCATION Containment FLOOR FLEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: 200°, Elev. 91, near containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  1" horizontal stainless line-primary water line.
TARGET:  Line 524 - 3/4" - safety injection test line.  TARGET CODE: P-0524-0.75
POSTULATED INTERACTION:  1" line reflects late rally, impacts line 524.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install seismic stop on support 56N/104R to reduce lateral reflection of 1" primary water line.
M. Jones 04/08/80  MALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Pipe support added per RLCA Resolution Report No. 4 and ART No. 135. Bilat support added.
M. G. Jones 07/14/80 DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAT
M. Jones 02/24/82 1. W. Horn 09/30/82  FIFILD VERIFICATIONS BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS CNLY)

SHEET	1	OF	3

POSTULATED INTERACTION NO.: 15-01-187-01
FIRE ZONE 3-BR   LOCATION   Penetration Area   FLOOR ELEVATION   100'-0"
LOCATION WITHIN FIRE ZONE:  Flev. 106', azimuth 152°, 3' from containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: Steel platform 103GF, elev. 106'-6".
TARGET:  Test connection valve handwheel (3/4" T-58 valve) and test connection cap off of line 1181- 3/4".
POSTULATED INTERACTION:  , Clearance between handhweel and platform approx. 1/8". Clearance between test connection cap and structure approximately 1/8". Relative motion between platform and piping causes impact/damage to piping.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Rework platform to provide 2" clearance.
S. F. Traisman 07/27/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPITNE:  Platform 103GE has been checked as a Class I structure due to attachment of Class I equipment. The platform has been qualified with modification. See Calcs.  No. 52.15.12.9. For modification see DCN No. DC1-EC-13109 RO. Also see TDS files
No. 24-181-01-01 for Field Verification Report and DCN DC1-EC-13109.
S. Gaballah 11/28/83  DISCIPITNE FNGTNFER/DATE  J. K. McCall 11/28/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] FF EMS ENG GC HVAC ICC PSE NPO NAN

1. W. Horn 04/20/84 SIP PROJECT EMGINEER APPROVAL/DATE

S. F. Traisman 02/24/84
FIFID VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS CALY)

SHEET		OF	
-------	--	----	--

POSTULATED INTERACTION NO.: 15-02-03-01			
FIRE ZONE 3-RR LOCATION Penetration Area FLOOR FLEVATION 100'-0"			
LOCATION WITHIN FIRE ZONE: Flev. 100', intersection of col. 15.7 & A.			
IDENTIFICATION OF INTERACTING COMPONENTS			
SOURCE:  2" galvanized line 3108.			
TARGET:  Electrical conduit K6497.			
POSTULATED INTERACTION:  Lateral deflection of 2" pipe impacts conduit K6497.			
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Verify that conduit K6497 is needed for shutdown.  2. If K6497 is needed for shutdown, add lateral restraint line 3108.			
M. Jones 05/07/80 WALKDOWN TEAM ORIGINATOR/DATE			
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Added U-bolt assembly per DCN DC1-F-M-702 and Resolution Report No. 3, Rev. 1.			
R. W. Eschenburg 07/02/80  DISCIPLINE ENGINEER/DATE  S. Chitnis 08/01/84  ENGR. GROUP SUPERVISOR/DATE			
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN			
S. F. Traisman 02/14/83  FIELD VERIFICATIONS ONLY)  S. F. Traisman 02/14/83  I. W. Horn 02/16/83  SIP PROJECT ENGINEER APPROVAL/DATE			

[0030A/00877-43]

SHEET 1 OF 1	
--------------	--

POSTULATED INTERACTION NO.: 15-02-06-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR FLEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Adjacent to panel PM-82 $\simeq$ 4" from containment wall at azimuth 160°.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Battery operated light fixture and its assoc. power conduit.
TARGET:  Inst. tubes to FT-922 (SI pump discharge).  TARGET CODE: I-FT922
POSTULATED INTERACTION:  Light fixture mounting fails fixture pulls its conduit off the wall and conduit damages adjacent target inst. tubes.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Reroute conduit to preclude interaction or replace existing light fixture with qualified (seismic Class I) fixture.  Note: This IDS is a result of SIP review of DCN DC1-FE-17081.
S. Skochko 01/18/84 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Reroute conduit as shown to preclude postulated interaction (see ART 478). ART 478 has been superceded by ART 532. Resolved by modification.
C. Wong 05/23/84  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC ICC PSE NPO NAN

S. Skochko 06/08/84
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

I. W. Horn 06/25/84 SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & EI DIABLO CANYON PLAN SEISMICALLY INDUCED SYSTEM: INTERACTION DOCUMENTA	T, UNIT NO. 1 S INTERACTION PROGRAM
POSTULATED INTERACTION NO.: 15-03-01	
FIRE ZONE 3-M LOCATION Safety Relation	ted Pump FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85. area K. near safety injection	pump 1—1 ·
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: RHR HXII to SI pump suction	SOURCE CODE: P-ULB-3M
<u>TARGET</u> : K9396	TARGET CODE: E-K9396-1.25
POSTULATED INTERACTION:  The pipe restraints allow 1 1/2" of def.  3/4" away (rigidly supported)	PHENOMENA CODE: DEFLECT lection while the conduits is
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of K9396 by shimming the and thermal movements to acceptable levels.	
F. Denison 6/16/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The "as-built" condition indicated in ha	anger Dwg. 049279 Sheet 133 and
143 Tes. Doc. 4121-0042 satisfactorily	resolves this interaction.
C. R. Van Natta 02/28/83 DISCIPLINE ENGINEER/DATE	K. M. Krause 03/01/83 ENGR. GROUP SUPERVISOR/DATE

M. Baker 03/02/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

I.. W. Horn . 9/19/83 SIP PROJECT ENGINEER APPROVAL/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

SHEET	1	OF	1.

1.	

POSTULATED INTERACTION NO.: 15-03-03-02			
FIRE ZONE 3-M LOCATION Safety Related Pump FLOOR ELEVATION 85'-0"			
LOCATION WITHIN FIRE ZONE: Elev. 85, erect near Safety Injection Po	ump 1-1.		
IDENTIFICATION OF INTERACTING COMPONENTS	•		
SOURCE: RHR HX 1-1 to SI PP Suct.	SOURCE CODE: NS-T		
TARGFT: Conduit K9396	. TARGET CODF: E-K9396-1.25		
POSTULATED INTERACTION:  The uninsulated pipe is 3/4" away from he the conduit.	PHENOMENA CODE: FNVTRON  (9396. Postulated heat damage to		
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of wires inside K9396, clearance.	insulate, or provide additional		
Fdward Dennison 06/16/81 WALKDOWN TEAM ORIGINATOR/DATE			
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Resolved per analysis described in RLCA	Report No. 59.		
E. Dennison 12/10/81 DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	R. I Cloud 12/10/81 ENGR. GROUP SUPERVISOR/DATE EMS [ENG] GC HVAC I&C PSE NPO NAN		
FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 03/23/83 SIP PROJECT ENGINEER APPROVAL/DATE		

(FOR MODIFICATIONS ONLY)

	SHEET1 OF1
PACIFIC GAS & FLECT	
DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT	
SELISTICALLY INDUCED SYSTEMS IN	
	1
POSTULATED INTERACTION NO.: 15-08-03-01	
FIRE ZONE 3-M LOCATION Safety Related	Pump FLOOR FLEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85', area K, near safety injection pun	np 1-2.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Construction deficiency.	SOURCE CODE: NS-CD
TARGET: Conduit K9240.	TARGET CODE: E-K9240-1.25
POSTULATED INTERACTION:  Poor connection from flex to valve (89748).	PHENOMENA CODE: HOUSEKEEP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Repair connection.	,
E. Denison 06/10/81 WALKDOWN TEAM ORIGINATOR/DATE	• •
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Flex conduit K9240 replaced per ART 167.	
•	•
DISCIPLINE ENGINEER/DATE	A. G. Barta 07/16/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RÉSPONSIBLE FOR RESOLUTION: CF. FF. FMS	
•	

I.. W. Horn 10/29/82 SIP PROJECT ENGINEER APPROVAL/DATE

[0028A/0082Z-26]

S. E. Traisman 08/31/82
FJFLD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

SHEET1 OF _	1.
-------------	----

	POSTULATED INTERACTION NO.: 15-09-05-01
	FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
	LOCATION WITHIN FIRE ZONE: Elev. 100', 8' east of S,9' north of 15.7.
	IDENTIFICATION OF INTERACTING COMPONENTS
•	SOURCE:  2" fire protection line above.  SOURCE CODE: P-SPR-3BB
	TARGET: TARGET CODE: E-K6341-3  Conduit K-6341 (3") @ BJG 169.
•	POSTULATED INTERACTION:  PHENOMENA CODE: SPTFAIL  Fire protection line has not been upgraded and has a long run with only threaded fixed end rod hangers.
	RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add a rigid restraint near BJG 169.
	R. L. Cloud 06/09/81 WALKDOWN TEAM ORIGINATOR/DATE
	FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Pipe supports added to resolve interaction. See Hanger DWG 049339 Sht. 293 & 329  Rev. 1, in generic DCN-DC1-EP-5061 and pipe support DWG NO. SPR-729, Rev. 1.
	C. R. VanNatta 03/21/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 03/21/83  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC IEC [PSE] NPO NAN
	S. E. Traisman 09/21/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS CNLY)

SHEET 1 OF 1
--------------

POSTULATED INTERACTION NO.: 15-14-02-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: 7' east of L and 11' north of Col. 15.7, area GE-GW.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-1046-6  Line K-1046-6" (STM blowdown TK overflow), (runs E - W).
TARGET:  Air line to valve 8883 (Safety Inj. test line), (runs vertically from valve to ceiling).
POSTULATED INTERACTION:  Source undergoes lateral deflection and impacts target line. 2" + gap between source and target.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Reroute target line to preclude interaction.
S. Skochko 02/22/84 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Reroute air line to valve 8883. Air line to be rerouted per the directions of G  Construction and supported in compliance with PG&E DWG 049238. Local reroute of air line to valve 8883 will preclude interaction between line K-1046-6" and the air line associated with valve 8883.  Note: This interaction is a result of final SIP area walkdown.
S. Skochko 03/16/84 D. R. Warren 03/20/84  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [IEC] PSE NPO NAN
S. L. Harris 02/23/84 L. W. Horn 07/03/84  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS CMLY)

CHECKED AUG 0 9 1984 [0014A/0079Z-19] OK

SHEFT	1	OF	_1

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 15-15-02-02
FIRE ZONE 3-R-2 .LOCATION Safety Related Pump FLOOR ELEVATION 64'-0"
LOCATION WITHIN FIRE ZONE:  Flev. 64, (N, 16:), near RHR PP 1-2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Insulated sump pump 1-3 discharge.  SOURCE CODE: NS-T
TARGET:  K8545 and K8587 conduit.  TARGET CODE: F-K8545+
POSTULATED INTERACTION:  1/2" clearance and insulation missing in local area (postulated heat damage).
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Finsure integrity of the conduits.
Edward Dennison 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Resolved by analysis described in RLCA Resolution Report #41.
S. Motiwalla 08/26/81  DISCIPLINE ENGINEER/DATE  R. 1. Cloud 08/28/81  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CF. EF. EMS [FNG] GC HVAC I&C PSE NPO NAN
FIFI D VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

- ·			
SHEET	1	OF	1
J111111		VI.	

POSTULATED INTERACTION NO.: 15-15-02-03
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'
LOCATION WITHIN FIRE ZONE:  9' east of col-L, 15' north of 15', area GW.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-1750-8 Line K-1750-8", Aux. Steam Supply HDR.
TARGET:  Conduit K6482-1 1/4 (orange) power to valve 8802A between SI PPS and RCS loops 1 and 2.
POSTULATED INTERACTION:  Source line is supported for dead weight loads with trapeze type hanger which provide little resistance to lateral loads. Lateral motion of line K-1750-8 results in impact with target conduit existing clearance is 3 1/4".
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify that the deflection of source line is less than existing clearance at interaction points. If necessary provide seismic stop to prevent source line fr impacting target. Alternatively, locally reroute conduit and coord with IDS. No 18-01-17-01.
S. Chesnut 02/22/84 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  DC1-SP-19878 (support 339-401R) was issued to resolve this interaction.  (TDS 18-O1-17-O3 was called out on both drawings, however by mistake)
E. G. Green 04/14/84 K. M. Krause 04/16/84 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Skochko 06/01/84  FIELD VERIFICATION BY WALKDOWN TEAM  (FOR MODIFICATIONS CALY)  1. W. Horn 06/18/84  SIP PROJECT ENGINEER APPROVAL/DATE

[0040A/0106Z-61]

SHEET	1_	OF	1_
SUCEI		UF	

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 15-18-02-01
FIRE ZONE 3-B-1 LOCATION Safety Related Pump FLOOR ELEVATION 58'-0"
LOCATION WITHIN FIRE ZONE: . Elev. 58, area H (16 <sup>8</sup> ), near RHR Pump 1—1 and RHR Sump Pump.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  RHR sump pump discharge line vent.
TARGET: TARGET CODE: F-K6661+ Conduits K6661 and K6635
POSTULATED INTERACTION:  3/4" clearance between K6661 and the source.
2" clearance hetween K6635 and the source (postulated heat damage).
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of K6661 and K6635 or reroute the conduits.
Fdward Dennison 06/04/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by analysis described in RLCA Report #40.
S. Motiwalla 08/26/81  DISCIPI INE ENGINFER/DATE  R. I Cloud 08/28/81  ENGR. GROUP SUPERVISOR/DATE  DISCIPI INE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO
NAN

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1 OF 1 CTRIC CO. UNIT NO. 1 INTERACTION PROGRAM ON SHEET (IDS)
FLOOR ELEVATION 91'-0"
SOURCE CODE: H-E15
TARGET CODE: 1-8878D
PHENOMENA CODE: SPTFAIL n shear, resulting in unit sliding into
. skid to preclude movement of unit.
e No. 03-35-02-02.
D. H. Hagstrom ENGR. GROUP SUPERVISOR/DATE

#### PACIFIC GAS & ELEC DIABLO CANYON PLANT, SEISMICALLY INDUCED SYSTEMS 1 INTERACTION DOCUMENTATIO

POSTULATED INTERACTION NO.: 15-31-01-01

FIRE ZONE 1-A	_ LOCATION _	Containment	FLOOR ELEVATION	91'-0"
LOCATION WITHIN FIRE Zo		., 270°.		
IDENTIFICATION OF INTE	RACTING COMP	PONENTS		
<u>SOURCE</u> : Iodine removal un	it E-15.		SOURCE CODE: H-	E15 `
TARGET: Valve 8878D.			TARGET CODE: I-	-8878D
POSTULATED INTERACTION  Iodine removal un  valve 8878D.	: it mounting	bolts fail in	PHENOMENA CODE: Shear, resulting in	PTFAIL nunit sliding into
RECOMMENDED RESOLUTION Install hold-down	BY WALKDOWN clamps to u	<u>I TEAM</u> : unit mounting s	kid to preclude mov	rement of unit.
M. Jones 08/1 WALKDOWN TEAM ORIGINATE FINAL RESOLUTION BY RE Bolts qualified b	OR/DATE SPONSIBLE DI		No. 03-35-02-02.	•
DISCIPLINE ENGINEER/D DISCIPLINE RESPONSIBLE		TION: CE EE E	D. H. Hagstro ENGR. GROUP SUP MS ENG GC [HVAC]	PERVISOR/DATE
FIELD VERIFICATION BY (FOR MODIFICATIONS ONL		<del>vn</del>	L. W. Horn SIP PROJECT ENGINEE	O9/10/82 R APPROVAL/DATE

SHEET	1_	OF	1
-------	----	----	---

ŕ	POSTULATED INTERACTION NO.: 15-32-05-02
	FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
	LOCATION WITHIN FIRE ZONE: Elev. 117', col. 7 at BTX12E, DWG 57687.
:	IDENTIFICATION OF INTERACTING COMPONENTS
3	SOURCE: SOURCE CODE: C-GRATING Floor grating.
•	TARGET: Conduit K1741-2".  TARGET CODE: E-K1741-2
į	POSTULATED INTERACTION:  PHENOMENA CODE: INTERFERE & DEFLECT  Floor grating close to conduit and could impact if movement occurred.
į	RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Provide clearance between floor grating and conduit.
ī	J. F. Grant 09/17/80 WALKDOWN TEAM ORIGINATOR/DATE
į	FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  2" clearance provided between floor grating and conduit, per ART No. 033.
-	S. Hanusiak 01/16/81 E. P. Wollak DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
ξ	DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
	M. Jones 02/17/82 L. W. Horn 09/30/82

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS CALY)

SHEET	1_	OF	1
-------	----	----	---

POSTULATED INTERACTION NO.: 15-48-02-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, area GW, H line.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-0556-16  SG1-4 FW supply L5567-16".
TARGET:  K6494 and KT628 conduit.  TARGET CODE: E-K6494+
POSTULATED INTERACTION:  The pipe is allowed to move longitudinally. The lateral restraint, 3/8" from the conduits, pins targets against the wall.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of the conduits by analysis of both seismic and thermal effects on the steam line.
Edward Denison 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Pipe qualified by analysis. See Resolution Report No. 38.
C. R. VanNatta 06/21/84  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE



SHEET	1	OF	1	

POSTULATED INTERACTION NO.: 16-02-03-01
FIRE ZONE 3-Q-1 LOCATION Safety Related Pump Room FLOOR ELEVATION 110'
LOCATION WITHIN FIRE ZONE: E1, 110', above auxiliary FW pump 1-1
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-USB-3Q1 Temporary line (copper)
TARGET:  Conduits KT948 - 1 "  TARGET CODE: E-KT948-1
POSTULATED INTERACTION:  Temporary line is poorly supported and could fall, impacting conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Provide adequate restraint or remove line prior to operation.
P. Anderson 06/09/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Judgement made during field walkdown is that source, 1-1/2" copper line, cannot develop enough kinetic energy to damage target. (Ref. SIP manual, Appendix B, page B-17, L-14). Therefore no action necessary.
C. R. Van Natta 07/28/83 DISCIPLINE ENGINEER/DATE  K. M. Krause 08/3/83 ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAM
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

SHEET 1 OF 1

## PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED	INTERACTION	NO.:	16-02-03-02

FIRE ZONE 3-Q-1 LOCATION Safety Related Pump FLOOR ELEVATION 100'-0"

LOCATION WITHIN FIRE ZONE:

Above elev. 100; Aux. FW Pump 1-1

IDENTIFICATION OF INTERACTING COMPONENTS

SOURCE:

SOURCE CODE: P-0220-4

220-4" (See ISO. DWG. 16-63 Rev. 0)

TARGET: TKT948 TARGET CODE: E-KT948-1

POSTULATED INTERACTION:

PHENOMENA CODE: DEFLECT

There exists 1" vertical clearance between source pipe and conduit. Source pipe is well supported but small clearance is midspan and could hit conduit.

RECOMMENDED RESOLUTION BY WALKDOWN TEAM:

By analysis show deflection of pipe insufficient to hit conduit.

Paul Anderson 06/09/81
WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

\*Supports added per DCN-DC1-EP-5061 DWG. 049229, Sheets: 17 & 66, (299-14R& 62R) \*See Calc. #4.75 (IDS # 16-02-03-02). I have made a Field Inspection and determined that the line which is marked 4378 is incorrectly marked. It should be marked 220 as shown on ISO. DWG. 16-63 Rev. O. Deflection of line 220 is insufficient to hit conduit KT 948 for the following reasons:

- 1. Analysis by E. L. Green shows that movement at the point near conduit KT948 is less 1" and therefore will not contact KT948.
- 2. New supports 299/14R & 62R have been added to line 220 to satisfy stress requirements.

C. R. Van Natta 09/22/83 DISCIPLINE ENGINEER/DATE K. M. Krause 09/22/83
ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

G. Zaharoff 02/10/84
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS CNLY)

Lee Horn 04/20/84
SIP PROJECT ENGINEER APPROVAL/DATE

Sal

SHEET	Т	1	OBF	1

POSTULATED INTERACTION NO.: 16-02-03-03	· 
FIRE ZONE 3-A LOCATION Aux./Fuel Hand	ling FLOOR FLEVATION 100'-0"
1.OCATION WITHIN FIRE ZONF: Flev. 100, (U-V, $15^7 - 16^8$ ), on ceiling.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: 7" L hut relief line outlet.	SOURCE CODE: NS-T
TARGET: Conduit KT510-1.50.	TARGET CODE: E-KT510-1.50
POSTULATED INTERACTION:  Postulated heat damage to KT510 by the outle between the outlet and conduit is 4 ft.	PHENOMENA CODE: ENVIRON etDexhaust. The clearance
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure the integrity of KT510 by analysis.	
Edward Dennison 07/08/81 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Resoved by analysis described in RLCA Repor	t #41.
S. Motiwalla 08/26/81 DISCIPLINE ENGINFER/DATE	R. L. Cloud 08/28/81  ENGR. GROUP SUPERVISOR/DATE
DISCIPILNE RESPONSIBLE FOR RESOLUTION: CE EE E	MS <u>[ENG]</u> GC HVAC I&C PSE NPO NAN
	I W. Horn 11/02/82 SIP PROJECT ENGINFER APPROVAL/DATE

SHEET	1	<b>OF</b>	1	

INTERNATION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 16-04-03-02
FIRE ZONE 3-R LOCATION Aux./Fuel Handling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: EL 115' COLS 11 and V
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Misc. Rolling equipment in corridor.  SOURCE CODE: N-MISC-3R
TARGET: TARGET CODE: E-KT980-1 Conduit KT 980-1"
POSTULATED INTERACTION:  Misc equipment in corridor rolls/slides into conduit. Conduit runs vertically through corridor at wall.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Relocate or anchor misc. equipment in corridor that will be present during planty operation. Or: Install guard structure around conduit.
S. E. Traisman 04/24/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Protective barrier provided per ART 492. See Resolution Sheet and Calc. 01-04-03-02.
S. Gaballah 01/09/84  DISCIPLINE ENGINEER/DATE  J. K. McCall 01/09/84  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
S. G. Chesnut 04/18/84  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS CALY)

SHEET	1	OF	1	

POSTULATED INTERACTION NO.: 16-04-03-03
FIRE ZONE 3-R LOCATION Aux./Fuel Handling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elevation 115' Cols 11 and V.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  CO2 fire ext. FE-F115-02-1.
TARGET: Conduit KT-980-1".  TARGET CODE: E-KT980-1
POSTULATED INTERACTION:  Fire ext comes off hook, nozzle breaks off, and fire ext. becomes a missile which impacts conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Clamp fire ext in place with a quick release mechanism.
S. E. Traisman 07/21/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Quick release mechanism provided per ART 373. See IDS file 01-19-02-07 for modification package.
J. Haake 05/02/83 J. Longworth 05/03.83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NAM
S. E. Traisman 02/24/84  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS CNLY)

1.1.8. 8/28/84

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)	
POSTULATED INTERACTION NO.: 16-04-03-05	
FIRE ZONE 3-R LOCATION Aux./Fuel Handling FLOOR ELEVATION 115'-0"	
LOCATION WITHIN FIRE ZONE: EL 135' Cols 14 and 11 along cask decon area wall.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: SOURCE CODE: C-CRANE-3R  Misc Appurtenances mounted on fuel HDL Bldg crane.	
TARGET: Conduit KT 980-1".  TARGET CODE: E-KT980-1	
POSTULATED INTERACTION:  Appurtenances fall off of crane and impact conduit.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of misc. appurtenances.	
S. E. Traisman 07/21/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Provide protective barrier over conduit KT 980-1". See ART No. 405, ART No. 5 and Calc. 16-04-03-05.	00
S. Gaballah 11/21/83 DISCIPLINE ENGINEER/DATE  J. K. McCall 11/28/83 ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO No.	AN

l. W. Horn

06/04/84

SIP PROJECT ENGINEER APPROVAL/DATE

S. G. Chesnut 05/22/84

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET	1	0F	1

#### PACIFIC GAS & ELECTRIC CO. 'DIABLO CANYON PLANT, UNIT NO. 1 SEISHICALLY INDUCED SYSTEMS INTERACTION PROGRAM,

THICKNOITON DOCUMENTATION SHEET (IDS)	
POSTULATED INTERACTION NO.: 16-05-05-01	
FIRE ZONE 31 LOCATION <u>Aux./Fuel Handling</u> FLOOR ELEVATION <u>110'-0"</u>	
LOCATION WITHIN FIRE ZCNE: Elev. 110' Col Lines V and 12.9	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: SOURCE CODE: C-RSM-31 RWST, Pipe Vault Structure, and Aux. Bldg. Structure	
TARGET:  Line 221-18" RWST to ECCS Pumps suction  TARGET CODE: P-0221-18	
PHENOMENA CODE: RELSTRUCT  Piping is anchored to RWST, Supported off of pipe vault structure between RWST and Aux. Bldg., and supported off of Aux. Bldg. structure. The three structures have different seismic responses. Relative motion between structures damages piping.	(
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify relative motion between the three structures does not damage piping  •	
S. E. Traisman 08/15/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  As a rule for all seismic Class I piping, relative motions between pipes and Flex. equipment, pipe in different buildings is considered in the pipe stress analysis calculations.  For the above identified target, SAM (Seismic Anchor Motion) has been considered.	
MR. Tresler (D.C. Unit 1, Stress Group)  DISCIPLINE ENGINEER/DATE  K. M. Krause 07/08/83  ENGR. GROUP SUPERVISOR/DATE	
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO N	AN
· ·	
FIELD VERIFICATION BY WALKDOWN TEAM  L. W. Horn 108/04/83  SIP PROJECT ENGINEER APPROVAL/DATE	1

(FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIARLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)	
POSTULATED INTERACTION NO.: 17-01-01	
FIRE ZONE 3-H-1 LOCATION Safety Related Pump FLOOR ELEVATION 73'-0"	
LOCATION WITHIN FIRE ZONE: Charging pump room, elev. 73'.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Crane trolley overhead.  SOURCE CODE: C-CRANF-3H1	
TARGET: Line 1973-6" Boron ins. line.  TARGET CODE: P-1973-6	
POSTULATED INTERACTION:    I.ongitudinal movement of crane trolly causes trolly hanger bracket to contact line 1973.	ıe
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add restraint to trolley by installing shear plate to wall located about 2' feet from line 1973.	
M. Jones 04/29/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSTRIE DISCIPLINE:  Sway bracing has been added per DCN DCO-GC-2382, DCO-GC-2385, DC1-GC-2415 & DWG 59652, 512482, 29654. See resolution sheet and Calc. No. 17-01-01-01.	
S. Hanusiak 04/06/81  DISCIPLINE ENGINFER/DATE  ENGR. GROUP SUPERVISOR/DATE	
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN	
S. F. Traisman 09/01/82 L. W. Horn 11/08/82	

SIP PROJECT FNGTNEER APPROVAL/DATE

FIFI.D VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

2012E1OLT	SHEET	1	OF	1
-----------	-------	---	----	---

POSTULATED INTERACTION NO.: 17-01-05-01	•
FIRE ZONE 3R3 LOCATION Auxiliary Ruild	ing FLOOR FI EVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Flev. 73', Bit Room.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Overhead 1" Line #994	SOURCE CODE: P-0994-1
TARGET:	TARGET CODE: I-8803A
Valve 8803A Power and Control Cable	
POSTULATED INTERACTION:	PHENOMENA CODE: DEFLECT
Lateral movement of overhead 1" Line impacts	valve cable.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	
Install lateral restraint to Line 994 by rem valve 8803R and installing bracket from ceil U-bolt pipe to bracket.	oving rod hanger near ing plate to Line 994.
M.J. Jones 04/30/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
Added support by Generic DCN-DC1-EP-5061-PRO-	-HGR. DWG. 049339-339/270R.
C. R. Van Natta 07/21/83 DISCIPLINE FNGINFER/DATE	K. M. Krause 07/21/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EM	S ENG GC HVAC ICC [PSE] NPO NAN

10/25/83

L. W. Horn

SIP PROJECT FAGTAFER APPROVAL/DATE

S. E. Traisman 09/21/83

FIFI.D VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

~	•	Λ.	4
SHEET		LAT-	

#### PACIFIC GAS & ELECTRIC CO.

#### DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 17-01-06-01
FIRE ZONE 3-B-3 LOCATION Aux./Fuel Handling FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Elev. 73, BIT room
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-0994-1"  Overhead 1" line 994
TARGET:  Valve 8803B power and control cable
POSTULATED INTERACTION:  Lateral movement of overhead 1" line impacts valve cable.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install lateral restraint to line 994 by removing rod hanger near valve 8803B and installing bracket from ceiling plate to line 994. U-bolt pipe to bracket.
M. Jones 04/30/80 WALKDOWN TEAM ORIGINATOR/DATE

C. R. VanNatta 07/21/83
DISCIPLINE ENGINEER/DATE

K. M. Krause 11/16/83
ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE NPO NAN

S. E. Traisman 09/23/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

See IDS No. 17-01-05-01.

L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE



SHEET	1	OF	1

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 17-01-08-02
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, near penetrations 25 & 50.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-388  Structural platforms (2).
TARGET:  Line 2033-4 and other Class I components.  TARGET CODE: P-2033-4
Platforms fall, impact line 2033, etc.  Platforms fall, impact line 2033, etc.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of ladder by simplified analysis.
M. Jones 04/29/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The platforms have been seismically qualified by analysis. See attached resolution sheet and referenced Calc. No. 09-15-01-01, 17-01-08-02.
S. Hanusiak 01/30/81 DISCIPLINE ENGINEER/DATE  E. Wollak ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
L. W. Horn 08/23/82 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

i.

(FOR MODIFICATIONS ONLY)

F0011A/0072Z-40]

SHEET	1_	OF	_1_
-------	----	----	-----

THIERHOITON DOCUMENTH	ION SHEET (IDS)
POSTULATED INTERACTION NO.: 17-01-08-03	
FIRE ZONE 3-88 LOCATION Panetration	Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85', mid-room.	· · ·
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead abandoned pipe hanger.	SOURCE CODE: NS-CD
TARGET: 1.ine 2033-4".	TARGET CODE: P-2033-4
POSTULATED INTERACTION: Hanger falls, impacts line 2033.	PHENOMENA CODE: HOUSEKEEP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove abandoned pipe hanger.	
M. Jones 04/29/80 WALKDOWN TEAM ORIGINATOR/DATE	_
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Removed pipe hanger as stated in RLCA re	eport No. 17.
P. Anderson 11/11/81 DISCIPLINE ENGINEER/DATE	R. L. Cloud 11/12/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	EMS ENG [GC] HVAC ICC PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 05/25/83 SIP PROJECT ENGINEER APPROVAL/DATE
(FOR MODIFICATIONS ONLY)	

[0030A/0087Z-18]

SHEET	1	OF	1
~	-	· ·	_

INTERNACION DOC	OURSIGNITOR SHEET (TD2)
POSTULATED INTERACTION NO.: 17-01-22-	01 .
FIRE ZONE 1-A LOCATION Cont	ainment FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Penetration 21, elev. 110.	
IDENTIFICATION OF INTERACTING COMPONEN	TS .
SOURCE: 1" N2 supply line.	SOURCE CODE: P-USB-1A
TARGET: / 1 - 1/2" line 1992 (loop 2 boron	<u>TARGET CODE</u> : P-1992-1.5
POSTULATED INTERACTION: 1" N <sub>2</sub> line contacts line 1992.	PHENOMENA CODE: INTERFERE & DEFLECT
RECOMMENDED RESOLUTION BY WALKDOWN TEAM Add U-bolts to existing support no line.	1: ear contact point to preclude movement of N2
M. Jones 04/16/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPL Pipe support modified per RLCA Res	<u>INE</u> : solution Report No. 4 and ART #135.
M. Jones 07/14/80 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION:	J. A. Ante 07/14/80  ENGR. GROUP SUPERVISOR/DATE  CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN
M. Jones 02/23/82 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY)	L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

[0032A/0074Z-33]

PACIFIC GAS & ELECTI DIABLO CANYON PLANT, U SEISMICALLY INDUCED SYSTEMS IN INTERACTION DOCUMENTATION	NIT NO. 1 TERACTION PROGRAM
POSTULATED INTERACTION NO.: 17-01-22-04	
FIRE ZONE 1-8 LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91, under loop 2 cold leg.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:	SOURCE CODE: NS-CD
TARGET: Boron in injection line 1992-1 1/2".	TARGET CODE: P-1997-1.50
POSTULATED INTERACTION: A scaling of the pipe surface near a socket	PHENOMENA CODE: HOUSEKEEP FNVTRON weld coupling was observed.
•	•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Penetrant test this portion of the pipe to e	oncura nina integritu
renetiant test this portion of the pipe to t	
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Pipe qualified, see Examination Report 411-6 July 14, 1980.	30.226.
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 08/20/82 SIP PROJECT ENGINEER APPROVAL/DATE

DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [ENG] GC HVAC I&C PSE NPO NAN

T.	SHEET1 OF1
PACIFIC GAS & EL	· · · · · · · · · · · · · · · · · · ·
DIABLO CANYON PLANT SEISMICALLY INDUCED SYSTEMS	
INTERACTION DOCUMENTAT	
POSTULATED INTERACTION NO.: 17-01-58-01	•
FIRE ZONE 3-RR LOCATION Aux./Fuel H	andling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE:	
Along RWST, south face, elev. 115'.	
,	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:	SOURCE CODE: C-LADDER
Condensate storage tank access ladder an	
<u>-</u>	
	·
TARGET:	TARGET CODE: P-2641-4
Line 2641-4".	
- No. 7	
POSTULATED INTERACTION:	PHENOMENA CODE: SPTFAIL
Ladder falls, impacts line 2641.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	i e
Ensure integrity of ladder/cage assembly	by simplified analysis.
•	
•	
	· ·
M. Jones 06/04/80	
HALKDOWN TEAM ORIGINATOR/DATE	
FINAL_RESOLUTION BY RESPONSIBLE DISCIPLINE:	
Ladder/cage qualified by analysis. See	Calc. No. 17-01-58-01.
	•
•	
S. Hanusiak 08/08/81	V. J. Ghio 08/08/81
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	FMS FMG GC HVAC TEC DSF NPO NAS
JACTITUDE RESPONSABLE FOR RESOLUTION. [CE] EE	TO THE CO HAME THE LOT BEEN HUM

5-G 8/14/17 L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS CNLY)

SHEET	1	OF	1

	TRIERACITON	DOCUMENTALITON	SHEE! (IDS)		
POSTULATED INTERACT	ION NO.: 17-12	-0301			
FIRE ZONE 3-BB	LOCATION _	Penetration A	rea FLOOR E	LEVATION 100'-0"	_
LOCATION WITHIN FIRE	E <b>ZONE:</b> about azimuth 1	84°.			N
IDENTIFICATION OF I	NTERACTING COMP	ONENTS			
SOURCE: Fire protection	n pipe (possibl	e source)	SOURCE CODE	: P-SPR-3BB	_
TARGET: Conduit K6252			TARGET CODE	: <u>E-K6252-2.50</u>	
diffential dis	n pipe is suppo		nto the contai	DE: SPTFAIL & PIPEF nment and the GW ar lso anchor motion o	^ea
RECOMMENDED RESOLUTE Examine stress	<u>ION BY WALKDOWN</u> due to seismic				
R. L. Cloud 06/09					
FINAL RESOLUTION BY Pipe qualified	RESPONSIBLE DIS		Report No. 23.		
		•			
H\$K. Loey 07 DISCIPLINE ENGINEER	7/16/81 R/DATE			09/17/81 P SUPERVISOR/DATE	-
DISCIPLINE RESPONSIE	BLE FOR RESOLUT.	ION: CE EE E	MS ENG GC, H	AC ISC PSE NPO	NA
1					

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1 0	)F 1	
-------	-----	------	--

,				
POSTULATED INTERACT.	ION NO.: 17-2	4-04-01		•
FIRE ZONE 1-A	LOCATION	Containment	FLOOR ELEVATION 91'-	<u>o"                                     </u>
LOCATION WITHIN FIRE Elev. 113, at o		ll, 190°.		
IDENTIFICATION OF I	NTERACTING COM	PONENTS		
SOURCE: 3/4" conduits (	(3), running h	orizontally (KH-7	SOURCE CODE: E-R-1A 36, KH-603).	
	f containment	& annulus steel r	TARGET CODE: E-KX530-0.7 containment wall. Relati esults in KX-530 impacting	ve
POSTULATED INTERACT: Ensure that impaway from conta	act with sour	ce conduits will	PHENOMENA CODE: SPTFAIL not damage KX-530. Rerout	e KX-530
RECOMMENDED RESOLUTI	ON BY WALKDOW	N TEAM:	•	·
M. Jones 02/26				
<pre>steel would not</pre>	source conduits as a result damage eithers resolution	its are 3/4". Due of relative disp r target or source	e to similarity in mass, in lacement of containment & a e conduits. No further act us resolution dated 09/15/8	annulus Lion
R. J. Swaim 05/ DISCIPLINE ENGINEER	17/83 /DATE	-	G. C. Bhatt 05/17/83 ENGR. GROUP SUPERVISOR/DA	
DISCIPLINE RESPONSIB	LE FOR RESOLUT	TION: CE [EE] EMS	ENG GC HVAC I&C PSE	NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 08/04/83 SIP PROJECT ENGINEER APPROVAL/DATE

4

SHEET	1	OF	1
-------	---	----	---

#### PACIFIC GAS & ELECTRIC CO.

#### DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM

THIERMOITON DOCUMENTHIS	tom Sheet (IDS)
POSTULATED INTERACTION NO.: 17-25-06-01	<del></del>
FIRE ZONE 7-A LOCATION Electrical R	Rooms FLOOR ELEVATION 127'-4"
LOCATION WITHIN FIRE ZONE: Elev. 128', south of rack #24.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Fire Protection Piping (1-1/2" red).	SOURCE CODE: P-USB-7A
TARGET: K1072, K5794.	TARGET CODE: E-KT072+
POSTULATED INTERACTION:  Fire protection piping could fail due to	PHENOMENA CODE: SPTFAIL & PIPEFAIL threaded joints and excessive span
RECOMMENDED RESOLUTION BY WALKDOWN TEAM.  Ensure integrity of piping either by anal modification.	ysis r by providing support
P. Anderson 06/04/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Reslved per Hanger DWG 049339 Sht. 131 in	DCN DC1-EP-3606.
C. R. VanNatta 01/21/83 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	K. M. Krause 01/25/83 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 09/21/83	L. W. Horn 10/25/83

(FOR MODIFICATIONS ONLY) 0110Z/-17

SHEET1_	OF	
---------	----	--

POSTULATED INTERACTION NO.: 18-01-09-01	•
FIRE ZORE 3-R-3 LOCATION Aux./Fuel Handlin	ng FLOOR FI EVATION 63'-0"
LOCATION WITHIN FIRE ZOME: Column lines N/16, east wall of corridor between	een RHR pump rooms 1-1 & 1-2.
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Incandescent wall light fixture, detail 24 of	SOURCE CODE: F-LF-3R3 DWG 050041.
TARGET: Press. indic. PT-632 (RHR pump disch. press)	TARGET CODE: I-PI632 Lassociated instr. lines.
POSTULATED INTERACTION:  One mounting bolt attaching the light fixture fixture can break off & fall on the target in:	
RECOMPENDED RESOLUTION BY MAIKDOWN TEAM:  Install missing mounting bolt to light fixture	,
N. Barangan 02/23/84 WAI KIXOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
Install missing mounting bolt to light fixture Add missing mounting bolt to incandescent light shall match existing size and type. Retail 24 determined by walkdown team inspection to not	nt fixture. Mounting bolt has been previously be a concern if properly
installed. Resolved by modification. See ART	49% for details.
C. C. Wong 03/01/84  DISCIPITME FMGTMFER/DATE	C. Kahl 03/05/84  EMGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CF. [EF] EMS	
S. Chesnut 05/16/84	I. W. Horn 06/25/84
ETELD WEDTETCATTON BY HOLYDOLN TEAM STE	PROTECT EMCTMEED ADDROVAL (DATE

(FOR MODIFICATIONS CHLY)

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 18-01-09-02
FIRE ZONE 3-B-2 LOCATION Safety Related Pump. FLOOR ELEVATION 58'-0"
LOCATION WITHIN FIRE ZONE: West Wall of RHR Pump Room 1-2
IDENTIFICATION OF INTERACTING COMPONENTS
Source:  Spring can support #72-3V for line S1-1663-8, RHR exchs bypass cross tie
TARGET: PI-632 process tubing, RHR PP 1-2 suction  TARGET CODE: I-PI632
POSTULATED INTERACTION:  Thermal and seismic motion of both line S1-1663-8 and spring can support 72-3V cuases impact with target process tubing. Source spring can is in contact w/ target tubing (line S1-1663-8 is in hot condition.)
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Reroute process tubing to preclude interaction.
S. Chesnut 02/21/84 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Reroute 3/8 S.S. inst. tube associated with PI-632. See ART 493.
S. Skochko 02/29/84 DISCIPLINE ENGINEER/DATE  D. R. Warren 02/29/84 ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [IEC] PSE NPO NAN
ATOMIC TIME REPORTABLE LOW RESOURCE OF EE ELD ENG OF MANY TIPOT NEE WHO WHILE

L. W. Horn 06/13/84

SIP PROJECT ENGINEER APPROVAL/DATE

S. G. Chesnut 05/16/84

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	0F	1
-	-	~.	4

POSTULATED INTERACTION NO.: 18-01-13-01	
FIRE ZONE 3-8-1 LOCATION Safety Related	Pump FLOOR ELEVATION 58'-0"
LOCATION WITHIN FIRE ZONE: Elev. 58, under stairways leading to RHR Pu	ump Rooms
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Stairways leading to RHR Pump Rooms	SOURCE CODE: C-STAIR-381
TARGET: Line 1663-8" RHR Pump discharge cross tie	TARGET CODE: P-1663-8
POSTULATED INTERACTION: Stairways fall, impact pipe	PHENOMENA CODE: SPTFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of stairsway by simplified	analysis
M. Jones 12/10/80 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Stairways qualified by Analysis, see Resolu 18-01-13-01.	tion sheet and Calc's. No.
S. Hanusiak 03/20/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak 03/20/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	MS ENG GC HVAC ILC PSE NPO HAN
•	L. W. Horn 08/23/82

5:6 7/28/24 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET	1	OF	1

THIERMCITOR DOCUMENTIATION	SALET (IDS)
POSTULATED INTERACTION NO.: 18-01-17-03	
FIRE ZONE 3-BB LOCATION Penetration Area	FLOOR ELEVATION 108'-2"
LOCATION WITHIN FIRE ZONE:  6' west of col. N, 15' north of col. 15 <sup>7</sup> , are	ea GW.
IDENTIFICATION OF INTERACTING COMPONENTS	· · · · · · · · · · · · · · · · · · ·
SOURCE: Line K-1750-8", aux. steam supply HDR.	SOURCE CODE: P-1750-8
TARGET: Line S1-985-12", RHR to RCS H.L. 1 and 2.	TARGET CODE: P-0985-12
POSTULATED INTERACTION:  Source line is supported for dead weight load provide little resistance to lateral loads. results in impact with target line. Existing	Lateral motion of line K-1750-8
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify that the deflection of source line is interaction points. If necessary provide se impacting target. Alternatively, coord with analysis on RHR line showing interaction is a	ismic stop to prevent source line fro IDS 15-15-02-03 and provide impact
S. Chesnut 02/22/84 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Two pipe supports were added to source line.  was issued to resolve this interaction.  Note: This interaction is a result of Final	
•	•
E. L. Green 04/13/84 DISCIPLINE ENGINEER/DATE	K. M. Krause 04/16/84 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	S ENG GC HVAC IEC [PSE] NPO NAN
S. Skochko 06/01/84  FIELD VERIFICATION BY WALKDOWN TEAM SI	L. W. Horn 06/21/84 IP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

SHEET	1	OF	_1_
		•	

POSTULATED INTERACTION NO.: 18-01-21-01	
FIRE ZONE 3-88 LOCATION Penetration	Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Near penetration wall, Elev. 100.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead light fixture.	SOURCE CODE: 'E-LF-388
TARGET: HCV638.	TARGET CODE: 1-HCV638
POSTULATED INTERACTION: Fixture falls, impacts HCV-638 actuator an	PHENOMENA CODE: FIXTURE d attached tubing,
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add support to fixture or modify existing	support (chain suspension).
M. Jones 04/30/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The above source light fixture has been fi be installed in accordance with PGSE Dwg. Install backup support chain per DCN DCO-F Resolved by modification. See ART 348.	050041, detail 8 (category I).
R. J. Swaim 02/23/83 DISCIPLINE ENGINFER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE]	G. C. Bhatt 02/23/83 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO NAN
S. F. Traisman OR/18/83 FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 09/09/83 SIP PROJECT ENGINEER APPROVAL/DATE

[0029A/0086Z-28]

(FOR MODIFICATIONS ONLY)

KyB

SHEET	1	OF	1
-------	---	----	---

THE CHIEF DOON LEGIT	100 0000 (200)
POSTULATED INTERACTION NO.: 18-01-23-01	
FIRE ZONE 3-BR . LOCATION Penetratio	n Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Near penetration wall, Elev. 100.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead light fixture.	SOURCE CODE: E-1 F-3RR
TARGET: Valve 8716A	TARGET CODE: I-8716A
POSTULATED INTERACTION:	PHENOMENA CODE: FIXTURE
Fixture falls, impacts value 8716A actua  RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add support to fixture or modify existing	
M. Jones 04/30/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPITNE:  The above source light fixture has been to the installed in accordance with PG&E Dwg Install backup support chain per DCN DCO-Resolved by modification. See ART 348.	. 050041, detail 8 (category II).
R. J. Swaim 02/23/84	G. C. Bhatt 02/23/84
DISCIPLINE FNGTNEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE]	] EMS ENG GC HVAC I&C PSE NPO NAN
S. E. Traisman 08/18/83	L. W. Horn 09/09/83

[0029A/00867-29]

(FOR MODIFICATIONS ONLY)

KEB

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 18-01-23-02
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, near outer wall, Col 15.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-ULB-3BB Overhead 1" and 1-1/2" lines (4604 & 1450) and 4" caustic line.
TARGET CODE: I-8716A  Valve 8716A.
POSTULATED INTERACTION:  Lateral movement of overhead pipe impacts power & control cable to valve 8716A motor operator.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Add lateral support to lines (caustic, 4604 & 1450), to preclude deflection.
M. Jones 04/30/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hanger drawing 049339-339/344R issued under Generic DCN DC1-EP-5061 will prevent all three pipes from interacting with valve 8716A motor operator and, thoreby, resolves this interaction. Field verification shows that line 4604 is incorrectly identified as line 3354 and 1-1/2" size of line 1450 is incorrectly shown as 2".
C. R. VanNatta 08/25/83 K. M. Krause 08/25/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC IEC [PSE] NPO NAN
•

S. E. Traisman 10/14/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

L. W. Horn 05/01/84
SIP PROJECT ENGINEER APPROVAL/DATE

CHECKED AUG 0 9 1984
[0014A/0079Z-20] OK

DIABLO CANYON SFISMTCALLY INDUCED S	SHFET 1 OF 1 AS & ELECTRIC CO. N PLANT, UNIT NO. 1 SYSTEMS INTERACTION PROGRAM MENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 18-01-24-0	01
FIRE ZONE 3-B-2 LOCATION Safet	ty Related Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Flev. 73', RHR HX1-2 room.	
IDENTIFICATION OF INTERACTING COMPONENT	rs
SOURCE: Platforms (2) at elev. 85' & 103"	SOURCE CODE: C-PLAT-3R2
TARGET: 1.ine 1661-8"; RHR bypass.	TARGET CODE: P-1661-8
POSTULATED JATERACTION: Platforms fall, impact line 1661.	PHENOMENA CODE: CIVII FATI
RECOMMENDED RESOLUTION BY WALKDOWN TEAM Ensure integrity of platforms by	
M. Jones 04/29/82 WAI KDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLE The platform has been seismically and referenced Calc. No. 11-01-01-	qualified by analysis. (See resolution sheet
A. M. Appleford 10/04/82 DISCIPLINE FNGTNFER/DATE	8. Sarkar 10/04/82 FNGR. GROUP SUPERVISOR/DATE
DISCIPITNE RESPONSIBLE FOR RESOLUTION:	[CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
FJFLD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 01/18/84 SIP PROJECT FACTNEER APPROVAL/DATE

SHEET	1_	OF	1
-------	----	----	---

	4	
	4	
7	/	<del>-</del> •,

POSTULATED INTERACTION NO.: 18-01-46-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 95, mid room, near valve 8734 B.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-1521-2 Stress
TARGET: Line 1662 at tie-in to line 1521.  TARGET CODE: P-1662-2
POSTULATED INTERACTION:  Existing pipe restraints do not allow for thermal movement of line 1662, resulting in a possible high stress situation.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Review thermal analysis of line 1662 to verify that stresses are within limits.
M. Jones 04/29/80 NALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Stresses are within limits per Calc. 10-301, Rev. 4 (07/13/83).
M. Dimalanta 07/27/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS [EMG] GC HVAC IEC PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

[0028A/0082Z-55]

Sill I VI I	SHEET	1	OF	. 1
-------------	-------	---	----	-----

POSTULATED INTERACTION NO.: 18-01-52-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 112, mid-room near ceiling.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Pipe hanger 57-25V.  SCURCE CODE: P-0224-8
TARGET:  Vent pipe to line 224-8'".  TARGET CODE: P-0224-8
POSTULATED INTERACTION:  Pipe hanger located near vent to line 224, could contact under seismic loads.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Shorten vent pipe downstream of root valve to provide clearance with hanger 57-25
M. Jones 04/29/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Vent pipe to be shortened as shown on sketch. See ART 347.
B. Abella 01/15/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 02/16/83  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman  L. W. Horn 02/03/84  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

SHEET	1	OF	<u>· 1</u>	
-------	---	----	------------	--

POSTULATED INTERACTION NO.: 18-01-88-01
FIRE ZONE 3-B-1 LOCATION Safety Related Pump FLOOR FLEVATION 73'-0"
LOCATION WITHIN FIRE ZONE:  Flev. 73;', RHR HX1-1 room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-3R1 Platforms (2) at elev. 85' & 103'.
TARGET:  Drain pipe & manual valve; RHR HX1-1 drain.  TARGET CODE: M-RHRHX1-1
POSTULATED INTERACTION:  Platforms fall, impact pipe and valve.  Phenomena code: CTVTI FAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platforms by simplified analysis.
M. Jones 05/05/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The platform has been seismically qualified by analysis. (See resolution sheet and referenced calc. No. 11-01-01-01)."
S. Gaballah 09/22/83 B. Sarkar 09/23/82 DISCIPLINE ENGINFER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPITME RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC IEC PSE NPO NAN
FIFI.D VFRIFICATION BY WALKDOWN TEAM  (FOR MODIFICATIONS ONLY)  SIP PROJECT ENGINEER APPROVAL/DATE

SEISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTAT	
POSTULATED INTERACTION NO.: 18-01-102-01	
FIRE ZONE 3-B-2 LOCATION Safety Rela	ated Pump FLOOR FI EVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Elev. 73', RHR HX 1-2 room.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platforms (2) at elev. 85' & 103'.	SOURCE CODE: C-PLAT-3R2
TARGET:   I.ine (drain) & manual valve to RHR HX 1-	TARGET CODE: M-RHRHX1-2
POSTULATED INTERACTION: Platforms fall, impact pipe valve.	PHENOMENA CODE: CIVILEATI
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platforms by simplify	fied analysis.
M. Jones 04/29/82 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	fied by analysis. (See resolution s
The platform has been seismically qualif and referenced Calc. No. 11-01-01-01).	
	8. Sarkar 10/04/82 ENGR. GROUP SUPERVISOR/DATE
and referenced Calc. No. 11-01-01-01).  A. M. Appleford 10/04/82	ENGR. GROUP SUPERVISOR/DATE

PACIFIC GAS & FLECTRIC CO.

SHFET 1 OF 1

SHEET1 OF1
l . N PROGRAM IDS)
•
OOR ELEVATION 117'-0"
•
CODE: C-GRATING
•
r code: E-K1741-2
- CODE
ENA CODE: INTERFERE & DEFLECT
movement occurred.
,
•

SIP PROJECT ENGINEER APPROVAL/DATE

#### PACIFIC GAS & ELECTRIC, CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION INTERACTION DOCUMENTATION SHEET (I

POSTULATED INTERACTION NO.: 18-02-03-01	•
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Flev. 117', col. 7 at RTX12F, DWG 57687.	•
IDENTIFICATION OF INTERACTING COMPONENTS	,
SOURCE: Floor grating.	SOURCE CODE: C-GRATING
TARGET: K1741 conduit.	TARGET CODE: E-K1741-2
POSTULATED INTERACTION: Floor grating close to conduit and could important the could important the could important the could import the could	PHENOMENA CODE: INTERFERE & DEFLECT act if movement occurred.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Provide clearance between floor grating and	conduit.
J. G. Grant 09/17/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPIINE:  Minimum clearance around the conduit has been Note: This IDS is duplicate with IDS #15-32-	
S. Hanusiak 01/16/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE FM	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE S ENG GC HVAC I&C PSE NPO NAN
M. Jones 02/17/82	I W. Horn 02/17/82

Ŋ

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET 1 OF 1
--------------

THIEKHCIT	ON DOCUMENTALITON	SHEEL (TD2)
POSTULATED INTERACTION NO.: 18-	-030802	·. • '
FIRE ZONE 1-A LOCATION	<u>Containment</u>	FLOOR ELEVATION 117'0"
LOCATION WITHIN FIRE ZONE: Elev. 117' near missile bar	rier.	
IDENTIFICATION OF INTERACTING CO	MPONENTS	•
SOURCE: Floor grating below BTX24F.		SOURCE CODE: C-GRATING
TARGET: Conduit 1731.		TARGET CODE: E-K1731-2.50
POSTULATED INTERACTION: Grating impacts conduit.		PHENOMENA CODE: INTERFERE & DEFLECT
RECOTTENDED RESOLUTION BY WALKDO Provide clearance between g		t.
J. Grant 04/02/80  MALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE  Min. 2" clearance, around th	DISCIPLINE: se conduit has bee	n provided per ART 035.
S. Hanusiak 01/16/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOL	UTION: [CE] EE EM	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE S ENG GC HVAC ILC PSE NPO NAN

S. Harris 02/17/82
FIELD VERIFICATION BY MALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

L. W. Horn 09/30/87
SIP PROJECT ENGINEER APPROVAL/DATE



SHEET 1 OF	1
------------	---

	3B1	LOCATION Safety Re	lated Pump FLOOR ELEVATI	ON 56'-0"
	WITHIN FIRE Z			
IDENTIFIC	ATION OF INTE	RACTING COMPONENTS		
SOURCE: Over	head Light fi	xtures (Ball/Socket :	SOURCE CODE: E-LF	-3B1
TARGET:	Pump 1-1	•	TARGET CODE: M-RH	RPP1-1
	D INTERACTION ures fall, im		PHENOMENA CODE: FI	XTURE
M. Jones		/29/80		
	TEAM ORIGINATO	OR/DATE		
		SPONSIBLE DISCIPLINE		
FINAL RESO The a be in has I	nstalled in a been qualifie	light fixture has bee	en field inspected and ver DWG. 050041, Detail 5. Thi Iculation 52.24.52.	
FINAL RESO The a be in has I	nstalled in a been qualifie	light fixture has bee ccordance with PG&E [ d by analysis`per ca]	en field inspected and ver DWG. 050041, Detail 5. Thi Iculation 52.24.52.	
FINAL RESO The a be in has I No fo	nstalled in a been qualified urther action Swaim 03/28	light fixture has bee ccordance with PG&E [ d by analysis`per cal necessary. Resolved	en field inspected and ver DWG. 050041, Detail 5. Thi lculation 52.24.52. d by analysis. G. Bhatt	s fixture 03/28/83
FINAL RESO The a be in has I No fo	nstalled in a been qualified urther action Swaim 03/28 NE ENGINEER/D	light fixture has bee ccordance with PG&E [ d by analysis per cal necessary. Resolved /84 ATE	en field inspected and ver DWG. 050041, Detail 5. Thi lculation 52.24.52. d by analysis.  G. Bhatt ENGR. GROUP SUPE	o3/28/83 RVISOR/DATE
FINAL RESO The a be in has I No fo	nstalled in a been qualified urther action Swaim 03/28 NE ENGINEER/D	light fixture has bee ccordance with PG&E [ d by analysis per cal necessary. Resolved /84 ATE	en field inspected and ver DWG. 050041, Detail 5. Thi lculation 52.24.52. d by analysis. G. Bhatt	o3/28/83 RVISOR/DATE
FINAL RESO The a be in has I No fo	nstalled in a been qualified urther action Swaim 03/28 NE ENGINEER/D	light fixture has bee ccordance with PG&E [ d by analysis per cal necessary. Resolved /84 ATE	en field inspected and ver DWG. 050041, Detail 5. Thi lculation 52.24.52. d by analysis.  G. Bhatt ENGR. GROUP SUPE	o3/28/83 RVISOR/DATE

Acts 7/25/84

SHEET 1 OF1	CUEET 1 OF 1
-------------	--------------

TRIERACITON DOCUMENTATION S	HEET (IDS)
POSTULATED INTERACTION NO.: 18-05-01-02	· · · · · · · · · · · · · · · · · · ·
FIRE ZONE 3-R-1 LOCATION Safety Related P	ump FLOOR ELEVATION 56'-0"
LOCATION WITHIN FIRE ZONE: Elev. 56' RHR Pump1-1 and associated piping.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead crane monorail and hoist.	SOURCE CODE: C-CRANE-3B1
TARGET: RHR pump1-1 and associated piping.	TARGET CODE: M-RHRPP1-1
POSTULATED INTERACTION:  Monorail falls, impacts pump.	PHENOMENA CODE: MFCHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of monorail and verify that position.	hoist is secured into
M. Jones 04/29/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Source component was seismically qualified sulphically subjected by the seismically subjected by the seismically subjected by the seismically subjected by the seismically subjected by the seismical subjected by the seis	superseded by ART 527.
S. Hanusiak 04/06/81	E. P. Wollak 04/06/81
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS	ENG GC HVAC I&C PSE NPO NAM
S. Skochko 06/08/84	L. W. Horn 07/03/84
S. Skochko 06/08/84	L. W. Horn 07/03/84

(FOR MODIFICATIONS ONLY)
CHECKED AUGED 9 1984

SHEET 1	0F	1	
---------	----	---	--

POSTULATED INTERACTION NO.: 18-05-01-03			
FIRE ZONE 3-B-1 LOCATION Safety Relate	ed Pump FLOOR ELEVATION 56'-0"		
LOCATION WITHIN FIRE ZONE: Elev. 56' RHR Pump 1-1 Room	•		
IDENTIFICATION OF INTERACTING COMPONENTS	•		
SOURCE:	SOURCE CODE: C-RSM-3B1		
TARGET: Seal Water vent and other similar vents to R	TARGET CODE: M-RHRPP1-1 RHR Pump 1-1		
POSTULATED INTERACTION:  Vents are fixed to support structure, will f	PHENOMENA CODE: RELSTRUCT		
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove vent pipe support to provide requisit	e pipe flexibility.		
M. Jones 04/29/80 WALKDOWN TEAM ORIGINATOR/DATE			
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Recommended resolution OK. See Pipe Support	: DWG. No. 72-48 Rev. 8		
C. R. Van Natta 08/30/83 DISCIPLINE ENGINEER/DATE	K. M. Krause 08/30/83 ENGR. GROUP SUPERVISOR/DATE		
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EM			
S. E. Traisman 11/02/83 L FIELD VERIFICATION BY WALKDOWN TEAM S (FOR MODIFICATIONS ONLY)	W. Horn 01/18/84 IP PROJECT ENGINEER APPROVAL/DATE		

SHEET OF
Program S)
OR ELEVATION 100'-0"
CODE: C-COVFR
CODE: M-RHRHX1-1
A CODE: LOOSE
•
•
y analysis. See resolution

POSTULATED INTERACTION NO.: 18-09-01-01
FIRE ZONE 3-B-1 LOCATION Safety Related Pump FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE:  Flev. 112' in RHR HX vault 1-1, 15.7 and L.
IDENTIFICATION OF INTERACTING COMPONENTS .
SOURCE:  Concrete hatch cover for RHR HX vault.
TARGET CODE: M-RHRHX1-1  RHR HX 1-1.
POSTULATED INTERACTION:  Hatch cover falls through opening and impacts RHR HX.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Hatch cover falls through opening and impacts RHR HX.
S. E. Traisman 09/18/87 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Concrete hatch cover has been seismically qualified by analysis. See resolution sheet and referenced Calc. No. 18-20-01-01.
S. Gaballah 01/22/83  DISCIPLINE FNGTNFER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] FE FMS ENG GC HVAC I&C PSE NPO NAN
S. F. Traisman 08/31/82  FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)  L. W. Horn 10/28/82  SIP PROJECT FNGTNFER APPROVAL/DATE

SHEFT 1 OF 1	
--------------	--

POSTULATED INTERACTION NO.: 18-10-03-02	
FIRE ZONE 3-8R LOCATION Penetrati	on Areas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 125, area GF, (S).	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Rod hanger to 3" pipe.	SOURCE CODE: PS-ULR-3BB
TARGET: K6474 (from BJG 114).	TARGET CODE: E-K6474-3
POSTULATED INTERACTION:  Rod hanger to pipe is attached to 3" co	PHENOMENA CODE: SPTFAII  Induit instead of steel or concrete support
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove rod hanger from conduit and atta	ch to the ceiling.
P. Anderson 06/08/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  OPEG-piping field inspected the interac attached to the conduit but to the ceil necessary.	tion and found that the rod hanger is not ing. Therefore no modification is
C. R. VanNatta 08/04/83 DISCIPLINE ENGINEER/DATE	K. M. Krause 08/04/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE	E EMS ENG GC HVAC ICC [PSE] PO NAN QC
FIFID VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 08/24/83 SIP PROJECT ENGINEER APPROVAL/DATE



PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 18-11-01-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 104, 15 ft. west of north line, 8 ft. N of 15.7.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Unistrut personnel barrier for TE-639.  SOURCE CODE: C-SHIELD
TARGET:
POSTULATED INTERACTION: PHENOMENA CODE: DEFLECT  Barrier rests on conduit connecting TE-639 to pipe thermowell. Barrier vertical motion could damage TE-639.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install vertical bracing to barrier or remove barrier.
M. Jones 05/05/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Install vertical bracing to personnel barrier per ART 349.
E. M. Valeriano 09/13/82 F. Mori 06/29/84  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [I&C] PSE NPO NAN
S. E. Traisman 02/24/84  FIELD VERIFICATION BY WALKDOWN TEAM  (FOR MODIFICATIONS ONLY)  L. W. Horn 04/20/84  SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1_	OF	_1_
-------	----	----	-----

POSTULATED INTERACTION NO.: 18-11-01-02	
FIRE ZONE 3-88 LOCATION Penetration Are	as FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 104, 15 ft. W of N line 8 ft. n of 15.	7.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Light fixture.	SOURCE CODE: E-LF-3BB
TARGET: TE-639.	TARGET CODE: J-TF639
POSTULATED INTERACTION: Light fixture falls, impacts TF-639.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	
M. Jones 05/05/82 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been fiel be installed in accordance with PG&F Owg. 05  Install backup support chain per DCN DCO-FE-Resolved by modification. See ART 348.	004], detail 8 (category II).
R. J. Swaim 02/23/83 DISCIPLINE FNGTNFFR/DATE	G. C. Bhatt 02/23/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EM	S ENG GC HVAC IEC PSE NPO NAN
	L. W. Horn 09/09/83 IP PROJECT ENGINEER APPROVAL/DATE

[0029A/0086Z-30]

(FOR MODIFICATIONS ONLY)

K13

SHEET	1	_ OF	_1_
00004			

POSTULATED INTERACTION NO.: 18-13-01-01	·
FIRE ZONE 3-BB LOCATION Penetration A	Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 90, at N line, 3' south of line 15.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: if ight fixture.	SOURCE CODE: F-LF-3RR
•	
TARGET: Tubing to FT-640.	TARGET CODE: I-FT640
POSTULATED INTERACTION:  Light fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	•
	•
M. Jones 05/05/82 . WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been fie be installed in accordance with PG&E Nwg. O Install backup support chain per DCN DCO-FF Resolved by modification. See ART 348.	50041, detail 8 (category II).
R. J. Swaim 02/23/83	C. C. Bhatt 02/23/83
DISCIPLINE FNGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [FF] E	MS ENG GC HVAC I&C PSE NPO NAN
S. F. Traisman 08/18/83 FIELD VERIFICATION BY WALKDOWN TEAM	I. W. Horn 09/09/83 SIP PROJECT ENGINEER APPROVAL/DATE

[0029A/0086Z-31]

ACTS

	SHEET1_ OF1	
PACIFIC GAS & ELECTRIC CO.		
DIABLO CANYON PLANT, UTIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM		
INTERACTION DOCUMENTATIO		
POSTULATED INTERACTION NO.: 18-14-01-01		
	, , , , , , , , , , , , , , , , , , ,	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"	
LOCATION WITHIN FIRE ZONE: Elev. 103, 345° near PRT.	•	
•	•	
IDENTIFICATION OF INTERACTING COMPONENTS	49	
enibre.	SOURCE CODE: E-LF-1A	
SOURCE: . Light fixture.		
	TARGET CODE: I-8703	
TARGET: Power control cable to valve 8703.	THREET CODE: 1-8703	
DOCTULATED TENTHACTTONIA	PHENOMENA CODE: FTXTURE	
POSTULATED INTERACTION:  Fixture falls, impacts tubing.	PREMOTERN CODE. PERTORS.	
, 1,444 ( 14110 ) 1 mp4000 00013		
•		
•		
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of light fixture.		
Ensure integrity of light fixture.	•	
M. Jones 03/11/82 WALKDOWN TEAM ORIGINATOR/DATE		
THE PROPERTY OF PROPERTY PROPERTY THE	·	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Fixture qualified by analysis. See Civil	Calc. 52.24.52, Rev. 1 & 2.	
des		
AT		
R. J. Swaim 01/26/83	G. C. Bhatt 01/26/83	
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE	
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE]	EMS ENG GC HVAC ICC PSE NPO NAN	
	•	

L. W. Horn 08/12/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET 1 OF 1
PROGRAM DS)
OOR ELEVATION _56'-0"
CODE: E-LF-3B2
CODE: M-RHRPP1-2
NA CODE: FIXTURE
ified analysis.

INTERACTION DOCUMENTATION SHEET (I	us)
POSTULATED INTERACTION NO.: 18-16-01-01	
FIRE ZONE 382 LOCATION Safety Related Pump FL	OOR ELEVATION 56'-0"
LOCATION WITHIN FIRE ZONE: Elev. 56, RHR Pump 1-2 Room	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  Overhead Light fixtures (Ball/Socket mount)	CODE: E-LF-3B2
TARGET  RHR Pump 1-2  TARGET	CODE: M-RHRPP1-2
POSTULATED INTERACTION:  Fixtures fall, impact pump.	NA CODE: FTXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of fixture mount, possibly by simple	ified analysis.
M. Jones ·4/29/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspec be installed in accordance with PG&E DWG. 050041, Dehas been qualified by analysis per Calculation 52.24 No further action necessary.	tail 5. This fixture
R. J. Swaim 03/28/83 DISCIPLINE ENGINEER/DATE ENGR.	S. Auer 03/28/83 GROUP SUPERVISOR/DATE
DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG	GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECTIONS ONLY)	O5/25/83 CT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)		
POSTULATED INTERACTION NO.: 18-16-01-02		
FIRE ZONE 3-B-1 LOCATION Safety Related Pump	FLOOR ELEVATION 56'-0"	
LOCATION WITHIN FIRE ZONE: Elev. 56' RHR Pump 1-2 Room .		
IDENTIFICATION OF INTERACTING COMPONENTS		
SOURCE: SOURCE	CODE: C-RSM-382	
•		
TARGET:  Seal Water vent and other similar vents to RHR Pump	CODE: M-RHRPP1-2	
	NA CODE: RELSTRUCT	
Vents are fixed to support structure, will fail due	to movement of pump	
·	•	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	•	
Remove vent pipe support to provide requisite pipe f	lexibility.	

#### RECOMMENDED RESOLUTIO

04/29/80 M. Jones WALKDOWN TEAM ORIGINATOR/DATE

#### FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Recommended resolution OK. Pipe Support DWG. No. 72-50 Rev. 11 and 72-132 Rev. 2

C. R. Van Natta 08/30/83 DISCIPLINE ENGINEER/DATE

08/30/83 K. M. Krause ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC IEC [PSE] NPO NAN

S. E. Traisman 11/02/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

ľ

PACIFIC GAS & ELECTRY DIABLO CANYON PLANT, UNIT SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 18-16-01-03	, <del></del>
FIRE ZONE 3-B-2 LOCATION Safety Related I	Pump FLOOR ELEVATION 56'-0"
LOCATION WITHIN FIRE ZONE: Elev. 56', RHR Pump1-2 room.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead falls, impacts pump.	SOURCE CODE: C-CRANE-3B1
TARGET:  RHR pump1-1 and associated piping.	TARGET CODE: M-RHR1-2
POSTULATED INTERACTION:  Monorail falls, impacts pump.	PHENOMENA CODE: MECHFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of monorail and verify that	hoist is secured into position.
M. Jones 04/29/80 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Source component was seismically qualified so 412482 (detail "F") and ART 439. See interaction in the second sec	
S. Hanusiak 04/06/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak 04/06/81 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS	!

S. Skochko 06/08/84 FIELD VERIFICATION BY WALKDOWN TEAM . (FOR MODIFICATIONS ONLY)

L. W. Horn 07/03/84 SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTION DIABLO CANYON PLANT, UNDUCED SYSTEMS INTERACTION DOCUMENTATION	MIT NO. 1 WIERACTION PROGRAM
POSTULATED INTERACTION NO.: 18-20-01-01 Safety Reference 3-8-2 LOCATION Pump Rooms	
LOCATION WITHIN FIRE ZONE: El 112' in RHR HX Vault 1-2, 15.7 and R  IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Concrete Hatch Cover for RHR HX Vault	SOURCE CODE: C-COVER
TARGET: RHR HX 1-2	TARGET CODE: M-RHRHX1-2
POSTULATED INTERACTION: Hatch Cover Falls Through Opening and Impacts RHR HX	PHENOMENA CODE: LOOSE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify HOSGRI Seismic Event not Capable of Moving Hatch Cover Out of its Normal Position	•
S.E. Traisman 7/28/82 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Concrete Hatch Cover has been Seismically Colc. No., 18-20-01-01.	Qualified by Analysis. See
S. Gaballah 2/22/83	B. Sarkar 2/27/83
DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE E	THS ENG GC HVAC ILC PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY) 0040Z/0010Z-2

5.6

6(9184

1

3/7/83 L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE.

SHEET 1 OF 1
Program DS)
-
OOR ELEVATION 100'-0"
•
CODE: E-LF-3R8
CODE: I-TF649
NA CODE; FIXTURE
ted and verified to
ted and veritied to

POSTULATED INTERACTION NO.: 18-22-01-01	
FIRE ZONE 3-BR LOCATION Penetration F	reas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Flev. 104, 9 ft. E of N line, 15 ft. Nof 1	
IDENTIFICATION OF INTERACTING COMPONENTS	,
SOURCE: Light fixture.	SOURCE CODE: E-LF-388
TARGET: TE-649.	TARGET CODE: I-TF649
POSTULATED INTERACTION: Light fixture falls, impacts TF-649.	PHENOMENA CODE; FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of light fixture.	
M. Jones 05/05/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been fix be installed in accordance with PG&E Owg.  Install backup support chain per DCN DCO-E.  Resolved by modification. See ART 348.	050041, detail 8 (category IT).
R. J. Swaim 02/23/83 DISCIPLINE ENGINFER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE]	G. C. Bhatt 02/23/83 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO NAN
S. F. Traisman 08/18/83 FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 09/09/83 SIP PROJECT FNGINFER APPROVAL/DATE

[0029A/0086Z-32]

(FOR MODIFICATIONS ONLY)

keß

SHEET	1	<b>OF</b>	1

POSTULATED INTERACTION NO.: 18-23-02-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE:  3' east of 'N', 17' north of 15 <sup>7</sup> , azimuth 175°
IDENTIFICATION OF INTERACTING COMPONENTS .
SOURCE: SOURCE CODE: P-0224-8  Trapeze snubber support 15-765L for line S2-224-8"
TARGET:  Conduit support S6 for conduit K6385-1-1/4" - H.
POSTULATED INTERACTION:  Lateral movement of line S2-224 will cause the snubber support to impact class I support S6 for conduit. Existing gap is 3/8".
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify by analysis that movement of snubber support will not compromise the integrity of the class I support of conduit.  Note: This postulated interaction is a result of modifications associated with DCN DC1-EP-3621 (addition of pipe support 15-765L assoc. with line 224-8").
N. Barangan 06/22/83 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  For the snubber (15-76SL) to contact conduit support it would have to move in the negative "Z" direction. The movements in the negative "Z" direction are in the seismic, dead load and hydro load cases which are less than the existing 3/8" clearance between the snubber and the conduit support. Thermal load cases are in the positive "Z" directions. Ref. Calc. 8-103, Rev. 3, Node Pt. 582. (15-76 SL). No action necessary.
Marc Dimalanta 08/02/83 K. M. Krause 07/29/83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

SHEET	1	OF	1_

INTERNCTION DOCORENTAL	ON SHEET (IDS)
POSTULATED INTERACTION NO.: 19-01-04-01	
FIRE- ZONE 3-BB LOCATION Penetration	Area FLOOR ELEVATION 110'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, at penetration 56, 148°.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead platform.	SOURCE CODE: C-PLAT-3BB
TARGET: Valve 9354B, pressurizer steam space samp	TARGET CODE: I-9354B
POSTULATED INTERACTION: Platform falls on valve 9354B and attached	PHENOMENA CODE: CIVILFAIL d tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform by analysis.	
M. Jones 05/07/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform has been qualified by analysis. Calc. No. 19-01-04-01.	See resolution sheet and
S. Hanusiak 08/08/80 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	V. J. Ghio 08/08/80 ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC I&C PSE NPO NAM
FIELD VERIFICATION BY WALKDOWN TEAM 5.4	L. W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

5.55 7128184

(FOR MODIFICATIONS ONLY)

[00114/00727-41]

~	•	~~	•	
SHEET		1 14-		

POSTULATED INTERACTION NO.: 19-04-03-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 117'-0"
LOCATION WITHIN FIRE ZONE: Elev. 117, 220°, on missile wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Line 1870-1" N <sub>2</sub> supply line.  SOURCE CODE: P-1870-1
TARGET: TARGET CODE: I-PM127  Mechanical panel 127 tubing.
POSTULATED INTERACTION:  Line 1870 hangers do not meet the 831.1 hanger spacing requirements. Pipe could fall, damage mechanical panel 127 tubing.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Perform additional piping analysis on line 1870 to verify adequacy of the supports. Add restraints as required.
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hanger DWG. 049339 SHT. 117 is a portion of DCN DC1-EP-3606. Design calculations by H. Hohmann dated 08/02/82 is a response to field verification report by M. Jones dated 02/24/82 which resolves all interaction concerns identified in the report.
C. R. VanNatta 01/24/83 K. M. Krause 01/24/83
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC IXC [PSE] NPO NAM
S. E. Traisman 12/19/83 L. W. Horn 04/15/83 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

SHEET	1	OF	1
-------	---	----	---

	A ELOOD ELEMATTON 1001 OIL 1
FIRE ZORE _S-DD LOCHITOR FEREURAL	ion Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, 166° near containment.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Structural platform at 162°.	SOURCE CODE: C-PLAT-3BB
TARGET: Mechanical panel 184.	TARGET CODE: I-PM184
POSTULATED INTERACTION:  Lateral deflection or failure of plate panel.	PHENOMENA CODE: CIVILFAIL form causes impact with mechanical
RECOMMENDED RESOLUTION BY WALKINGWA TEAM.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity and rigidity of plats	form by analysis.
	form by analysis.
Ensure integrity and rigidity of plats  M. Jones 05/14/80	form by analysis.
Ensure integrity and rigidity of plats  M. Jones 05/14/80  WALKDOWN TEAM ORIGINATOR/DATE	
Ensure integrity and rigidity of plats  M. Jones 05/14/80	
M. Jones 05/14/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform has been qualified by analysi	
M. Jones 05/14/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform has been qualified by analysicalc. No. 19-04-06-01.  S. Hanusiak 08/08/80	V. J. Ghio 08/08/80 ENGR. GROUP SUPERVISOR/DATE

SHEET1	0F	1	
--------	----	---	--

POSTULATED INTERACTION NO.: 19-	14-05-01	
FIRE ZONE 1-A LOCATION	Containment	FLOOR ELEVATION 117'-0"
LOCATION MITHIN FIRE ZONE: Elev. 117, 220°, on missile	wmll.	
IDENTIFICATION OF INTERACTING CON	PCNENTS	
SOURCE: Line 1870-1" Nz supply line.		SOURCE CODE: P-1870-1
TARGET: Mechanical panel 127.		TARGET CCDE: I-PM127
POSTULATED INTERACTION: Line 1870 hangers do not mee fall, damage mechanical pane	t the B31.1 hang 1 127.	PHENOMENA CODE: SPTFAIL & PIPEFAIL er spacing requirements. Pipe could
RECOMMENDED RESOLUTION BY MALKDOM Perform additional piping an supports. Add restraints as	alysis on line	1870 to verify adequacy of the
M. Jones 04/15/80 WALKDOWN TEAM ORIGINATOR/DATE		
H. Hohmann dated 08/02/82 is	a portion of D a response to f	CN DC1—EP—3606. Design calculation by ield verification report by M. Jones n concerns identified in the report.
C. R. VanNatta 01/24/83 DISCIPLINE ENGINEER/DATE		K. M. Krause 01/24/83 EDGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUT	richi: Ce ee e <del>n</del>	S ENG GC HVAC IEC [PSE] NPO NAN
M. Baker 08/02/83 FIELD VERIFICATION BY HALKDOWN TEA (FOR MODIFICATIONS COLY)	<del>yr</del> 5:	L. W. Horn 01/18/84  IP PROJECT ENGINEER APPROVAL/DATE

CHECKED AUG 0 9 1984
[0014A/0079Z-21] OK-F

SHEET 1 OF 1  PACIFIC GAS & FIECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SFISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 19-15-09-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100, 150°, near containment.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixture, chain supported.  SOURCE CODE: E-LF-3BB
TARGET:  Backup air accumulator tubing for valve 9356B.  TARGET CODE: 1-9356B
POSTULATED INTERACTION:  Light fixture falls, impacts tubing.  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture. Additional support will be required,
M. Jones 05/05/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&F Dwg. 050041, detail 8 (category IT). Install backup support chain per DCN DCO-FE-5552 Sht. 12 of 13, detail 75. Resolved by modification. See ART 348.
R. J. Swaim 02/23/83  DISCIPLINE FNGTNFER/DATE  G. C. Bhatt 02/23/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [FE] EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn 09/09/83

SIP PROJECT ENGINEER APPROVAL/DATE

[0029A/00867-33]

Aer's

S. E. Traisman 08/18/83 FIFI.D VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

OUILE!I OFI_	SHEET	1	OF	1
--------------	-------	---	----	---

POSTULATED INTERACTION NO.: 19-17-01-01	· · · · · · · · · · · · · · · · · · ·
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Elev. 91', at missile barrier, 270°.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE:  Iodine removal unit E-15.	SOURCE CODE: H-E15
TARGET: Valve 9352A.	TARGET CODE: I-9352A
POSTULATED INTERACTION:  Iodine removal unit mounting bolts fail in sh valve 9352A.	PHENOMENA CODE: SPTFAIL near, resulting in unit sliding into
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Install hold-down clamps to unit mounting ski	id to preclude movement of unit.
M. Jones 08/12/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Bolts qualified by analysis. See IDS file No.	o. 03–35–02–02
•	
DISCIPLINE ENGINEER/DATE	D. H. Hagstrom ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	S ENG GC [ <u>HVAC</u> ] I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SI	L. W. Horn 09/10/82  IP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 20-02-01-01
FIRE ZONE 3-J-2 LOCATION Safety Related Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE:  CCW Pump 1-2 Room, Elev. 73
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixtures (3), chain supported  SOURCE CODE: E-LF-3J2
TARGET:  CCW Pump 1-2  TARGET CODE: M-CCWPP1-2
POSTULATED INTERACTION:  PHENOMENA CODE: FIXTURE  Fixtures fall, impact tubing and conduit to pump lube oil system
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of light fixtures. Supports will need to be modified for these fixtures.
M. Jones 05/06/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E DWG. 050041, Detail 8. Install back-up support chain per DCN-DCO-EF-5552 Rev. 1 Sheet 9 of 9, detail #75. ART 353 Resolved by modification.
R. J. Swaim 08/24/83 G. C. Bhatt 08/24/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAM

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

09/09/83

. Les

S. E. Traisman 08/24/83

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1	OF	1
-------	---	----	---

za z
POSTULATED INTERACTION NO.: 20-03-01-01
FIRE ZONE 3-J-3. LOCATION Safety Related Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE:  CCW pump 1-3 room, elev. 73.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-SPR-3J3  1" branch from 2" fire water line, drawing # 693299, support #SPR-47.
TARGET:  CCW pump 1-3.  TARGET CODE: M-CCWPP1-3
POSTULATED INTERACTION:  Lateral support needed at end of branch to preclude overstress of threaded joint and subsequent failure of pipe which could fall on CCW pump 1-3. Note: The firewater line is design Class I.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add bracket to steel which holds support 83-6. This support should have been added when the firewater system was upgraded.
M. Jones 05/06/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Modified support. See Generic DCN DC1-EP-5061. HGR DWG No. 049339-339/352R.
C. R. VanNatta 09/06/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 10-24-83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

Sin

L. W. Horn 10/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman 10/14/83 FIELD VERIFICATION BY WALKDOWN TEAM .

de .		DIABLO SEISMICALLY IN	IFIC GAS CANYON P DUCED SYS	LANT, UNI TEMS INTE	T NO. 1 RACTION	PROGRAM		OF .	1	-
,	POSTULATED INTERA	CTION NO.: 20-	03-03-03		<del></del>		• .		•	
F	FIRE ZONE 3-BB	LOCATION	Penetra	tion Area	FL	OOR ELEVA	MOITE	85'-	0"	
t	LOCATION WITHIN F Elev. 85'—0"									
3	IDENTIFICATION OF	INTERACTING CO	MPONENTS		•					
S	SOURCE: Checker plat	e.			SOURCE	CODE: N	NS-CD			_
]	<u>FARGET</u> : K6977—4".				TARGET	CODE: E	E-K697	7-4	<del></del>	
Ī	POSTULATED INTERA Unbolted che	<u>CTION</u> : cker impacts th	e conduit		PHENOME	NA CODE:	LOOS	Ε		_
<u> </u>	RECOMMENDED RESOL Secure the c	UTION BY WALKDO hecker prior to		n.						
	E. Denison HALKDOWN TEAM ORIGINAL RESOLUTION Checker plate	SINATOR/DATE	DISCIPLIN per ART 2	<u>E</u> : 36.						
		,				,				
-	S. Hanusiak ( DISCIPLINE ENGIN			:		P. Wolla				-
	DISCIPLINE RESPONS		UTION: [C	E] EÈ EMS						NAR
	E. Denison FIELD VERIFICATION FOR MODIFICATION CUFCK			SII Yahay		. Horn CT ENGINE	O7.			Ē

PACIFIC GAS & ELECTRIC CG.  DIABLO CANYON PLANT, UNIT NO. 1  SFISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 20-03-05-01
FIRE ZONE 3-J-3 . LOCATION Safety Related Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Elev. 75', near CCW PP1-3.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: NS-CD Construction deficiency.
TARGET:  Conduit K7025-1.  TARGET CODE: E-K7025-1
POSTULATED INTERACTION:  PHENOMENA CODE: HOUSEKEEP  Flexible line is cracked at both ends of couplings.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace flex line.
P. Anderson 06/05/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Flex conduit replaced per ART 167.
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG [QC] HVAC I&C PSE NPO NAN
S. F. Traisman 08/31/82 I. W. Horn 10/29/82 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1
PROGRAM			•

	•
POSTULATED INTERACTION NO.: 20-04-01-01	
FIRE ZONE 3-J-1 LOCATION Safety Related Pump	FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: CCW Pump 1-1 Room, Elev. 73	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead light fixtures, (3) chain support	SOURCE CODE: E-LF-3J1
TARGET: CCW Pump 1-1	TARGET CODE: M-CCWPP1~1
POSTULATED INTERACTION:  Fixtures fall, impact tubing and conduit t	PHENOMENA CODE; FIXTURE co pump lube oil system.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixtures. Supportion these fixtures.	orts will need to be modified
M. Jones 05/06/80	·
WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been fi  be installed in accordance with PG&F DWG.  up support chain per DCN-DCO-FE-5552 Rev.  Resolved by modification.	O50041, Detail 8. Install back-
R. J. Swaim 03/21/83 DISCIPLINE ENGINEER/DATE	G. C. Bhatt 03/21/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE]	EMS ENG GC HVAC I&C PSE NPO NAM
S. E. Traisman 08/24/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 09/09/83 SIP PROJECT ENGINEER APPROVAL/DATE

ALIE CET	•	OF	•
SHEET	<u>l</u>	Or .	<u> </u>

POSTULATED INTERACTION NO.: 20-04-01-07
FIRE ZONE 2-J-1 LOCATION Safety Related Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: CCM pump 1-1 room, elev. 73'.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-GRANE-3J1 Overhead crane trolley.
TARGET:  CCW pump 1-1 & attached conduit.  TARGET CODE: M-CCWPP1-1
POSTULATED INTERACTION:    PHENOMENA CODE: CIVILEAU   Contains   C
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Add sway brace to end of trolley to preclude lateral deflection  2. Verify seismic capability of existing trolley supports.
M. Jones 05/06/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Sway bracing added per DWGs No. 59652, 59654, 512482 and DCNs No. DCO-GC-2382, DCO-GC-2385, DC1-GC-2415. See resolution sheet and Calc. No. 20-04-01-02.
S. Hanusiak 04/06/81 E. P. Wollak 04/06/81 DISCIPLINE ENGINFER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
S. F. Traisman OR/31/82 L. W. Horn 10/28/82 FIFLD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRI DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S	T NO. 1 RACTION PROGRAM
POSTULATED INTERACTION NO.: 20-04-01-03	•
FIRE ZONE 3-J-1 LOCATION Safety Related P	ump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Elev. 73, CCW Pumps 1-3 Rooms	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead Service Hoist	SOURCE CODE: M-HOIST-3J1
TARGET: CCW Pumps 1, 2, 3	TARGET CODE: M-CCWPP1-1
POSTULATED INTERACTION:  Hoist is not secured to trolly and is free to Pumps. Dangling chains or the falling of the possible.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure that hoist is secured and fixed to the operation.	trolly during plant
M. Jones 05/06/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Hoist stop has been added to secure service he 512482. See resolution sheet and file for ID:	
S. Hanusiak 04/06/81  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS	E. P. Wollak 04/06/81 ENGR. GROUP SUPERVISOR/DATE ENG GC HVAC I&C PSE NPO NAN

S.G. 315184

L. W. Horn

10/28/82

SIP PROJECT ENGINEER APPROVAL/DATE

08/31/82

FIELD VERIFICATION BY WALKDOWN TEAM

S. E. Traisman

(FOR MODIFICATIONS ONLY)

SHEET	1	OF	1
			7

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT MO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)		
POSTULATED INTERACTION NO.: 20-07-01-03	•	
FIRE ZONE 14-E LOCATION Turbine Building FLOOR ELEVATION	85'-0"	
LOCATION WITHIN FIRE ZONE:		

#### IDENTIFICATION OF INTERACTING COMPONENTS

SOURCE CODE: C-P12T-1 SOURCE: Platform P12T-1, NW of CCWHX 1-1

North end of CCW heat XCGR room above CCW heat XCGR 1-1.

TARGET CODE: I-PI 113' TARGET: Īnst. line to PI−111 & PI−113.

POSTULATED INTERACTION; PHENOMENA CODE:

Inst. lines are supported off of Class II platform. Platform undergoes lateral deflection causes inst. tubes to be damaged.

#### RECOMMENDED RESOLUTION BY WALKDOWN TEAM:

Reroute inst. lines (do not support inst lines off of platform P12T-1)

S. Skochko 02/24/84 WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

The subject platform has been qualified for the Hosgri event against collapse. Qualification methodology is similar to that used for the non-Class I turbine building, which itself has numerous Class I attachments. Refer to Civil Calculation No. 20-14-01-04 for qualification of the platform. This is based on a conversation between Mr. Bill Walker, Civil SIP Walkdown member, and Mr. Safwat Gaballah, Unit 1 Civil SIP Group leader. Bill Walker also discussed turbine building qualification with Mr. Herman Minkowski, Unit 1 Civil turbine building Group leader. See technical review No. 8216-TR-0671 & Telecon (Chron. No.. 048011, dated 04/02/84). Notice: This IDS is a result of final SIP WD.

S. Skochko/W. L. Walker 02/29/84 D. R. Warren 03/01/84 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [I&C] PSE NPO NAN

L. W. Horn 06/04/84 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

[0005A/0064Z-22]

PACIFIC GAS & ELEC DIABLO CANYON PLANT, SEISMICALLY INDUCED SYSTEMS : INTERACTION DOCUMENTATIO	UNIT NO. 1 INTERACTION PROGRAM
POSTULATED INTERACTION NO.: 20-10-01-01	
FIRE ZONE 14-A LOCATION Turbine Build	ding FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Chamber containing CCW headers.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead steel platform.	SOURCE CODÉ: C-PLAT-14A
TARGET: 30" CCW header, line 95.	TARGET CODE: P-0095-30
POSTULATED INTERACTION: Platform falls, impacts pipe.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform. Simple ana	alysis should be adequate.
M. Jones 05/06/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform has been qualified by analysis. 20-10-01-01.	See resolution sheet and Calc. No.
S. Hanusiak 08/08/80 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	V. J. Ghio 08/08/80  ENGR. GROUP SUPERVISOR/DATE  EMS ENG GC' HVAC I&C PSE NPO NAN
	I W. Horn 09/30/82

SIP PROJECT ENGINEER APPROVAL/DATE

[0035A/0065Z-33]

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

SHEET	1_	OF	_1_

POSTULATED INTERACTION NO.: 20-10-01-02	
FIRE ZONE 14-E LOCATION Turbine Building	FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: CCW HX room, elev. 95', north end.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: 1" firewater line.	SOURCE CODE: P-SPR-14E
TARGET: Vent 1-46-V to line 95 CCW inlet to CCW HX1.	TARGET CODE: PA-0095-30
POSTULATED INTERACTION:  Lateral deflection of 1" line impacts vent.	PHENOMENA CODE: DEFLECT
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add lateral restraint to 1" firewater line to support near vent.	preclude contact with vent. Add
M. Jones 05/07/80 . WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Addition of new supports resolved by hanger DCN-DC1-EP-3865 and sheet 296 in generic DCN-	
C. R. VanNatta 01/81/83 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	K. M. Krause 01/31/83 ENGR. GROUP SUPERVISOR/DATE S ENG GC HVAC ISC [PSE] NPO NAM
S. E. Traisman 08/24/83 FIELD VERIFICATION BY WALKDOWN TEAM SI	L. W. Horn 09/19/83 IP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 20-12-04-01
FIRE ZONE 3-J-3 LOCATION Safety Related Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE:  Room Adjacent to CCW Pump 1-3 Room, Elev. 73
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixtures (chain suspension)  SOURCE CODE: E-LF-3J3
TARGET:  RE 17A Radiation monitor tubing, conduit  TARGET CODE: I-RE17A
POSTULATED INTERACTION:  Fixture falls, impacts tubing and conduit.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount. Modifications needed for this fixture.
M. Jones O5/06/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E DWG. O50041, Detail 8. Install back—up support chain per DCN-DCO-EE-5552 Rev. 1 Sheet 9 of 9, detail #75, ART 353. Resolved by modification.
R. J. Swaim 03/21/83  DISCIPLINE ENGINEER/DATE  G. C. Bhatt 3/21/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAM
S. E. Traisman 08/24/83 L. W. Horn 09/09/83

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)			
POSTULATED INTERACTION NO.: 20-13-04-01			
FIRE ZONE 3-J-3 LOCATION Safety Related Pump FLOOR ELEVATION 73'-0"			
LOCATION WITHIN FIRE ZONE: Room Adjacent to CCW Pump 1-3 Room, Elev. 73			
IDENTIFICATION OF INTERACTING COMPONENTS			
SOURCE:  Overhead light fixtures (chain suspension)  SOURCE CODE: E-LF-3J3			
TARGET:  RE 17B Radiation monitor tubing and conduit.  TARGET CODE: I-RF17B			
POSTULATED INTERACTION:  Fixtures fall, impact tubing and conduit.  PHENOMENA CODE: FIXTURE			
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount. Modifications needed for this fixture.			
M. Jones 05/06/80			
WALKDOWN TEAM ORIGINATOR/DATE			
The above source light fixture has been field inspected and verified to be installed in accordance with PGGE DWG. 050041, Detail 8. Install back—up support chain per DCN-DCO-EE-555? Rev. 1 Sheet 9 of 9, detail 75, ART 353. Resolved by modification.			

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC IGC PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

08/24/83

L. W. Horn 09/09/83 SIP PROJECT ENGINEER APPROVAL/DATE

ENGR. GROUP SUPERVISOR/DATE

G. C. Bhatt 03/21/83

S. E. Traisman

R. J. Swaim' 03/21/83

DISCIPLINE ENGINEER/DATE

SHEET _	1	_ OF _	1	
CDAM				

POSTULATED INTERACTION NO.: 20-14-01-03	
FIRE ZONE 14-E LOCATION Turbine Bldg	FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: CCW HX room, elev. 95.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Firewater system has not been upgraded to Cl	SOURCE CODE: P-SPR-14E ass I in this room.
TARGET: CCW heat exchanger.	TARGET CODE: M-CCWHX
POSTULATED INTERACTION:  Firewater piping falls on CCW heat exchanger	PHENOMENA CODE: SPTFAIL s and associated pipe & instruments.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Upgrade firewater piping in this room to sei	smic Class I, if required.
M. Jones 05/07/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The firewater system has been analysed by ME- added or modified per DWG 049339. Reference	
R. Hare 12/02/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EM	K. M. Krause 12/02/83 ENGR. GROUP SUPERVISOR/DATE S ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 02/24/84  FTFI D VERTFICATION BY HAI KDOWN TFAM ST	L. W. Horn 04/20/84

CHECKED AUG D.9 1984 [0014A/0079Z-23] OK-+

SHEET	1	OF	1

SIP PROJECT ENGINEER APPROVAL/DATE

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 20-14-01-04	
FIRE ZONE 14-E LOCATION Turbine Buildi	ng FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: CCW HX room, elevation 85'.	
IDENTIFICATION OF INTERACTING COMPONENTS	. •
SOURCE: Overhead platforms, and railings.	SOURCE CODE: C-PLAT-14E
TARGET:	TARGET CODE: M-CCWHX1-1
POSTULATED INTERACTION:  Class II platforms and railings fail, fall etc.	PHENOMENA CODE: CIVILFAIL on JX 1-1 and attached piping, nozzles,
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platforms and railings !	by analysis.
R. L. Cloud 05/07/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platforms/railings qualified by analysis. Seresolution sheet.	See Calc. No. 20-14-01-04 and
S. Hanusiak 02/18/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	V. J. Ghio ENGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC ISC PSE NPO NAN
	1 ' W Horn 09/30/82

[0010A/0078Z-28]

FIELD VERIFICATION BY WALKDOWN TEAM

PACIFIC GAS & ELECTRIC ( DIABLO CANYON PLANT, UNIT ) SEISMICALLY INDUCED SYSTEMS INTERA INTERACTION DOCUMENTATION SHE	NO. 1 CTION PROGRAM .
POSTULATED INTERACTION NO.: 20-15-01-01	•
FIRE ZONE 14-E LOCATION Turbine Building	FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: CCW AX room, elev. 85'.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Source	OURCE CODE: C-PLAT-14E
TARGET: I	ARGET CODE: M-CCWHX1-2
POSTULATED INTERACTION:  Class II platforms & railings fail, fall on HX etc.	ENCMENA CODE: CIVILFAII 1-2 and attached piping, nozzles,
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platforms and railings by a	nalysis.
M. Jones 05/07/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Sources have been seismically qualified by anal and resolution sheet.	ysis. See IDS file No. 20-14-01-04
	B. Sarkar 11/04/82 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS	ENG GC HVAC I&C PSE NPO NAN

I.. W. Horn 01/05/83 SIP PROJECT ENGINEER APPROVAL/DATE

55/1194

[0039A/0102Z-24]

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

•
SHEET 1 OF 1  RIC CO. NIT NO. 1 TERACTION PROGRAM SHEET (IDS)
FLOOR ELEVATION 85'-0"
elow CCW headers near PM-101
SOURCE CODE: P-3103-2 drain line - gray line, runs
TARGET CODE: I-FT68
PHENOMENA CODE: SPTFAIL & PIPEFAIL existing clearance ±3" failure of fixed roblem.
ne. a walkdown.

#### PACIFIC GAS & ELECTI DIABLO CANYON PLANT, U SEISMICALLY INDUCED SYSTEMS IN INTERACTION DOCUMENTATION

FIRE ZONE 14-A LOCATION Turbine Ar	ea FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE:  Area GW at col. H between cols. 15 and panel.	16 below CCW headers near PM-101
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Line 3103-2" (Fuel HDL. Bldg. heating conth-south and 2'-0" east of col. G.	SOURCE CODE: P-3103-2 coils drain line - gray line, runs
TARGET: Process tubing for FT-68, CCW sup. head	TARGET CODE: I-FT68
POSTULATED INTERACTION:  Source line deflects into process tubine and rod hangers on source line aggravate.	PHENOMENA CODE: SPTFAIL & PIPEFAIL g. Existing clearance ±3" failure of fixed es problem.
	•
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add bilats as required to restrain source.  Note: This IDS is a result of final significant.	
C. R. VanNatta 02/21/84 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Resolved by ART 503.	•
S. Skochko 03/11/84 DISCIPLINE ENGINEER/DATE	D. R. Warren 03/15/84 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	

SHEET	1	OF .	1
-------	---	------	---

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 20-17-04-01
FIRE ZONE 4-A LOCATION Aux./Fuel Handling FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, inside room 150, inside wall panels.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-WALL Wall, Germanium detector and HP Instrument panel.
TARGET:  TARGET CODE: E-K7248+  TSAA, K7248, and K7249.
POSTULATED INTERACTION:  Wall, Germanium detector and HP Instrument panel tip over and strike cable tray. Wall is class II.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of wall, Germanium detector and HP Instrument panel.
Edward Denson 06/05/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Wall qualified by analysis. See resolution sheet and IDS file #01-19-02-01.
S. Hanusiak 09/21/81 E. P. Wollak 09/24/81  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

5/23/8v

SHEET	1	OF	1
-------	---	----	---

	ULATED INTE	RACTION	NO.: 20-	-180101					
FIRE	ZONE 14-E		_ LOCATIO	W <u>Turbin</u>	e Bldg.		FLOOR	ELEVATI	ON 85'-
	TION WITHIN CCW 4X Rooi			°oom				•	
IDENT	TIFICATION (	OF INTER	ACTING C	OMPONENTS		×			
SOURC	<u>CE</u> : 2" stainle	ss Pipe,	No late	ral suppor	t for 30	SOURCE 5' rod s	E CODE:	P-4000- only (Li	2 ne 4000)
TARGE	ET: 3/4" Vent	to CCW p	ipe (CCW	1-43V) Ve	nt 51 h		T COOE: to C cro		
POSTU	ULATED INTE Lateral di			pipe impa	cts ven		ena code	:_DEFLEC	т
KECOF	MMENDED RES Add latera	il suppor	t to 2"	line to pr	eclude	contact	with ven	t.	
WALKE	DOWN TEAM O		R/DATE	DTCCTDI T	ıc.				
FINAL	L RESOLUTIO Added pipe 72-132 Rev	support	per Han	ger DWG. S	<u>:</u>	38R Sht.	238 by	DCN DC1-	EP-5335
	R. Van Natt CIPLINE ENG					K. M.	Krause . GROUP	SUPERVIS	01/10/ OR/DATE
DISC	IPLINE RESP	ONSIBLE	EOD DECC	LITTON. CS	EE E	MS ENG	GC HVA	C IEC [	PSE] NP
			FUR KESO	LUITON: C					

•	
SHEET 1 OF 1	
PROGRAM DS)	
OOR ELEVATION <u>85'-0"</u>	
CODE: C-PLAT-14A	·
CODE: P-0103-20	
NA CODE: CIVILFAIL	,
d be adequate.	
cion sheet and IDS file	
J. Ghio GROUP SUPERVISOR/DATE	
SC HVAC I&C PSE NPO	NAN

POSTULATED INTERACTION NO.: 20-19-01-01
FIRE ZONE 14-A LOCATION Turbine Building FLOOR ELEVATION B5'-O"
LOCATION WITHIN FIRE ZONE: Chamber containing CCW headers, elev. 85'.
IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE:  Overhead steel platform.  SOURCE CODE: C-PLAT-14A
TARGET: TARGET CODE: P-0103-20 24" CCW header, line 103.
Platform falls, impacts pipe.  Platform falls, impacts pipe.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platform. Simple analysis should be adequate.
M. Jones 05/06/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform has been qualified by analysis. See resolution sheet and IDS file No. 20-10-01-01.
S. Hanusiak 02/14/81  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

SHEET 1 OF 1_
---------------

POSTULATED INTERACTION NO.: 20-1	9-01-02
FIRE ZONE 14-A LOCATION	Turbine Bldg. FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Chamber containing CCW heade	rs, elev. 85.
IDENTIFICATION OF INTERACTING COM	PONENTS
SOURCE: Overhead 4" cast iron pipe,	SOURCE CODE: P-ULB-14A clamp coupled, rod supported.
TARGET: 24" CCW supply header, line	TARGET CODE: P-0103-20
POSTULATED INTERACTION:  Cast iron pipe fails, falls	PHENOMENA CODE: SPTFAIL & PIPEFAIL on instrument taps to CCW header, shearing taps.
compromise system operation. OR	N TEAM: eak of (2) 3/4" taps (stainless tubing) does not o cast iron line to preclude failure.
M. Jones 05/06/80 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE D See IDS 20-20-01-01.	ISCIPLINE:
F	J. A. Longworth 01/14/83

DISCIPLINE ENGINEER/DATE

J. A. Longworth 01/14/83
ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC IEC [PSE] NPO MAN

S. E. Traisman 09/21/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)
FINAL - 0064Z/63

L. W. Horn 01/18/84
SIP PROJECT ENGINEER APPROVAL/DATE

SW

SHEET	1	OF	1

THIERHCITON DOCOLEMINITON SUFEL (TD2)
POSTULATED INTERACTION NO.: 20-20-01-01
FIRE ZONE 14-A LOCATION Turbine Building FLOOR ELEVATION 85'-O"
LOCATION WITHIN FIRE ZONE: Chamber containing CCW headers, Elev. 85.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead 4" cast iron pipe, clamp coupled, rod supported.
TARGET:  24" CCW supply header, 104.
POSTULATED INTERACTION:  Cast iron pipe fails, falls on instrument taps to CCW header, shearing taps.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Verify that guillotine break of (2) 3/4" taps (stainless tubing) does not compromise system operation.  —or—  2. Add additional supports to cast iron line to preclude failure.
M. Jones 05/06/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Add & modify supports per hanger Dwg. SK-339-239R by DCN DC1-EP-5336.
C. R. VanNatta 01/13/83 DISCIPLINE ENGINEER/DATE  K. M. Krause 01/14/83 ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
PIGGIFEING VEGLOUGHER TOU VEGLOUITOR, OF TE HW MIC OR HAVE THE FLORE HIS

L. W. Horn 10/25/83

SIP PROJECT ENGINEER APPROVAL/DATE

[0039A/01017-36]

S. E. Traisman 09/21/83 FIEID VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

Sw

SHEET	1	OF	1
-------	---	----	---

•
POSTULATED INTERACTION NO.: 20-21-01-01
FIRE ZONE 14-A LOCATION Turbine Building FLOOR ELEVATION 85'-O"
LOCATION WITHIN FIRE ZONE: Chamber containing CCW headers. Elev. 85'.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead 4" cast iron pipe, clamp coupled, rod supported.
TARGET:  24" CCW supply header, line 2277
POSTULATED INTERACTION:  Cast iron pipe falls on instrument taps to CCW header, shearing taps.
RECOTTENDED RESOLUTION BY WALKDOWN TEAM:  1. Verify that quillotine break of (2) 3/4" taps (stainless tubing) does not compromise system operation.  -or-  2. Add additional supports to cast iron line to preclude failure.  M: Jones 05/06/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: See IDS. No. 20-20-01-01.
C. R. VanNatta 01/13/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC IEC [PSE] NPO NAN

L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman 08/18/83

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 20-23-01-01
FIRE ZONE 3J3 LOCATION Safety Related Pump FLOOR ELEVATION 72'-0"
LOCATION WITHIN FIRE ZONE: CCW Pump 1-3 Room, Elev. 73, Rear of room, by wall
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  3" Service Air Header  SOURCE CODE: P-SA-3J3
TARGET:  Line 2131, header A CCW supply (2")
POSTULATED INTERACTION:  Lateral deflection of service air header causes impact with line 2131.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add lateral restraint to service air header about 4' below point of contact. Add bracket to wall.
M. Jones 5/6/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Recommended resolution O.K. See Hgr. Dwg. No. 049339 - Sht. 43 & 44.
C. R. Van Natta 08/12/83  DISCIPLINE ENGINEER/DATE  K. M. Krause - 08/12/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman

(FINAL/0057Z)

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

01/19/84

SHEET	1_	<b>OF</b>	1
-------	----	-----------	---

POSTULATED INTERACTION NO.: 20-25-04-01
FIRE ZONE 1-A LOCATION Containment FLOOR ELEVATION 119'-0"
LOCATION WITHIN FIRE ZONE: Azimuth 340° above annulus duct.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-1246-10  Line 1246-10" CFC 1-2, 1-3, tray leakage to containment sump.
TARGET:  Support for line 3163-2" and 3164-2", CCW supply/return to CFC 1-1 motor cooler.
POSTULATED INTERACTION:  Source line supported with dead weight supports only (no lateral restraints).  Seismic excitation causes lateral motion of source. Source impacts 3" x 3" angle supports for target lines at two locations (clearance is 3/16" and 2", ±). Impact fails CCW supports and jeopardizes pressure boundary integrity of CCW system.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Determine deflection at point of contact. If damaging, add bilats to source line. Note various lines off of 10" source line appear to be anchored at elev. 140'. Note: Unistrut supports for Class I conduits 1995 and 1996 are with 1/2" of source line. Raceway supports may also be subject to damage by source. Note: This interaction is a result of final SIP area walkdown.
S. E. Traisman 09/28/83 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  See DCN DC1-EP-5061 HGR. DWG 049339-339/377R and Calc. No. SIP-437, Rev. 2.
C. R. VanNatta 10/11/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 10/11/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC IEC [PSE] NPO NA.
S. E. Traisman 09/28/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

Sw

		•		SEIS	TICALI	CABLO Y IN	CANYON	AS & ELE I PLANT, SYSTEMS IMENTATI	UNIT	NO. ACTIO	1 N PROGI	•	1	_ OF _	1	
POST	ULAT	ED I	NTERA	CTION	NO.:	20-2	27-07-0	)1			·····					
FIRE	ZON	E _1	<u>-c</u>		_ LOC	HOLLE	Conta	ainment		F	LOOR EI	LEVA	LION_	140'-	150.5	<u> </u>
LOCA				TRE Zontain		liner	(insid	ie) () az	zimuth	222 <sup>0</sup>	•					
IDEN	NIFI	CATI	ON OF	INTE	RACTI	NG CO	MPONENT	rs	•							
SOUR	CE:									SOURC	E CODE	: <u>E</u>	-ANTE	NNA		
	KR- (2	994 1/2"	(anto	enna) 40)	condu	it 10	.5' ft	. tall r	nounte	d fro	m 140'	dec	۲.			
TARG	Man			on l return			8–2". FC–1–5	).		TARGE	T COOE	: <u>P</u>	-3168·	-2		-
POST	Sou	rce	MTER is 10 tar		; ong.	Dist	ance b	etween :			ENA CO target				e fai	ls and
RECO	Ver	ify	adeq	acy o	f sup	port	WN TEA config sult o	<u>M</u> : uration f final	of so	ource urea w	compon alkdow	ent. n.				
				9/09/8 EGINAT		TE	ı				1					
FINA	Ant fil	enna le 52	KR-	94 ha	s bee DCN #	n qua	DISCIP lified -C-547	<u>LINE</u> : to Cla 8 (orig	ss I s inal i	seismi instal	c crit lation	eria det	per ails)	calc.	no.	148C
DIS				09/27 NEER/D					_		Kahl . GROU		/27/8 PERVI		ATE	-

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

09/09/83

L. W. Horn

01/18/84

SIP PROJECT ENGINEER APPROVAL/DATE

S. E. Traisman

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 20-34-06-01
FIRE ZONE 3-RR LOCATION Penetration Areas FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE:  Elev. 85', area GW, (N, 15 <sup>7</sup> ), near vertical RHR PP1-1 suction.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: NS-CD Construction deficiency.
TARGET:  Conduit K6989-1.  TARGET CODE: E-K6989-1
POSTULATED INTERACTION:  Target K6989 falls due to missing restraints.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace missing restraints.
F. Denison 06/10/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Replaced missing restraints per ART 159.
DISCIPLINE ENGINEER/DATE  A. G. Barta 07/15/81 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE FE EMS ENG [QC] HVAC IEC PSE NPO NAN

S. E. Traisman 08/31/82 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

1. W. Horn 10/29/82 SIP PROJECT ENGINEER APPROVAL/DATE

PACIFIC GAS & ELECTRIC DIABLO CANYON PLANT, UNIT SEISMICALLY INDUCED SYSTEMS INTER INTERACTION DOCUMENTATION SH	NO. 1 NACTION PROGRAM
POSTULATED INTERACTION NO.: 20-38-06-02	
FIRE ZONE 3-BB · LOCATION Penetration Area	FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: At steam generator blowdown tank.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platform 26GE.	SOURCE CODE: C-26GE
TARGET:  K-4172-3/4" (CCW supply to SG blowdown tank ve	TARGET CODE: P-4172-0.75 ent RE-27)
POSTULATED INTERACTION:  Target line passes platform leg 43" above eleg deflection of platform results in contact with loss of pressure boundary. Target line is rig point by a bilateral support.	n target line and consequently in
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify that $\Delta \geq$ (greater than or equal to) 1/3  Otherwise, re-route target line.  Note: This IDS is a result of final sip area	
S. E. Traisman 02/24/84 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  DC1-SP-19068 generated ro reroute line K-4172-	-3/4".
B. Abella DISCIPLINE ENGINEER/DATE	K. M. Krause 03/21/84 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS	ENG GC HVAC IEC [PSE] NPO NAN

S. G. Chesnut 05/16/84 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

> L. W. Horn 06/04/84 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	0	F.	1

POSTULATED INTERACTION NO.: 20-39-44-01
FIRE ZONE 3-BR LOCATION Penetration Area FLOOR ELEVATION 100'-0"
S.OCATION WITHIN FIRE ZONE: Elev. 108', near azimuth 185', col. N & 15.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:    SOURCE CORE: P-0927-14   SOURCE CORE: P-0927-14
TARGET:  Line 2679-2" CCW to Gross Failed Fuel Detector.  P-2679-2
POSTULATED INTERACTION:    I ine 2679-2" is in contact with insulated source line. Excessive seismic or thermal movements of source line could damage target.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  By analysis, verify integrity of line 2679-2". Otherwise provide seismic stop t source pipe or locally reroute target line.
P. Anderson 06/17/81 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Source pipe qualified by analysis of seismic/thermal displacements. See RICA Resolution Report No. 38.
DISCIPLINE ENGINEER/DATE  G. B. Page 10/09/81  ENGR. GROUP SUPERVISOR/DATE
DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN
. II Home 00/00/00
FIELD VERIFICATION BY WALKDOWN TEAM  L. W. Horn 09/30/82  SIP PROJECT ENGINEER APPROVAL/DATE

SHEET1_ OF1
PROGRAM OS)
OOR ELEVATION 104'-7"
CODE: P-DRAIN-18
CODE: P-2314-4
NA CODE: DEFLECT
point to preclude contact
. See drawing
GROUP SUPERVISOR/DATE  SC HVAC I&C [PSF] NPO NAN

PACIFIC GAS & ELECTRIC CO.	
DIABLO CANYON PLANT, UNIT NO. 1	
SETSMICALLY INDUCED SYSTEMS INTERACTION I	
INTERACTION DOCUMENTATION SHEET (IDS	S)

ţ

POSTULATED INTERACTION NO.: 20-40-01-01	
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 104'-7"
1.OCATION WITHIN FIRE ZONE: Under RCP1, elev. 105'.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: 1" drain line.	SOURCE CODE: P-DRAIN-18
TARGET: 4" CCW line 2314.	TARGET CODE: P-2314-4
POSTULATED INTERACTION:  1" drain line has no lateral support - impac	PHENOMENA CODE: DEFLECT
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Install U-bolts to restraint on each side of with line 2314.	contact point to preclude contact
M. Jones 04/16/80 WALKDOWN TEAM ORIGINATOR/DATE	·
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Bilateral restraints added each side of cont No. SK-20-40-01-01. Resolved per ART 005.	act point. See drawing
R. W. Eschenburg 10/28/80 DISCIPLINE ENGINFER/DATE	V. I. Killpack 12/03/80 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CF FF FM	IS ENG GC HVAC IEC [PSF] NPO NAN
M. Jones 02/23/82  FIFID VERIFICATION BY WALKDOWN TEAM S (FOR MODIFICATIONS ONLY)	I. W. Horn 09/30/82 IP PROJECT ENGINFER APPROVAL/DATE

SHEET	11	OF	1

D.J.E. 8/21/84

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 20-40-66-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Azimuth 193°, 4' from containment wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: I-FIT1  FIT-1 (Gross Failed Fuel Detector assembly) and associated support struture.
TARGET:  Gross failed fuel detector heat exchanger (required for CCW pressure boundary integrity).
POSTULATED INTERACTION:  (1) Bolts holding FIT-1 to support panel fail, FIT-1 falls onto target  HX.
(2) Support panel for FIT-1 (constructed of 1" tube sections, unknown wall thickness) fails, panel and associated FIT fall onto target HX. Potential exists for breach of CCW pressure boundary.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify adequacy of connections for FIT-1 and FIT-1 support structure by engineering evaluation.
S. E. Traisman 06/29/83 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Adequacy of connections for FIT-1 support structure has been verified per Diablo Canyon Unit 1 Calculation No. M-466, Rev. 0, dated 09/29/83, FIT-1, (gross failed fuel detector assembly) and FIT-1 support structure are acceptable as is. No
further action is required.  D. Esken  E. Connell III
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO MAN
I. W. Horn 01/19/84 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

[0034A/0085Z-24]

SHEE! I OFI_	SHEET	1	OF	1
--------------	-------	---	----	---

POSTULATED INTERACTION	ON NO.: 20-44	4-01-01			
FIRE ZONE 3-BB			reas FLOOR EL	EVATION 100	<u>'-0"</u>
LOCATION WITHIN FIRE Elev. 100, Col.		ersection.	•		•
. IDENTIFICATION OF IN	TERACTING COMP	PONENTS			
SOURCE: 3" line 1595.			SOURCE CODE:	P-1595-3	<del></del>
TARGET: 6" CCW surge tar	nk line 123.		TARGET CODE:	P-0123-6	<del></del>
POSTULATED INTERACTION Lateral deflect		e causes impact	PHENOMENA COD with line 123.		
,					
RECOMMENDED RESOLUTION Add lateral res CCW lines 121 &	traint to line	e 1595 to precl		h CCW line.	Add between
•		iş.	à		
M. Jones 05 WALKDOWN TEAM ORIGIN					
FINAL RESOLUTION BY See IDS No. 06-		<u>ISCIPLINE</u> :			
C. R. VanNatta 06/		,	<u>K. M. Krau</u> ENGR. GROUP	se 06/08/83	

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN

M. Baker 08/02/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

L. W. Horn 10/20/83
SIP PROJECT ENGINEER APPROVAL/DATE

SW

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 20-44-18-01 Over Zones
FIRE ZONE 8C & 8B1 LOCATION HVAC Rooms FLOOR ELEVATION 163'-0"
LOCATION WITHIN FIRE ZONE: Roof of auxiliary building, elev. 171'.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: E-ANTENNA  Microwave antenna & support tower.
TARGET:  TARGET CODE: M-CCWTANK  Microwave antenna & support tower.
POSTULATED INTERACTION:  Antenna & tower topple, impact CCW surge tank.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of antenna and support structure by analysis.
M. Jones 05/07/80 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:
Stiffener plates added to antenna. See Calc. No. 20-44-18-01 and ART No. 263.
S. Hanusiak 07/15/81  DISCIPLINE ENGINEER/DATE  E. P. Wollak 07/16/81  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NA

S. E. Traisman

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

09/29/82

L. W. Horn 10/28/82

SIP PROJECT ENGINEER APPROVAL/DATE

•	SHEET 1 OF 1
PACIFIC GAS & ELECTRIC	
DIABLO CANYON PLANT, UNIT	
SEISMICALLY INDUCED SYSTEMS INTER INTERACTION DOCUMENTATION SH	The state of the s
THIERMCITCH DOCOMENIATION SE	IEEI (IDS)
POSTULATED INTERACTION NO.: 20-45-08-01	•
FIRE ZONE 1-B LOCATION Containment	FLOOR FLEVATION 125'-0"
LOCATION WITHIN FIRE ZONE:	
Reactor coolant pump 1-4, lube oil cooler.	,
•	₹ •
IDENTIFICATION OF INTERACTING COMPONENTS	4
IDENTIFICATION OF INTERACTING CONFORMING	į.
SOURCE:	SOURCE CODE: C-71G
Grating kick for Class I platform No. 71G.	
•	
TARGET:	TARGET CODE: P-0137-4
CCW line K-137-4 (RCP1-4 lube oil cooler suppl	(y).
	PHENOMENA CODE: INTERFERE & DEFLECT
Gap between line and sharp corner of kick is 1	
insufficient). Thermal/seismic displacement o	
and target. Damage could cause breach of pres	ssure boundary.
· ·	\$
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	
Cut kickplate to provide adequate clearance, o	or show existing clearance is
adequate.	•
This interaction is a result of final SIP area	walkdown.
N 1 Nalkon 00/20/02	•
W. I. Walker 09/28/83 WALKDOWN TEAM ORIGINATOR/DATE	
WILLIAM TILES ON ENTERTONY DOTTE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
Modification provided per ART No. 452. Also s	ee Calc. No. 20-45-08-01.
*	
•	
•	
W. 1. Walker 10/10/83	F. Morsy 10/10/83
DISCIPI, INE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
	•
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS	ENG GC HVAC I&C PSE NPO NAN
•	
S. E. Traisman 01/19/84	I W. Horn 01/26/84
ETELD VEDTETCATTON BY LIAI VIOLEI TEAM CTD	DRATECT ENCINEED ADDROVAL (DATE

5/1/84

PACIFIC GAS & ELECT DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	NIT NO. 1 TERACTION PROGRAM
POSTULATED INTERACTION NO.: 20-45-13-01	•
FIRE ZONE 1-B LOCATION Containment	FLOOR ELEVATION 125'-0"
LOCATION WITHIN FIRE ZONE: RCP 1-3 upper BGR oil CLR.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platform 69G grating kick plate.	SOURCE CODE: C-69G
TARGET:  CCW line 2305-4", RCP 1-3 motor upper bearing	TARGET CODE: P-2305-4 g cooling CCW return.
POSTULATED INTERACTION:  Gap between grating kick plate & line CCW-23 movement ofth pipe due to RCP 1-3 seismic mogrowth.	PHENOMENA CODE: INTERFERE & DEFLECT 06-4" is 3/16" which shows no room to tion and thermal
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Cut kickplat to provide adequate clearance o adequate.	r show existing clearance is
C. R. VanNatta 09/28/83 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Modification provided per ART No. ART No. 45: 20-45-08-01.	2. For Calc. see IDS file No.
W. L. Walker 10/10/83 DISCIPLINE ENGINEER/DATE	F. Morsy 10/10/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EM	s eng GC hvac iec pse npo nan

绮柳

L. W. Horn

SIP PROJECT ENGINEER APPROVAL/DATE

01/18/84

S. E. Traisman 11/29/83

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY) .

PACIFIC GAS & ELECTRIC DIABLO CANYON PLANT, UNIT SEISMICALLY INDUCED SYSTEMS INTER INTERACTION DOCUMENTATION SH	F NO. 1 RACTION PROGRAM
POSTULATED INTERACTION NO.: 20-45-14-01	
FIRE ZONE 3-BB LOCATION Penetration Areas	FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 93, GE area, mid-room.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Light fixture.	SOURCE CODE: E-LF-3RB
TARGET: Air supply tubing to FCV-360.	TARGET CODE: I-FCV360
POSTULATED INTERACTION:  Fixture falls, impacts tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.	
M. Jones 11/18/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field be installed in accordance with PG&E Dwg. 050 Install backup support chain per DCN DCO-FF-5 Resolved by modification. See ART 348.	O41, detail 8 (category T).
R. J. Swaim 02/23/83 DISCIPITINE FNGTNEER/DATE	G. C. Bhatt 02/23/83  ENGR. GROUP SUPERVISOR/DATE  ENG GC HVAC I&C PSE NPO NAN
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [FE] EMS	FIND OF HALLE THE LOS IN A INNE

I. W. Horn 09/09/83

SIP PROJECT ENGINEER APPROVAL/DATE

[0029A/00867-34]

Kers

S. F. Traisman 08/18/83 FIFI.D VERIFICATION BY WALKDOWN TEAM

SHEET 1	OF	- 1

I.. W. Horn 09/09/83

SIP PROJECT ENGINFFR APPROVAL/DATE

## PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 20-45-32-01	,
FIRE ZONE 3-88 LOCATION Penetration Areas	FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 85, area GW-above CCW supply and return	headers.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead flourescent light - 3 total.	SOURCE CODE: E-LF-3BB
TARGET: K6114	TARGET CODE: E-K6114-1.25
POSTULATED INTERACTION:  lights impacts conduit due to unchained and in	PHENOMENA CODE: FIXTURE sufficiently supported.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Figure integrity of light fixtures.	
P. Werinski 01/09/81 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:	
The above source light fixture has been field be installed in accordance with PG&E Dwg. 0500 Install backup support chain per DCN DCO-FE-55 Resolved by modification. See ART 348.	41, detail 8 (category II).
R. J. Swaim 02/23/83 DISCIPLINE ENGINEER/DATE	G. C. Bhatt 02/23/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [FE] EMS	

S. E. Traisman 08/18/83
FIELD VFRTFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

Kers

SHEET1_ OF1_	
--------------	--

• • • • • • • • • • • • • • • • • • • •
POSTULATED INTERACTION NO.: 20-46-01-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: .Elev. 100, Col 15.7, & A intersection.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-1595-3 3" line 1595.
TARGET:  6" CCW surge tank line 121.
POSTULATED INTERACTION:  Lateral deflection of 3" line causes impact with line 121.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Add lateral restraint to line 1595 to preclude contact with CCW line. Add between CCW lines 121 & 123 and attach to col. 15.7 wall.
M. Jones 05/07/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: See IDS No. 06-60-10-04.

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN

M. Baker 08/02/83
FIELD VERIFICATION BY WALKDOWN TEAM

C. R. VanNatta 06/07/83
DISCIPLINE ENGINEER/DATE

(FOR MODIFICATIONS ONLY)

L. W. Horn 10/20/83 SIP PROJECT ENGINEER APPROVAL/DATE

K. M. Krause 06/08/83 ENGR. GROUP SUPERVISOR/DATE

•
PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 20-48-13-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 118, Mid-room, GE Area
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixture (Ball/Socket mount)  SOURCE CODE: E-LF-3B8
TARGET:  Drain connection (Pipe & Root Valve) to Line 318-12"  PA-0318-12
POSTULATED INTERACTION:  Fixture falls, impacts drain connection.  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly by analysis.
M. Jones 7/29/80 WALKDOWN TEAM ORIGINATOR/DATE
The above source light fixture has been field inspected and verified to be installed in accordance with PGAE Owg. 050041, Detail 9 (Category XI). This fixture type has been qualified by analysis per calculation 52.24.52. No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83 G. C. Bhatt 03/04/83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC ICC PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 8/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	 OF	_1_

POSTULATED INTERACTION NO.: 20-48-14-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 118, Mid-room, GE Area
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixture (Ball/Socket mount)  SOURCE CODE: E-LF-3BB
TARGET:  Drain connection (Pipe & Root Valve) to Line 323-12"  TARGET CODE: PA-0323-12
POSTULATED INTERACTION:  Fixture falls, impact drain connection.  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of fixture mount, possibly by analysis.
MALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, Detail 9 (Category X).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83  DISCIPLINE ENGINEER/DATE  G. C. Rhatt 03/04/83  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN
L. W. Horn 8/24/83 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

[0040A/0106Z-6]

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 20-49-13-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 118, Mid-room, GE Area
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixture (Ball/Socket mount)  SOURCE CODE: F-LF-3BB
TARGET:  Drain connection (Pipe & Root Valve) to Line 322-12"  TARGET CODE: PA-0322-12
POSTULATED INTERACTION:  Fixture falls, impacts drain connection.  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly by analysis.
M. Jones 7/29/80 WALKDOWN TEAM ORIGINATOR/DATE
The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, Detail 9 (Category XI). This fixture type has been qualified by analysis per calculation 52.24.52. No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83 G. C. Bhatt 03/04/83  DISCIPI INE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC IEC PSE NPO NAM

L. W. Horn 8/24/83
SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

AUB

SHEET 1 OF 1  O. 1  TON PROGRAM  (IDS)
FLOOR ELEVATION 115'0"
IRCE CODE: E-I.F-388
RGET CODE: PA-0321-12
WOMENA CODE: FIXTURE
nalysis.
spected and verified to be etail 9 (Category XI). per calculation 52.24.52. is.
G. C. Bhatt 03/04/83 WGR. GROUP. SUPERVISOR/DATE
NG GC HVAC I&C PSE NPO NAM

POSTULATED INTERACTION NO.: 20-50-17-01
FIRE ZONE 3-8B LOCATION Penetration Area FLOOR ELEVATION 115'0"
LOCATION WITHIN FIRE ZONE: Elev. 118, Mid-room, GE Area
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixture (Ball/Socket mount)  SOURCE CODE: E-1.F-388
TARGET:  Orain connection (Pipe & Root Valve) to Line 321-12"
POSTULATED INTERACTION.  Fixture falls, impacts drain connection.  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly by analysis.
M. Jones 7/29/80 WALKDOWN TEAM ORIGINATOR/DATE
The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. O50041, Detail 9 (Category XI).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83 G. C. Bhatt 03/04/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE NPO NAM
L. W. Horn 8/24/83_ FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE
(FOR MODIFICATIONS ONLY)

SHEET1_ OF1
PACIFIC GAS & ELECTRIC CO.
DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM
INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 20-51-17-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 118, Mid-room, GE Area
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Source code: E-LF-3BB  Overhead light fixture (Ball/Socket mount)
TARGET: TARGET CODE: PA-0320-12
Drain connection (Pipe & Root Valve) to Line 320-12"
POSTULATED INTERACTION:  Fixture falls, impacts drain connection.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:
Ensure integrity of fixture mount, possibly by analysis.
•
M. Jones 7/29/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:
The above source light fixture has been field inspected and verified to be
installed in accordance with PG&E Dwg. 050041, Detail 9 (Category XI).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
•
R. J. Swaim 3/4/83 G. C. Bhatt 03/04/83 DISCIPLINE ENGINFER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC ICC PSE NPO NAN

I. W. Horn 8/24/83
SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1_	OF	1
-------	----	----	---

•
POSTULATED INTERACTION NO.: 20-51-18-01
FIRE ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 118, Mid-room, GE Area
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixture (Ball/Socket mount)  SOURCE CODE: E-LF-388
TARGET:  Drain connection (Pipe & Root Valve) to Line 315-12"  TARGET CODE: PA-0315-12
POSTULATED INTERACTION:  Fixture falls, impacts drain connection.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixture mount, possibly by analysis.
M. Jones 7/29/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, Detail 9 (Category XI).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83 G. C. Bhatt 03/04/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN
TIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

[0040A/0106Z-10]

•
SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
LATED INTERACTION NO.: 20-52-13-01
ZONE 3-BB LOCATION Penetration Area FLOOR ELEVATION 115'-0"
ION WITHIN FIRE ZONE: Elev. 118, Mid-room, GE Area
IFICATION OF INTERACTING COMPONENTS
SOURCE COOE: E-LF-3BB Overhead light fixture (Ball/Socket mount)
T: TARGET CODE: PA-0314-12  Drain connection (Pipe & Root Valve) to Line 314-12"
PHENOMENA CODE: FIXTURE Fixture falls, impacts drain connection.
MENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of fixture mount, possibly by analysis.
Jones 7/29/80 OWN TEAM ORIGINATOR/DATE
RESOLUTION BY RESPONSIBLE DISCIPLINE:
The above source light fixture has been field inspected and verified to be

8/24/83

#### FINAL RESOLUTION BY RESPONSIBLE DISCIPLIN

RECOMMENDED RESOLUTION BY WALKDOWN TEAM:

POSTULATED INTERACTION NO.: 20-52-13-01

IDENTIFICATION OF INTERACTING COMPONENTS

FIRE ZONE 3-BB

SOURCE:

TARGET:

LOCATION WITHIN FIRE ZONE:

POSTULATED INTERACTION:

M. Jones

WALKDOWN TEAM ORIGINATOR/DATE

The above source light fixture has b installed in accordance with PG&E Dwg. 050041, Detail 9 (Category XI). Yest This fixture type has been qualified by analysis per calculation 52.24.52. No further action necessary. Resolved by analysis.

G. C. Bhatt 03/04/83 R. J. Swaim 3/4/83 ENGR. GROUP SUPERVISOR/DATE DISCIPLINE ENGINEER/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

I. W. Horn FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

SHEET _	1	OF	_1_
DOCDAM			

POSTULATED INTERACTION NO.: 20-52-14-01
FIRE ZONE 3-8B LOCATION Penetration Area FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE: Elev. 118, Mid-room, GE Area
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead light fixture (Ball/Socket mount)  SOURCE CODE: FL.F-388
TARGET:  Drain connection (Pipe & Root Valve) to Line 319-12"  PA-0319-12
POSTULATED INTERACTION:  Fixture falls, impacts drain connection.  PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of fixture mount, possibly by analysis.
M. Jones 7/29/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&F Dwg. 050041, Detail 9 (Category XI).  This fixture type has been qualified by analysis per calculation 52.24.52.  No further action necessary. Resolved by analysis.
R. J. Swaim 3/4/83  DISCIPLINE ENGINEER/DATE  G. C. 8hatt 03/04/83  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAM
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

SHEET	1	OF	1

	ion Area FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE:	
Elev. 95, mid-room, GE area.	•
IDENTIFICATION OF INTERACTING COMPONENTS	,
	SOURCE_CODE: PA-0310-2
SOURCE:  3X3 angle bracket brace to pipe suppo	
TARGET:	TARGET CODE: P-0312-2
Handwheel to Manual Valve, item 39, t	to CCW line 310-2".
POSTULATED INTERACTION:	PHENOMENA CODE: DEFLECT
Handwheel <sup>3</sup> /8" from brace. Seismic m contacting brace.	novements could result in handwheel
contacting brace.	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Reroute pipe support brace away from	valve to provide 2" minimum clearance.
• * *	
M 7 07/00/00	
M. Jones 07/29/80 WALKDOWN TEAM ORIGINATOR/DATE	
HALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE	<b>:</b> :
HALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE	be support DWG No 55-12 Rev. 3 which is
HALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE  Recommended resolution — OK. See pig	be support DWG No 55-12 Rev. 3 which is
HALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE Recommended resolution — OK. See pig reflect "as-built" condition that cle	be support DWG No 55-12 Rev. 3 which is ear 2 <sup>1</sup> /2" from valve handle.
WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE  Recommended resolution — OK. See pig	be support DWG No 55-12 Rev. 3 which is ear 2 <sup>1</sup> /2" from valve handle.
HALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE  Recommended resolution - OK. See pig reflect "as-built" condition that cle  C. P. Van Natta 05/19/83	J. Longworth O5/19/83  ENGR. GROUP SUPERVISOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE Recommended resolution - OK. See pig reflect "as-built" condition that cle  C. P. Van Natta 05/19/83 DISCIPLINE ENGINEER/DATE	J. Longworth O5/19/83  ENGR. GROUP SUPERVISOR/DATE

SHEET	1	OF	_1_

POSTULATED INTERACTION NO.: 20-55-03-01
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Flev. 108, northeast corner of room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: F-LF-3BB Overhead light fixture (chain supported).
TARGET:  Line 144-4" vent connection.  TARGET CODE: PA-0144-4
POSTULATED INTERACTION:  Fixture falls, impacts vent connection.  PHENOMENA CODE: FIXTURF
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixtures.
M. Jones 07/29/80
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E Dwg. 050041, detail 8 (category I). Install backup support chain per DCN DCO-EF-5552 Sht. 12 of 13, detail 75. Resolved by modification. See ART 348.
R. J. Swaim 02/23/83 G. C. Bhatt 02/23/83 DISCIPLINE ENGINFER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN
S. F. Traisman 08/18/83  FIELD VERIFICATION BY WALKDOWN TEAM  (FOR MODIFICATIONS ONLY)  L. W. Horn 09/09/83  SIP PROJECT ENGINEER APPROVAL/DATE

AGD

SHFET	1_	OF	1
	1		

POSTULATED INTERACTION NO.: 20-56-01-01	
FIRE ZONE 3-BR LOCATION Penetration	Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Flev. 108, northeast corner of room.	*
IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE: Overhead light fixture (chain supported).	SOURCE CODE: E-LF-3BB
TARGET: Operator to valve FCV-361.	TARGET CODE: I-FCV361
POSTULATED INTERACTION: Fixture falls, impacts operator.	PHENOMENA CODE: FIXTURF
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of fixture mount.	· · · ·
M. Jones 07/29/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPITNE:  The above source light fixture has been for the installed in accordance with PGGE Dwg.  Install backup support chain per DCN DCO-Resolved by modification. See ART 348.	050041, detail 8 (category I).
R. J. Swaim 02/23/83 DISCIPLINE FNGTNFER/DATE	G. C. Bhatt 02/23/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [FE]	EMS ENG GC HVAC I&C PSE NPO NAN
S. F. Traisman 08/18/83 FIFI D VERIFICATION BY WALKDOWN TEAM	L. W. Horn 09/09/83 SIP PROJECT FMGTNFER APPROVAL/DATE

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 20-57-02-01	
FIRE ZONE 3J1 LOCATION Safety Relpat	ed Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Elev. 73, Over CCW Pump 1-1	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Light fixtures, chain supported (2)	SOURCE CODE: E-1 F-3J1
TARGET: Air supply tubing to FCV-606	TARGET CODE: I-FCV606
POSTULATED INTERACTION: Fixtures fall, impact tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixtures.	·
M. Jones 12/2/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been fine to be installed in accordance with PG&F DWG.  up support chain per DCN-DCO-FF-5552 Rev.  Resolved by modification.	050041, Detail 8. Install back-
R. J. Swaim 03/21/83 DISCIPLINE ENGINFER/DATE	G. C. Bhatt 03/21/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [FE]	EMS ENG GC HVAC I&C PSE NPO NAN
S. E. Traisman 08/24/83 FIFID VERTFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	Lee Horn 09/9/83 SIP PROJECT ENGINFER APPROVAL/DATE

PACIFIC GAS & ELECTRI	SHEET <u>1</u> OF <u>1</u> C CO.
DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE INTERACTION DOCUMENTATION S	T NO. 1 RACTION PROGRAM
POSTULATED INTERACTION NO.: 20-58-02-01	
FIRE ZONE 3-J-2 LOCATION Safety Related Pump	FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Elev. 73, over CCW pump 1-2.	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: light fixtures (2)	SOURCE CODE: E-LF-3J2
TARGET: Air supply tubing to FCV-607	TARGET CODE: I-FCV607
POSTULATED INTERACTION:  Fixtures fall, impact tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixtures.	•
M. Jones 12/02/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The above source light fixture has been field	I inspected and verified to

DISCIPLINE ENGINEER/DATE

R. J. Swaim 03/21/83

G. C. Bhatt 03/21/83 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

be installed in accordance with PG&F DWG. 050041, Detail 8. Install backweb up support chain per DCN-DCO-EE-5552 Rev. 1 Sheet 9 of 9, detail #75, ART No. 353

08/24/83 <u>S. E. Traisman</u> FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

Resolved by modification.

09/09/83 L. W. Horn " SIP PROJECT ENGINEER APPROVAL/DATE

SHEET1 OF1	SHEET	1	OF	_1_
------------	-------	---	----	-----

POSTULATED INTERACTION NO.: 20-59-02-01	
FIRE ZONE 3-J-3 LOCATION Sahety Relate	ed Pump FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: Elev. 73, over CCW Pump 1-3	-
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:	SOURCE CODE: E-LF-3J3
TARGET: Air Supply tubing to FCV-608	TARGET CODE: I-FCV608
POSTULATED INTERACTION: Fixtures fall, impact tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixtures.	
M. Jones 12/02/80 WALKDOWN TEAM ORIGINATOR/DATE	,
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been for the installed in accordance with PG&E DWG. up support chain per DCN-DCO-EE-555? Rev. Resolved by modification.	O50041, Detail 8. Install back-
R. J. Swaim 03/21/83 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE]	G. C. Bhatt 03/21/83 ENGR. GROUP SUPERVISOR/DATE  EMS ENG GC HVAC I&C PSE NPO NAN
S. E. Traisman 08/24/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 09/09/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET1_ OF _1_			
PACIFIC GAS & ELECTRIC CO.  DIAGLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)			
TION NO.: 20-63-03-01			
LOCATION Aux./Fuel Handling FLOOR ELEVATION 85'-0"			
RE ZONE: Central Sample Panel			
INTERACTING COMPONENTS			
(chain supported fluorescent)  SOURCE CODE: E-LF-3L			
TARGET COOE: I-CSP central sample panel			
TION: PHENOMENA CODE: FIXTURE falls, impacts tubing			

### POSTULATED INTERACTION NO.: 20-63-03-01 FIRE ZONE 3-L LOCATION Aux./Fuel Handling LOCATION WITHIN FIRE ZONE: Elev. 91, at Central Sample Panel IDENTIFICATION OF INTERACTING COMPONENTS SOURCE: SOURC Light Fixture (chain supported fluorescent)

TARGET: TARGE CCW Tubing in central sample panel

POSTULATED INTERACTION: PHENO Light fixture falls, impacts tubing

RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixture.

M. Jones 5/05/82 WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Safety chain added to light fixture. See DCN DCO-EE-5552, Rev. 1, Sheet 9 of 9, Det. 75. Also, see ART #377.

Ken

Ì

!

R. J. Swaim 05/17/83 G. C. Bhatt 05/18/83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC IEC PSE NPO NAN

S. E. Traisman 10/14/83 Lee Horn FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

10/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

	• •
POSTULATED INTERACTION NO.: 20-63-03	-02
FIRE ZONE 3-L LOCATION Aux	./Fuel Handling FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE:  Behind central sample panel Auxiliary Bldg. columns N and 15	5.7/16.8
IDENTIFICATION OF INTERACTING COMPONE	ents .
SOURCE: Condensate collection tank.	SOURCE CODE: M-Tank
TARGET: CCW lines within central sample	TARGET CODE: I-CSP
	PHENCHENA CODE: SPTFAIL orage fails, tank overturns and impacts central sample panel support structure may result in reach of CCW pressure boundary.
RECOMMENDED RESOLUTION BY WALKDOWN TE Verify adequacy of condensate co evaluation.	<u>AM</u> : Ollection tank anchorage by engineering
	PLINE: mically qualified with modification. modification, see DCN No. DC1-EC-11853.
S. Gaballah 09/08/83 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION	B. Sarkar 09/09/83  ENGR. GROUP SUPERVISOR/DATE  :[CE] EE EMS ENG GC HVAC I&C PSE NPO NAM
S. E. Traisman 02/24/84	L. W. Horn 04/20/84

S.C. 8/3/34

PACIFIC GAS & FLECTR DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTO INTERACTION DOCUMENTATION S	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 20-64-07-01	
FIRE ZONE 1-A LOCATION Containment	FLOOR ELEVATION
LOCATION WITHIN FIRE ZONE: . Elev. 125', near platform above RCP1-1.	· · · · · · · · · · · · · · · · · · ·
IDENTIFICATION OF INTERACTING COMPONENTS	·
SOURCE: Temporary scaffolding.	SOURCE CODE: NS-CD
<u>TARGET</u> : Line 2307-1".	TARGET CODE: P-2307-1
POSTULATED INTERACTION: Scaffolding is not secured and could impact	PHENOMENA CODE: HOUSEKEEP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove scaffolding prior to operation.	•
P. Anderson 06/16/84	
WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Scaffolding removed per ART No. 207 and RLCA	Report No. 36.
S. Hanusiak 07/15/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak 07/28/81 ENGR. GROUP SUPERVISOR/DATE

09/30/82

I.. W. Horn

SIP PROJECT ENGINFER APPROVAL/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE FE FMS ENG [GC] HVAC I&C PSE NPO NAN

*i* '

S. Harris 02/17/82

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET 1 OF	1
------------	---

INTERACTION DOCUMENTATI	CON SHEET (IDS)
POSTULATED INTERACTION NO.: 20-65-12-01	
FIRE ZONE 1-R 1.OCATION Containment	FLOOR EI EVATION 110'-9"
LOCATION WITHIN FIRE ZONE: Flev. 120', near RCP 1-2.	•
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: line 135-4" thermal units.	SOURCE CODE: P-0135-4
TARGET: Line 139-4" supply.	TARGET CODE: PA-0139-1
POSTULATED INTERACTION:  Line 135-4" is snubber supported. Branch ported. Excessive thermal movement of line 139-1".	PHENOMENA CODE: DFF1FCT h line 139-1" is rigidly sup- ine 135-4" could overstress
RECOMMENDED RESOLUTION BY WALKDOWN TEAM.  Ensure integrity of line 139-1" by analy: modify support to provide sufficient bran	sis of thermal nuts. If needed, nch flexibilities,
Paul Anderson 06/18/81 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPITNE: Line qualified by analysis, see RLCA Reso	olution Report No. 61.
	, ,
P. Anderson 12/17/81 DISCIPIINE ENGINEER/DATE	R. L. Cloud 12/18/81  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE	EMS [ENG] GC HVAC I&C PSE NPO NAT
R. I Cloud 12/18/81	1. W. Horn 09/30/82 STP PROJECT FAGINEER APPROVAL/DATE

[0039A/01027-47]

•	SHEET1_ OF1
PACIFIC GAS & ELECT DIABLO CANYON PLANT, U SEISMICALLY INDUCED SYSTEMS IN INTERACTION DOCUMENTATION	NIT NO. 1 TERACTION PROGRAM
POSTULATED INTERACTION NO.: 20-71-01-01	· ;
FIRE ZONE 1-A LOCATION Containment	FLOOR FLEVATION 91'-0"
LOCATION WITHIN FIRE ZONF: Elev. 99', near primary shield wall.	: ;.
IDENTIFICATION OF INTERACTING COMPONENTS	9
SOURCE: Temporary scaffolding.	SOURCE CODE: NS-CD
TARGET:   l.ine 2320-1-1/2".	TARGET CODE: P-2320-1.50
POSTULATED INTERACTION: Scaffolding is not secured and could impact	PHENOMENA CODE: HOUSEKEEP
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove scaffolding prior to operation.	
WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Scaffolding removed per ART No. 206 and RLC	A Report No. 36.
	•

DISCIPI THE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG [GC] HVAC ICC PSE NPO NAN

02/17/82 M. Jones FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

I., W. Horn 09/30/82 SIP PROJECT ENGINEER APPROVAL/DATE

F. P. Wollak 07/28/81

ENGR. GROUP SUPERVISOR/DATE

S. Hanusiak 07/15/81 DISCIPLINE ENGINFER/DATE

SHEET -	1	OF	1
---------	---	----	---

					•	•				
POSTULATED IN	TERACTION	NO.: <u>20-8</u>	1-01-01				•			
FIRE ZONE 28		LOCATION	Outside Are	a	FLO	OR ELEVA	TION _	140'-	<u>)"</u>	
LOCATION WITH Elev. 14			tank, col t	.2 <sup>9</sup> and	т.					
IDENTIFICATIO	N OF INTER	ACTING COM	PONENTS							
SOURCE: SG blowd	own tank,	steel plat	forms (Class		SOURCE	<u> </u>	HTANK_		<del></del>	•
TARGET: Line 240	2-1" blue.			:	TARGET	CODE: F	-2402-	1		•
POSTULATED IN Class II		over, Cla	ss II platfo			A CODE:			. · · · · · · · · · · · · · · · · · · ·	
				] of						
RECOMMENDED R By analy			N TEAM: y of tank an	d plati	forms.			1		
P. Anders	on 06/18 ORIGINATO	<del></del>								
	forms: No	. 25GE to 1 . 26GE is :	ISCIPLINE: be removed, seismically							
2. Tank	is seismi	cally qual:	ified, subje	ct to m	nodific	ation pe	r 0C1-	EC-526	50.	
S. Gaball	ah 12/18/ NGINEER/DA			<u>-</u>		arkar GROUP SU			ΓE	
DISCIPLINE RE	SPONSIBLE !	FOR RESOLUT	TION: [CE] E	E EMS	ENG	GC HVAC	I&C	PSE	NPO	NA

S. E. Traisman 08/24/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

L. W. Horn 09/09/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1 OF 1	
--------------	--

ZISTERROTZON DOG	MADELLI (TDO)
POSTULATED INTERACTION NO.: 20-81-09-	01
FIRE ZONE 28 LOCATION Outs	ide Area FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 140!, near SG blowdown tank	1-1, col. 12 <sup>9</sup> and 7.
IDENTIFICATION OF INTERACTING COMPONEN	тѕ
SG blowdown tank, steel platforms	SOURCE CODE: M-TANK (Class II).
TARGET: Line 2403-1" blue.	TARGET CODE: P-2043-1
POSTULATED INTERACTION: Class II tank tips over, Class II 2403.	PHENOMENA CODE: SPTFAIL platforms fall, hitting the target line
RECOMMENDED RESOLUTION BY WALKDOWN TEA By analysis, ensure stability of	
P. Anderson 06/18/81 WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSIBLE DISCIP	
1. Tank supports are seismically DCN No. DC1-EC-5260. 2. Platforms: No. 26GE has been Calc. No. 20-81-01-01. 25 GE to DCN No. DC1-EC-5292.	
S. Gaballah 02/07/83 DISCIPLINE ENGINEER/DATE	B. Sarkar 02/07/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION:	[CE] EE EMS ENG GC HVAC ICC PSE NPO NA
•	
S. E. Traisman 08/18/83 FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 04/20/84 SIP PROJECT ENGINEER APPROVAL/DATE

3/3/8

SHEET	1	OF	1	
		•	 •	

•	DELEKTION DOCUMENTALION	SHEET (IDS)
POSTULATED INTERACTION N	10.: <u>20-81-19-01</u>	
FIRE ZONE 3-BB	LOCATION Penetration And	eas FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZON Azimuth 130', 10' f	Æ: From containment wall.	
IDENTIFICATION OF INTERA	CTING COMPONENTS	
Source: Shield cask for RE1 12" height).	9, SG blowdown liquied m	SOURCE CODE: I-RE19 conitor (cylinder 16" diameter)
TARGET:		TARGET CODE: M-SC55
3/4" SS Line - CCW	supply to SC-55 (SG blow	down sample cooler)
POSTULATED INTERACTION:		PHENOMENA CODE SPTFAIL
		structure fail, cask falls
		One associated 3/4" SS line could pull target line away
		reach of CCW pressure boundary.
	RE-19 shield cask suppor	t configuration. Alternative- hield cask so that interaction
•		•
S. E. Traisman 06/29/83  HALKDOHN TEAM ORIGINATOR		t.
	ield cask support config I calculation No. M-467	uration has been verified per Rev. O dated 09/29/83. RF-19
		E Connell TIT
DISCIPLINE ENGINEER/DATE	Ē	E. Connell III  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FO	OR RESOLUTION: CE EE [E	MS] ENG GC HVAC IEC PSE NPO NA

FIELD VERIFICATION BY HALKDOWN TEAM (FOR MODIFICATIONS ONLY)

<del> </del>	_		_
SHEET	1	OF	1

Instrumitor Decorporation Street (195)
POSTULATED INTERACTION NO.: 20-82-01-01 Intercomp
FIRE ZONE 34 (outside) LOCATION Penetration Area FLOOR FI EVATION 140'-0"
LOCATION MITHIN FIRE ZONE: Flev. 140' near cols. T and 15.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: M-BOTTLE Compressed air breathing bottles outside fan room.
TARGET: TARGET CODE: P-4172-0.75  CCW lines to RF-27, line 4172-3/4".
POSTULATED INTERACTION:  Breathing air bottle(s) supports fail, air bottle nozzle breaks off, bottle becomes a missile, and impacts CCW line.

#### RECOMMENDED RESOLUTION BY WALKDOWN TEAM:

Verify integrity of air bottle supports.

### S. E. Traisman 08/05/82 WALKDOWN TEAM ORIGINATOR/DATE

ting of all tages and the

#### FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Resolution of IDS No. 20-82-05-01 is applicable to this. See ART 359 and resolution sheet.

S. Burney 04/08/83
DISCIPLINE FNGTNEER/DATE

F. Fpstein 04/08/83
ENGR. GROUP SUPERVISOR/DATE

discipline responsible for resolution: [CE] FF. EMS FMG GC HVAC IEC PSE NPO NAN

S. F. Traisman 02/24/84

FIELD VFRIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

L. W. Horn 04/20/84 SIP PROJECT FNGTNEER APPROVAL/DATE

SHEET1 OF1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 20-82-05-01 Intercomp
FIRE ZONE 34 (outside) LOCATION Penetration Area FLOOR ELEVATION 140'-0"
LOCATION WITHIN FIRE ZONE: Elev. 140' near cols. T and 15.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Compressed air breathing bottles outside fan room.  M-BOTTLE  Compressed air breathing bottles outside fan room.
TARGET:  CCW lines to RE-27, line 4173-3/4".  TARGET CODE: P-4173-0.75
POSTULATED INTERACTION:  Breathing air bottle(s) supports fail, air bottle nozzle breaks off, bottle becomes a missile, and impacts CCW line.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of air bottle supports.
S. E. Traisman 08/05/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Provide new support for Compressed air bottles per ART 359. See resolution sheet and Calc. No. 20-82-05-01.
S. Burney 04/08/83 E. Epstein 04/08/83 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAN

L. W. Horn

04/20/84

SIP PROJECT ENGINEER APPROVAL/DATE

[0011A/0072Z-44]

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

	**
SHEET 1 OF 1	
ION PROGRAM (IDS)	
OCR ELEVATICA 115'-0"	
lding.	
RCE CODE: M-TANK	
GÊT CCOE: M-CST	
CHENA CODE: SPTFAIL	

POSTULATED INTERACTION NO.: 21-01-01-01	<u> </u>
FIRE ZONE 3-P-3 (outsd)LOCATION HVAC Fan Roc	ons FLOCR ELEVATICA 115'-0"
LOCATION MITHIN FIRE ZOME: Elev. 115, outside north end of fuel hand	. iling building.
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Primary water storage tank (PWT).	SOURCE CODE: M-TANK
TARGET: Condensate storage tank (CST).	TARGET CODE: M-CST
POSTULATED INTERACTION: PWT overturns, impacts CST.	PHENOMENA CODE: SPTFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure by analysis that PWT will not over	turn.
M. Jones 10/15/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Referenced calculations show the tank will  (file No. 52.24) and Calcs. No. OT-3, and	
S. Hanusiak 03/20/81 DISCIPLINE ENGINEER/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	E. P. Wollak 03/20/81 EMGR. GROUP SUPERVISOR/DATE EMS ENG GC HVAC IEC PSE NPO NAN
FIELD VERIFICATION BY MALKDOWN TEAM	L. W. Horn 10/28/82 SIP PROJECT ENGINEER APPROVAL/DATE

[0011A/00727-45]

(FOR MODIFICATIONS ONLY)

E DESCRIPTION DE LES MANDE ANT LE DESCRIPTION DE LE LE COMMUNICATION DE LE COMMUNICATI

Ĺ

SHEET 1 OF 1 CO. NO. 1 ACTION PROGRAM EET (IDS)	
FLOOR ELEVATION 100'-0"	
SOURCE CODE: C-RSM-31 ing structure	
FARGET CODE: P-0380-10	-
DENOMENA CODE: RELSTRUCT DE vault structure between of auxiliary building to seismic responses.	-
tures does not damage	
been included in the	٠
R. Tresler - ENGR. GROUP SUPERVISOR/DATE	
ENG GC HVAC IEC [PSE] NPO	NAN

#### PACIFIC GAS & ELECTRIC DIABLO CANYON PLANT, UNIT SEISHICALLY INDUCED SYSTEMS INTERA INTERACTION DOCUMENTATION SHE

POSTULATED INTERACTION NO.: 21-02-01-01
FIRE ZONE 31 LOCATION Aux./Fuel Handling FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100' col. line V and 10.7
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: C-RSM-31  CST. pipe vault structure, and auxiliary building structure
TARGET:  Line 380-10" CST supply to AFW Pumps  TARGET CODE: P-0380-10
POSTULATED INTERACTION:  Piping is anchored to CST, supported off of pipe vault structure between CST and auxiliary building, and supported off of auxiliary building structure. The three structures have different seismic responses.  Relative motion between structures damages pipe.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify relative motions between the three structures does not damage piping.
S. E. Traisman 08/05/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Relative desplacements between structures have been included in the
analysis of line 380.  M. R. Tresler
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

(0058Z/FINAL/p.19)

SHEET	1	<b>OF</b>	1

THIERICITOR DOCUMENTATION SHEET (TD2)
POSTULATED INTERACTION NO.: 21-02-03-01
FIRE ZONE 31 LOCATION Aux./Fuel Handling FLOOR ELEVATION 110'-0"
LOCATION MITHIN FIRE ZONE: Elev. 110' Col Lines V and 10.7
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-RSM-31 CST, Pipe Vault Structure, and Aux. Bldg. Structure
TARGET: TARGET CODE: P-4551-2  Line 4551-2"
POSTULATED INTERACTION:  Piping is anchored to CST, supported off of pipe vault structure between CST and Aux. Bldg., and supported off of Aux. Bldg. structure. The three structures have different seismic responses. Relative motion between structures damages pipe.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify relative motion between the three structures does not damage piping .
S. E. Traisman 08/05/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The relative movements between the structures are sufficiently small that no significant stress in the piping system should result. See attached Memo's.
R. R. Grey 04/16/83  (D.C. unit #1, PEG/S/8 pipe stress)  DISCIPLINE ENGINEER/DATE  K. M. Krause 07/08/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAM
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

SHEET		OF	_1_
-------	--	----	-----

POSTULATED INTERACTION NO.: 21-02-05-01	•
FIRE ZONE 31 LOCATION Aux./Fuel Handlin	g FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, CST tie-in area.	
IDENTIFICATION OF INTERACTING COMPONENTS	,
SOURCE: Overhead platform.	SOURCE CODE: C-PLAT-31
TARGET: Line 567-2"; auxiliary feed pump recirc. line.	TARGET CODE: P-0567-2
POSTULATED INTERACTION:  Platform falls, impacts line 567.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platform by simplified ana	alysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform qualified by analysis. See resolution	on sheet and IDS file No. 21-03-01-03
S. Hanusiak 02/19/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS	ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP (FOR MODIFICATIONS ONLY)	. W. Horn 08/23/82 PROJECT ENGINEER APPROVAL/DATE

[0005A/0064Z-26]

SHEET	1	<b>OF</b>	1
-------	---	-----------	---

•
POSTULATED INTERACTION NO.: 21-02-07-01
FIRE ZONE 3-RR LOCATION Aux./Fuel Handling FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: South face of CST, Elev. 115.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-ladder  Overhead ladder, railing, ladder/cage assembly mounted on CST, & fuel handling building siding.
TARGET:  1" instrument tap on bottom of CST.  TARGET CODE: I-tubing
POSTULATED INTERACTION:  Ladders, etc. fall, impact instrument tap.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of structurals listed above by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Ladder etc. qualified by analysis. See resolution sheet and IDS file No. 17-01-58-01.
S. Hanusiak 02/19/81  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)  S-G-8/3/84

SHEET 1 OF 1	
--------------	--

POSTULATED INTERACTION NO.: 21-02-10-01
FIRE ZONE 31 LOCATION Aux./Fuel Handling FLOOR ELEVATION 110'-0"
LOCATION WITHIN FIRE ZONE: Elev. 110' Col Lines V and 10.7
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: C-RSM-31  CST, Pipe Vault Structure, and Aux. Bldg. Structure
TARGET:  Line 1917-4", CST 1-1 from transfer pumps  TARGET CODE: P-1917-4
PHENOMENA CODE: RELSTRUCT  Piping is anchored to CST, supported off of pipe vault structure between CST and Aux. Bldg., and supported off of Aux. Bldg. structure. The three structures have different seismic responses. Relative motion between structures damages piping.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify relative motion between the three structures does not damage piping
S. E. Traisman 08/05/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  As a rule for all seismic class I piping, relative motions between pipes and Flex. equipment, pipe in differenct buildings is considered in the pipe stress analysis calculations.  For the above identified target, SAM (Seismic Anchor Motions) has been considered.
M. Re Tresler (D. C. Unit 1, Stress Group)  DISCIPLINE ENGINEER/DATE  K. M. Krause 07/08/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN
L. W. Horn 08/04/83  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

مهما

SHEET1_ OF1_
1 M PROGRAM (IDS)
FLOOR ELEVATION 100'-0"
CE CODE: C-PLAT-31
ET CODE: I-LT40
MENA CODE: CIVILFAIL
. (
•
·•
•
et and 21-03-01-01.

POSTULATED INTERACTION NO.: 21-03-01-01
FIRE ZONE 31 LOCATION Aux./Fuel Handling FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 115, CST tie-in area.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-PLAT-31  Overhead platform.
TARGET: Target code: I-LT40 Tubing & root value to LT-40
POSTULATED INTERACTION:  Platform falls, impacts tubing & root valve.  Platform falls, impacts tubing & root valve.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platform by simplified analysis.
M. Jones 06/04/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform qualified by analysis. See resolution sheet and 21-03-01-01.
S. Hanusiak 01/23/81  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN
L. W. Horn 08/23/82

PACIFIC GAS & FIFCTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 21-03-03-01
FIRE ZONE 3-AA LOCATION Aux./Fuel Handling FLOOR ELEVATION 115'-0"
LOCATION WITHIN FIRE ZONE:
Below 140, area K, (U, 16 <sup>2</sup> ).
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: NS-T Auxiliary STM to MU deaerator 1.4546.
TARGET:  FNGF (cable tray).  TARGET CODF: F-FNGF
POSTULATED INTERACTION:  Steam line touching the top of ENGF causes heat damage.
RFCOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure by analysis that the temperature at the exterior of the insulation will not damage the wires in FNGF.
Fdward Dennison 06/10/81 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolved by analysis described in RICA Report #41.
S. Motiwalla 08/26/81 . R. I. Cloud 08/28/81  DISCIPLINF ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINF RESPONSIBLE FOR RESOLUTION: CF. EF. EMS [FNG] GC. HVAC IEC PSE NPO NA
I. W. Horn 11/02/82 FIFID VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET	1	OF	1

LOCATION MITHIN FIRE ZONE: Elev. 100, Area K, (U, 162), on ceiling above.  IDENTIFICATION OF, INTERACTING COMPONENTS  SOURCE:  SOURCE:  SOURCE CODE: P-USB-3X  1" Yellow hydrogen line restrained vertically by a wire tie  TARGET:  K9894  POSTULATED INTERACTION:  Hydrogen line falls and impacts T-K9894 where it empties into the cable tray  RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove the hydrogen line  E. Denison  O6/10/81 WALKDOWN TEAM ORIGINATOR/DATE
Elev. 100, Area K, (U, 16 <sup>2</sup> ), on ceiling above.  IDENTIFICATION OF INTERACTING COMPONENTS  SOURCE:  1" Yellow hydrogen line restrained vertically by a wire tie  TARGET:  K9894  POSTULATED INTERACTION:  Hydrogen line falls and impacts T-K9894 where it empties into the cable tray  PRECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove the hydrogen line  E. Denison 06/10/81
SOURCE:  1" Yellow hydrogen line restrained vertically by a wire tie  TARGET:  K9894  POSTULATED INTERACTION:  Hydrogen line falls and impacts T-K9894 where it empties into the cable tray  PRECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove the hydrogen line  E. Denison  O6/10/81
TARGET:  K9894  TARGET CODE: E-K9894-3  K9894  POSTULATED INTERACTION:  Hydrogen line falls and impacts T-K9894 where it empties into the cable tray  PRECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove the hydrogen line  E. Denison 06/10/81
POSTULATED INTERACTION:  PHENOMENA CODE: SPTFAIL & HOUSEKEEP Hydrogen line falls and impacts T-K9894 where it empties into the cable tray  RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Remove the hydrogen line  E. Denison 06/10/81
Hydrogen line falls and impacts T-K9894 where it empties into the cable tray  RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove the hydrogen line  E. Denison 06/10/81
Remove the hydrogen line  E. Denison 06/10/81
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:
Recommended Resolution - O.K. See ART 437.
C. R. Van Natta 09/01/83 K. M. Krause  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAM
S. E. Traisman 02/24/84 Lee Horn 4/20/84

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

	SHEET	1	OF	1
--	-------	---	----	---

THICKUCITOR DOCOLERIHITOR SHEET, (TOO)
POSTULATED INTERACTION NO.: 21-04-03-04
FIRE ZONE 3-BB LOCATION Penetration Areas FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 108, 2'& 10' west of col. L., 10' north of 15.7.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-3354-1.50  Trapeze pipe support assemblies (3) to line 3354-1 1/2" & 1" stainless line.
TARGET:  TARGET CODE: P-3006-4  Line 3006-4"; demin. water make-up.
POSTULATED INTERACTION:    PHENOMENA CODE: SPTFAIL     Lateral motion of pipe support assemblies results in impact with line 3006.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Remove trapeze pipe support assemblies and support pipe from above.
M. Jones 06/10/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Pipe supports 049339-356R and - 357R will prevent the (3) trapeze pipe supports from interacting with the target line 3006 - 4".  The maximum movement of line 3006-4" at data point 50 is .020 ". this is less
than the existing .50 in clearance.
C. R. VanNatta 09/29/83  DISCIPLINE ENGINEER/DATE  K. M. Krause 09/29/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 11/02/83 L. W. Horn 01/18/84  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

SHEET	_1_	OF	_1_
-------	-----	----	-----

POSTULATED INTERACTION NO.: 21-04-03-06
FIRE ZONE 301 LOCATION Safety Related Pump FLOOR ELEVATION 100'-0"
LOCATION WITHIN FIRE ZONE: Elev. 112, Over MU Transfer Pumps
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Line 382-4" Seawater Evap. distillate to condensate storage tank (spec. K, Sch. 40)
TARGET:  Line 3006-4"; Demin. water make-up (Spec. S2, Sch. 10S)
PHENOMENA CODE: DEFLECT  Lateral deflection of line 382 results in impact with line 3006. Existing clearance is approximately 1".
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure pressure boundary integrity of line 3006 by simplified impact analysis.
M. Jones 6/10/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Additional support per hanger DWG. 049339 Sht. 271 in Generic DCN-DC1-5061-PRO.
C. R. Van Natta 01/24/83 DISCIPLINE ENGINEER/DATE  K. M. Krause 01/25/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAME
S. F. Traisman 10/14/83 L. W. Horn 10/24/83

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET	1	OF	. 1

, INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 21-04-10-03
FIRE ZONE 3-R LOCATION Aux./Fuel Handling FLOOR ELEVATION
LOCATION WITHIN FIRE ZONE: EL 135' cols, 12.9 and U along casic decon area wall.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-CRANF-3R  Misc. appurtnenances mounted on fuel HDL Bldg. crane.
TARGET:  Line 2242-3", from MU water transfer pump to SFP 1-1.
POSTULATED INTERACTION:  Appurtenances fall off of crane and impact pipe.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of misc. appurtenances.
•
S. E. Traisman 07/21/82 NALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Protective barrier has been installed to protect the target line. See ART No. 517 and calc. No. 21-04-10-03.
N. K. Makam 04/05/84 Fathy A Morsy 04/06/84
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: $\underline{CE}$ EE EMS ENG GC HVAC I&C PSE NPO NAN
S. E. Skochko 06/01/84 L. W. Horn 06/18/84  ETELD VERTECATION BY WALKDOWN TEAM STP PROJECT ENGINEER APPROVAL/DA

,
PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 22-01-01-01
FIRE ZONE 30-A-1 LOCATION Intake Structure FLOOR ELEVATION -2'
LOCATION WITHIN FIRE ZONE: Elev2. Aux. Saltwater Pump 1-1 Room
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: C-Plat-30A1 Overhead Platform & Ladder
TARGET:  Aux. Saltwater Pump 1-1 & Associated Piping and Valves
POSTULATED INTERACTION:  Platform and Ladder fall, impact Pump
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of Platform and Ladder by simplified Analysis.
M. Jones 06/24/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform/Ladder qualified by Analysis. See Calc.'s No. 22-01-01-01
S. Hanusiak 1/23/81 E. P. Wollak DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS EMG GC HVAC I&C PSE NPO MAN

Lee Horn

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

/ETNAL /00527/\

PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 22-01-01-02
FIRE ZONE 30-A-1 LOCATION Intake Structure FLOOR ELEVATION -2-1.25
LOCATION WITHIN FIRE ZONE: Elev2, Aux. Saltwater pump 1-1 Room
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: E-LF-30A1  Overhead Light fixtures (2), Ball/Socket mounted
TARGET:  Aux. Saltwater Pump 1-1 and associated piping and valves
POSTULATED INTERACTION:  Fixtures fall, impact pump .
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixtures, possibly by analysis.
M. Jones 6/24/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E DWG. 050041, Detail 9. This fixture type has been qualified by Analysis per calculation 52.24.52. No further action necessary.
R. J. Swaim 05/25/83  DISCIPLINE ENGINEER/DATE . ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC ICC PSE NPO NAI

Lee Horn

4/20/84

SIP PROJECT ENGINEER APPROVAL/DATE

AGB 7/25/54

(FOR MODIFICATIONS ONLY)

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	·	1	OF	1

POSTULATED INTERACTION NO.: 22-03-02-02
FIRE ZONE 30-A-5 LOCATION Intake Structure FLOOR ELEVATION -2'-1.25"
LOCATION WITHIN FIRE ZONE: Elevation -2, mid-room near east wall
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-0677-16  Line 677-16"; screen wash supply to SCW HX, cast iron pipe
TARGET:  Line 687-24"; auxiliary saltwater pump 1-1 discharge
POSTULATED INTERACTION:  Line 677 falls, impacts line 687
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of line 677
M. Jones 10/29/80 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Added pipe support per DCN-DC1-EP-5061-HGR. DWG. 049339-339/301R
C. R. Van Natta 10/10/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
S. E. Traisman 02/24/84 L. W. Horn 06/15/84 FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

A1100000 A A.O.
SHEET 1 OF 1  CO.  NO. 1  CTION PROGRAM  ET (IDS)
OOR ELEVATION 2-11/4"
OURCE CODE: M-BOTTI.E:
ARGET CODE: P-0687-24 harge.
ENOMENA CODE: SPTFAIL ulting in toppling of the ves, causing cylinders to become
rack. Add restraints if/as
clamps on high pressure CO2 CO2 cylinders falling from rack Rack is adequately anchored to
o minimum of 30 lb.—ft. (See ART 101 and caculation M—575.
ENGR. GROUP SUPERVISOR/DATE
ENG GC HVAC IEC PSE NPO NAN

#### PACIFIC GAS & ELECTRIC ( DIABLO CANYON PLANT, UNIT SEISMICALLY INDUCED SYSTEMS INTERAC INTERACTION DOCUMENTATION SHEE

	,	•
	POSTULATED INTERACTION NO.: 22-03-02-03	<del></del>
FIRE	ZONE 30-A-5 LOCATION Intake Structure	FLOOR ELEVATION _2-11/4"
	LOCATION WITHIN FIRE ZONE: Elev. 2, mid-room near east wall.	•
	IDENTIFICATION OF INTERACTING COMPONENTS	2 20
	SOURCE: CO2 cýlinders - CWP fire protection system.	SOURCE CODE: M-BOTTI.E:
	TARGET: Line 687-24"; aumiliary saltwater pump 1-1 d	TARGET CODE: P-0687-24 ischarge.
	POSTULATED INTERACTION:  CO2 cylinders fall from rack or rack fails, cylinders and subsequent damage to cylinder missiles - impacting line 687.	PHENOMENA CODE: SPTFAIL resulting in toppling of the valves, causing cylinders to become
	RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of CO <sub>2</sub> cylinders and cylind required.	er rack. Add restraints if/as
	M. Jones 10/29/80 WALKDOWN TEAM ORIGINATOR/DATE	
	FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Tighten 1/2" nuts of CO <sub>2</sub> cylinder storage ra system in intake structure. This will preve and generating missiles which impact line 68 wall and will not fall or fail. Torque bolt referenced ART). Resolved by modification p	nt CO2 cylinders falling from rack 7. Rack is adequately anchored to s to minimum of 30 lb.—ft. (See
	DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
	DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EM	<u>s]</u> eng gc hvac i&c pse npo nan
	S. E. Traisman 02/14/83  FIELD VERIFICATION BY WALKDOWN TEAM S  (FOR MODIFICATIONS ONLY)	L. W. Horn 02/16/83  IP PROJECT ENGINEER APPROVAL/DATE  1 1 2 8/28/84
[0039	98/01017-107	N.U,

[0039A/0101Z-10]

4	•			12	٧
SHEET	1_	OF	_1_	45	
				/	

·POS	TULATED INTERACTION NO.: 2	2-05-02-02		
FIR	E ZONE 14-E LOCATI	ONTurbine Buildin	ng FLOOR ELEVATION 85'-0"	
LOC	ATION WITHIN FIRE ZONE: In CCW HXCGR room north o	f col 15 between F&G	3.	
IDE	NTIFICATION OF INTERACTING	COMPONENTS		
<u>sot</u>	RCE: Platform P11T-1, NE of CC	₩HX 1-2.	SOURCE CODE: C-P11T-1	
TAF	GET: Inst. lines associated wi -149 (8 total).	th PT-5, PT-6 & vari	TARGET CODE: <u>I- GENERIC</u> ious Class I inst. lines going to PM	
<u>P0</u> 5	TULATED INTERACTION:  The Class I inst. lines a and/or undergoes excessiv tubes.	re supported off of	PHENOMENA CODE: CIVILFAIL Class II platform. Platform fails ent resulting in damage to inst.	(
REC	OFFICIAL RESOLUTION BY WALK Qualify platform or rerou		are supported off of platform.	
S. Sko	chko 02/24/84 KDOWN TEAM ORIGINATOR/DATE			
The Qua whi 20- Mr. Gro Her 821	lification methodology is s ch itself has numerous Clas 14-01-04 for qualification Bill Walker, Civil SIP Wal up leader. Bill Walker als man Minkowski. Unit 1 Civil	qualified for the Ho imilar to that used s I attachments. Re of the platform. The kdown member, and Mr o discussed turbine turbine building Gr	osgri event against collapse. for the non-Class I turbine buildingefer to Civil Calculation No. his is based on a conversation between. Safwat Gaballah, Unit 1 Civil SIP building qualification with Mr. roup leader. See technical review Notes (1984). Notice: This IDS is a	en
	. Skochko/W. L. Walker02/29 SCIPLINE ENGINEER/DATE	/84	D. R. Warren 03/01/84 ENGR. GROUP SUPERVISOR/DATE	
DIS	CIPLINE RESPONSIBLE FOR RES	OLUTION: CE EE EMS	S ENG GC HVAC [IEC] PSE NPO NAN	(

L. W. Horn 06/05/84.

SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	•	OF	•
CHEEL		UP	
21155		~,	

POSTULATED INTERACTION NO.: 22-05-02-03
FIRE ZONE 14-E LOCATION Turbine Building FLOOR ELEVATION 85'-0" .
LOCATION WITHIN FIRE ZONE: South end of component cooling water HX room.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Platform P9T-1.  SOURCE CODE: C-P9T-1
TARGET:  Instrument lines associated with PT-5 and PT-6. (ASW diff. PT ACROSS CCWHX).
POSTULATED INTERACTION:  Class I instrument lines are supported from Class II platform.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Re-route lines away from platform.
W. S. Walker 02/24/84 WALKDOWN TEAM ORIGINATOR/DATE
The subject platform has been qualified for the Hosgri event against collapse. Qualification methodology is similar to that used for the non-Class I turbine building, which itself has numerous Class I attachments. Refer to Civil Calculation No. 20-14-01-04 for qualification of the platform. This is based on a conversation between Mr. Bill Walker, Civil SIP Walkdown member, and Mr. Safwat Gaballah, Unit 1 Civil SIP Group leader. Bill Walker also discussed turbine building qualification with Mr. Herman Minkowski, Unit 1 Civil turbing building Group leader. See technical review No. 8216-TR-0671 & Telecon (Chron No. 048011, dated 04/02/84). Notice: This IDS is a result of final SIP WD.
S. Skochko/W. Walker 02/29/84 D. R. Warren 03/01/84 DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC [I&C] PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	IT NO. 1 ERACTION PROGRAM
POSTULATED INTERACTION NO.: 22-06-07-02	
FIRE ZONE 14-E LOCATION Containment	FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 95', over CCW HX's 1-1 & 1-2.	•
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: Overhead fluorescent light fixtures.	SOURCE CODE: E-LF-14E
TARGET: Tubing to PT-5.	TARGET CODE: I-PT5
POSTULATED INTERACTION: Light fixtures fall, impact tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixtures.	

#### 05/13/82 M. Jones WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The above source light fixture has been field inspected and verified to be installed in accordance with PG&E DWG 050041, detail 9. This fixture type has been qualified by analysis per calculation 52-24-52. No further action necessary. Resolved by analysis.

G. C. Bhatt 05/25/83 R. J. Swaim 05/25/83 ENGR. GROUP SUPERVISOR/DATE DISCIPLINE ENGINEER/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

04/20/84 L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE

í

•
SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 22-06-07-03
FIRE ZONE 14-E LOCATION Turbine Building FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 95', over CCW HX's 1-1 & 1-2.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Class II platforms.  SOURCE CODE: C-PLAT-14E
TARGET: Tubing to PT-5.  Target Code: I-PT5
POSTULATED INTERACTION:  Platforms fall, impact tubing. In some areas, tubing is supported from the Clas II platforms.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of platforms by simplified analysis. Verify acceptability of supporting tubing from these platforms in light of platform movements & qualification status.
M. Jones 05/13/82 HALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platforms have been seismically qualified by analysis. See resolution sheet and referenced Calc. No. 20-14-01-04 and resolution sheet.
S. Gaballah 09/23/82 DISCIPLINE ENGINEER/DATE  B. Sarkar 09/23/82 ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAN

L. W. Horn 01/03/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

	•	CUEET 1 OF 1
	PACIFIC GAS & ELECTRI DIABLO CANYON PLANT, UNI SEISMICALLY INDUCED SYSTEMS INTE	T NO. 1 RACTION PROGRAM
. !	INTERACTION DOCUMENTATION S	HEET (IDS)
	POSTULATED INTERACTION NO.: 22-06-08-02 Intercomp	
	FIRE ZONE 14-A LOCATION Turbine Building	FLOOR ELEVATION 119'-0"
•	LOCATION WITHIN FIRE ZONE: Elev. 119', col. G between 16 and 17.	
	IDENTIFICATION OF INTERACTING COMPONENTS	
	SOURCE:	SOURCE CODE: C-WALL
	Concrete block wall: (east wall of lube oil	G reservoir room).
	TARGET: Conduit KD351.	TARGET CODE: _E-KD351-1.50
	•	
	POSTULATED INTERACTION:  Concrete block wall fails and impacts target.	PHENOMENA CODE: CIVILFAIL
	RECOMMENDED DECOLUTION BY HALVOOR IN TEAM.	
	RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of wall by simplified analys:	is.
	,	
		•
	S. F. Traisman 09/01/82	
	WALKDOWN TEAM ORIGINATOR/DATE	
	FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Block wall has been seismically qualified under Program in accordance with IE Bulletin 80-11".  DC1-EC-11577-RO.	r Concrete Block Wall Evaluation See Calc. No. 52-26 and DCN No.
	S. Gaballah DISCIPLINE ENGINEER/DATE	B. Sarkar ENGR. GROUP SUPERVISOR/DATE
	• · · · · · · · · · · · · · · · · · · ·	,

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 09/28/83 SIP PROJECT ENGINEER APPROVAL/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAN

SHEET 1 OF 1  PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 22-07-01-01
FIRE ZONE 30-A-2 LOCATION Intake Structure FLOOR ELEVATION2-1.25
LOCATION WITHIN FIRE ZONE: Elev2, Aux. Saltwater pump 1-2 Room
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: E-LF-30A2 Overhead Light fixtures (2), Ball/Socket mounted
TARGET:  Aux. Saltwater Pump 1-1 and associated piping and valves
POSTULATED INTERACTION:  Fixtures fall, impact pump
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of fixtures, possibly by analysis.
M. Jones 6/24/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and verified to be installed in accordance with PG&E DWG. 050041, Detail 9. This fixture type has been qualified by Analysis per calculation 52.24.52. No further action necessary.
R. J. Swaim 05/25/83  G. Bhatt 05/25/83
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG GC HVAC ICC PSE NPO NAI

L. W. Horn

04/20/84\*

SIP PROJECT ENGINEER APPROVAL/DATE

ذايم

7/25/64

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1_	Œ	_1_

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 22-07-01-02
FIRE ZONE 30-A-2 LOCATION Intake Structure FLOOR ELEVATION -2' -1.25"
LOCATION WITHIN FIRE ZONE: Elev2. Aux. Saltwater Pump 1-2 Room
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  Overhead Platform & Ladder  .
TARGET:  Aux. Saltwater Pump 1-2 & Associated Piping and Valves
POSTULATED INTERACTION:  Platform and Ladder fall, impact Pump  .
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of Platform and Ladder by simplified Analysis.
M. Jones 06/24/80 HALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform/Ladder qualified by Analysis, See Calc.'s No. 22-01-01-01.
· •
S. Hanusiak 02-19-81 E. P. Wollak
DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC IEC PSE NPO MAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE

5-1/21/8 Y

(FOR MODIFICATIONS ONLY)

·---- /00577/\

SHEET	1	OF	1

POSTULATED INTERACTION NO.: 22-09-02-02	
FIRE ZONE 30-A-5 LOCATION Intake Structure FLOO	R ELEVATION 2'-1 74"
LOCATION WITHIN FIRE ZONE: , Elev. 2", mid-room near east wall.	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE:  CO2 cylinders - CWP fire protection system.	DODE: M-BOTTLF
TARGET:  Line 680-24"; auxiliary saltwater pump 1-2 discharge.	DODE: P-0680-24
POSTULATED INTERACTION:  CO2 cylinders fall from rack or rack fails, resulting cylinders and subsequent damage to cylinder valves, camissiles — impacting line 680.	in toppling of the ausing cylinders to become
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Ensure integrity of CO2 cylinders and cylinder rack.  required.	Add restraints if/as
M. Jones 10/29/80 · WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Modification per ART 102 and Calc. M-575. Tighten 1/2 storage rack clamps on high pressure CO2 system in intwill prevent CO2 cylinders falling from rack and gener impact line 680. Rack is adequately anchored to wall Torque bolts to minimum of 301b-ft. (See referenced for the control of the	rating missiles which and will not fail or fall
DISCIPLINE FNGTNFER/DATE ENGR. C	nnell, IJT GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GO	
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT	Horn 02/16/83 FENGINEER APPROVAL/DATE
200/01017-111	8/3181

[0039A/01017-11]

SHEET	1	OF	. 1

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 22-09-02-03
FIRE ZONE 30-A-5 LOCATION Intake Structure FLOOR ELEVATION 2'-1.25"
LOCATION WITHIN FIRE ZONE:  Elevation -2, mid-room near east wall
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-0677-16  Line 677-16"; screen wash supply to SCW HX, cast iron pipe
TARGET:  Line 680-24"; auxiliary saltwater pump 1-2 discharge
POSTULATED INTERACTION:  Line 677 falls, impacts line 680
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of line 677, possibly by analysis
M. G. Jones 10/29/80 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: See IDS No. 22-03-02-02

C. R. Van Natta 10/10/83 DISCIPLINE ENGINEER/DATE

K. M. Krause 10/10/83
ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC IEC [PSE] NPO NAM

S. E. Traisman 02/24/84
FIELD VERIFICATION BY WALKDOWN, TEAM
(FOR MODIFICATIONS ONLY)

L. W. Horn 04/20/84 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1
~		••	

POSTULATED INTERACTION NO.: 22-09-04-01	<u> </u>
FIRE ZONE 14-E LOCATION Turbine E	Building FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE:  South end of component cooling water h	neat exch. room, between exchangers.
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Platform P9T-1.	SOURCE CODE: C-P9T-1
•	TARGET CODE: <u>F-K4866-0.75</u> SV-385 and SV-386 to ASW valves FCV-602 and
603).  POSTULATED INTERACTION:  Class I conduits are supported from Cl	PHENOMENA CODE; CIVILFAIL lass II platform.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Re-route conduits, providing supports clearance (>1") between conduits and p Note: This IDS is a result of final S	
W. L. Walker 02/24/84 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: The subject platform has been qualified for Qualification methodology is similar to that which itself has numerous Class I attachment 20-14-04-04 for qualification of the platform. Bill Walker, civil SIP walkdown member, group leader. Bill Walker also discussed therman Minkowski, Unit I civil turbine Buil 8216-TR-0648, dated 03/28/84.	the Hosgri event against collapse. It used for the non-Class I turbine building Its. Refer to civil calculation No. Irm. This is based on a conversation between and Mr Safwat Gaballah, unit I civil SIP urbine building qualification with Mr.
C. Wong 02/29/84 DISCIPLINE ENGINEER/DATE	C Kahl 03/01/84  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [	EE] EMS ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)	L. W. Horn 06/05/84 SIP PROJECT ENGINEER APPROVAL/DATE

[0032A/0074Z-38]

pos

..

	on contract the co	EET1_ OF1_
	PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 GICALLY INDUCED SYSTEMS INTERACTION PROG INTERACTION DOCUMENTATION SHEET (IDS)	RAM .
POSTULATED INTERACTION	No.: <u>22-17-07-01</u>	•
FIRE ZONE 14-E	LOCATION Turbine Building FLOOR E	LEVATION 85'-0"
LOCATION WITHIN FIRE ZO Elevation 95', ove	ONE: er CCW HX's 1-1 & 1-2.	,
IDENTIFICATION OF INTER	RACTING COMPONENTS	
SOURCE: Class II platforms		: <u>C-PLAT-14E</u>
TARGET: Tubing to PT-6.	TARGET CODE	: <u>I-PT6</u>
POSTULATED INTERACTION: Platforms fall, im II platforms.	: <u>PHENOMENA CO</u> npact tubing. In some areas, tubing is	ODE: CIVILFAIL supported from the Clas
	of platforms by simplified analysis. Ve from these platforms in light of platfo	
M. Jones 05/13/ WALKDOWN TEAM ORIGINATO		
	PROMOTELE INTECTEL THE	
FINAL RESOLUTION BY RES Platforms have bee referenced Calc. N	en seismically qualified by analysis. S No. 20-14-01-04 and resolution sheet.	See resolution sheet and
Platforms have bee	en seismically qualified by analysis. S No. 20-14-01-04 and resolution sheet.  8. Sarka	See resolution sheet and ar 09/23/82 P SUPERVISOR/DATE

5.6 11151

L. W. Horn 01/03/83 SIP PROJECT ENGINEER APPROVAL/DATE

[0039A/0102Z-25]

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

у	SHEET: 1 OF 1
PACIFIC GAS & ELECTR DIABLO CANYON PLANT, UN SEISMICALLY INDUCED SYSTEMS INT INTERACTION DOCUMENTATION	IT NO. 1 TERACTION PROGRAM
POSTULATED INTERACTION NO.: 22-12-07-03	
FIRE ZONE 14-E LOCATION Turbine Buildin	ng FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 95', over CCW HX's 1-1 & 1-2.	••
IDENTIFICATION OF INTERACTING COMPONENTS	į.
SOURCE: Overhead fluorescent light fixtures.	SOURCE CODE: E-LF-14E
TARGET: Tubing to PT-6.	TARGET CODE: I-PT6
POSTULATED INTERACTION: Light fixtures fall, impact tubing.	PHENOMENA CODE: FIXTURE
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of light fixtures.	•
M. Jones 05/13/82	
WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field in accordance with PG&E DWG 050041 been qualified by analysis per calculation secessary. Resolved by analysis.	I, detail 9. This fixture type has
R. J. Swaim 05/25/83 DISCIPLINE ENGINEER/DATE	G. C. Bhatt 05/25/83 ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] E	MS ENG GC HVAC I&C PSE NPO NAN

04/20/84

SIP PROJECT ENGINEER APPROVAL/DATE

L. W. Horn

[0040A/0106Z-17]

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

peb

	PACIFIC GAS & ELECTRIC CO.
	DIABLO CANYON PLANT, UNIT NO. 1
	SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)
	THE CHINAL TO CONTROL METER (TOO)
	POSTULATED INTERACTION NO.: 22-12-08-01
_	FIRE ZONE 14-F LOCATION Turbine Bldg FLOOR ELEVATION 85'-0"
	I.OCATION WITHIN FIRE ZONE:  Flev. 100', cols. G between 15 & 16 east of CCW HX's.
	IDENTIFICATION OF INTERACTING COMPONENTS
•	SOURCE: SOURCE CODE: NS-CD Construction deficiency.
	TARGET:  Conduit KD353-1".  TARGET CODE: E-KD353-1
	POSTULATED INTERACTION PHENOMENA CODE: HOUSEKEEP  Condulet cover missing.
	RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Replace cover.
	S. E. Traisman 07/21/82  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  IDS is a result of a construction deficiency. IDS transferred to onsite quality control. Construction deficiency to be corrected during normal course of construction activities.
	DISCIPLINE ENGINEER/DATE  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C PSE NPO NAN [CC]

SHEET \_\_\_1 OF \_

L. W. Horn 07/31/84 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

	SHEET	1	OF	. 1
--	-------	---	----	-----

POSTULATED INTERACTION NO.: 22-12-08-03
FIRE ZONE 14-E LOCATION Turbine Bldg FLOOR ELEVATION 85'-0"
LOCATION WITHIN FIRE ZONE: Elev. 100' col. G between 15 and 16 east of CCWHX's.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE: P-SPR-14E  1-1/2" sprinkler line for CCW HX area.
TARGET:  Conduit KD353-1".  TARGET CODE: E-KD353-1
PHENOMENA CODE: SPTFAIL  Sprinkler pipe has supports poorly clamped to structural steel. Supports fail, pipe impacts conduit. Conduit and pipe run perpendicular to each other.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Provide rod hanger supports for sprinkler line with clevis hooks welded to structural steel. Add bilats as necessary to restrain sprinkler pipe motion.  Note: sprinkler pipe sway brace in vicinity of interaction is attached onto Class I unistrut electrical conduit support.
S. E. Traisman 07/21/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Addition of new support which resolved by hanger DWG 049339 Sht. 190 thru 235 in DCN DC1-EP-3865 and Sht 296, Rev. 1 in Generic DCN DC1-5061. Also sprinkler pipe sway brace that attached onto Class I unistrut electrical conduit support has bee removed by new support.  See also IDS No. 20-14-01-03.
C. R. VanNatta 01/31/83 K. M. Krause 01/31/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC I&C [PSE] NPO NAN
G. Zaharoff 02/08/84 L. W. Horn 02/20/84  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE  (FOR MODIFICATIONS ONLY)

N Water of Englyses yes	PACIFIC GAS & ELECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)
	POSTULATED INTERACTION NO.: 22-12-08-04
	FIRE ZONE 14-E LOCATION Turbine Building FLOOR ELEVATION 100'-0"
78	LOCATION WITHIN FIRE ZONE: Elev. 100' col. G between 15 and 16 east of CCW HX's.
4	IDENTIFICATION OF INTERACTING COMPONENTS
<b>a</b> 0 q	SOURCE:  SOURCE CODE: P-USB-14E  Vent line off of water supply to phosphate system, line 93-2" labeled "not used".
•	TARGET: Conduit KD353-1".  TARGET CODE: E-KD353-1
ć	POSTULATED INTERACTION:  PHENOMENA CODE: SPTFAIL & HOUSEKEEP Fixed end rod hangers fail, hand wheel for vent line valve impacts conduit.
	RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  1. Remove source line if it is not envisioned to be required in the future.  - OR -  2. Replace fixed end rod hangers with clevis hooks.
	S. E. Traisman 07/21/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Removal of offending line per ART-350.
·	J. A. Longworth 03/01/83  DISCIPLINE ENGINEER/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC ISC PSE NPO NAN

S. E. Traisman 02/24/84

FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

119 8/9/84

[0016A/0074Z-40]

SHEET	1	OF	1.
-------	---	----	----

Entransia December (1994)
POSTULATED INTERACTION NO.: 22-12-08-05 Intercomp
FIRE ZONE 14-A LOCATION Turbine Building FLOOR ELEVATION 104'-0"
LOCATION WITHIN FIRE ZONE: Elevation 119', col. G, between 16 and 17.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: C-WALL  Concrete block wall (east wall of lube oil reservoir room).
TARGET: TARGET CODE: E-KD350-150 Conduit KD 350.
POSTULATED INTERACTION:  Concrete block wall fails and impacts target.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify integrity of wall be simplified analysis.
S. E. Traisman 09/01/82 WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Block wall has been seismically qualified under "concrete block wall evaluation program in accordance with IE bulletin 80-11". See Calc. No. 52.26 and DCN No. DC1-EC-11577-RO.
S. Gaballah  DISCIPLINE ENGINEER/DATE  B. Sarkar  ENGR. GROUP SUPERVISOR/DATE  DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC I&C PSE NPO NAME

3:51 124 Stivity

FIELD VERIFICATION BY WALKDOWN TEAM

(FOR MODIFICATIONS ONLY)

\*\*\*\*\* 100047 17

L. W. Horn 09/28/83 SIP PROJECT ENGINEER APPROVAL/DATE

SHEET 1 (	٥	F	3
-----------	---	---	---

POSTLATED INTERACTION NO.: 22-16-01-01	
FIRE ZONE 30-A-5 LOCATION Intake Structur	FLOOR ELEVATION 4'-0"
LOCATION WITHIN FIRE ZONE: Elev. 4, outside Aux. Saltwater Pump Rooms	
IDENTIFICATION OF INTERACTING COMPONENTS	
SOURCE: Overhead cast iron Pipe to screen wash pumps	SOURCE CODE: P-ULB-30A5
TARGET: Aux. saltwater pump gate operator 1-8	TARGET CODE: M-ASWGO1-8
POSTULATED INTERACTION:	PHENOMENA CODE:SPTFAIL & PIPEFAIL

#### RECOMMENDED RESOLUTION BY WALKDOWN TEAM:

Pin or otherwise secure the gate itself in the upright position. Ensure that unwanted energization of the gate operator (due to damaged conduits) or falling pipe will not compromise the pinning mechanism.

Cast iron pipe or screwed fittings fail, pipe falls on gate operator, gate operator is damaged sufficently to cause the gate to lower to the

M. Jones 03/25/82
WALKDOWN TEAM ORIGINATOR/DATE

closed position.

#### FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Resolution by Analysis - justification that the ASW pump gate operator will maintain the bay gate in the open condition, and damage to conduits will not cause gate closure in the event that pipe (failure) interacts with components. This resolves the Postulated Interaction.

SHEET	2	OF	3 '

POSTULATED INTERACTION NO.: 22-16-01-01

ADDENDUM A

(Interaction No. 22-17-01-01 and 22-16-01-01)

In response to your technical review, the following comments are addressed:

#### Comment No. 1

"Should the casing be destroyed, the stem nut will not be able to hold the stem in the up position."

Response)

The above hypothetical comment suggests that the valve casing would completely disintegrate and cause the stem and gate to fall. In order for this to occur, the internally threaded stem nut would have to completely disengage itself from the 4-1/4" inch diameter Acme threaded stem and surrounding supporting parts of the valve. This infers that the adjacent drive sleeve and geared parts would not provide any frictional surface contact between the stem nut which is splined to a worm gear driven sleeve. Hence, the valve body would have to completely break apart for this to occur.

Alternate, more probable scenarios could be postulated as follows:

- (A) 1. A piece of the 24 inch diameter pipe (horizontally displaced and falling approximately 6 feet) would ricochet off the stem pipe enclosure which rises above the screen wash pipe.
  - 2. The impact could conceivably deform the protective pipe in enclosure and bend or distort the valve stem inside.
  - Any further impact on the valve body would tend to crack the casing and only disrupt functional engagement of internal gears and threaded parts.
  - There would be sufficient internal valve body restraint to prevent the "Acme threaded stem" from completely slipping through the stem nut.
- (B) 1. The screen wash pipe could be seismically displaced in a vertical mode and cause a piece to fall straight down and completely miss the valve operator body.

#### Comment No. 2

"Unwanted energization has not been addressed. This could occur when the limit switch compartment is impacted, or when the torque switch is impacted. Collapsed conduits may also cause unwanted energization."

Response)

11.8 8/24/84

	SHEET	3	OF	3
--	-------	---	----	---

POSTULATED INTERACTION NO.: _	22-16-01-01
-------------------------------	-------------

The torque switches are wired in series with the geared limit switches to protect against mechanical overload anywhere between full open and closed positions of the valve. In case either one switch or conduit is impacted and affects the integrity of the circuitry, an electrical shunt/short circuit (if it occurs) would blow the 5 AMP fuse on the secondary side of the 480/120V control transformer and prevent energization of the starter relay in either "open" or "close" position.

Resolution

The recommended resolution to place a removable pin in the gate or stem would be difficult to accomplish and would hinder operational functions with the weight bearing down on the fixed pin.

The above response to comments 1 and 2 constitutes an "engineering judgment" resolution to the pdostulated interaction and, therefore, no further action is required.

E.	Barna	<b>3</b> .	
DISCI	DI TNE	FNGTNEED	/DATE

E. C. Connell
ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

Lee Horn 03/17/83
SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	_ 1
SHEET		UF	

POSTULATED INTERACTION NO.: 22-17-01-01
FIRE ZONE 30-A-5 LOCATION Intake Structure FLOOR ELEVATION 4'-0"
LOCATION WITHIN FIRE ZONE: Elev. 4, outside Aux. Saltwater Pump Rooms
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-ULB-30A5  Overhead cast iron Pipe to screen wash pumps
TARGET:  Aux. saltwater pump gate operator 1-9  TARGET CODE: M-ASWG01-9
POSTULATED INTERACTION:  Cast iron pipe or screwed fittings fail, pipe falls on gate operator, gate operator is damaged sufficently to cause the gate to lower to the closed position.
Pin or otherwise secure the gate itself in the upright position. Ensure that unwanted energization of the gate operator (due to damaged conduits) or falling pipe will not compromise the pinning mechanism.
M. Jones 3/25/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Resolution by Analysis - justification that the ASW pump gate operator will maintain the bay gate in the open condition, and damage to conduits will not cause gate closure in the event that pipe (failure) interacts with components. This resolves the Postulated Interaction. See final resolution for IDS # 22-16-01-01.
E. Barna E. C. Connell DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE [EMS] ENG GC HVAC I&C PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

D.J.E. 8/24/64

SHEET 1 OF 1

#### PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

INTERACTION DOCUMENTATION SHEET (IDS)
POSTULATED INTERACTION NO.: 23-01-01
FIRE ZONE 31 LOCATION Aux./Fuel Handling FLOOR ELEVATION 110'-0"
LOCATION WITHIN FIRE ZONE: Elev. 110' Col Lines V and 12.9
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  RWST, Pipe Vault Structure, and Aux. Bldg. Structure
TARGET:  Line 261-12" RWST to Con. Spray Pumps.
PIPING INTERACTION:  Piping is anchored to RWST, supported off of pipe vault structure between RWST and Aux. Bldg., and supported off of Aux. Bldg. structure. The three structures have different seismic responses. Relative motion between structures damages pipe.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Verify relative motion between the three structures does not damage piping
S. E. Traisman 08/05/82 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  As a rule for all seismic class I piping, relative motions between pipes and Flex. equipment, pipe in different buildings is considered in the pipe stress analysis calculations.  For the above identified target, SAM (Seismic Anchor Motion) has been considered.
M. R. Tresler (D. C. Unit 1, Stress Group)  DISCIPLINE ENGINEER/DATE  K. M. Krause 07/08/83  ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS EMG GC HVAC I&C [PSE] NPO NAM

SW

L. W. Horn 08/04/83 SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM

SHEET	1_	OF	1
-------	----	----	---

# PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 23-01-09-01
FIRE ZONE 3-BR LOCATION Penetration Area FLOOR ELEVATION 85'
*LOCATION WITHIN FIRE ZONE:  Col. N and 3' north of col. 15 <sup>7</sup> , azimuth 180°. Area GE-GN.
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE:  SOURCE CODE: P-0749-8 Line S3-749-2-B (RX cav./cont. spray PPS discharge to FDRS).
TARGET CODE: PS-0279-8  Sway strut HGR No. 555-164R of line S1-279-8-B (RHR supply to spray HDR 163).
POSTULATED INTERACTION:  Clearance between line S3-749-2 and the sway strut support of line S1-279-8 is 2". Failure of the fixed end rod supports results in lateral movement of line S3-749-2 causing impact to the lower pin of the sway strut of line S1-279-8 resulting in failure of the support.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:  Replace the lower pin secured by cotter pin at each end with a pin secured with nuts or with a bolt and nut.  Note: This postulated interaction is a result of modifications associated with DCN DC1-EP-3565. (Addition of support 55S-164 to line 279-9").
S. Cudiamat 06/23/83 WALKDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  On support No. 55S-164R. Modified lower pin per DCN #DC1-E-P-3565,  Rev. 1.
E. L. Green 08/15/83 K. M. Krause 08/16/83  DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC IEC [PSE] NPO NAN
S. E. Traisman 11/07/83 L. W. Horn 01/18/84  FIELD VERIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)	
POSTULATED INTERACTION NO.: 23-02-04-01	•
FIRE ZONE 3F LOCATION Safety Related Pump FLOOR FI EVATION	ON 73'-0"
LOCATION WITHIN FIRE ZONE: Flev. 73, CS Pump 1-1 Room	
IDENTIFICATION OF INTERACTING COMPONENTS	•
SOURCE: SOURCE CODE: F-LF- Overhead fluorescent light fixtures (3) chain supported	<u>-3F</u>
TOPOST CODS: M.C.	CDD1_1
TARGET: TARGET CODE: M-C	<u> </u>
POSTULATED INTERACTION:  Fixtures fall on pump and attached tubing.  PHENOMENA CODE: FIX	XTURF ,
RECOMMENDED RESOLUTION BY WAIKDOWN TEAM:  Ensure integrity of fixtures. Additional support will be required.	ed.
M. Jones 05/19/80 WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  The above source light fixture has been field inspected and ver be installed in accordance with PG&E DWG. 050041, Detail 8. Installed up support chain per DCN-DCO-FE-5552 Rev. 1 SH. 9 of 9, See ART Resolved by modification.	tall back-
R. J. Swaim 05/17/83 G. C. Bhatt DISCIPLTNE ENGINEER/DATE ENGR. GROUP SUPE	
DISCIPLINE RESPONSTRIF FOR RESOLUTION: CE [EE] EMS ENG GC HVAC I	&C PSE NPO NAN
S. F. Traisman 05/17/83 Lee Horn FIFLD VERIFICATION BY WALKDOWN TEAM SIP PROJECT FAGINFER	10/24/83 APPROVAL/DATE

\_\_1\_\_ OF \_\_1\_\_

FIFI.D VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET	1	OF	1
~		~.	•

## PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

FIRE ZONE 3-F	LOCATION Safety Re	lated Pump FLOOR ELEVATION 731-0	-
LOCATION WITHIN FIRE	ZONE:	ACTA .	, - <u>, , , , , , , , , , , , , , , , , ,</u>
Elev. 73, Outsi	ide CS Pump 1-2 Room	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
		Section 1997	
IDENTIFICATION OF IN	ITERACTING COMPONENTS	~,	i
SOURCE:	• • • • • • • • • • • • • • • • • • •	SOURCE_COOE: _C_SB	
	om Security Barrier	<u> </u>	
	e in a constant	the second secon	
	1		
TARGET:		TARGET CODE: M-CSPP1-2	
CS Pump 1-2	-	"Bries"	,
OSTULATED INTERACTI	COM :	PHENOMENA CODE: CIVILFAIL	
	er falls, impacts CS Pump	1-2	<del>- ·</del>
	ON BY WALKDOWN TEAM:	e time to the second	
	ON BY WALKDOWN TEAM: y of security Barrier by	simplified analysis:	
		simplified analysis:	
Ensure integrit  1. Jones 10	y of security Barrier by	simplified analysis:	
Ensure integrit  1. Jones 10	y of security Barrier by	simplified analysis:	
Ensure integrit M. Jones 10 MALKDOWN TEAM ORIGIN	y of security Barrier by 0/27/80 NATOR/DATE	simplified analysis:	
Ensure integrit  1. Jones 10 NALKDOWN TEAM ORIGIN FINAL RESOLUTION BY	y of security Barrier by  /27/80  ATOR/DATE  RESPONSIBLE DISCIPLINE:	simplified analysis:	
Ensure integrit  1. Jones 10  NALKDOWN TEAM ORIGIN  FINAL RESOLUTION BY  Barrier qualifi	y of security Barrier by  /27/80  ATOR/DATE  RESPONSIBLE DISCIPLINE:		
Ensure integrit  1. Jones 10  NALKDOWN TEAM ORIGIN  FINAL RESOLUTION BY  Barrier qualifi	y of security Barrier by  /27/80  ATOR/DATE  RESPONSIBLE DISCIPLINE:		
Ensure integrit  M. Jones 10 MALKDOWN TEAM ORIGIN  FINAL RESOLUTION BY  Barrier qualifi 23-12-04-02.	y of security Barrier by  1/27/80  INTOR/DATE  RESPONSIBLE DISCIPLINE: ed by analysis. See reso	lution sheet and Calc. No.	
Ensure integrit  1. Jones 10  NALKDOWN TEAM ORIGIN  FINAL RESOLUTION BY  Barrier qualifi 23-12-04-02.	y of security Barrier by  0/27/80  ATOR/DATE  RESPONSIBLE DISCIPLINE: ed by analysis. See reso	lution sheet and Calc. No.	
Ensure integrit  1. Jones 10 NALKDOWN TEAM ORIGIN FINAL RESOLUTION BY Barrier qualifi 23-12-04-02.  S. Hanusiak 03/1 DISCIPLINE ENGINEER	y of security Barrier by  //27/80  ATOR/DATE  RESPONSIBLE DISCIPLINE: ed by analysis. See reso	L. P. Wollak 03/12/81 ENGR. GROUP SUPERVISOR/DATE	
Ensure integrit  1. Jones 10 NALKDOWN TEAM ORIGIN FINAL RESOLUTION BY Barrier qualifi 23-12-04-02.  S. Hanusiak 03/1 DISCIPLINE ENGINEER	y of security Barrier by  //27/80  ATOR/DATE  RESPONSIBLE DISCIPLINE: ed by analysis. See reso	lution sheet and Calc. No.	
Ensure integrit  1. Jones 10  NALKDOWN TEAM ORIGIN  FINAL RESOLUTION BY  Barrier qualifi 23-12-04-02.  S. Hanusiak 03/1  DISCIPLINE ENGINEER	y of security Barrier by  //27/80  ATOR/DATE  RESPONSIBLE DISCIPLINE: ed by analysis. See reso	L. P. Wollak 03/12/81 ENGR. GROUP SUPERVISOR/DATE	
Ensure integrit  M. Jones 10  WALKDOWN TEAM ORIGIN  FINAL RESOLUTION BY  Barrier qualifi 23-12-04-02.  S. Hanusiak 03/1  DISCIPLINE ENGINEER	2/81 /DATE  LE FOR RESOLUTION: [CE] E	L. P. Wollak 03/12/81 ENGR. GROUP SUPERVISOR/DATE	AK OS

di attacher di	SHEET 1_ OF1_			
PACTFIC GAS & FLECTRIC CO.  DIABLO CANYON PLANT, UNIT NO. 1  SFISHICALLY IMDUCED SYSTEMS INTERACTION PROGRAM  INTERACTION DOCUMENTATION SHEET (IDS)				
POSTULATED INTERACTION NO.: 23-12-04-03				
FIRE ZORE 3-F LOCATION Penetration Areas	FLOOR FLEVATION 73'-0"			
LOCATION MUTHIN FIRE ZONE: Flev. 73', CS pump 1-2 room.	·			
IDENTIFICATION OF INTERACTING COMPONENTS	' , <b>S.</b> ' .			
SOURCE: Overhead light fixtures, chain supported (2).	SOURCE CODE: 'F-1 F-3F			
EM CONTRACTOR	y			
TARGET: CS pump 1-2.	TARGET CODE: M-CSPP1-2			
	• •			
POSTULATED INTERACTION:  [Fixtures fall on pump and attached tubing.	PHENOMENA CODE: FIXTURE			
RECOMPENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of fixtures. Additional supp	port will be required.			
	а			
M. Jones 05/14/80 WALKDOWN TEAM ORIGINATOR/DATE				
The above source light fixture has been field installed inaccordance with PGandF DWG 050041,	detail 8. Install back-up			
support chain per DCN DCO-FE-5552 Rev. 1, Sh. Resolved by Modification.	3 UI 3. SEE HKI 5//.			
R. J. Swaim 05/17/83 DISCIPITME, FMGTMFFR/DATE	G. C. Bhatt 05/18/83 EDGR. GROUP SUPERVISOR/DATE			
DISCIPITME RESPONSIBLE FOR RESOLUTION: CE [FE] EMS	FING GC HVAC IEC PSE NPO NAN			

l. W. Horn 10/24/83

SIP PROJECT FINGTHER APPROVAL/DATE

01107/-18

S. F. Traisman 10/14/83

FIFI D VERTETCATION BY MALKDOWN TEAM (FOR MODIFICATIONS ONLY)

## PACIFIC GAS & ELECTRIC CO. BIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.: 23-15-02-01	· · · · · · · · · · · · · · · · · · ·
FIRE ZOME 1-A LOCATION Containment	FLOOR ELEVATION 91'-0"
LOCATION WITHIN FIRE ZONE: Along containment wall @ azimuth 148° and e	•
IDENTIFICATION OF INTERACTING COMPONENTS	· · · · · · · · · · · · · · · · · · ·
SOURCE: Class I line K17-1357-6" (RC PPS barrier CC	SOURCE CODE: P-1357-6" SOURCE CODE: P-1357-6"
e demonstrate	ما العميس
TARGET: PT-934 (containment press prot. 4).	TARGET CODE: I-PT934 COURSE
	er Time of the second
POSTULATED INTERACTION:	PHENOMENA CODE: INTERFERE & DEFLECT
3/16" clearance between source and target.  (lateral motion of source) flazimuth 148° c	

#### RECOMMENDED RESOLUTION BY WALKDOWN TEAM:

Verify motion of source line at potential contact point does not exceed 3/16". Thermal movement exceeds the 3/16" considerably. Recommend rotating PT-934 45° on the civil steel or relocating the support all together.

S. Skochko - 09/15/83
WALKDOWN TEAM ORIGINATOR/DATE

target.

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Bellows rotated per ART 443 and see also Calcs. Done by R. Hankins on 09/16/83.

S. Skochko 09/21/83
DISCIPLINE ENGINEER/DATE

J. P. Meierdierks 09/22/83
ENGR. GROUP SUPERVISOR/DATE

The second secon

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS EDG GC HVAC [TAC] PSE NPO NAM

S. E. Traisman 11/29/83
FIELD VERIFICATION BY HALKDOWN TEAM
(FOR MODIFICATIONS COLY)

L. W. Horn 01/18/84 SIP PROJECT ENGINEER APPROVAL/DATE

SW

- - -

	SHEET1_ OF1
,	& ELECTRIC CO.
DIABLO CANYON	
· · · ·	STEMS INTERACTION PROGRAM
INTERACTION DOCUM	ENTATION SHEET (IDS)
	t.,
POSTULATED INTERACTION NO.: 23-20-02-02	
•	
FIRE ZONE 3-88 LOCATION Penet	ration Area FLOOR ELEVATION 115'-0"
•	
""LOCATION WITHIN FIRE ZONE:	E 19 TAN TAN AND AND AND AND AND AND AND AND AND A
Elev. 115, GE area, near south wall	
	5 1 8 87 1. FW 2118
IDENTIFICATION OF INTERACTING COMPONENTS	•
	a na Aud project
	SOURCE CODE: E-1.F-388
Overhead light, fixtures (2), ball/se	ocket mounted
er times to some paragram for the formers from	
	•
TARGET:	TARGET CODE: I-9003B
Valve 9003B	
விலாலை வணிக்கா பாரணவை வாக்கட்டு விறுக்கான இருந்து விறுக்கான விறுக்கான விறுக்கான விறுக்கான விறுக்கான விறுக்கான இருக்கான விறுக்கான வ	
<i>i</i> = • •	MARK CANADA CANA
POSTULATED INTERACTION:	PHENOMENA CODE: FIXTURE
Fixtures fall, impact valve and asso	
the state and the state of the	Jordon Pouc. Gabre.
- Pi % N	•
	*ur e' •
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	
Ensure integrity of fixtures, possi	oly by analysis.
at an in the company of the company	· · · · · · · · · · · · · · · · · · ·
M. Jones 7/22/80	
WALKDOWN TEAM ORIGINATOR/DATE	
FINAL RESOLUTION BY RESPONSIBLE DISCIPLIE	WE.
	been field inspected and verified to be
installed in accordance with DCCC D.	
This fixture has been qualified by	
No further action necessary. Resolv	
no tarther action necessary. Result	rea of analysis:
D T Curim 2/A/02	C C DL_LL 02/04/02
R. J. Swaim 3/4/83	G. C. Bhatt 03/04/83
· DISCIPLINE ENGINEER/DATE	ENGR. GROUP SUPERVISOR/DATE
BEARTH THE ARCHARAGE STATE STA	
DISCIPLINE RESPONSIBLE FOR RESOLUTION: CI	E [EE] EMS ENG GC HVAC ILC PSE NPO NAN
FIELD VERIFICATION BY WALKDOWN TEAM	L. W. Horn 8/24/83 SIP PROJECT ENGINEER APPROVAL/DATE

[0040A/0106Z-21]

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SHEET	· 1	OF	_1_

#### PACIFIC GAS & ELECTRIC CO. THE EST DIABLO CANYON PLANT, UNIT NO. 1 SEISHICALLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS)

	INTERACTION DOCUMENTATION SHEET (IDS)
POSTU	BLATED INTERACTION NOTE 23-24-06-01
FIRE	ZONE 3F LOCATION Saftey Related Pump FLOOR ELEVATION 73
	ION WITHIN FIRE ZONE: Elev. 73', along east wall near spray additive tank 1-1
	Control of the control of the second of the
IDENT SOURC	
	2" and 1" N <sub>2</sub> Supply Line
	TARGET CODE: TARGE
TARGE	Spray Additive Tank 1-1 and associated piping
POSTI	ULATED INTERACTION: PHENOMENA CODE: SPITAIL
<u> -0310</u>	Piping falls or deflect excessively due to lack of vertical support and impacts spray additive tank.

RECOMMENDED RESOLUTION BY WALKDOWN TEAM: "

Add vertical pipe support at 12" horizontal run of 2" N<sub>2</sub> supply pipe elevation 95'.

M. G. Jones 7/22/80
WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Added pipe support at vertical and horizontal. See generic DCN-DC1-EP-5061, Hgr. No. 049339 Sht. 267 and 268. and "as-built" condition on Hgr. Dwg. No. 049339 Sht. 118.

C. R. Van Natta 8/12/83 DISCIPLINE ENGINEER/DATE K. M. Krause 8/12/83
ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EE EMS ENG GC HVAC ICC [PSE] NPO NAN

S. E. Traisman 09/21/83
FIELD VERIFICATION BY WALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

L. W. Horn 1/19/84
SIP PROJECT ENGINEER APPROVAL/DATE

SHEET	1	OF	1

### 

INTERACTION DOCUMENTAL	ITOM SHEET (IDS)	
POSTULATED INTERACTION NO.: 23-24-09-01	A STATE OF THE STA	
	ated Pump FLOOR FI EVATION 73'-0"	
LOCATION WITHIM FIRE JOWE:  Elev. 78', along north wall nearlespary additive tank.		
IDENTIFICATION OF INTERACTING COMPONENTS	1.18.786 ( V. )	
SOURCE:	SOURCE CONE: F-FF-3F	
Ovehead Fluorescent light fixture		
TARGET:	TARGET CODE: 1-FT930	
FT-930		
POSTULATED INTERACTION:	PHENOMENA CODE: FIXTURE	
Light fixture falls, impact FT-930.		
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:		
Ensure integrity of light fixture.	No. of the second secon	
M. Jones 05/05/82		
WALKDOWN TEAM ORIGINATOR/DATE		

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

The above source light fixture has been field inspected and verified to be installed in accordance with PG&F Dwg. 050041, detail 8. Install back-up support chain per DCN DCO-FF-5552 Rev. 1, Sh. 9 of 9, Detail 75. See ART 377. Resolved by Modification.

R. J. Swaim 05/17/83
DISCIP! TEF, EMSTEFF, DATE

G. C. Bhatt 05/18/83
FEGR. GROUP SUPERVISOR/DATE

DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE [FE] FMS ENG GC HVAC IEC PSE NPO NAM

S. F. Traisman 10/14/83
FIFLD VFRIFICATION BY MALKDOWN TEAM
(FOR MODIFICATIONS ONLY)

L. W. Horn 10/24/83
SIP PROJECT FRIGUREER APPROVAL/DATE

[0022A/0077Z-23]

- .00 ביוודנים או בי דינודעים 20.-PIAGLO OF DEAT, LARLY NO. 1 

PACIFIC GAS G"ELECTRIC CO. DILLA FEREE DIABLO CAMYON PLANT, UNIT NO. 1

SEISPICALLY INDUCED SYSTEMS INTERACTION PROGRAM (C) TO (C)

INTERACTION DOCUMENTATION SHEET (IDS)

THE TENT PARKED TRIBE FORTESTA

SKOY ARTY

POSTULATED INTERACTION NO.: 23-44-03-01

3 the 18 18 18

LOCATION .- Penetration .Areas.

FLOOR ELEVATION 100 100 VO

LOCATION MITHIN FIRE ZONE:

FIRE ZONE 3-BB

Elev. 100', containment wall azimuth 184°. (() ANTE ANTERIO NE TAINE THE TENTE OF TAINE THE CO

IDENTIFICATION OF INTERACTING COMPONENTS

TROUGHT TO EXERTING

SOURCE:

Construction Deficiency.

Fraix! Sugi SOURCE CODE: NS-CD

TARGET:

Conduit KT-284.

TARGET CODE: F-KT284-0.75

THE STATE OF THE STREET

POSTULATED INTERACTION:

PHENOMENA CODE: HOUSFKFEP Construction deficiency. Conduit KT-284 requires an additional support on

containment wall.

The second service was resident and substitutional and services are services are services and services are services and services are services and services are services are services and services are services and services are se

RECOTTIFNOED RESOLUTION BY HALKDOWN TEAM: -

Install support.

R. L. Cloud 06/09/81 HALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

ART 200 was written to resolve interaction. However, field verification of 9/1/824 revealed that ART 200 had not adequately resolved the interaction. IDS accepted on an as-is basis. Electrical to verify interaction has been resolved (see SIP transmittal, 8/9/84 from L. W. Horn to S. Auer).

DISCIPLINE ENGINEER/DATE

ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE EMS ENG GC HVAC ILC . PSE MPO MAN [CC]

FIELD VERIFICATION BY HALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 08/09/84 SIP PROJECT ENGINEER APPROVAL/DATE ...

38A/0100Z-51]

1 14 L 1503 -

اه سخع و دورو و ه سود د

<u>.धे.</u> २० <u>।</u> १८३॥४ SHEET \_\_\_1\_ OF \_\_1\_ PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1 SEISMICALLY INDUCED SYSTEMS INTERACTION PROGRAM (SOLINIERACTION DOCUMENTATION SHEET::(IDS) POSTULATED INTERACTION NO.: 23-46-01-01 FIRE (ZONE 3-BB TATE LOCATION Penetration Area FLOOR ELEVATION 100'-0" LOCATION WITHIN FIRE ZONE: Elev. 100, at containment wall, 135° IDENTIFICATION OF INTERACTING COMPONENTS Platform 11-GE. SOURCE CODE: C-11GE \_\_TARGET::: \*\* TARGET CODE: I-PT937 Tubing to PT-937. Pridat bat. POSTULATED INTERACTION: PHENOMENA CODE: CIVILFAIL Platform falls, impacts tubing. an and the second second and and a Comment of the commen RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Ensure integrity of platform by simplified analysis. M. Jones 07/15/80 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform qualified by analysis. See resolution sheet and referenced Calc. No. 05-27-03-01. S. Hanusiak 02/19/81 E. P. Wollak DISCIPLINE ENGINEER/DATE ENGR. GROUP SUPERVISOR/DATE  $^{E,\Delta C}$  Discipline responsible for resolution: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn 08/23/83
SIP PROJECT ENGINEER APPROVAL/DATE

S.C. 114

*	* · · · · · · · · · · · · · · · · · · ·
CT CIFTUEL 3 CAD CELECO PACIFIC GAS & ELECO CANYON PLANT, SEISMICALLY INDUCED SYSTEMS INTERACTION DOCUMENTATION	WILT, NO. 1 WIERACTON PROGRAM
POSTULATED INTERACTION NO.: 23-47-02-01	end : . On Printerment of the more
	Trea FLOOR-ELEVATION 1001-015574
FIRE ZONE 3-88 LOCATION Penetration	•
LOCATION WITHIN FIRE ZONE:  Elev. 100, at containment wall, 139°.	LOCATION AT IN THE CONTROL OF THE CO
IDENTIFICATION OF INTERACTING COMPONENTS	१९६० च्या १४ व्हासूच ५७ वर्षका व्यवस्थाता.
SOURCE: Platform 11GE.	SOURCE CODE: C-11GE.30 (47)
TARGET:	TAPGET CYNE: T_PTG3775045
PT-932 and associated tubing.	TARGET CODE: I-PT932EOFA
<b>.</b>	
y y Shirt Shi hana 1	WELLY SLAT, CLASS LSON
	an every office the second
POSTULATED INTERACTION: Platform falls, impacts PT-932.	PHENOMENA CODE: CIVILFAIL
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:	analysis.
•	
M. Jones 07/15/80 WALKDOWN TEAM ORIGINATOR/DATE	The second secon
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Platform qualified by analysis. See resol Calc. No. 05-27-03-01.	ution sheet and referenced
C. Hammaiak. Co. (20 / 21	B 0 1033-6
S. Hanusiak 02/19/81 DISCIPLINE ENGINEER/DATE	E. P. Wollak ENGR. GROUP SUPERVISOR/DATE
DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE	EMS ENG GC HVAC IEC PSE NPO NAN
·	L. W. Horn 08/23/83
FIELD VERIFICATION BY WALKDOWN TEAM	SIP PROJECT ENGINEER APPROVAL/DATE

(FOR MODIFICATIONS ONLY)

SHEEL PACIFIC CAS & FI ECTRIC CO. SHEET \_\_\_1\_ OF F. Co TIMPACTPIC GASYE FLECTRIC CO. THE CANDERS NOTTHER BEAUTION PEANTE UNTERNATED SEISHTCANLY INDUCED SYSTEMS INTERACTION PROGRAM INTERACTION DOCUMENTATION SHFFT (IDS) \* 10-60-65-65 · O# POSTULATED INTERACTION NO.: 23-48-03-02 COCATTON Paper at the Comment of the Paper of the Comment of the C LOCATION Penetration Areas FLOOR ELEVATION 100'-0" FIRE ZONE 3-BB T ZCME. Education within Fire Zone: caring it is to the so sawa at Elev. 110, near containment wall, 164°. STREET MOD BRITTHAPAY ( -, IDENTIFICATION OF INTERACTING COMPONENTS 81968 : Tubont Trie 1048 of SOURCE CODE: P-SPR-388 2" firewater pipe, 2" instrument air pipe, 2 1/2" aux. feedwater pipe. TARGET: TARGET CODE: F-KK383-1.75 Conduit KK 383-1" PHENOMENA CODE: FTXTURE POSTULATED INTERACTION: FIXTURE Conduit contacts each of above lines seismic and/or thermal movements result in impact with conduit. RECOMMENDED RESOLUTION BY WALKDOWN TEAM Reroute KK 383 to provide minimum 2000 clearance to source lines and missing conduit support near instrument air line. M. Jones 06/29/82 WALKDOWN TEAM ORIGINATOR/DATE FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE: Add missing conduit and reroute conduit KK383 to provide a minimum of 2 inches clearance to the source lines. 'Refer to ART 329. Resolved by Kerts modification. Peter P. Chu 11/18/82 G. C. Bhatt 11/18/82 DISCIPITNE FNGTNFER/DATE ENGR, GROUP SUPERVISOR/DATE DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [FE] FMS FNG GC HVAC I&C PSE NPO NAN

I.. W. Horn 09/09/83

SIP PROJECT FACTNEER APPROVAL/DATE

S. E. Traisman 08/24/83

(FOR MODIFICATIONS ONLY)

FIFI D VFRIFICATION BY WALKDOWN TEAM

	SHEET1OF1
PACIFIC GAS & FI.EC	•
CO DIABLO CANYON PLANTS	UNIT NO. 1
SFTSMTCALLY INDUCED SYSTEMSO	(NXERACTION PROGRAM
<u>↑;THITERACTION_DOCUMENTATIO</u> TECTHER POITETHER POITE	
POSTULATED INTERACTION: NO.: 23-49-03-01	14487) eT
CD-67-34-67	POSTULATED LATRACTION NO : 22
FIRE ZONE 3-BB LOCATION Penetration A	Areas FLOOR ELEVATION 100'-0"
	TIPE ZONF 12-51 LOCATIO
LOCATION WITHIN FIRE ZONE:  Flev. 110, 13 ft. west of N line, 7 ft. no	orth of 035.70 near (Valve 18716A)
	Eight Store of the
A. Carterina de la Carterina d	4.
IDENTIFICATION OF INTERACTING COMPONENTS	· parties promote a partie of the state of t
SOURCE:	DESTRUCTION OF THE PROPERTY OF
Class 1 conduit support S401 for conduit k	· ————————————————————————————————————
the state of the s	tens "5 acts repaided: 17 for
	e e e e e e e e e e e e e e e e e e e
TARAST.	TARGET CODE: E-KK379-0.75
TARGET:  KK 379-3/4" cond@it:::"	TARGET CODE: E-RX379-0:77
111 07 5 07 7 00115,4C,0 1,1	ा स्थापन के के के के के के किया है। जिल्हा के किया के किया के किया किया के किया के किया किया किया किया किया कि
· · · · · · · · · · · · · · · · · · ·	
	DUCTION CODE - DEEL COT
POSTULATED INTERACTION: Lateral motion of \$401 support results in	PHENOMENA CODE: DEFLECT
	138 TORM TORRESON TO TO STIPLE 1 18.
	the state of the s
•	
RECOMMENDED RESOLUTION BY WALKDOWN TEAM: No. 14. 14.	פארייים אונים ביינים ביינים אונים אין ביינים אונים ביינים
Add lateral brace to conduit support \$300	toppettidestontactifics
	ที่สิงครู้ หลิกก รางเล่นงนี้ แล้งสหรัก รู้ก็รู้
	1
	•
M. Jones 06/10/82	•
WALKDOWN TEAM ORIGINATOR/DATE	•
FINAL RESOLUTION BY RESPONSTRIE DISCIPLINE:	
1. Secure angle support brace (S6) to uni	istrut As-built detail drawing
indicated support is loose.	
<ol> <li>For Conduit K6318 Replace broken FMT of as indicated in "as built" detail from</li> </ol>	
Modifications done by ART 329.	in office day and amount
,	,
Peter P. Chu 11/15/82	G. C. Bhatt 11/15/82
DISCIPLINE ENGINFER/DATE	ENGR. GROUP SUPERVISOR/DATE
DISCIPITNE RESPONSTBLE FOR RESOLUTION: CE [EE]	EMS ENG GC HVAC I&C PSE NPO NA
S. F. Traisman OR/30/83: ":	L. W. Horn 10/25/83
S. F. Traisman 08/30/83 FIFLD VERIFICATION BY WALKDOWN TEAM	SIP PROJECT ENGINEER APPROVAL/DATE
(FOR MODIFICATIONS ONLY)	Trianger dispersion in Charles all a
•	

heb

[0029A/0086Z-40]

PACIFIC CAS & ELECTRIC CO. DIABLO CRRYCH PLANT, UNIT NO. 1 DIABLO CANYON PLANT, UNIT NO. 1 MASTONELLE NO. JR POSTULATED INTERACTION NO .: 23-50-01-02 FIRE ZONE 1-A LOCATION Containment LOCATION WITHIN FIRE ZONE: Flav. 130, near containment wall, 146° DEFTORS TO

SEISMICALLY INDUCED SYSTEMS, INTERACTION, PROGRAM INTERACTION DOCUMENTATION SHEET "(IDS)

FLOOR ELEVATION 117'-0"

IDENTIFICATION OF INTERACTING COMPONENTS

SOURCE:

SOURCE CODE: C-PLAT-1A

57 TX

Platform and ladder.

The second second

TARGET: TARGET CODE: P-0325-8

Line 325-8"; containment spray header A, drain connection.

POSTULATED INTERACTION: PHENOMENA CODE: DFFLECT

lateral deflection of platform results in impact with drain connection.

RECOMMENDED RESOLUTION BY WALKDOWN TEAM:

Add lateral brace to platform to reduce platform movement.

OR:

\$ 15,0

Verify that platform deflection is insufficient to cause contact.

M. Jones 07/22/80 WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

lateral brace will be added and existing A307 bolts replaced with high strength bolts. See ART 292 and Calc. No. 23-50-01-02.

The State of the S

. . . . . . .

S. Hanusiak 01/28/81 DISCIPLINE ENGINEER/DATE

E. P. Wollak ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] FE EMS ENG GC HVAC ICC PSE NPO NAM

M. Baker 08/02/83 FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

L. W. Horn

08/24/83

SIP PROJECT ENGINEER APPROVAL/DATE

	•
SHEET 1 OF 1	
PROGRAM DS)	
eire Antonomia en Roman de la companya d	1
ELEVATION 115'-0"	
Ersa some	
COLVERN TO M FIRE I	
CODE: E-LF-388	-
PERMITTED AND AND AND AND	
**CODE: 1-9007A	-
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
NA CODE: FTXTURE	_
CASTALL STATES	
077627628	
* .*	
76 17 % \$50 1	
eted and verified to	
calculation 52.24.52.	
GROUP SUPERVISOR/DATE	
GC HVAC ICC PSE NPO	NAN
V 11 12 1 11 11	

\* PACIFIC GAS & ELECTRIC CO. DIABLO CANYON PLANT, UNIT NO. 1

SEISMICALLY\_INDUCED SYSTEMS INTERACTION INTERACTION DOCUMENTATION SHEET (I

POSTULATED INTERACTION NO 23-56-02-01 CTO-000 CHRONIC ion Area FLOOR FIRE ZONE \_3-BB\_ LOCATION Penetration Area LOCATION WITHIN FIRE ZONE: Elev. 130, near containment walf; 16000 Por St IDENTIFICATION OF INTERACTING COMPONENTS AND THE PROPERTY OF T SOURCE STANK TO DATE THE SOURCE: Overhead light fixture 19.642 TARGET TARGET: Valve 9007A 141 1 CF # 16.\* PHENOME POSTULATED INTERACTION: Fixture falls, impacts valve. The Part of the Pa Car at at an arm of the terret RECOMMENDED RESOLUTION BY WALKDOWN TEAM: Fnsure integrity of fixture, possibly by analysis. THE WAS UNDER TE F But at it includes of a The state of the s

M. Jones 7/15/80 WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

The above source light fixture has been field inspec be installed in accordance with PG&E Dwg. 050041, de Kors This fixture type has been qualified by analysis per No further action necessary. Resolved by analysis.

R.J. Swaim 3/4/83 DISCIPLINE ENGINEER/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: CE [EE] EMS ENG

L. W. Horn SIP PROJECT ENGINEER APPROVAL/DATE

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY) " /"

SHEET 1 OF 1

SHEET CHAST THAT CO. 1213 CO.

INTERACTION DOCUMENTATION SHEET (IDS)

POSTULATED INTERACTION NO.; 23-66-01-01 LOCATION WALLSLANDS

- FIRE ZONE 3F LOCATION Safety Related Pump FLOOR ELEVATION 73'-0"

LOCATION WITHIN FIRE ZONE:

Elev. 73, Outside CS Pump 1-2 Room

CARTINARIO BLIDGE.

CONE: ind and a

\_\_ SOURCE: 11 44 4 1

. . . OIL SOURCE CODE: CS Pump 1-2 Room Security Barrier

2.76 12.94.0

TARGET: The THE SECTION SET TARGET CODE: M-SAT

Spray additive tank

and the second surface of the second POSTULATED INTERACTION: ..... Security barrier falls, impacts tank.

RECOMMENDED RESOLUTION BY WALKDOWN TEAM: A STATE OF THE PROPERTY OF THE PROPER Insure integrity of security Barrier by simplified analysis.

M. Jones 10/27/80 WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Barrier qualified by analysis. See resolution sheet and Calc. No. 23-12-04-02.

S. Hanusiak 03/12/81 DISCIPLINE ENGINEER/DATE

E. P. Wollak 03/12/81 ENGR. GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ICC PSE NPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM ... SIP PROJECT ENGINEER APPROVAL/DATE

" (FOR MODIFICATIONS ONLY)

`

13 Tel.

\$ \$ 10 m

SHEET	1	OF	1

### PACIFIC GAS & FLECTRIC CO.

### \_DIARLO\_CANYON PLANT, UNIT NO. 1 SETSMTCAILY INDUCED STRTPRSIZEMERACTION PROGRAM

TO WENTERACTION DOCUMENTATIONS SHEET (IDS)
SET OF CHANGE OF THE REST OF THE PROPERTY OF T
POSTULATED INTERACTION NO.: 23-67-02-01-01 NO.: 23-67-02-01 NO.: 23-67-01 NO.
FIRE ZONE 3-F LOCATION Safety Related Pumpi FLOOR ELEVATION 73'-0"
LOCATION WITHIN FIRE ZONE: SALE SALES SALES SALES
Flev. 73, over CS pump 1-1.
יסבודבסי או אדון פינתב בנאבי בין איינון פינתב בנאבי בין איינון פינתב בנאבי בין איינון פינת בין איינון פינת בין
IDENTIFICATION OF INTERACTING COMPONENTS
SOURCE: SOURCE CODE OF HANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETHANDETH
SOURCE: SOURCE-CODE: STANDET-3F.  CS pump 1-1 ventilation duct (Class I).
TO STATE WITH STORY STORY
TARGET CODE: M-CSPP1-1
CS pump 1-1 motor & associated equipment.
Spra addition of the control of the
The state of the s
POSTULATED INTERACTION: SPIFAR SOLUTION STATE ST
Duct is cantilevered over CS pump, last seismic duct support is 14 ft. from end o cantilever. Duct could fail, fall on CS pump; motor a equipment.
The second secon
ranger of the second of the
in f.
DECOMPTINED DECOLUTION BY HALVON IN TEAM.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM:
Ensure integrity of duct by simplified analysis. Additional duct supports
if/as required.
M. Jones 05/05/82
WAI KDOWN TEAM ORIGINATOR/DATE
FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:
The subject duct has been qualified under the DCP Ductwork Reverification Program. DCN DC1-FC-3603 has been issued for modification. No. further action
required by SIP Group.
F. Morsy 10/18/82 J. K. McCall 11/03/82
DISCIPITME FNGTNFER/DATE ENGR. GROUP SUPERVISOR/DATE
DISCIPITNE RESPONSIBLE FOR RESOLUTION: [CF] FE EMS FNG GC HVAC ICC PSF NPO NAN
I. W. Horn 10/25/83
FIFLD VFRIFICATION BY WALKDOWN TEAM SIP PROJECT ENGINEER APPROVAL/DATE (FOR MODIFICATIONS ONLY)

1 Rolling The PHILLIS SAR Y ETERLING SHEET \_\_\_1 OF \_\_1 ON TIME TRACIFICY GAS GLELEGIBLE CO. MET THE THE THE THE TENTO PROLOGORY ON THE PROPERTY AND A '80") SEISHICALLY-TROUCEDOSNSTENS SENTERACTION PROGRAM INTERACTION DOCUMENTATION SHEET (IDS) POSTULATED INTERACTION NO.: 23-68-02-01 LOCATION SAFETY Related Pump FLCOR ELEVATION 73'-0" FIRE ZONE 3-F · MILHTH LIKE IN 1E. LOCATION WITHIN FIRE ZONE: '91. .! ISW 37 11 Edge 3 IDENTIFICATION OF INTERACTING COMPONENTS BUTTORS, TO MESTRUM SOURCE TO A PARK THE SOURCE CODE: H-DUCT-3F CS Pump 1-2 Ventilation Duct. (Class 1) TARGET - SELTIME CS Pump 1-2 Motor and Associated Equipment 1-2 Motor and Associated 1-2 Motor and Associated Equipment 1-2 Motor and Associated 1-2 Motor and Associated 1-2 POSTULATED INTERACTION: PHENOMENA CODE: SPTFAIL Duct. is cantileyered over CS pump, last seismic duct support is 14 ft. from end of cantilever. Duct could fail, fall on CS pulip motor and That sie equipment. RECOMMENDED RESOLUTION BY WALKDOWN TEAM SOLAR TO A TOP 275 Ensure integrity of duct by simplified analysis. Add additional duct supports if/as required.

M. Jones 05/05/82
WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

The subject duct has been qualified under the DCP Ductwork Reverification Program. DCN DC1-EC-3603 has been issued for modification. No further action required by SIP Group.

S. Gaballah 08/02/83
DISCIPLINE ENGINEER/DATE

an John T

B. Sarkar 08/02/83
ENGR - GROUP SUPERVISOR/DATE

DISCIPLINE RESPONSIBLE FOR RESOLUTION: [CE] EE EMS ENG GC HVAC ILC PSE MPO NAN

FIELD VERIFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

SIP PROJECT ENGINEER APPROVAL/DATE

	SHEET1_ OF1_
TRANS PACIFIC GAS & ELECT	RIC CO.
PACIFIC GAS & ELECT THAT THE TOTAL PACIFIC GAS & ELECT THAT SETS TO THE PACIFIC GAS & ELECT SETS TO THE PACIFIC GAS & THE STORY OF THE PACIFIC GAS & THE	MIT NO. 1
SETSMICALLY INDUCED SYSTEMS ON	ITERACTION PROGRAM
INTERACTION DOCUMENTATION	D'SKEET (IDS)
	NAME OF COMMENTS AND ASSESSED OF THE PROPERTY
POSTULATED INTERACTION HO.: 23-47-02-01	JAN ANA
FIRE ZONE 3-BB LOCATION Penetration Are LOCATION WITHIN FIRE ZONE:	ea FLOOR ELEVATION 0 100 1 0 0 0
ACTION REPORT OF THE PROPERTY	7-6, 3632 3716
LOCATION MUTHIN FIRE ZONE:	Standard by the standard manufacture of the standard of the st
Elev. 100, at containment wall, 139°.	and a marketing acts to make the three owns
	augreques and est fold es soudstable gradige collecti
	San and Marie A. 2.1 Action
IDENTIFICATION OF INTERACTING COMPONENTS	S. Satisfy and many magnification
TANDANA TANDANA	SOURCE CODE: DECENTED I
SOURCE:	SOURCE CODE: " J'C-11GE JUSUI
Platform 11 GE. T. District No. 1. 15 Con no.	SORBOS SELECTION
Platform 11GE TO TOTAL T	"S wall not know by or
TARCET.	TARGET CORE. T OTODA
TARGET:	TARGET CODE: I-PT932
PT-932 and associated tubing by the service	TE DOTOT INT A TOTAL
	Cartach XX Submit
• 44.5	
And the state of t	POTTEM STREET, NO CONTROL
יש שער היות שליים ביים וויים ו	PETALL AND STATE OF TALL AND ADDRESS OF TALL AND ADDRESS OF TALL AND ADDRESS OF TALL ADDRESS O
POSTULATED INTERACTION (4) IN COLUMN TO COLUMN	PHENOTENH CODET TOLVIERHEE
POSTULATED INTERACTION: 19 Platform falls, impacts PT-932.	, के भूत के का <b>ने अधिकारियार किया है।</b> किया का
	•
	•
DECOMMENDED DECOLLETTON BY LIALUDOUS, TEAM	N. C.
RECOMMENDED RESOLUTION BY WALKDOWN TEAM TO THE TEAM TO	<u>(5.) ,                                   </u>
Euznie i ucedujchkot braciosm, odykimbiri Ciedii	9097A27251147186414 tutted also 0038
Euzniesiucediichkol bischolm offikkimbrilfedi	THE THE POST OF THE PROPERTY O
Euzniesiucediichkol bischolm offikkimbrilfedi	9097A27251147186414 tutted also 0038
Euzniesiucediichkol bischolm offikkimbrilfedi	auging the continues of the second
Euzniesiucediichkol bischolm offikkimbrilfedi	auging the continues of the second
Euznie sintedii takot bistrotii ootistiibiti fedi	A Committee of the comm
Ensure sintegrity to platform by samplifyed.	A Committee of the comm
Euznie sintedii takot bistrotii ootistiibiti fedi	auging the continues of the second
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE	SC TO STATE OF THE
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCEPLINE:	ANALYSIS TO STATE OF THE STATE
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCEPLINE:  Platform qualified by analysis. See resolu  Calc. No. 05-27-03-01.	analysis it is the second of t
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCEPLINE:  Platform qualified by analysis. See resolu  Calc. No. 05-27-03-01.	ANALYSIS TO STATE OF THE STATE
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCEPLINE:  Platform qualified by analysis. See resolu  Calc. No. 05-27-03-01.	analysis it is the second of t
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCEPLINE:  Platform qualified by analysis. See resolu  Calc. No. 05-27-03-01.	analysis it is the second of t
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCEPLINE:  Platform qualified by analysis. See resolu Calc. No. 05-27-03-01.	tion sheet and referenced
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCEPLINE:  Platform qualified by analysis. See resolu Calc. No. 05-27-03-01.	tion sheet and referenced
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCEPLINE:  Platform qualified by analysis. See resolu Calc. No. 05-27-03-01.	analysis it is the second of t
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platform qualified by analysis. See resolu Calc. No. 05-27-03-01.	E. P. Wollak  ENGR: GROUP SUPERVISOR/DATE
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCEPLINE:  Platform qualified by analysis. See resolu Calc. No. 05-27-03-01.	E. P. Wollak  ENGR: GROUP SUPERVISOR/DATE
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platform qualified by analysis. See resolu Calc. No. 05-27-03-01.	E. P. Wollak  ENGR: GROUP SUPERVISOR/DATE
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platform qualified by analysis. See resolu Calc. No. 05-27-03-01.	E. P. Wollak  ENGR: GROUP SUPERVISOR/DATE
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platform qualified by analysis. See resolution.	E. P. Wollak  ENGR: GROUP SUPERVISOR/DATE  EMS ENG GC HVAC TEC PSE NPO NAN  L. W. Horn 08/23/83
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platform qualified by analysis. 'See resolution.' (See resolution of the control of the con	E. P. Wollak  ENGR: GROUP SUPERVISOR/DATE  EMS ENG GC HVAC ISC PSE NPO NAN  L. W. Horn 08/23/83  SEP PROJECT ENGINEER APPROVAL/DATE
M. Jones 07/15/80  WALKDOWN TEAM ORIGINATOR/DATE  FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:  Platform qualified by analysis. 'See resolution.' (See resolution of the control of the con	E. P. Wollak ENGR: GROUP SUPERVISOR/DATE EMS ENG GC HVAC ISC PSE NPO NAN

SHEET \_\_\_\_\_ OF \_\_\_\_\_

SHEET \_\_\_1\_ OF \_\_1\_

THE THE PACIFIC CASE & FLECTRIC CO.

SEISHTCALLY INDUCED SYSTEMS INTERACTION PROGRAM

POSTULATED INTERACTION NO: 23-48-03-02

FIRE ZONE 3-8B LOCATION Penetration Areas PLOCATION 100'-0"

LOCATION WITHIN FIRE ZONE;

Elev: 110, near containment wall, 164°.

IDENTIFICATION OF INTERACTING COMPONENTS.

SOURCE: SOURCE CODE: P-SPR-388 SOURCE: 2" firewater pipe, 2" instrument air pipe, 2 1/2" aux. feedwater pipe.

TARGET:

Conduit KK 383-1"

# - # TARGET COOF: F-KK383-1.75

POSTULATED INTERACTION: --- Conduit-contacts each of above lines seismic and/on thermal movements result in impact with conduit.

RECOMMENDED RESOLUTION BY WALKDOWN TEAM:

Reroute KK 383 to provide minimum 2" clearance to source lines and missing conduit supportinear instrument air line.

M. Jones 06/29/82

WALKDOWN TEAM ORIGINATOR/DATE

FINAL RESOLUTION BY RESPONSIBLE DISCIPLINE:

Add missing conduit and reroute conduit KK383 to provide 'a minimum of 2 inches clearance to the source lines. Refer to ART 329. Resolved by . modification.

Peter P. Chu 11/18/82 DISCIPITNE FNGTNFER/DATE

G. C. Bhatt 11/18/82 ENGR. GROUP SUPERVISOR/DATE

- DISCIPILINE RESPONSIBLE FOR RESOLUTION: CE [FF] EMS FNG GC HVAC IEC PSE NPO NAN

ූ්වරා S. E. Trai'sman 08/24/83

FIFI D VFRTFICATION BY WALKDOWN TEAM (FOR MODIFICATIONS ONLY)

1.. W. Horn 09/09/83 SIP PROJECT FACTORER APPROVAL/DATE

773 439

Kerts