



AUG 02 1985

CLASS 1E CABLE TERMINATIONS

PREPARED BY:

[Signature]

8/1/85

APPROVED BY:

*RCB*  
*8/1/85*

[Signature]

8/1/85

APPROVED BY:

[Signature]

8-1-85

- 1.0 REFERENCE
- 1-A CP-QP-11.3, "Electrical Inspection Activities"
- 1-B QI-QP-11.3-41, "Inspection of Soldered Connections"
- 1-C QI-QP-11.3-43, "Verify Testing and Installation of NIS Triaxial Cable Connectors"
- 1-D QI-QP-11.3-29, "Electrical Separation"
- 1-E FSI-108, "Safety Related Instrument Installation Requirements"
- 1-F CP-CPM-6.3, "Preparation, Approval, and Control of Operation Travelers"
- 1-G 2323 E1-1701, "Conduit and Cable Tray Legend General Notes and Typical Details"
- 1-H QI-QP-11.3-25, "Inspection of new Installation for Class 1E Lighting Systems"
- 1-I 2323-E1-1702-02, "Cable and Raceway Separation Typical Details"
- 1-J 2323-E1-1800, "Electrical Bill of Material"
- 1-K QI-QP-11.2-1, "Installation of "Hilti" Drilled-In Bolts"
- 1-L CP-CPM-7.1, "Package Flow Control"
- 1-M CP-QP-18.0, "Inspection Reports"
- 1-N CP-QP-16.0, "Nonconformances"
- 1-O 2323-E1-1702-01, "Conduit, Cable, and Miscellaneous Details"

**FOR INFORMATION ONLY**



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AUG 02 1985

2.0 GENERAL INFORMATION

## 2.1 PURPOSE

The purpose of this Quality Instruction is to supplement Reference 1-A.

## 2.2 SCOPE

To provide the inspection criteria and the documentation requirements for inspecting Class 1E Cable and associated cable terminations. Non-Class 1E may be inspected to this instruction if indicated in other instructions.

## 2.3 DEFINITIONS

2.3.1 Terminations

The electrical connection between a conductor and an item of electrical equipment at the connection point provided by the equipment manufacturer. Also any electrical connection between a connector and a terminal block.

2.3.2 Splice

A connection between two or more separate lengths of cable with the conductors in one length individually connected to conductors in the other length and with the protecting sheaths so connected as to extend protection over the joint.

3.0 INSTRUCTION

The following is an index of Section 3 of this instruction:

## 3.1 GENERAL INSTRUCTIONS

## 3.1.1 Cable Ties

## 3.2 INSPECTION CRITERIA

3.2.1 Verify Adequacy of Flex./Unique/Servicair Flex.  
Conduit Installation

## 3.2.2 Verify Flex Conduit Separation

## 3.2.3 Verify Terminations of Field Jumpers

## 3.2.4 Witness Adequacy of Jacket Removal

## 3.2.5 Witness Proper Tools for Stripping of Insulation

3.2.6 Verify Proper Terminal and Splice Connectors for  
Gauge of Conductor Wire Used3.2.7 Verify Proper Tools for Crimping/Compression of  
Terminal Lugs and Splices



AUG 02 1985

- 3.2.8 Witness the Setting of Stripping Tool Wire Stops for all Pre-Insulated Environmental Sealed (PIES) and Non-Insulated, Non-Sight Hole Type Splice Connections smaller than No. 8 AWG.
- 3.2.9 Verify Physical Attributes of PIES Splice Installation
- 3.2.10 Verify Physical Attributes of Insulated Ring Tongue Terminal Installation
- 3.2.11 Verify Physical Attributes of Non-Insulated Splice Installation
- 3.2.12 Verify Physical Attributes of Non-Insulated Ring Tongue Terminal Installation
- 3.2.13 Verify Cable Continuity Check Performed (Witness for PIES Butt Splices)
- 3.2.14 Verify Cable Shielding
- 3.2.15 Witness Preparation of Surfaces for Bolted Connections
- 3.2.16 Verify Correct Materials for Bolted Connections
- 3.2.17 Witness Torquing of Bolted Connections (except bolts/screws  $\frac{1}{4}$  inch)
- 3.2.18 Verify Minimum Bend Radius and Internal Cabinet Routing
- 3.2.19 Verify Cable Secure
- 3.2.20 Verify Cable Identification
- 3.2.21 Verify Terminations I.A.W. Engineering/Vendor Drawing
- 3.2.22 Verify Internal Separation
- 3.2.23 Witness Cable Surface Preparation Prior to Installation of Heat Shrink (IN-PROCESS inspection only)
- 3.2.24 Verify Proper Materials for Heat Shrink Installations
- 3.2.25 Verify Adequacy of Installation of Heat Shrink Materials (Witness for 8KV terminations)
- 3.2.26 Verify Installation of End Caps for Electrical Penetration Assembly
- 3.2.27 Verify Component Installation
- 3.2.28 Verify Internal Components
- 3.2.29 Verify Connector Free of Damage
- 3.2.30 Witness Pin/Plug Orientation
- 3.2.31 Witness Prefabricated Cable Crimping
- 3.3 DOCUMENTATION
- 3.4 IN PROCESS INSPECTIONS
- 3.5 DISCREPANCIES



AUG 02 1985

### 3.1 GENERAL INSTRUCTIONS

The QC Inspector shall inspect cable terminations in accordance with the latest revision of all referenced material and criteria delineated within this instruction.

Cable terminations involving solder connections for Class 1E and associated circuits, shall be inspected in accordance with Reference 1-B.

Testing and installation of NIS Triaxial Cable Connectors and Connections shall be performed in accordance with Reference 1-C.

Inspections for cable and electrical raceway Electrical Separation shall be performed in accordance with References 1-D and 1-I (external and internal separation, respectively), as applicable.

The electrical inspection criteria for safety related instrument installations shall be in accordance with Reference 1-E and documented per QI-QP-11.3-42.

The Electrical Engineering Department may initiate Operation Travelers in accordance with Reference 1-F for completing cable terminations. The QC Inspector shall inspect the terminating process as stated on the Operation Traveler and document inspections performed by signing and dating the applicable inspection points on the traveler adjacent to the operation step performed. Where indicated, the kit numbers, lot numbers etc. shall be recorded. Where space is limited the entry can be made at the bottom of the page or on the last page. QC shall sign date, and reference the applicable step.

Refer to Reference 1-G when reducing 600V cable size to accommodate vendor supplied terminal lugs/blocks (i.e., starter or breaker units in equipment such as Motor Control Centers).

Refer to Reference 1-H for lighting termination Inspection criteria.

#### 3.1.1 Cable Ties

Cable ties shall have a positive locking device to prevent slippage. Cable tie surfaces in contact with cable jackets shall be relatively smooth with no sharp projections, burrs, etc., which could damage the jacket.

The excess length of permanent ties shall be cut off after tying.



AUG 02 1985

In the reactor building, cable ties shall be Thomas & Betts Tefzel/TY-RAP or Engineering approved equal. In the remaining plant areas outside of the reactor building, cable ties shall be Panduit PAN-TY nylon cable ties or Engineering approved equal.

3.2 INSPECTION CRITERIA

3.2.1 Verify Adequacy of Flexible/Unique/Servicair Flexible Conduit Installation

The QC Inspector shall verify the adequacy of flexible/unique/servicair flexible conduit installation and document same on Attachments 1, and 1A or 1B as applicable.

Flexible conduit shall be inspected in accordance with the latest approved Engineering drawing and documented on Attachments 1 and 1A.

Unless shown otherwise on drawings "Sealtite" or "Liquid-Tite" flexible conduit shall be used in all areas except the Containment. Refer to Reference 1-G for typical flex conduit installations.

Flexible conduit shall be inspected per Reference 1-D and 1-I.

Stainless Steel flexible conduit as shown on material list (Reference 1-J) shall be used in the Containment.

Flexible conduit shall be identified and color coded in accordance with Attachment 11. Stainless steel flex conduit located in containment will not be color coded, the color code will be located at the end of the rigid conduit as close as possible to the flex connector. In cases where the entire run is S.S. flex conduit, the junction box color code will serve to identify conduit train or channel.

The installation of flex conduit at all instruments (wall, support or rack mounted) and the plugging of spare conduit connection shall be in accordance with Reference 1-E.

The QC Inspector shall inspect flex conduit installations, and upon acceptance, enter the conduit number in the "Remarks" Section of the Inspection Report as applicable.

Inspect exposed portion of cable for damage to cable jacket or insulation during reinstallation of flex conduit.



AUG 02 1985

## 3.2.1.1 Witness Rework of Flex Conduit or Unique Flex Conduit Containing Cables

Rework of flex conduit and unique flex conduit containing cables shall be inspected and documented on Attachment 3. The QC Inspector shall inspect rework of flex conduit or unique flex conduit for the following:

- a. Minimum bend radius is not violated during installation of cables.
- b. Inspect exposed portion of cable for damage to cable jacket or insulation during re-installation of flex conduit.
- c. Separation criteria per Reference 1-D and 1-I is not violated.

## 3.2.1.2 Servicair Flex

When Servicair Flex conduit is used (only to be used as a separation barrier inside control boards and vertical ventilation panels) the following attributes shall be inspected and documented on Attachment 1B:

- a. Verify a minimum of  $\frac{1}{2}$  inch solder applied to exposed ends of the Servicair flex conduit to preclude unraveling of the protective sheath.
- b. Verify no burrs in solder on the exposed ends only.
- c. Verify the installation of bushing on exposed ends of the flex conduit.
- d. Verify all connectors and service couplings installed.

During the IN-PROCESS inspection, the QC Inspector shall witness that at least  $\frac{3}{4}$  inch of Servicair flex is inserted into the "KWIKUPL" connector and that a minimum of  $\frac{1}{2}$  inch solder has been applied to the end which is to be inserted into the "KWIKUPL".

- e. Verify no sharp edges on both ends of the flex conduit which could potentially degrade the insulation of the conductors inside the flex (IN-PROCESS inspection only).
- f. Verify that the Servicair flex has been color coded at intervals not exceeding 3 ft. as follows:



AUG 02 1985

Train A - Orange  
Train B - Green  
Associated Train A - Orange with white stripe  
Associated Train B - Green with white stripe  
Train C - Black or Non-Colored  
Channel - 1, 2, 3, & 4 (red, white, blue, & yellow respectively)

- g. Verify flex conduit support - the QC Inspector shall verify that the conduit is supported by use of the tyrap or resting on a stationary surface not exceeding 3 feet (i.e., floor, strut, board, cross member, etc.).
- h. Verify separation in accordance with Reference 1-I.

### 3.2.2 Verify Flex Conduit Separation

Flexible conduit shall be inspected for separation in accordance with the technical requirements of Reference 1-D and 1-I for terminations inside the control cabinets/panels. If flex conduit can be moved to create an unsatisfactory separation problem and remains in the unsatisfactory configuration, the QC Inspector shall verify that a mechanical separator is used to maintain separation (see Attachments 5A and 5B). The inspector shall verify that all bolts are installed in accordance with Attachments 5A and 5B. Hilti Bolt installation shall be inspected per Reference 1-K.

### 3.2.3 Verify Termination of Field Jumpers

Field Jumpers shall be installed as shown on approved Engineering drawings. All Field Jumpers connected with the cable being terminated shall be inspected and documented on Attachment 1 as follows:

- a. Wire size shall be the same size or larger than the cable being terminated.
- b. Termination requirements of the jumpers shall be the same as the cable being terminated.
- c. Routing of field installed jumpers shall not violate separation requirement or minimum bend radius.

NOTE 1: Field jumpers are identified only when designated on the Engineering Drawing.





AUG 02 1985

NOTE 2: Temporary terminations utilizing field jumpers shall be identified using a "Temporary Modification Tag".

3.2.4 Witness Adequacy of Jacket Removal (IN-PROCESS Inspection only)

The QC Inspector shall inspect the inner conductor insulation subsequent to jacket removal to assure that inner conductor insulation has not been damaged (cuts, nicks).

During the IN-PROCESS inspection, the QC Inspector shall verify the proper tools are utilized for jacket removal (Refer to Attachment 9, Table 1).

3.2.5 Witness Proper Tools for Stripping of Insulation (In Process Inspection Only)

The QC Inspector shall verify that all stripping of conductor insulation between 10 - 22 AWG is performed utilizing the hand stripper (Ideal #45-092) with wire stop. For power cables (4/0 AWG and larger), the use of a pocket knife is acceptable for stripping of insulation. (See also Attachment 9, Table 1).

3.2.6 Verify Proper Terminal and Splice Connectors for Gauge of Conductor Wire Used

The QC Inspector shall verify that the terminal lugs and splice connectors are the correct size for the conductor used. Attachment 9, Figure 1 and Table 2 depict the terminal lugs and splice connectors for each gauge of conductor wire. For drain wire connections of shielded #16 AWG cable and connectors to be utilized in the core cooling monitoring system, refer to Table 1 of Attachment 9. Verification can be obtained for non-insulated terminal lugs and splices by noting that the AWG wire size being used matches the wire size stamped on the terminal or splice connector.

Compression type terminals shall not be used on thermocouple wire. Connections at instrument and reference junctions shall be made in accordance with the instrument manufacturer's recommendations. Wires will be looped under screws in a clockwise direction.

Splices will be installed in accordance with engineering drawings and details or vendor drawings, as applicable. (Reference 1-G).

Certain equipment such as switchgear, motor control centers, and cable bus ducus may be supplied with lugs which shall be



AUG 02 1985

installed only if they are of correct size, material, and type, and are compatible with the compression system being used.

Cables shall be installed from origin to destination without splices unless specifically called for on the latest approved Engineering drawings.

The installation of field splices inside control panels shall require the following:

- a. The splice shall be authorized by an approved design document (i.e. DCA or drawing revision).
- b. A conductor of the same color code and trade size of the conductor being spliced shall be utilized.

Where terminal lugs/blocks provided with equipment for 600 volt power cables are not large enough to accommodate the power cable, it is acceptable to terminate the power cables directly on the starter or break units in equipment such as Motor Control Centers. If the starter or breaker will not facilitate the existing cable a smaller cable may be spliced using the ampacity and location guidelines of detail 13 and Table 13 of Reference 1-G.

### 3.2.7 Verify Proper Tools for Crimping/Compression of Terminal Lugs and Splices

The QC Inspector shall verify that the crimping/compression tool is the tool specifically recommended for the activity performed.

Attachment 9, Figure 1 and Table 2 depict the proper tool, terminal lugs, splice connectors, dies (if applicable), and dot codes for each gauge of conductor wire.

### 3.2.8 Witness the Setting of Stripping Tool Wire Stops for All Pre-Insulated Environmental Sealed (PIES) and Non-Insulated, Non-Sight Hole Type Splice Connections Smaller than No. 8 AWG.

The QC Inspector shall witness the setting of stripping tool wire stops when utilizing the Ideal hand stripper (45-092). The strip length shall be in accordance with the manufacturers recommendations (see Attachment 9, Table 2).

The QC Inspector shall verify that the wire stop measuring device has been calibrated and indicate the calibration number in Block No. 14 on the IR (Attachment 1).



AUG 02 1985

When multiple butt splices in the same cable are being performed (e.g. electrical penetration, multi-conductor cables) the QC Inspector shall witness the setting of the wire stop for the first splice and monitor the subsequent stripping to assure the wire stop remains within the tolerances indicated in Attachment 9, Table 2.

3.2.8.1 Verify Stripping Length of No. 8 AWG and Larger Non-Insulated Non-Sight Hole Butt Splices.

The QC Inspector shall measure the length of exposed conductor (Figure 2, Attachment 9) for non-insulated/non-sight hole butt splices (No. 8 AWG only) prior to insertion of conductor into splice connector. The types of stripping tools are identified in Attachment 9, Table 1.

For IN-PROCESS inspection, the QC Inspector shall verify that the stripped conductor is free of nicks, cuts, missing conductor strands or extrusions.

3.2.9 Verify Physical Attributes of PIES Splice Installation

(Applicability - wire range 12 - 24 AWG)

The QC Inspector shall verify that the installation of the conductor into the splice meets the accept/reject criteria as shown in Figure 5 of Attachment 9. Since setting of wire-stop on stripping tool has been witnessed, the attributes to verify are as follows:

- a. Correct dot code, and/or observed that the correct tool was utilized.
- b. No flash or extruded insulation.
- c. PIES splice insulation is in firm contact (crimped) with wire insulation.
- d. Crimp centered on wire barrel.
- e. No evidence of conductor or splice insulation damage.
- f. Splices are staggered or trained so they are not touching one another.

NOTE: 4 crimps per PIES splice connector (Refer to Attachment 9, Figure 5)



AUG 02 1985

PIES splices do not require heat shrinking nor are they to be used in harsh environmental areas (Attachment 7) unless specifically required via an approved Design Change.

For non-insulated butt splices, refer to sub-paragraph 3.2.11.

PIDG Radiation Resistant Butt splices are for the Fire Protection System only.

3.2.10 Verify Physical Attributes of Insulated Ring Tongue Terminal Installation

(Applicability - wire range 8 - 22 AWG)

The QC Inspector shall verify that the installation of the conductor into the terminal lug meets the accept/reject criteria as shown in Figure 5 of Attachment 9. Attributes to verify are as follows:

- a. Insulation barrel is in firm contact (crimped) with wire insulation.

NOTE: Plasti-Grip Terminals (6-8 AWG) provide only a support for the wire when flexed (i.e. terminal insulation will not always touch wire insulation).

- b. No flash or extruded insulation.
- c. Crimp is centered or near centered on wire barrel. Crimps may be off center; however, crimp shall not be off the end of the wire barrel.
- d. End of conductor is flush with, or extends beyond end of terminal wire barrel and will not interfere with terminal hardware.

During the IN-PROCESS monitoring inspection, the QC Inspector shall verify the proper dot code and/or observe that the proper tool was utilized to make the crimp on the wire barrel.

NOTE: 2 crimps per terminal lug for 600V conductors 10AWG and smaller. (Refer to Attachment 9, Figure 5).

For non-insulated ring tongue terminals refer to sub-paragraph 3.2.12.



AUG 02 1985

When two (2) terminal lugs are terminated utilizing the same screws, the QC Inspector shall verify items a through d above for both lugs prior to the final termination.

3.2.11 Verify Physical Attributes of Non-Insulated Splice Installation  
(Applicability - wire range 8 - 22 AWG)

The QC Inspector shall verify that the installation of the conductor into the splice connector meets the accept/reject criteria as shown in Figure 5, of Attachment 9. Since the setting of the wire stop has been witnessed for non-sight hole type butt splices the attributes to verify are as follows:

- a. Crimp is centered or near centered. Crimps may be off center however, the crimp shall not be off the end of the wire barrel.
- b. The insulation does not enter wire barrel or,
- c. the conductor is inserted far enough into the splice connector (see Figures 1, 2, and 3 of Attachment 9).
- d. Wire is visible through inspection hole (if applicable).
- e. For parallel splices, bare wire ends must be flush with or extend slightly beyond end of barrel.
- f. Field Splices are staggered or trained to prevent raceway overfill.
- g. No apparent extrusions or flash on wire barrel.

NOTE: 2 crimps per butt splice and 1 crimp per parallel splice.

The non-insulated splices on conductor cable shall be insulated with heat shrinkable cable sleeves (Refer to sub-paragraph 3.2.23).

3.2.12 Verify Physical Attributes of Non-Insulated Ring Tongue Terminal Installation

(Applicability - wire range 6 AWG and larger (600V copper cable); 4/0 AWG and larger (8KV copper cable).



AUG 02 1985

The QC Inspector shall verify that the installation of the conductor into the terminal barrel meets the accept/reject criteria as shown in Figure 5, of Attachment 9. Attributes to verify are as follows:

- a. Crimp is centered or near centered. Crimps may be off center however, the crimp shall not be off the end of the wire barrel.
- b. The insulation does not enter wire barrel
- c. Conductor is flush with or extends slightly beyond end of terminal wire barrel and will not interfere with terminal hardware. When inspection holes are provided, ensure that conductor is visible through the inspection hole.
- d. No apparent extrusions or flash on wire barrel.

NOTE: 1 crimp per terminal lug. Long barrels have 2 crimps.

3.2.13 Verify Cable Continuity Check Performed (Witness for PIES Butt Splices)

The QC Inspector shall witness continuity checks performed on PIES field splices inside control panels prior to terminating the conductor.

The QC Inspector shall verify that craft personnel have completed cable continuity portion of the Cable Connect Card by indicating that continuity checks were satisfactorily performed for all other terminations.

3.2.14 Verify Cable Shielding

3.2.14.1 8KV Shielded Cable

The shield of single conductor shielded cable shall be terminated. 8KV electrical penetration shield shall not be grounded at the penetration assembly.

If shielding to be grounded passes through a ground sensor current transformer, the shielding lead shall be carried back through the ground sensor before grounding.

3.2.14.2 Instrument and Signal Cables

Terminations and shielded connections for instrument and signal cables shall be as shown on wiring diagrams. Shield grounds



AUG 02 1985

shall be applied only at points indicated on latest approved Engineering drawings.

3.2.15 Witness Preparation of Surfaces for Bolted Connections

Bare copper contact surfaces shall be wire brushed and wiped clean of residuals. Copper or aluminum contact surfaces which are tinned shall not be wire brushed or otherwise abraded. Bare aluminum contact surfaces shall be liberally coated with Ideal NOALOX joint compound and wire brushed through the compound. The mating surface shall then be coated with additional NOALOX. Excess compound shall not be wiped from aluminum contact surfaces before bolting. Joint compound shall be applied to all mating contact surfaces where one of the connecting pads is aluminum. Lugs which have the designation "AL-CU" require no joint compound when terminating copper conductors.

3.2.16 Verify Correct Materials for Bolted Connections

The QC Inspector shall verify that all final terminations are made utilizing the proper hardware. Connections utilizing  $\frac{1}{2}$ " and larger diameter hardware shall be made with standard, coarse thread, hex head bolts and nuts or standard machine screws only. Connections utilizing hardware less than  $\frac{1}{2}$ " diameter shall be made with standard machine screws and hex nuts or standard machine screws only. Threads may be either fine or coarse. Brass machine screws may be used.

NOTE: Machine screws may be varied configurations; i.e., round head, slotted, hex head, etc.

Bolted cable shall use flat washers under the head and nuts and lockwashers under the nut. Belleville spring washers shall be used in lieu of lockwashers if either mating surface is aluminum. Belleville spring washers, where used, shall be located under the nut with the concave side toward the joint, and a standard flat washer shall be used under the Belleville washer. If the bolt head bears on a tinned surface, a standard flat washer shall be used under the bolthead to prevent abrasion of the plated tin coating.

It is acceptable to use carbon steel (ASTM-A307, A325, A449), stainless steel or silicon bronze hardware for copper to copper connections. For copper to copper connections below  $\frac{1}{2}$ ", brass may be used if other material is not available. Carbon steel bolts shall be electro galvanized. See Attachment 4 for ASTM bolt types and markings.



AUG 02 1985

NOTE: Traceability need not be maintained.

Where bolting hardware is supplied by Vendor, substitutions shall not be made without prior approval from site Engineering.

If either pad is aluminum bolted joints between cable terminal pads and equipment terminal pads, buses, or other cable terminals shall be made with standard, coarse threaded, stainless steel, hexhead bolts, hex nuts, flat washers, and Belleville spring washers. Belleville washers having a plated coating shall not be used under any circumstances. For copper-to-copper connections, silicone bronze or electrogalvanized carbon steel (ASTM A-307) hardware is acceptable and Belleville washers are not required. All other bolted joints shall have lock washers. Bolt lengths shall be selected to provide full thread in the nut.

Bolting lengths shall be determined by the minimum length providing full nut engagement.

NOTE: Stock bolts may be shortened to meet specific requirements providing they are cut square, threads are dressed to ensure elimination of burrs and sharp edges, and the end of plated bolts coated with zinc rich paint.

Where bolting compression type lugs are supplied for 600V in-line splice connections, the lugs shall be back to back with silicon bronze or stainless steel hardware.

For 8KV power cable (4/0 AWG and larger), one bolt hole lugs may be utilized when supplied by equipment vendor or whenever equipment has provisions for lugs with only one bolt hole.

### 3.2.17 Witness/Verify Tensioning of Final Terminations

Final terminations shall be verified as follows:

1. Witness torquing of bolted/screwed connections 1/4" diameter and larger (except on mechanical compression type connectors).

The QC inspector shall witness torquing of all such bolted connections 1/4" diameter and larger. The QC inspector shall apply torque sealing compound (except limit switches) to bolts after torque requirements have been fulfilled.

Terminal and transition joint lugs for 600V copper cable size #6 AWG and larger as well as 8KV copper cable size #4/0 AWG and larger shall be of the uninsulated, tongue type lug having 2 bolt holes in the pad. However, a one bolt hole lug may be installed when supplied with equipment or





AUG 02 1985

whenever the equipment has provisions for lugs with only one bolt hole.

Bolts/screws 1/4" diameter and larger shall be torqued to values defined herein, unless otherwise required by the manufacturer:

<u>Bolted Material</u>	<u>Torqued in Foot-Pounds for Bolt Size</u>				
	<u>1/4-20</u>	<u>5/16-18</u>	<u>3/8-16</u>	<u>1/2-13</u>	<u>5/8-11</u>
Carbon Steel (A325)	8	17	20	50	95
Carbon Steel (A-307)	5	12	15	40	65
Silicon Bronze	5	10	15	40	55
Stainless Steel	5	12	15	40	70

All class 1E and associated cable bolted terminations on vendor supplied pigtails utilizing non-insulated splices shall be insulated with heat shrinkable cable sleeves (Refer to sub-paragraphs 3.2.23 thru 3.2.25).

When the shrink tubing will cover the bolted connections the QC Inspector shall verify torquing requirements and assure cable continuity tests were performed prior to the application of heat shrinkable tubing.

Torque tolerance is ± 10%.

2. Verify that bolted/screwed connections smaller than 1/4" diameter, all terminal block screws and mechanical compression type connectors are tight.

For the purpose of this procedure tight is defined as follows:

- a. A terminal connection wherein the contact surfaces of conducting material are visually flush against one another and no "freedom of movement" is evident (i.e. turning of screw/bolt when applying moderate to heavy pressure against terminal barrel does not constitute "freedom of movement"). (NOTE: When possible, pressure should be applied in clockwise direction.)
- b. During IN-PROCESS inspections this may be observed as follows: In general, once conductor contacts are flush a 10° to 90° turn of the screw/bolt is adequate to assure a good electrical connection.



AUG 02 1985

3. Where device terminals (e.g., terminal blocks) are marked with torque values or where torque requirements are otherwise required by a vendor, the QC Inspector shall witness that torquing to the vendor requirements.

#### 3.2.17.1 Weidmuller Terminal Blocks

The QC Inspector shall verify the following attributes:

- a. terminal block damage.
- b. stripped wire shall not extend out beyond the terminal block entry port.
- c. proper mounting of assembly rail, end plates and end brackets.
- d. maximum conductor size shall be No. 10 AWG. Weidmuller SAK 10 shall be utilized when terminating two No. 10 AWG cables. Weidmuller SAK 6N shall be utilized when terminating one cable (No. 10 AWG thru No. 16 AWG) and when terminating two cables (No. 12 AWG thru No. 16 AWG).

NOTE: Refer to Reference 1-0 for details and applications of Weidmuller terminal blocks.

During the IN-PROCESS inspection the QC Inspector shall witness the setting of the wire stop on the stripping tool (stripping length shall be within 15/32 inch and 19/32 inch) and verify that a parallel-bladed electricians screwdriver is used (similar to Weidmuller screwdrivers Nos. 2, 3, & 4).

NOTE: A parallel-bladed screwdriver does not contain a tapered end as this may tend to exert force on the plastic guide and damage the terminal block.

#### 3.2.17.2 Mechanical Compression Type Connectors

The QC Inspector shall verify that the exposed portion of the conductor for all mechanical compression type connectors (e.g. GE MCC's, breakers, thermocouples) do not exceed  $\frac{1}{4}$  inch beyond the connector entry port. Vendor supplied mechanical compression type connectors shall be installed per manufacturers recommendations.

#### 3.2.18 Verify Minimum Bend Radius and Internal Cabinet Routing

- a. Internal cabinet training and routing shall be arranged in a neat and orderly fashion and be consistent with good construction practices.



AUG 02 1985

- b. The QC Inspector shall assure that the radius of the finally "trained" cable does not violate the minimum bend radius criteria contained in Attachment 10.

## 3.2.19

Verify Cable Secure

Cable shall be verified as secure as follows:

- a. Securing the cable inside cabinets shall be accomplished with Engineering approved materials (Refer to Para. 3.1.1).
- b. The QC Inspector shall assure that no cable damage (i.e., cuts, nicks, to cable jacket or conductor insulation) occurs as a result of cable tie installation.
- c. When cables are bundled together the cut off ends of cable ties shall not be buried in the interior of cable bundles.

## 3.2.20

Verify Cable Identification

The QC Inspector shall visually inspect the cable and/or conductor identifications to ensure consistency with the Cable Termination Card, Cable and Raceway Schedule applicable Engineering drawings and the following criteria:

- a. All wires shall be terminated to terminal blocks and equipment components according to the identification numbers and color coding shown on the drawings with the exception of phasing. Identifications of wires of multi-conductor cables by tagging is required unless the cable has color coded wires, numbered wires, or is going to a multi-pin connector. Conductors shall be identified by tagging, using Raychem sleeve or self-locking Ty-rap with cable numbers as shown with marking pen, on approved design drawings and Cable and Raceway Schedule. Wires in multi-conductor cable and single cable/group six feet or less do not have to be identified except in the cases where the cable contains the same color conductors.
- b. Cable for safety-related and associated circuits will be color coded by the cable manufacturers. In general, all Class 1E cables and associated cables are jacket color coded throughout their entire length. If field color coding becomes necessary, cables will be color coded at intervals not to exceed five feet. Class 1E cables that have been field color coded are marked with a permanently colored "train identification" color band using an Engineering approved tape such as Brady B-361-B film tape or Okonite No. 35 jacketing tape. Associated cables will be marked with



AUG 02 1985

a white band and a "train" color band. No Class 1E or associated Class 1E cables shall be color coded in the field before receiving written approval from Engineering.

The cable markers shall be placed as follows:

1. Cables shall be identified at each end;
2. All cables shall be identified at termination points (except multi conductor cables).

NOTE: In the event that inconsistencies are noted, the Engineering/Vendor Drawing (cable connection drawing) shall be the governing document.

3.2.21 Verify Terminations I.A.W. Engineering/Vendor Drawing

The following criteria applies:

- a. The QC Inspector shall verify that conductors are terminated to the proper place and shall be in accordance with the latest applicable Engineering drawings or Vendor drawings.
- b. No more than two (2) lugs (back to back) will be allowed under a single terminal block screw, unless otherwise shown on approved Engineering drawings.
- c. Conductor terminations should be arranged in a neat and orderly fashion, and secured with cable ties.

NOTE: Temporary terminations shall be identified with a Temporary Modification Tag.

3.2.22 Verify Internal Separation

The QC inspector shall verify the following attributes as applicable:

- a. Separation between field run redundant Class 1E cables and Class 1E/ Non-Class 1E cables within equipment shall be maintained in accordance with the equipment specification. If the specification gives no separation requirements, the minimum separation distance between redundant Class 1E and Class 1E/Non-Class 1E cables shall be greater than or equal to 6 inches. In cases where the above separation criteria cannot be maintained, barriers shall be installed between the cables.  
Barriers used for separation shall be installed via an Operation Traveler/IR, Attachment 1B.



AUG 02 1985

- b. Barriers used for separation will be as follows (Refer to Reference 1-I).
1. Servicaire Company FC 33 flexible conduit (this flex-conduit is acceptable only in the main control boards and vertical ventilation panels). Refer to sub-paragraph 3.2.1.2.
  2. Two sheets of fire retardant material separated by a minimum of 1/4" of air space or thermal insulating material, or
  3. A single barrier with a 1" minimum air space or thermal insulating material between the components or devices and the barrier, as applicable.
- c. Power supply feeds to instrument and control room distribution panels shall be installed in solid enclosed raceways as shown on G&H design drawings. (Example: conduit)
- d. Redundant Class 1E circuits shall enter in separate apertures and terminate on separate terminal blocks or connectors as shown on G&H design drawings.
- e. The following cabinets have been analyzed and are exempt from the separation requirements; however, equipment that provides for channel or train separation shall be utilized when available.

NOTE: TBX for Unit 1 and TCX for Unit 2.

NIS Cabinets	T-X-NIELCA-01 (4 Cabinets)
Solid State Protection System	T-X-ESELSP-01 (Logic & Output Cabinets only)
Solid State Protection System	T-X-ESELTC-01 (Test Cabinets)
Upgrade Protection & Surveillance	T-X-XIELSS-50
Process Racks	T-X-XIELRK-01 T-X-XIELRK-02 T-X-XIELRK-03 T-X-XIELRK-04



AUG 02 1985

- f. Protection channel wiring, safety-train wiring, and Non-safety train wiring within panels PC1, PC2, PC3, PC4 will be in different wire bundles. These bundles will be separated to the maximum extent practicable.
- g. The minimum separation requirement of 6" within equipment for field run cables may be waived between Class 1E cables of one train and non-Class 1E fiber optic cables.

3.2.23 Witness Cable Surface Preparation Prior to Installation of Heat Shrink (IN-PROCESS inspection only)

The QC Inspector shall witness preparation of cable surface prior to installation of heat shrink materials. The QC inspector shall assure that the area of cable in which heat shrink will be applied has been cleaned with a cable cleaning solvent i.e. trichloroethane or methyl-ethyl ketone.

3.2.24 Verify Proper Materials for Heat Shrink Installations

The QC Inspector shall verify that the proper heat shrink kit is being used. Refer to Attachment 8 for kit numbers and their usage range. The QC Inspector shall document the applicable lot number, and kit number of all heat shrink materials prior to installation. If an Operation Traveler is used, the information shall be documented on the Operation Traveler as indicated in Paragraph 3.1. All nuclear heat shrink kits will have the prefix or suffix (N) to indicate nuclear material. Each kit components interior may have a red adhesive substance to indicate same.

Alternative applications or alterations of kits, except as noted in existing Raychem instructions, must be approved by engineering. Generic approvals will be made via letter from engineering and documented on Operation Travelers. The method of approval shall be indicated on the cable connection sign-off card.

NOTE: It is permissible to field cut WCSF-12N tubing into six inch lengths for uninsulated butt splices.

Heat shrinkable nuclear splice kits will normally be accompanied with a set of installation instructions to be followed as well as the criteria stated herein. If the kit does not contain a set of instructions, they can be obtained from the Electrical Tool Room.

Braided jacketing material shall be removed from the conductor surface where the heat shrink is applied.



AUG 02 1985

When individual heat shrink sleeves are used, they are to be considered as a kit consisting of a single part. 8KV terminations shall be installed with Raychem "N-HVT" termination kits in accordance with the manufacturer's recommendations and detailed instructions.

The installation of 600 volt in-line splices that meet any of the following criteria shall be insulated with heat shrinkable cable insulation sleeves (see also note below):

Installation of nuclear heat shrinkable sleeves shall be used as required to complete the installation of:

- Class 1E 480 volt motor terminations
- Electrical Penetration cable connections
- Cable reduction splices
- Uninsulated Splice connectors

3.2.25 Verify Adequacy of Installation of Heat Shrink Materials (Witness for 8KV terminations)

The QC Inspector shall verify the adequacy of installation of heat shrink materials. Satisfactory installation of sleeves will be indicated by:

- a. Smooth, consistent contact between sleeve and cable;
- b. Red adhesive flow showing at each end. Adhesive flow indicates complete shrinking and cable contact ensuring a positive environmental seal (if applicable).

NOTE 1: Lack of above conditions will require a reheat process until shrinking is complete.

NOTE 2: Overheating of sleeves will be indicated by obvious blistering (flaking) of surface and shall be removed and replaced.

- c. 2 inches of conductor insulation on both sides of uninsulated butt splices shall be covered with heat shrink material.

3.2.26 Verify Installation of End Caps for Electrical Penetration Assembly

The installation of heat shrinkable end caps utilized on the spare conductors on electrical penetration assemblies shall be in accordance with the end caps manufacturers instruction.



AUG 09 1985

Attachment 8 (Table 8-7) lists acceptable heat shrink end caps for electrical penetration assemblies.

The QC Inspectors shall verify the proper and satisfactory installation of the end cap. The end cap shall conform to the cable and completely encapsulate the end of the conductor after installation.

It is not necessary for the Inspector to record the kit number of the end cap on the Inspection Report when end caps are being installed on spare conductors of electrical penetration assemblies.

3.2.27 Verify Component Installation

The QC Inspector shall verify the installation of all Class 1E Instrumentation devices that are self-contained (does not have a site installed remote sensor or electromechanical interface) for proper mounting, location, orientation, and the termination of instrumentation or control cable and/or thermocouple wire in accordance with the design drawing(s).

NOTE: These devices will be installed by the electrical craft. Those instruments installed by I & C and are identified by an I & C sticker are not within the scope of this instruction. Terminal block mounting hardware shall be performed by the QC mechanical inspectors.

3.2.28 Verify Internal Components

The QC Inspector shall verify that all craft site installed internal components are the correct range, type, rating in accordance with the latest design or vendor documents.

These inspections shall be performed when the incoming wires are terminated to these devices. If a wire is terminated on a terminal block and associated components have been installed in the field to this terminal block, QC shall inspect these components. QC shall also inspect breakers in AC and DC distribution panels to assure the device has the proper amperage rating.

3.2.29 Verify Connector Free of Damage

Verify that the connector used is that connector specified on the vendor drawing.

Verify that the connector is free from damage by visually inspecting the shell to assure it is not deformed, has no chips, cracks or burrs and the lock is free to turn, if required.





AUG 02 1985

3.2.30 Witness Pin/Plug Orientation

The QC Inspector shall perform a pin/plug orientation verification for multi-pin connectors in accordance with Engineering or vendor drawings.

3.2.31 Witness Prefabricated Cable Crimping

The frequency of inspection for verifying that crimping tool testing is performed in accordance with Test/Calibration Procedures (EEL-10, "Electrical Termination Shack Operation") shall be performed after use in the field, prior to re-issuance and documented on Attachment 2. The test shall consist of (5) five sample crimps.

Verification of prefabricated cable crimping shall be performed for the following:

- a. proper connectors
- b. contacts
- c. tools
- d. crimp height

For specific identification of contact types, tools, etc., refer to Attachment 6.

There may be instances where no available specific tool and/or die calibration for certain contacts do not exist due to design (i.e., open barrel contact such as Burndy SC16). In these cases post crimp inspection shall be made according to the dimensional requirements of Attachment 6 and the following tensile strength test:

<u>WIRE SIZE (AWG)</u>	<u>MINIMUM TENSILE STRENGTH (Pounds)</u>
22	10
20	16
18	20
16	30
14	60
12	70
10	80

NOTE: Minimum duration of pulls is one minute.



AUG 02 1985

## 3.3 DOCUMENTATION

Inspection Report(s) associated with this instruction may be packaged as part of a traveler installation or as part of other procedures and IR's as necessary to complete a process or item installation (Reference 1-L), where applicable.

Class 1E termination inspections shall be documented on an Inspection Report (Attachments 1 and 2).

Attachment 2 will be used to verify crimping tool test was performed for prefabricated cable.

If cable is reworked as a result of removing unique flex conduit or flex conduit from conduit raceway, rework shall be documented on the appropriate Inspection Report (Attachment 3).

## 3.4 IN-PROCESS INSPECTIONS

A weekly IN-PROCESS inspection of electrical construction activities shall be performed and documented on Attachment 1. The QC Inspector shall check the appropriate box on Block 9 of Attachment 1. The weekly IN-PROCESS inspection may be combined with a final inspection by witnessing all operations and checking both In-Process and Final Inspection boxes on the IR.

This inspection shall be limited to those items that are not witnessed. A minimum of one item for each inspection attribute shall be performed per week, consistent with construction activities. In cases where there is no activity for a particular attribute that attribute shall be marked N/A and "No Activity" shall be recorded in the remarks section of the inspection report.

NOTE: Items are not required to be completed at one time.

## 3.5 DISCREPANCIES

Discrepancies found during inspection shall be documented on the IR (Attachments 1, 1A, 1B, 2, and 3) and/or a NCR per References 1-M and 1-N respectively, as directed by the QC Supervisor.



AUG 02 1985

ATTACHMENT 1

COMANCHE PEAK STEAM ELECTRIC STATION  
 INSPECTION REPORT

SHEET 1 OF 2

ITEM DESCRIPTION	IDENTIFICATION NO.	SYSTEM/STRUCTURE DESIGNATION	
Class IE Cable Terminations	Cable #		
SPEC. NO.	REF. D.C. DOC. & REV. & CHANGE NO.	MEASURE OR TEST EQUIP. IDENT. NO.	
ES-100	QI-QP-11.3-28 Rev.		
<input type="checkbox"/> IN PROCESS INSPECTION	<input type="checkbox"/> PRE INSTALLATION VERIFICATION	<input type="checkbox"/> INSTALLATION INSPECTION	
<input type="checkbox"/> FINAL INSPECTION	<input type="checkbox"/> PRETEST INSPECTION		
INSPECTION RESULTS		DATE	
<input type="checkbox"/> INSPECTION COMPLETED. ALL APPLICABLE ITEMS SATISFACTORY		IC INSPECTOR	
<input type="checkbox"/> INSPECTION COMPLETED. INSATISFACTORY ITEMS LISTED BELOW			
ITEM NO.	INSPECTION ATTRIBUTES	DATE	IC SIGNATURE
(V) 1.	Verify Adequacy of flexible/unique flexible/vertical-conduit installation. (attach IR 1A or 1B as applicable)		
(V) 2.	Verify terminations of field tumblers.		
(W) 3.	Witness adequacy of jacket removal (IN-PROCESS only).		
(W) 4.	Witness proper tools for stripping of insulation (IN-PROCESS inspection only).		
(V) 5.	Verify proper terminal and splice connectors.		
(V) 6.	Verify proper tools for crimping/compression of lugs & splices.		
(W) 7.	Witness setting of stripping tool wire across for all PIES and (non-insulated/non-sight hole type butt splice connections smaller than No. 3 AWG).		
(V) 8.	Verify proper stripping length of No. 3 AWG and larger non-insulated/non-sight holes butt splices.		
(V) 9.	Verify physical attributes of PIES splice installation.		
(V) 10.	Verify physical attributes of insulated ring tongue terminal installation.		
(V) 11.	Verify physical attributes on non-insulated splice installation.		
(V) 12.	Verify physical attributes on non-insulated ring tongue terminal installation.		
(V) 13.	Verify cable continuity check performed.		
(W) 14.	Witness continuity check for PIES butt splices inside control cabinets.		
(V) 15.	Verify cable shielding.		
(W) 16.	Witness preparation of surfaces for bolted connections.		
(V) 17.	Verify correct materials for bolted connections.		
(W) 18.	Witness torquing of bolted connections (1/2" and larger or as required by Manufacturer)		



ATTACHMENT 1 (Cont)

COMANCHE PEAK STEAM ELECTRIC STATION  
 INSPECTION REPORT

QI-QP-11.3-28, Rev. \_\_\_  
 SHEET 2 of 2

(SUPPLEMENTAL)

FOR FULL HEADINGS, SEE SHEET 1

NO. \_\_\_\_\_

ITEM NO.		DATE	INITIALS	SIG.	DATE	DC SIGNATURE
(V) 19.	Verify bolts/screws < 1/4" & T.B. screws are tight.					
(V) 20.	Verify termination(s) on Weidmuller terminal block.					
(V) 21.	Verify mechanical compression type connectors.					
(V) 22.	Verify min. bend radius and internal cabinet routing.					
(V) 23.	Verify cable secure.					
(V) 24.	Verify cable identification.					
(V) 25.	Verify terminations I.A.W. latest Engineering/Vendor drawing.					
(V) 26.	Verify internal separation.					
(W) 27.	Witness cable surface preparation prior to installation of heat shrink. (In-Process inspection only).					
(V) 28.	Verify proper materials for heat shrink installation.					
(V) 29.	Verify adequacy of installation of heat shrink materials (Witness for 3KV terminations).					
(V) 30.	Verify installation of end caps for electrical penetration assembly.					
(V) 31.	Verify component installation.					
(V) 32.	Verify internal components.					
(V) 33.	Verify connector free of damage.					
(W) 34.	Witness pin/plug orientation.					
(V) 35.	Verify no damage to exposed cable jacket/insulation.					

REMARKS: (DWGS, SPECS, ETC.)

RELATED WORK NO. \_\_\_\_\_ I.R. CLOSED  DATE \_\_\_\_\_ SIGNATURE \_\_\_\_\_  
DC INSPECTION



AUG 02 1995

ATTACHMENT 1-A

COMANCHE PEAK STEAM ELECTRIC STATION  
 INSPECTION REPORT

SHEET 1 OF 1  
 NO.

ITEM DESCRIPTION Class 1E Flexible Conduit		IDENTIFICATION NO.		SYSTEM/STRUCTURE DESIGNATION	
SPEC. NO.	REV.	REF. D.C. DOC. & REV. & CHANGE NO. QI-QP-11.3-28 Rev.		MEASURE OR TEST EQUIP. IDENT. NO.	
<input type="checkbox"/> IN PROCESS INSPECTION	<input type="checkbox"/> PRE INSTALLATION VERIFICATION	<input type="checkbox"/> INSTALLATION INSPECTION	<input type="checkbox"/> FINAL INSPECTION	<input type="checkbox"/> PRETEST INSPECTION	
INSP. RESULTS					
<input type="checkbox"/> INSPECTION COMPLETED, ALL APPLICABLE ITEMS SATISFACTORY					
<input type="checkbox"/> INSPECTION COMPLETED, UNSATISFACTORY ITEMS LISTED BELOW					
				DC INSPECTOR	DATE
ITEM NO.	INSPECTION ATTRIBUTES			SAI	UNSAI
				DATE	DC SIGNATURE
(V) 1.	Verify flex conduit installation.				
	A. Verify Size				
	B. Verify Type				
	C. Verify Identification				
	D. Verify Color Code				
	E. Verify Proper Connectors				
(V) 2.	Verify Flex Conduit Separation.				
REMARKS (DMS, SPECS, ETC.)					
RELATED NCR NO.		I.R. CLOSED <input type="checkbox"/>		DATE	SIGNATURE
E28/07		3/85			DC INSPECTOR



AUG 02 1985

ATTACHMENT 1-B

COMANCHE PEAK STEAM ELECTRIC STATION  
 INSPECTION REPORT

SHEET 1 OF 1  
 NO.

ITEM DESCRIPTION		IDENTIFICATION NO.		SYSTEM/STRUCTURE DESIGNATION	
Servicair Flex Conduit					
SPEC. NO.	REV.	REF. Q.C. DOC. & REV. & CHANGE NO.	MEASURE OR TEST EQUIP. IDENT. NO.		
		QI-QP-11.3-28, Rev.			
<input type="checkbox"/> IN PROCESS INSPECTION	<input type="checkbox"/> PRE INSTALLATION VERIFICATION	<input type="checkbox"/> INSTALLATION INSPECTION	<input type="checkbox"/> FINAL INSPECTION	<input type="checkbox"/> PRETEST INSPECTION	
INSP. RESULTS					
<input type="checkbox"/> INSPECTION COMPLETED. ALL APPLICABLE ITEMS SATISFACTORY					
<input type="checkbox"/> INSPECTION COMPLETED. UNSATISFACTORY ITEMS LISTED BELOW					
			QC INSPECTOR	DATE	
ITEM NO.	INSPECTION ATTRIBUTES			SAT	UNSAT
				DATE	QC SIGNATURE
(V) 1.	Verify 1/4 inch of solder on ends of conduit.				
(V) 2.	Verify no burrs on solder.				
(V) 3.	Verify installation of bushing on exposed end of conduit.				
(V) 4.	Verify presence of all connectors and service couplings.				
(W)	4.1 Witness insertion of Servicair flex into "KIKUP" (3/4" min.) (in-process inspection only).				
(V) 5.	Verify no sharp edge on both ends of conduit (in-process inspection only).				
(V) 6.	Verify color code of conduit.				
(V) 7.	Verify flex conduit support.				
(V) 8.	Verify flex conduit separation.				
REMARKS (DWGS. SPECS. ETC.)					
RELATED ACR NO.		I.R. CLOSED <input type="checkbox"/>		DATE	SIGNATURE
					QC INSPECTOR



AUG 02 1985

ATTACHMENT 2

COMANCHE PEAK STEAM ELECTRIC STATION  
 INSPECTION REPORT

SHEET 1 OF 1  
 NO.

ITEM DESCRIPTION/VERIFY PREFABRICATED CABLE CRIMPING		IDENTIFICATION NO.	SYSTEM / STRUCTURE DESIGNATION	
SPEC. NO.	REV.	REF. Q.C. DOC. & REV. & CHANGE NO.	MEASURE OR TEST EQUIP. IDENT. NO.	
ES-100	51	01-0P-11.3-28, Rev.	*(Note M&TE No's. Below)	
<input type="checkbox"/> IN PROCESS INSPECTION	<input type="checkbox"/> PRE INSTALLATION VERIFICATION	<input type="checkbox"/> INSTALLATION INSPECTION	<input type="checkbox"/> FINAL INSPECTION	<input type="checkbox"/> PRETEST INSPECTION
INSP. RESULTS				
<input type="checkbox"/> INSPECTION COMPLETED, ALL APPLICABLE ITEMS SATISFACTORY			QC INSPECTOR _____ DATE _____	
<input type="checkbox"/> INSPECTION COMPLETED, UNSATISFACTORY ITEMS LISTED BELOW				
ITEM NO.	INSPECTION ATTRIBUTES			QC SIGNATURE
(W) 1.	Witness Prefabricated Cable Crimping.			
	a.	Contact #		
	b.	Tool #		
	c.	Die #		
	d.	Crimp Height		
	e.	Tensile Strength Test (Pounds)		
REMARKS (DWGS, SPECS, ETC.)				
RELATED NCR NO.	I.R. CLOSED	DATE	SIGNATURE	
	<input type="checkbox"/>		QC INSPECTOR	



AUG 02 1985

ATTACHMENT 3

COMANCHE PEAK STEAM ELECTRIC STATION  
 INSPECTION REPORT

SHEET 1 of 1  
 NO.

ITEM DESCRIPTION Rework of Flex Conduit Containing Cables	IDENTIFICATION NO.	SYSTEM/STRUCTURE DESIGNATION
SPEC. NO. 85-100	REV.	MEASURE OR TEST EQUIP. IDENT. NO.
REF. Q.C. DOC. & REV. & CHANGE NO. QI-QP-11.3-28, Rev.		
<input type="checkbox"/> IN PROCESS INSPECTION	<input type="checkbox"/> PRE INSTALLATION VERIFICATION	<input type="checkbox"/> INSTALLATION INSPECTION
	<input type="checkbox"/> FINAL INSPECTION	<input type="checkbox"/> PRETEST INSPECTION
INSP. RESULTS <input type="checkbox"/> INSPECTION COMPLETED, ALL APPLICABLE ITEMS SATISFACTORY		QC INSPECTOR _____ DATE _____
<input type="checkbox"/> INSPECTION COMPLETED, UNSATISFACTORY ITEMS LISTED BELOW		
ITEM NO.	INSPECTION ATTRIBUTES	DATE
		QC SIGNATURE
(V) 1.	List cables contained in flex conduit in block 14.	
(W) 2.	Witness rework/repair/installation of flex conduit per NCR disposition.	
(V)	A. Verify no damage to cable jacket or insulation.	
(W) 3.	Minimum bend radius not violated during installation of cables.	
(V) 4.	Verify flex conduit separation.	
REMARKS (DWGS, SPECS, ETC.)		
RELATED NCR NO.	I.R. CLOSED <input type="checkbox"/>	SIGNATURE _____
	DATE	QC INSPECTOR














AUG 02 1985

ATTACHMENT 4

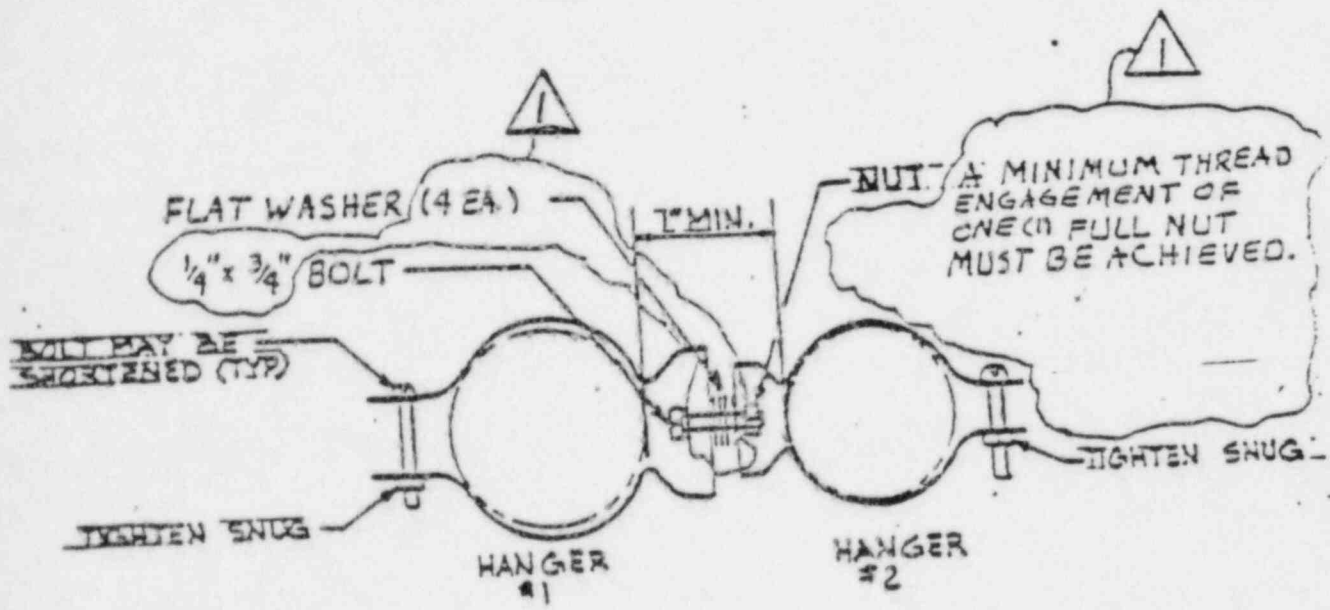
ASTM AND SAE GRADE MARKINGS FOR STEEL  
BOLTS AND SCREWS

GRADE MARKINGS	SPECIFICATION	MATERIAL
  NO MARK	SAE - GRADE 1	LOW OR MEDIUM CARBON STEEL
	ASTM - A 307	LOW CARBON STEEL
	SAE - GRADE 2	LOW OR MEDIUM CARBON STEEL
	SAE - GRADE 5	MEDIUM CARBON STEEL, QUENCHED AND TEMPERED
	ASTM - A 449	
	SAE - GRADE 5.2	LOW CARBON MARTENSITIC STEEL, QUENCHED AND TEMPERED
	ASTM - A 325 TYPE 1	MEDIUM CARBON STEEL, QUENCHED AND TEMPERED
	ASTM - A 325 TYPE 2	LOW CARBON MARTENSITIC STEEL
	ASTM - A 325 TYPE 3	ATMOSPHERIC CORROSION (WEATHERING STEEL), QUENCHED AND TEMPERED
	ASTM - A 354 GRADE AB	LOW ALLOY STEEL, QUENCHED AND TEMPERED
	ASTM - A 354 GRADE AC	LOW ALLOY STEEL, QUENCHED AND TEMPERED
	SAE - GRADE 7	MEDIUM CARBON ALLOY STEEL, QUENCHED AND TEMPERED, ROLL THREADED AFTER HEAT TREATMENT
	SAE - GRADE 8	MEDIUM CARBON ALLOY STEEL, QUENCHED AND TEMPERED
	ASTM - A 354 GRADE AD	ALLOY STEEL, QUENCHED AND TEMPERED
	ASTM - A 490	ALLOY STEEL, QUENCHED AND TEMPERED



AUG 02 1995

ATTACHMENT 5A



DETAIL "62" (NNS)

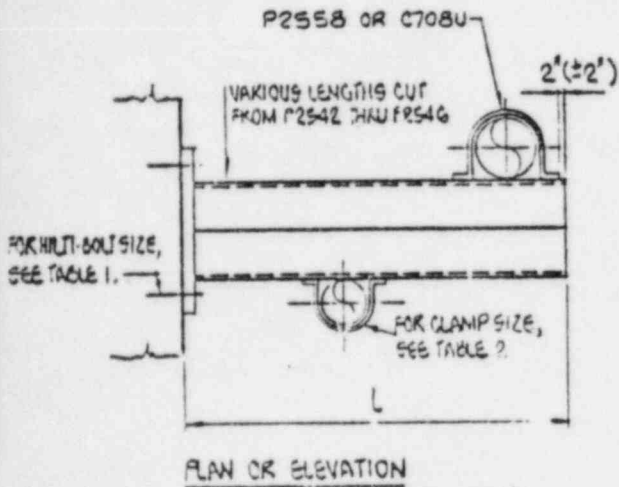
MECHANICAL SEPARATOR - USE ON FLEXIBLE CONDUIT INSTALLATIONS WHERE MINIMUM SEPARATION DISTANCE BETWEEN REDUNDANT CLASS "IE" CIRCUITS OR BETWEEN NON-CLASS "IE" AND CLASS "IE" CIRCUITS IS PROVIDED BUT MAY NOT SUBSEQUENTLY BE MAINTAINED DUE TO NON-DESIGN BASIS EVENT OR ENVIRONMENTAL CONDITIONS.

THE MECHANICAL SEPARATOR IS NOT CONSIDERED PART OF THE CONDUIT SUPPORT SYSTEM AND IS THEREFORE NON-SEISMIC AND NON-NUCLEAR SAFETY RELATED.



AUG 10 1995

ATTACHMENT 5B



NOTE: 1" visible slack must be present in the flex conduit on both sides

TABLE 1	
L (MAX.)	HILTI-BOLT SIZE
1'-6"	3/8" $\phi$ HKB W/2 1/2" MIN. EMB.
2'-0"	1/2" $\phi$ HKB W/2 3/4" MIN. EMB.
2'-6"	1/2" $\phi$ HKB W/4 1/2" MIN. EMB.
3'-0"	1/2" $\phi$ HSNBW/4 1/4" MIN. EMB.

TABLE 2	
CONDUIT SIZE	CLAMP SIZE
3/4" $\phi$	1"
1" $\phi$	1 1/2"
1 1/2" $\phi$	2"
2" $\phi$	3"



AUG 02 1985

ATTACHMENT 6

PREFABRICATED CABLE CONNECTOR CONTACTS

1. CP 605 Reliance Electric

Prefabricated cables supplied under this order primarily connect the main control boards to termination cabinets. These connectors and contacts are Burndy Trim Trio style connectors.

BURNDY CONNECTORS

Connector	Contact	Tool	Die	Crimp (b)	Height
G2B	SC016 M-1S6	M8ND	N16RT24	.057	± .003
G 6 F		UTM-2	CM-11	.058	± .003
	SM16 M-1S6	M8ND	N16RT24	.057	± .003
	RC 16M-23D28	M8ND	N16RT21	(a)	

a. Use GoNo Go gauge No. PG-324

2. CP 611B Westinghouse

Prefabricated cables supplied under this order primarily connect the auxiliary relay racks to termination cabinets. These connectors and contacts are AMP products.

AMP PRODUCTS

Connector	Contact	Tool	Die	Crimp (b)	Height
203959-5	66101	90067	Fixed (1)	.0510 ±	.0015

a. Fixed die cannot be substituted.

b. Crimp height may be measured with either a standard caliper or crimp height comparator No. RS-1019-SL.

c. CP-0001 Westinghouse

Prefabricated cables supplied for the solid state protection system utilize both Amp and Burndy Trim Trio connector types. The Amp products connector is used for #20-24 wire size and Burndy connectors for #16 wire size.



AUG 02 1985

ATTACHMENT 6 (Cont)

Amp Products (2)

Connector	Contact	Tool	Die	Crimp Height
203959-5	201328-1	45099	Fixed	(1)
* 34136	59239-4	59239-4	Fixed	(2) (3)
**34071	47387-1	47387-1	Fixed	(2) (3)

1. Use Go/No-Go gauge. This is a calibrated item.
2. Lug guide on tool not required of these splices.
3. Use values in Paragraph 3.1.31 to conduct tensile and strength test.

\*Applies to Westinghouse active valves only.

\*\*For extension on CONAX EPA conductors on PEN E-52 only.

Burndy Trim Trio Connector

Connector	Contact	Tool	Die	Crimp Height
G6F	RC16M-23D28	M8ND	N16RT21	(1)
	RM16-23	M9ND	N16RT21	(1)

1. Use Burndy plug gauge No. PG-324.
2. Per Amp Products IS Sheet 1786.

Buchanan Crimp Tool Products

Contact	Tool	Die	Crimp	Check
RC20M-12	MS-3191-1	Fixed	(1)	
CR20M-12	MS-3191-1	Fixed	(1)	

1. Use values in Paragraph 3.2.31 or Go/No-Go Gauges per Buchanan Instruction IS-101 1/27/77.



AUG 02 1985

## ATTACHMENT 6 (Cont)

## CPF-14535 Exo Sensor

Connectors to be utilized in the core cooling monitor system are manufactured by Amp Products.

## Amp Products

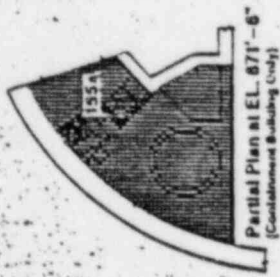
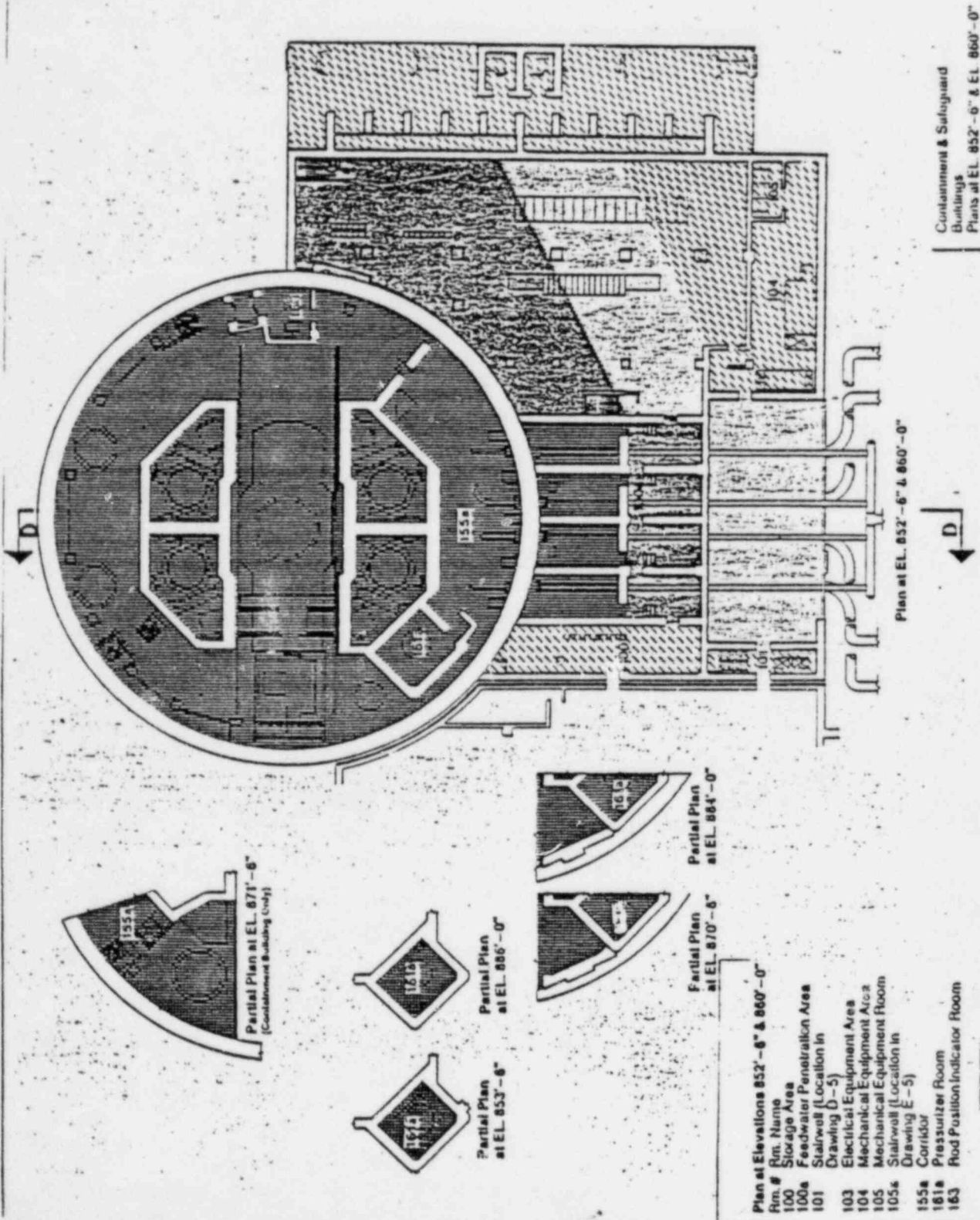
<u>Connector</u>	<u>Contact</u>	<u>Tool</u>	<u>Die</u>	<u>Crimp Height</u>
201345-1	66103-4	90277-1	Yellow	.039 ± .005 (1)
205-210-1	1-66506-0	90312-1	Red	.0305 ± .002 (2)
205-204-1	1-66506-0	90312-1	Red	.0305 ± .002 (2)
205-208-1	1-66506-1	90312-1	Red	.0305 ± .002 (2)

- (1) Information from Amp Instruction IS7574 and Exo Sensors drawing number 112D002, Rev. A.
- (2) Information from Amp Instruction IS7694 and Exo Sensors drawing number 112D002, Rev. A.



AUG 02 1985

ATTACHMENT 7



Partial Plan at EL. 871'-6"  
 (Containment Building Only)



Partial Plan  
 at EL. 853'-8"



Partial Plan  
 at EL. 886'-0"



Partial Plan  
 at EL. 870'-6"



Partial Plan  
 at EL. 864'-0"

Plan at Elevations 852'-6" & 860'-0"

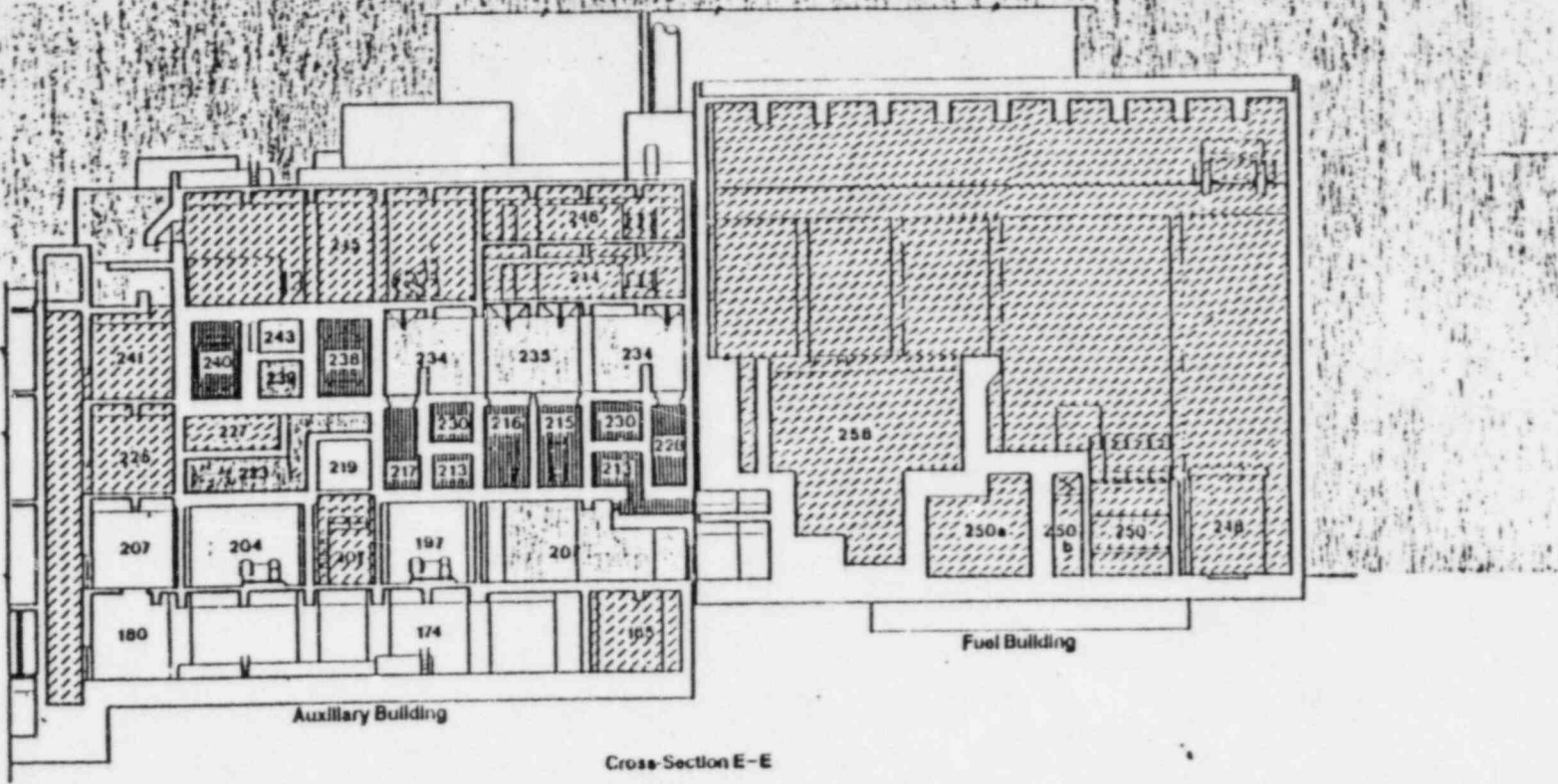
Rm. #	Rm. Name
100	Storage Area
100a	Feedwater Penetration Area
101	Stairwell (Location in Drawing D-5)
103	Electrical Equipment Area
104	Mechanical Equipment Area
105	Mechanical Equipment Room
105a	Stairwell (Location in Drawing E-5)
155a	Corridor
161a	Pressurizer Room
163	Rod Position Indicator Room

Containment & Subguard  
 Buildings  
 Plants at EL. 852'-6" & EL. 860'-0"



AUG 02 1985

ATTACHMENT 7 (Cont)



Cross-Section E-E

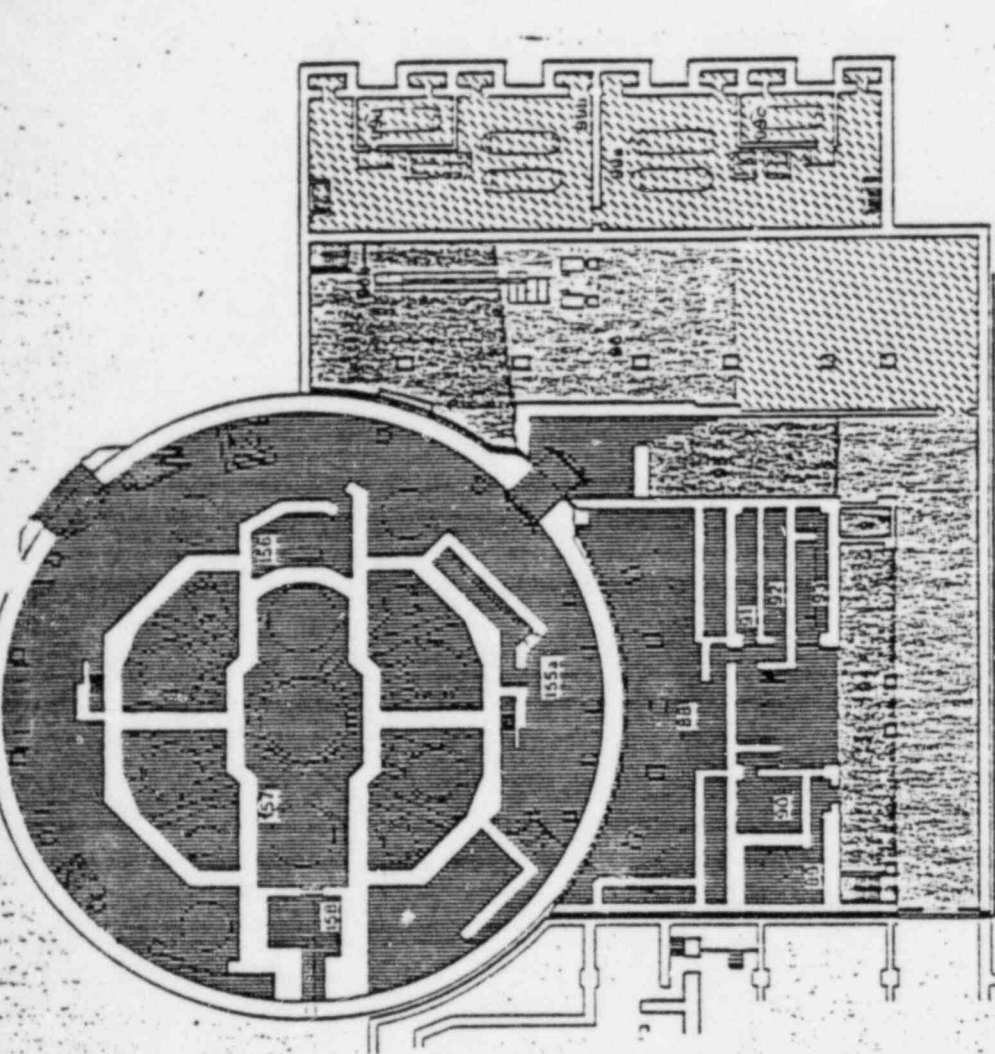
Rm. #	Rm. Name
155	Reverse Osmosis Package
174	Corridor
180	Corridor
197	Component Cooling Water Pump
204	Component Cooling Water Pump
207	Corridor
213	Piping Area
215	Demersalizers Concourse
217	Demersalizers Concourse
219	Corridor
221	Valve Room
223	Corridor
225	Valve Operating Room
227	Filter Rooms
228	Valve & Pipe Gallery
230	Manorail Corridor
234	Valve Operating Area
235	Gas Decay Tank
238	Valve Room
239	Gas Decay Tank
240	Gas Decay Tanks Drain Pump
241	Corridor
244	Mechanical Equipment Room
245	Mechanical Equipment Room
246	Mechanical Equipment Room
248	Fuel Building
249	Rail Road Loading & Unloading Area
250	Decontamination Area
250a	Square Room
250b	Change Room
258	Well Case Loading Pit





AUG 02 1985

ATTACHMENT 7 (Cont)



Containment & Safeguard  
 Buildings  
 Plans at EL. 831'-6" & EL. 832'-6"

Plans at EL. 831'-6" & 832'-6"

Plan at Elevations 831'-6" & 832'-6"

Rm. #	Rm. Name
88	Piping Penetration Area
89	Volume Control Tank Room
90	Valve Room
91	Letdown Reheat Heat Exchanger Room
92	Valve Room
93	Moderating Heat Exchanger Room
94	Corridor
95	Personnel Air-Lock Access
96	Electrical Equipment Area
96a	Stair No. S-1
96b	Stair No. S-1
99a	Equipment Room
99b	Equipment Room
99c	Fuel Oil Room
99d	Fuel Oil Room
155a	Corridor
156	Incore Instrument Room
157	Refueling Cavity Area
158	Fuel Transfer Canal

Partial Plan at Elevation 849'-0"

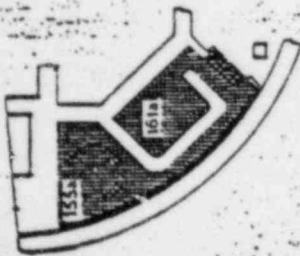
159	Incore Instrument Room
-----	------------------------

Partial Plan at Elevation 842'-0"

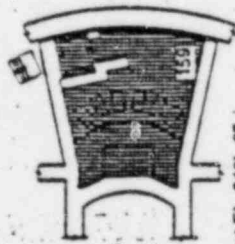
161a	Pressurizer Compartment
------	-------------------------

Partial Plan at Elevation 841'-6"

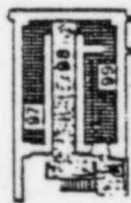
97	Upper Part - Letdown Reheat Heat Exchanger Room
98	Valve Operating Room
99	Letdown Chiller Heat Exchanger Room



Partial Plan at EL. 842'-0"  
 (Containment Building Only)



Partial Plan at EL. 849'-0"  
 (Containment Building Only)

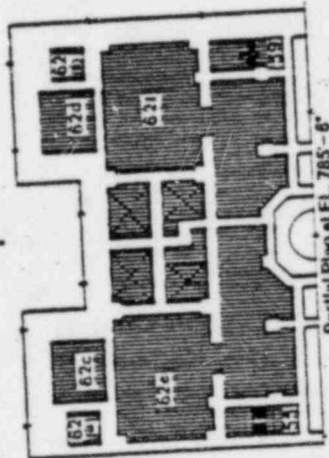
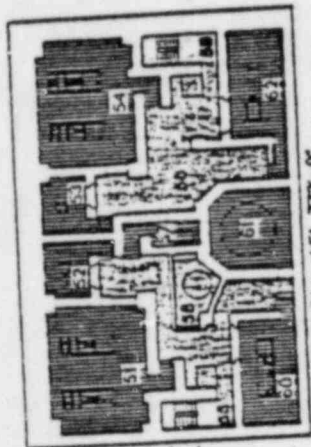


Partial Plan at EL. 841'-6"  
 (Safeguard Building Only)



AUG 02 1985

ATTACHMENT 7 (Cont)



Containment & Safeguard  
 Buildings  
 Plans at EL. 773-0', EL. 785-6'  
 & EL. 790-6'

Primary Plant - Unit 1 Containment  
 & Safeguard Buildings  
 Plan at Elevation 790-6'

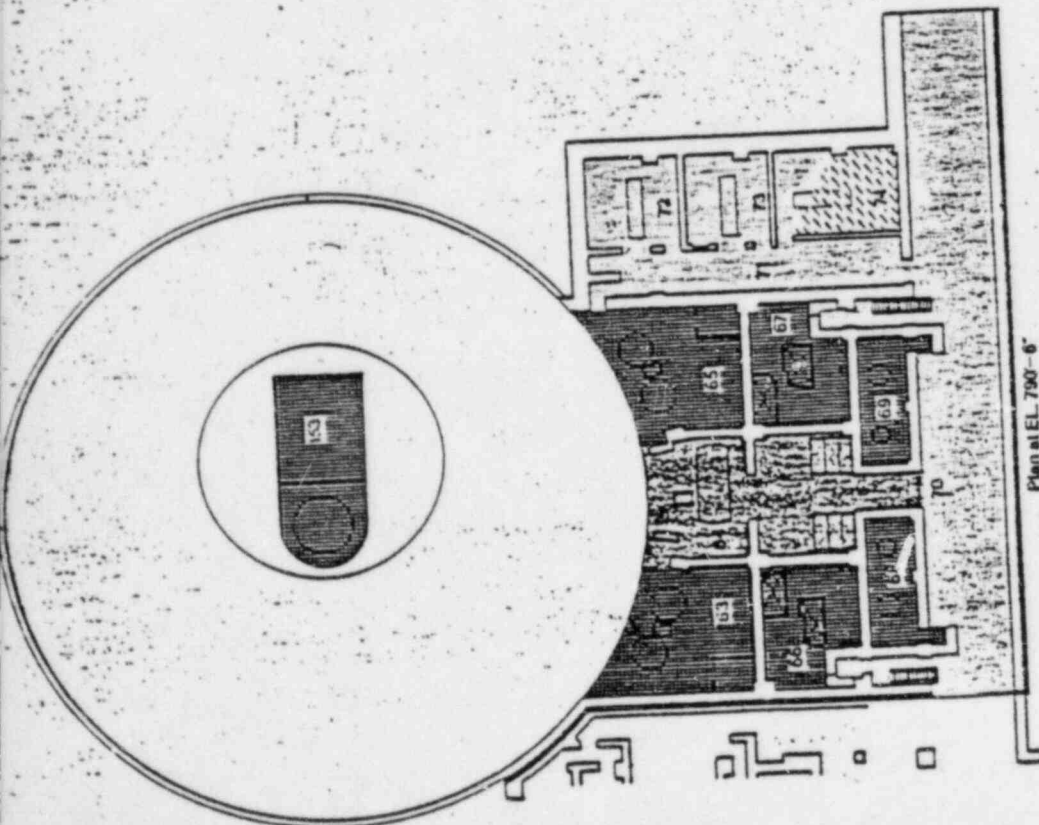
Rm. #	Rm. Name
63	Valve Isolation Tank Room
64	Chemical Additive Tank Room
65	Valve Isolation Tank Room
66	Valve Room
67	Valve Room
68	RHR & Containment Spray Heat Exchanger Room
69	RHR & Containment Spray Heat Exchanger Room
70	Comdor
71	Comdor
72	Motor Driven Auxiliary Feedwater Pump Room
73	Motor Driven Auxiliary Feedwater Pump Room
74	Turine Driven Auxiliary Feedwater Pump Room
153	Reactor Cavity

Primary Plant - Unit 1 Containment  
 & Safeguard Buildings  
 Plan at Elevation 773-0'

51	Containment Spray Pump Room
52	RHR Pump Room
53	RHR Pump Room
54	Containment Spray Pump Room
55	Stairwell
56	Comdor
57	Floor Drain Tank Pump Room
58	C.C.W. Drain Tank Room
59	Stairwell
60	Safety Injection Pump Room
61	Floor Drain Tank Room
62	Safety Injection Pump Room

Primary Plant - Unit 1 Containment  
 & Safeguard Buildings  
 Partial Plan at EL. 785-6'

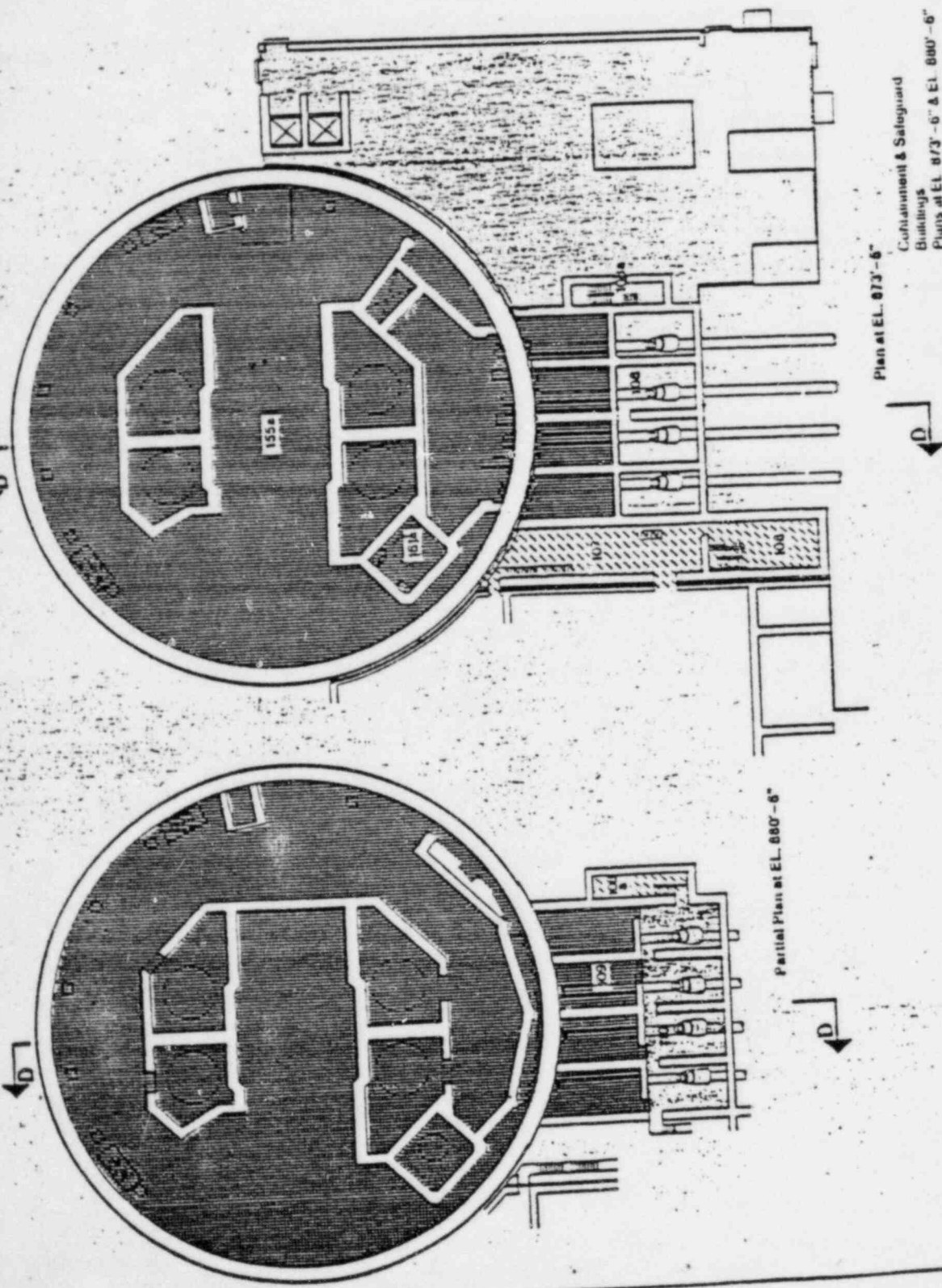
63a	Electrical Chase
63b	Electrical Chase
63c	Pipe Trench
63d	Pipe Trench
63e	Radioactive Pipe Tunnel
63f	Radioactive Pipe Tunnel





AUG 02 1985

ATTACHMENT 7 (Cont)

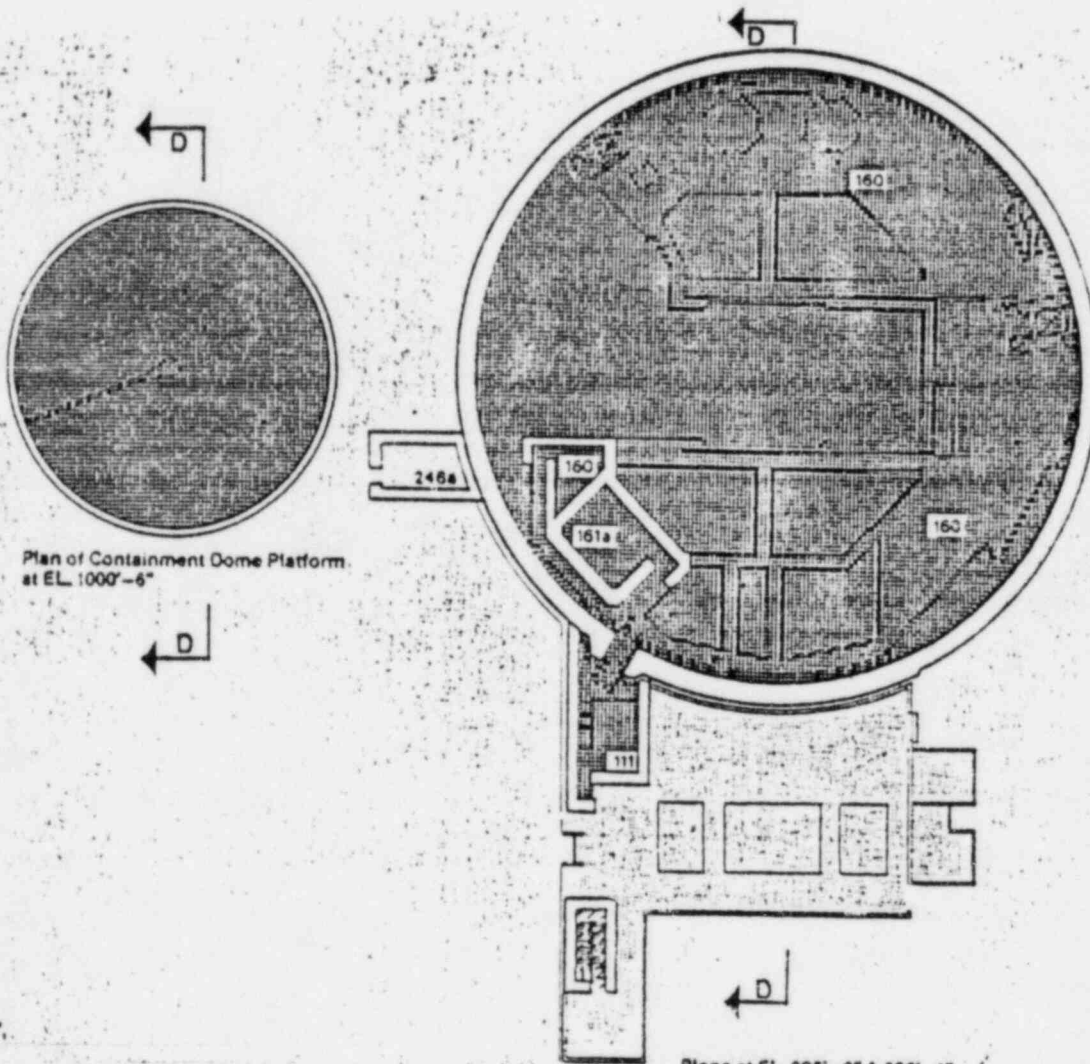


- Plans at Elevations 873'-6" & 880'-6"
- | Rm. # | Rm. Name                                  |
|-------|---|
| 106   | Corridor & Stairwell                      |
| 107   | Filter Storage Area                       |
| 108   | Main Steam Penetration Area (EL. 873'-6") |
| 108a  | Stairwell                                 |
| 109   | Main Steam Penetration Area (EL. 880'-6") |
| 110   | Main Steam Penetration Area               |
| 155a  | Corridor                                  |
| 161a  | Pressurizer Compartment                   |



AUG 02 1985

ATTACHMENT 7 (Cont)



Plan of Containment Dome Platform  
 at EL. 1000'-6"

Plans at EL. 905'-9" & 896'-4"

Plans at Elevations 905'-9",  
 896'-4" & 1000'-6"

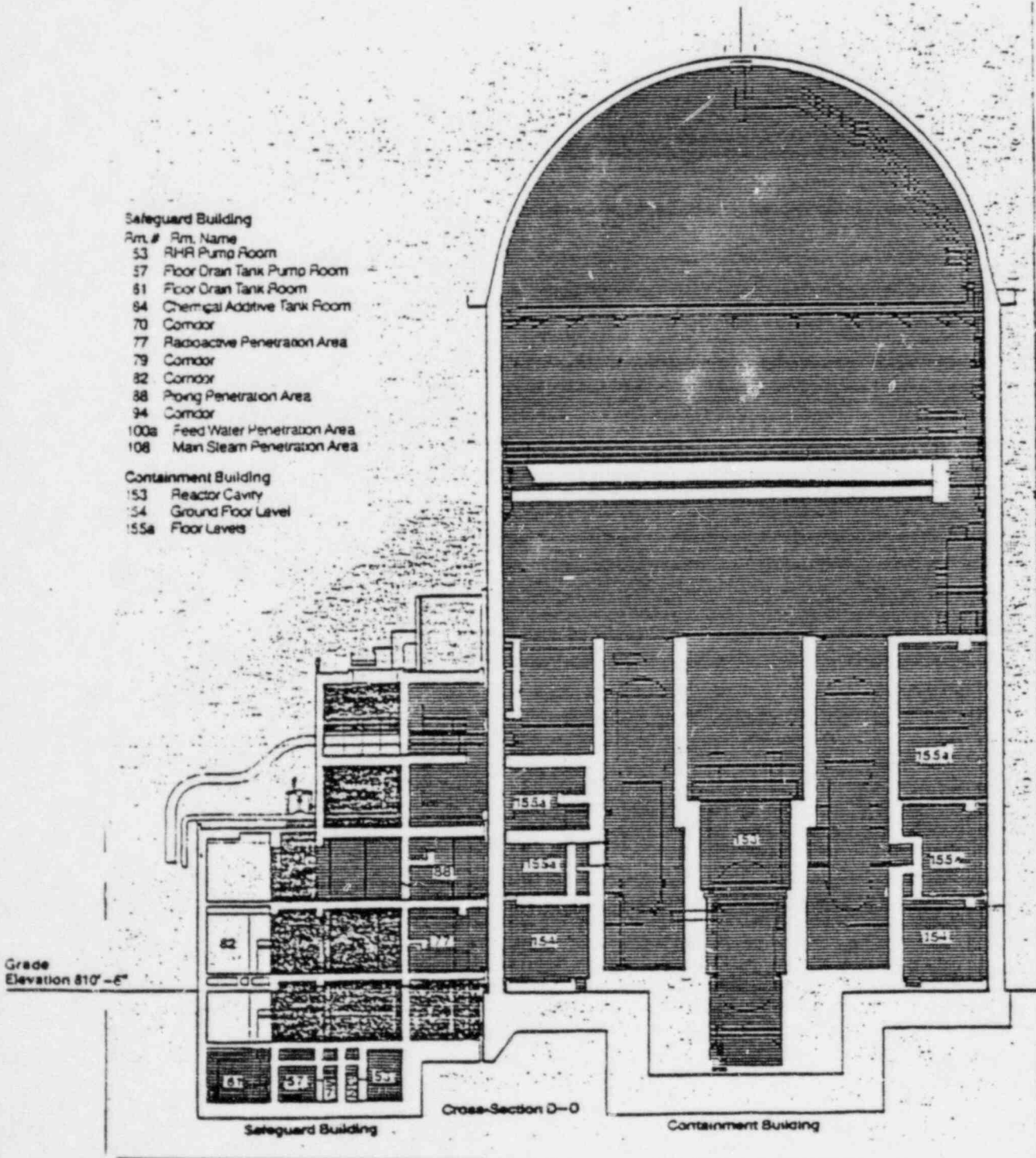
Rm. #	Rm. Name
111	Emergency Airlock Access
112	Stair No. 3-1
160	Operating Room
160	Valve Room
161a	Pressurizer Compartment
246a	Penthouse

Containment & Safeguard  
 Buildings  
 Plans at EL. 905'-9", EL. 896'-4"  
 & EL. 1000'-6"



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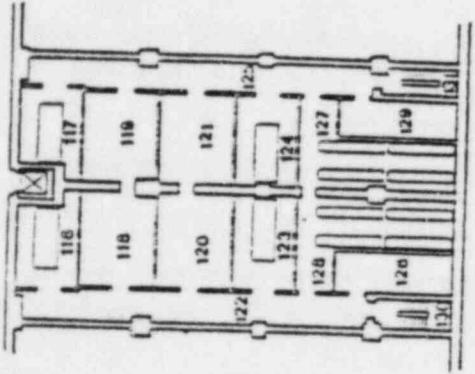
ATTACHMENT 7 (Cont)





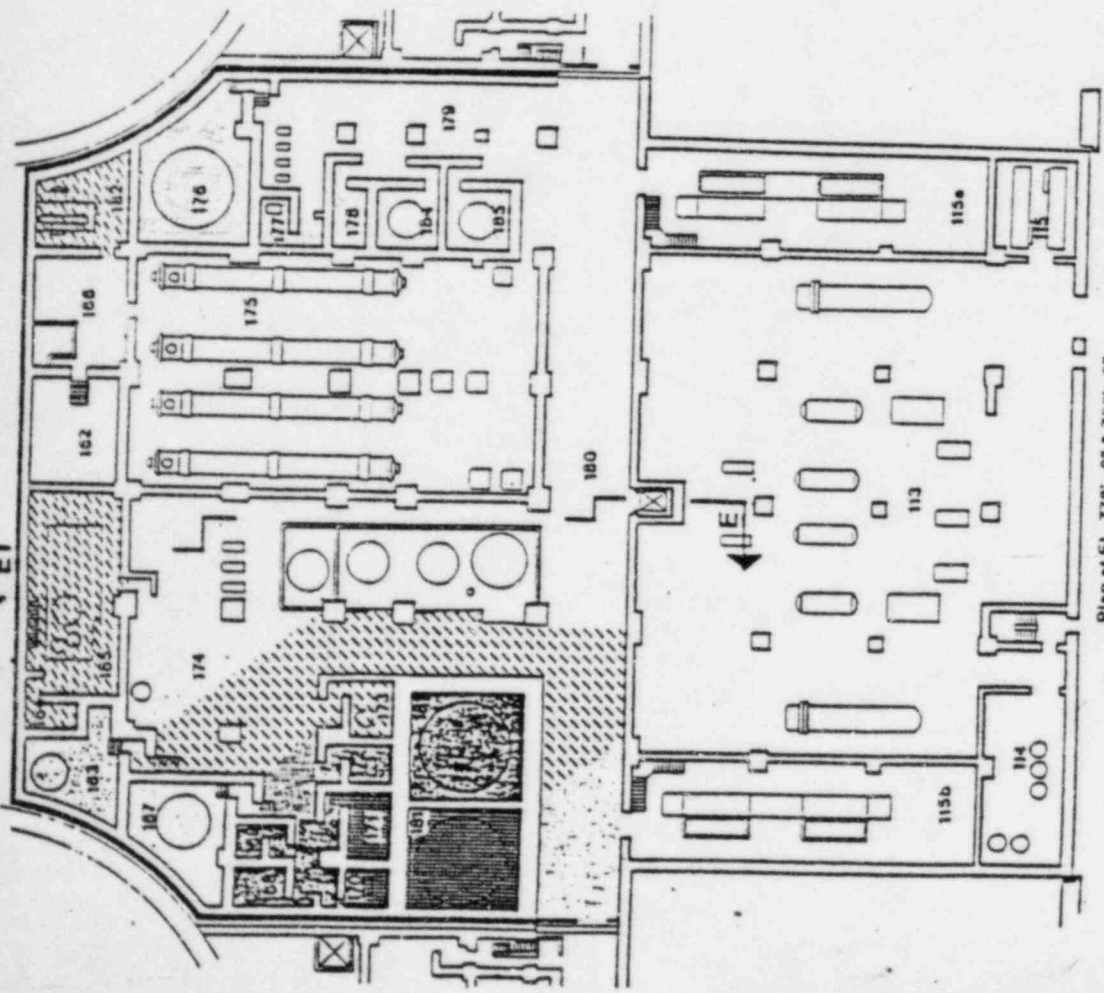
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ATTACHMENT 7 (Cont)



Partial Plan at EL. 792'-0"

Auxiliary & Electrical Control Bldg  
 Plans at EL. 778'-0" & EL. 790'-6"  
 & 792'-0"



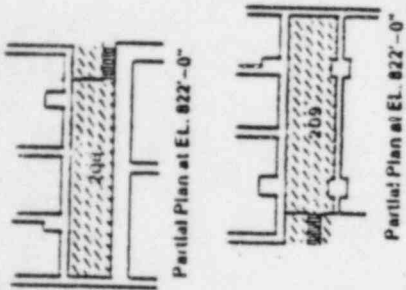
Plan at EL. 778'-0" & 790'-6"

- Plan at Elevations 778'-0" & 790'-6"
- | Rm. # | Rm. Name  |
|-------|---|
| 114   | Chemical Feed Equipment & Chemical Storage Room |
| 115   | Secondary Sampling Room                         |
| 115a  | Chiller Equipment Area                          |
| 115b  | Chiller Equipment Area                          |
| 162   | Valve and Piping Area                           |
| 163   | Blowdown Spent Resin Storage Tank Room          |
| 164   | Blowdown Spent Resin Sludge Pump Room           |
| 165   | Reverse Osmosis Package Room                    |
| 166   | Valve and Piping Area                           |
| 167   | Waste Hold-Up Tank Room                         |
| 168   | Valve Room                                      |
| 169   | Waste Evaporator Feed Pump Room                 |
| 170   | Recycle Evaporator Feed Pump (No. 2) Room       |
| 171   | Valve Room                                      |
| 172   | Recycle Evaporator Feed Pump (No. 1) Room       |
| 173   | Chemical Drain Tank Room                        |
| 174   | Laundry Hold Up Area                            |
| 175   | Component Cooling Water Heat Exchanger Room     |
| 176   | Floor Drain Tank Room                           |
| 177   | Floor Drain Tank Pump Room                      |
| 178   | Waste Monitor Tank Pump Room                    |
| 179   | Corridor  |
| 180   | Corridor  |
| 181   | Recycle Hold-Up Tank Room                       |
| 182   | Auxiliary Steam Drain Tank Equipment Room       |
| 184   | Waste Monitor Tank No. 1 Room                   |
| 185   | Waste Monitor Tank No. 2 Room                   |
- Partial Plan at EL. 792'-0"
- |         |                           |
|---------|---------------------------|
| 116     | Battery Room #2-2         |
| 117     | Battery Room #1-2         |
| 118     | UPS & Distribution Rooms. |
| 119     | Train B'                  |
| 120     | UPS & Distribution Rooms. |
| 121     | Train A'                  |
| 122     | Corridor                  |
| 123     | Battery Room #2-1         |
| 124     | Battery Room #1-1         |
| 125     | Corridor                  |
| 126     | UPS & Distribution Rooms  |
| 127     | Battery Room #1-3         |
| 128     | Battery Room #2-3         |
| 129     | Train C'                  |
| 130,131 | Stairways                 |

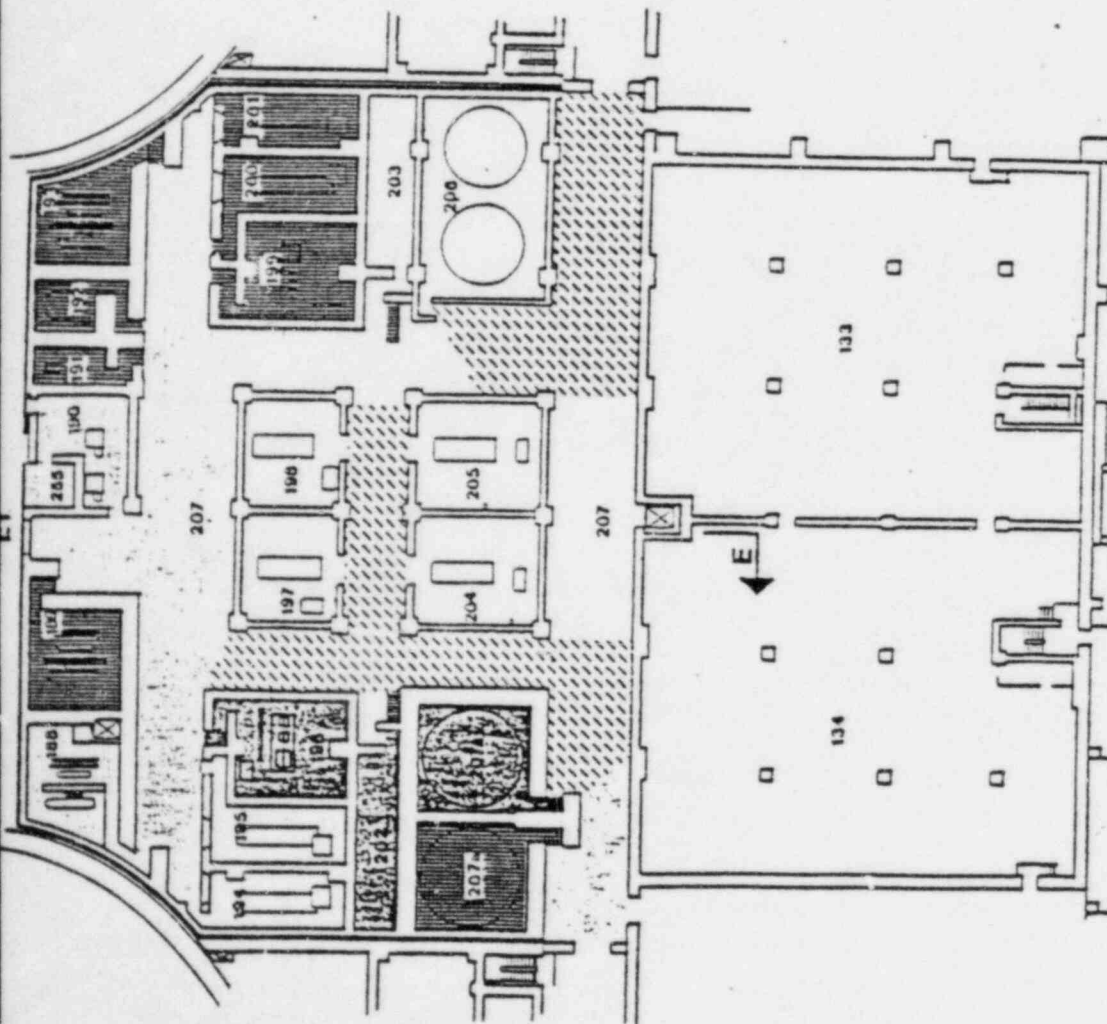


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ATTACHMENT 7 (Cont)



Auxiliary & Electrical Control Buildings  
 Plans at EL. 807'-0" & EL. 810'-6"

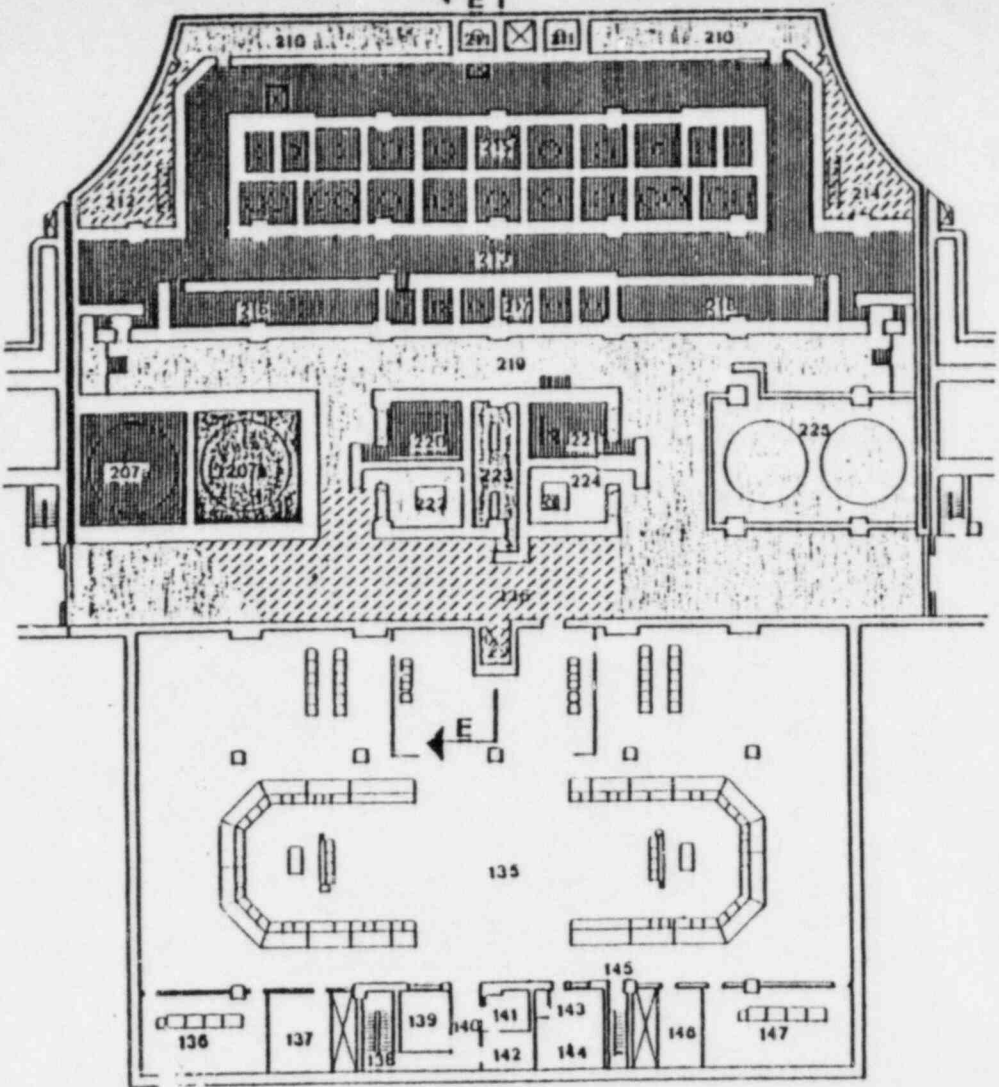
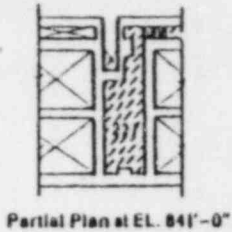


- Plan at Elevations 807'-0" & 810'-6"
- | Rm. # | Rm. Name   |
|-------|--|
| 133   | Cable Room   |
| 134   | Cable Room   |
| 134a  | Stair No. EC-1   |
| 134b  | Stair No. EC-2   |
| 188   | Floor Drain Waste Evap. Package Room                             |
| 189   | Waste Evaporator Room  |
| 190   | Waste Evaporator Control Room                                    |
| 191   | Scent Resin Sluice Pump Room                                     |
| 192   | Scent Resin Storage Tank Room                                    |
| 193   | Boron Recycle Evaporator Package Room                            |
| 194   | Centrifugal Charging Pump Room                                   |
| 195   | Centrifugal Charging Pump Room                                   |
| 196   | Positive Displacement Charging Pump Room                         |
| 197   | Component Cooling Water Pump Room                                |
| 198   | Component Cooling Water Positive Displacement Charging Pump Room |
| 199   | Component Cooling Water Pump Room                                |
| 200   | Centrifugal Charging Pump Room                                   |
| 201   | Centrifugal Charging Pump Room                                   |
| 202   | Valve Room   |
| 203   | Valve Room   |
| 204   | Component Cooling Water Pump Room                                |
| 205   | Component Cooling Water Pump Room                                |
| 206   | Boric Acid Storage Tank Room                                     |
| 207   | Comdror  |
| 207a  | Recycle Hold-Up Tank Room  |
| 255   | Filter Drop Area   |
- Partial Plan at Elevation 822'-0"
- |     |                      |
|-----|----------------------|
| 208 | Operating Valve Room |
|-----|----------------------|
- Partial Plan at Elevation 822'-0"
- |     |                      |
|-----|----------------------|
| 209 | Operating Valve Room |
|-----|----------------------|



AUG 02 1985

ATTACHMENT 7 (Contc)



Plan at EL. 830'-0" & 831'-6"

Auxiliary & Electrical Control Bldgs.  
 Plans at EL. 830'-0" & EL. 831'-6"

Rm. #	Rm. Name
135	Control Room
136	Computer Room
137	File Room
138	Stair No. EC-2
139	Production Supervisor's Office
140	Corridor
141	Bathroom
142	Locker Room
143	Janitor Closet
144	Kitchen
145	Stair No. EC-1
146	Stairs and Supplies Storage Room
147	Computer Room
207a	Recycle Hold-Up Tank Room
210	Piping Area
211	Spent Fuel Pool Demineralizer Cuckles
212	Piping Area
213	Piping Area
214	Piping Area
215	Demineralizers Cuckles
216	Piping Area
217	Demineralizers Cuckles
218	Piping Area
219	Corridor
220	Waste Gas Compressor (No. 1) Room
221	Hydrogen Recombiner Room
222	Waste Gas Compressor (No. 2) Room
223	Valve Room
224	Hydrogen Recombiner Room
225	Boric Acid Tank Room
226	Corridor
227	Valve Operating Room

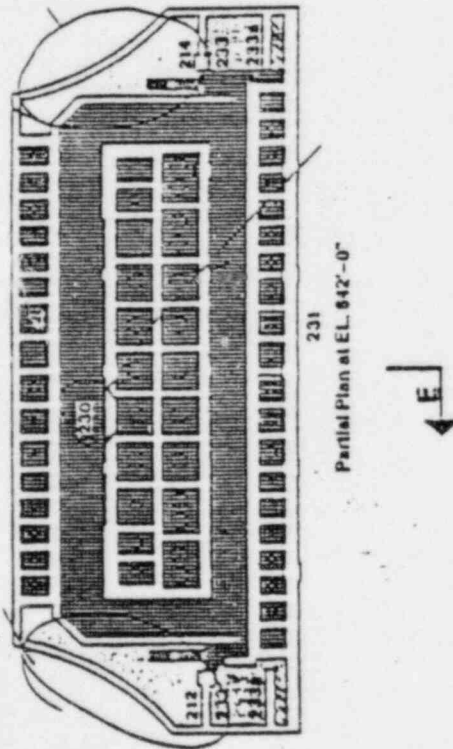
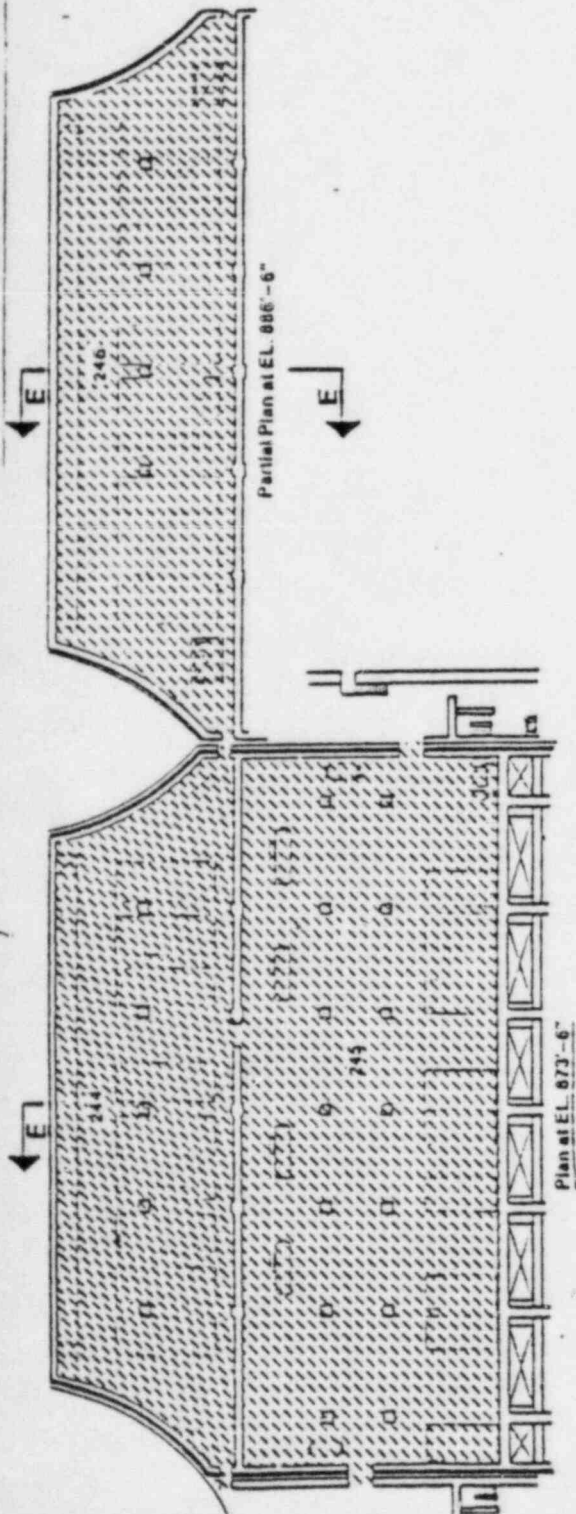
Partial Plan at Elevation 841'-0"





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ATTACHMENT 7 (Cont)



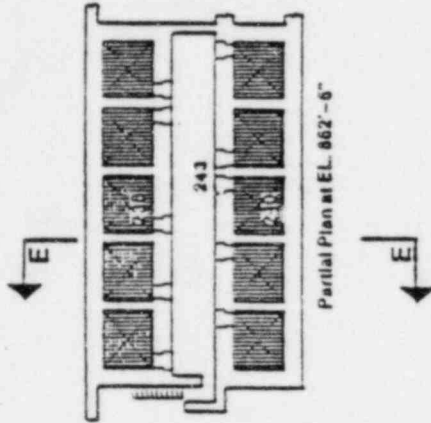
Auxiliary Building  
 Plans at EL. 842'-0" EL. 873'-6" &  
 886'-6"

- Partial Plan at Elevation 842'-0"
- | Rm. # | Rm. Name                    |
|-------|-----------------------------|
| 212   | Piping Area                 |
| 214   | Piping Area                 |
| 228   | Filters                     |
| 230   | Valve and Pipe Gallery      |
| 231   | Filters                     |
| 232   | Open Area                   |
| 233   | Open Area                   |
| 233a  | Stair No. A-12 and No. A-13 |
- Plan at Elevation 873'-6"
- |     |                           |
|-----|---------------------------|
| 244 | Mechanical Equipment Room |
| 245 | Mechanical Equipment Room |
- Partial Plan at Elevation 886'-6"
- |     |                           |
|-----|---------------------------|
| 246 | Mechanical Equipment Room |
|-----|---------------------------|



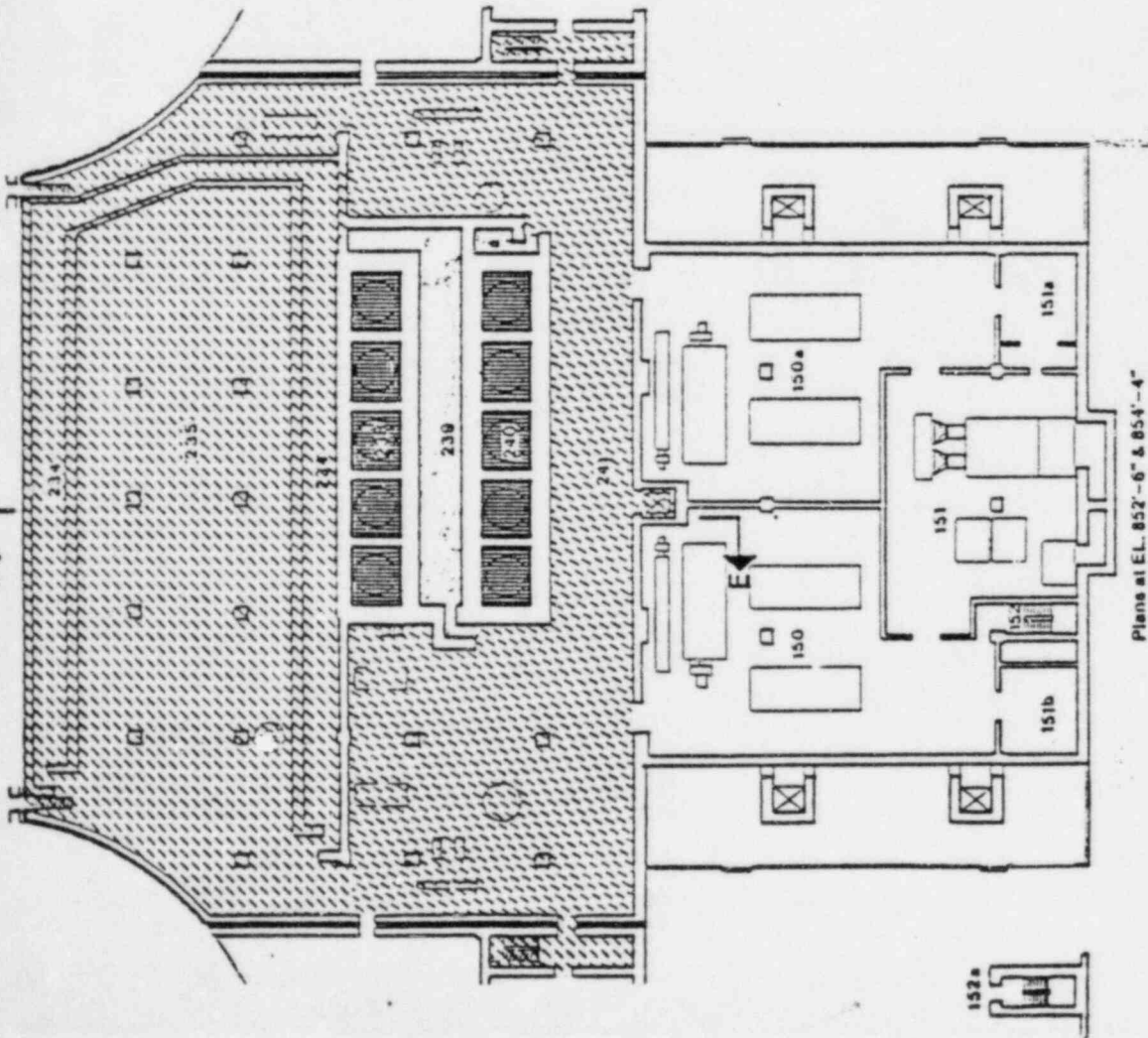
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ATTACHMENT 7 (Cont)



Partial Plan at EL. 862'-6"

Auxiliary & Electrical Control Bldg  
 Plans at EL. 852'-6" & EL. 854'-4"



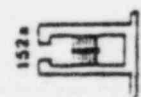
Plan at Elevations 852'-6" & 854'-4"

- | Rm. # | Rm. Name                        |
|-------|---------------------------------|
| 150   | Mechanical Equipment Room       |
| 150a  | Mechanical Equipment Room       |
| 151   | Mechanical Equipment Room       |
| 151a  | Mechanical Equipment Room       |
| 151b  | Mechanical Equipment Room       |
| 152   | Stair No. EC-2                  |
| 152a  | Stair No. EC-2                  |
| 234   | Monorail Corridor               |
| 235   | Valve Operating Area            |
| 238   | Gas Decay Tanks' Compartment    |
| 239   | Valve Room                      |
| 240   | Gas Decay Tanks Compartment     |
| 241   | Corridor                        |
| 242   | Gas Decay Tanks Drain Pump Room |

Partial Plan at Elevation 862'-6"

- | Rm. # | Rm. Name             |
|-------|----------------------|
| 243   | Valve Operating Room |

Plane at EL. 852'-6" & 854'-4"





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ATTACHMENT 7 (Cont)

Partial Plan at EL. 810'-6"  
 (Containment Building Only)

Containment & Safeguard  
 Buildings  
 Plans at EL. 800'-0" & LL. 810'-6"

Plan at Elevations 808'-0" & 810'-6"

- | Rm. # | Rm. Name                                    |
|-------|---|
| 58    | RHR & Containment Spray Heat Exchanger Room |
| 69    | RHR & Containment Spray Heat Exchanger Room |
| 77    | Radioactive Penetration Area                |
| 78    | Sample Room                                 |
| 79    | Corridor                                    |
| 80    | Valve Room                                  |
| 81    | Letdown Heat Exchanger Room                 |
| 82    | Corridor                                    |
| 83    | Electrical Equipment Area                   |
| 84    | Diesel Generator Room                       |
| 85    | Diesel Generator Room                       |
| 85a   | H&V Equipment Room                          |
| 85b   | Stair No. S-1                               |
| 85c   | Stair No. S-5                               |
| 154   | Corridor                                    |
| 156   | Incore Instrumentation Area                 |

Partial Plan at Elevation 821'-0"

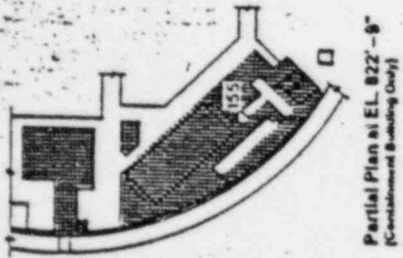
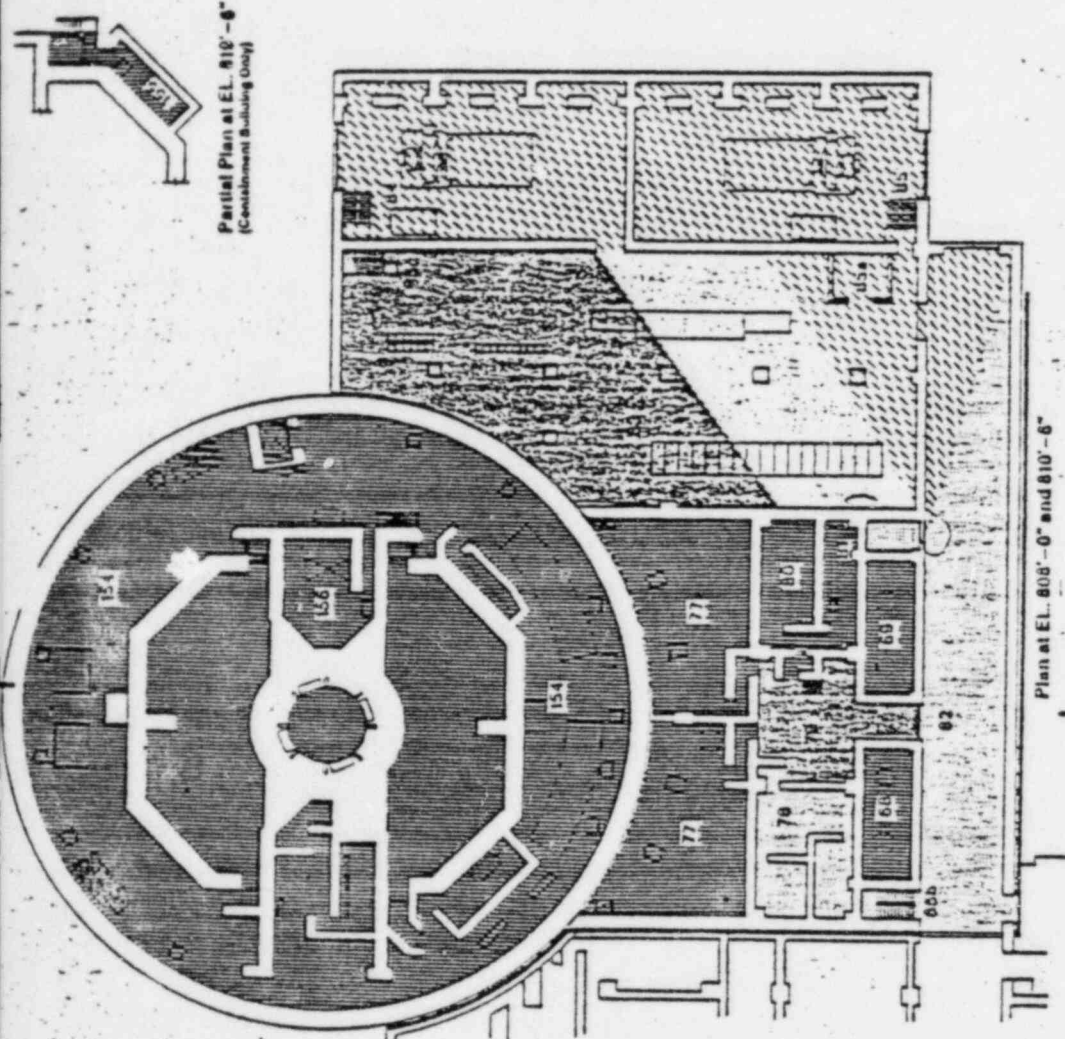
- |    |                                |
|----|--------------------------------|
| 86 | Valve Operating Room           |
| 87 | Seal Water Heat Exchanger Room |

Partial Plan at Elevation 800'-6"

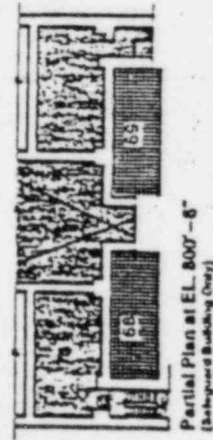
- |    |                      |
|----|----------------------|
| 75 | Valve Operating Room |
| 76 | Valve Operating Room |

Partial Plan at Elevations 822'-3" & 819'-6"

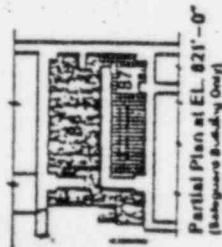
- |     |            |
|-----|------------|
| 155 | Valve Room |
|-----|------------|



Partial Plan at EL. 822'-3"  
 (Containment Building Only)



Partial Plan at EL. 800'-6"  
 (Safeguard Building Only)

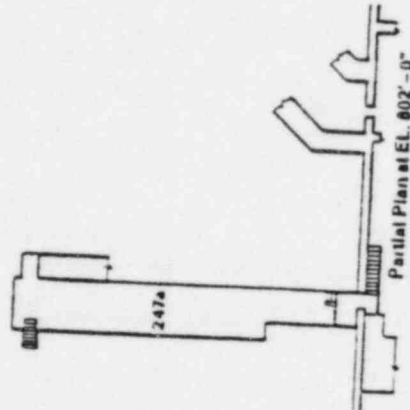
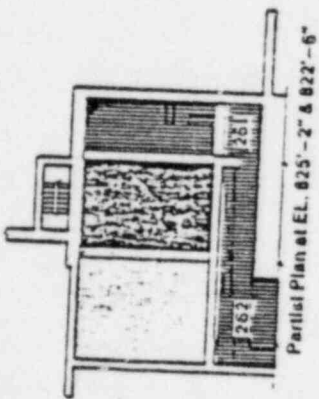


Partial Plan at EL. 821'-0"  
 (Safeguard Building Only)



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ATTACHMENT 7 (Cont)

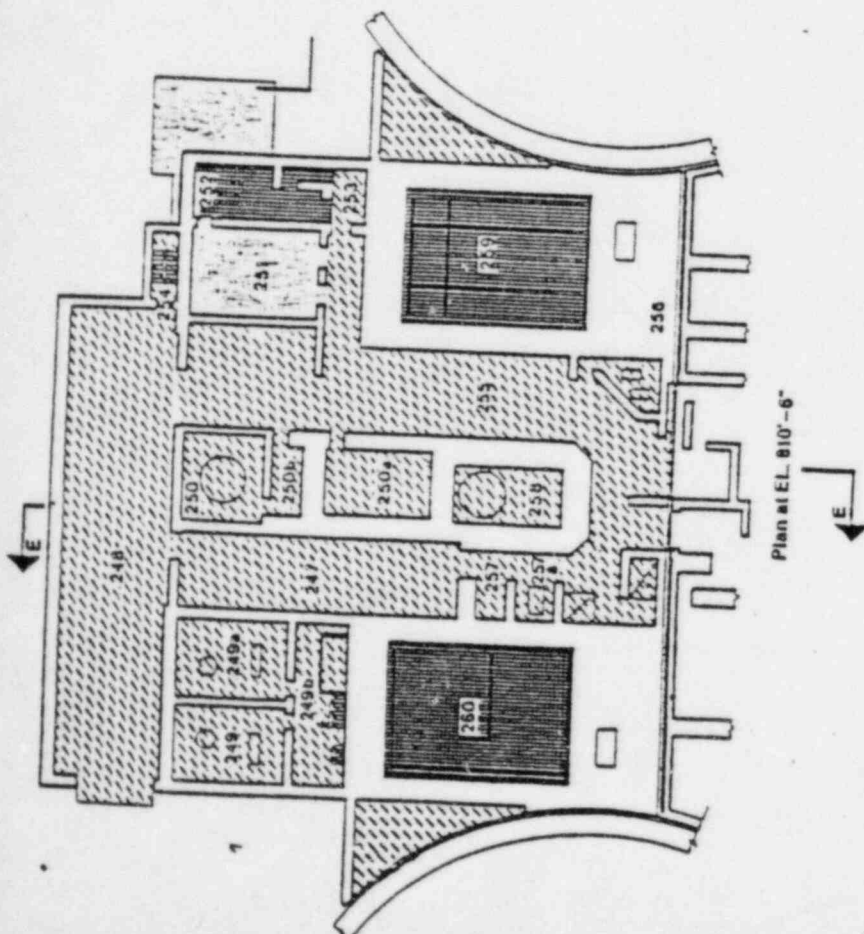


Fuel Building  
 Plans at EL. 810'-6", EL. 825'-2"  
 & EL. 802'-0"

- Plan at Elevation 810'-6"
- | Rm. # | Rm. Name                            |
|-------|-------------------------------------|
| 247   | Pit at EL. 800'-2"                  |
| 248   | Railroad Loading and Unloading Area |
| 249   | Pump Room                           |
| 249a  | Pump Room                           |
| 249b  | Open Area                           |
| 250   | Decontamination Area                |
| 250a  | Space                               |
| 250b  | Change Room                         |
| 251   | Drum Storage Area                   |
| 252   | Drum Filling Area                   |
| 253   | Drum Storage Viewing Area           |
| 254   | Stair No. F-1                       |
| 255   | Open Area                           |
| 256   | Spent Fuel Skimmer Room             |
| 257   | Low Level Radiation Storage         |
| 257a  | Open Area                           |
| 258   | Wet Cask Loading Area               |
| 259   | Spent Fuel Pool No. 1               |
| 260   | Spent Fuel Pool No. 2               |

- Partial Plan at Elevations 825'-2" & 822'-6"
- |     |                                  |
|-----|----------------------------------|
| 251 | Waste Process Module System Area |
| 262 | Flowway                          |

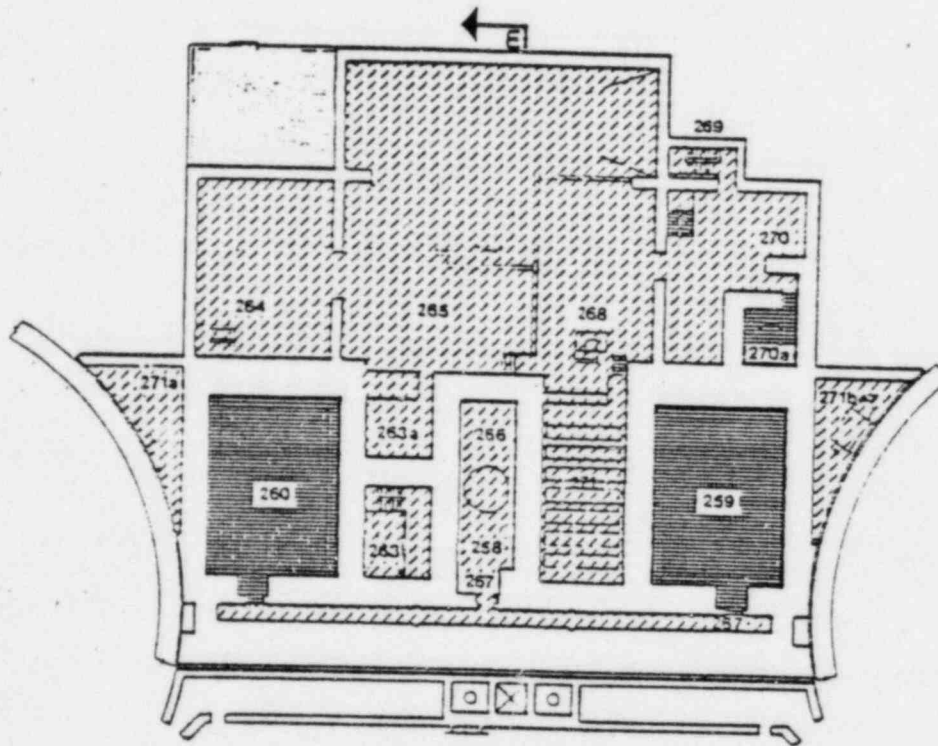
- Partial Plan at Elevation 802'-0"
- |      |        |
|------|--------|
| 247a | Tunnel |
|------|--------|





AUG 02 1985

ATTACHMENT 7 (Cont)



Plan at EL. 838'-9" & 841'-0"

Plan at Elevations 838'-9" & 841'-0"  
 Rm. # Rm. Name

- 256 Wet Cask Loading Area
- 259 Soent Fuel Pool No. 1
- 260 Soent Fuel Pool No. 2
- 263 Open Space
- 263a PT
- 264 Soent Fuel Pool Heat Exchanger and Pump Removal Area
- 265 Cask Handling Area
- 266 Wet Cask Loading Area
- 267 Fuel Transfer Canal
- 268 New Fuel Receiving Area
- 269 Stair No. F-1
- 270 Storage Area
- 270a Waste Conditioning Tank Room
- 271 New Fuel Storage Pit
- 271a Ventilation Equipment Area
- 271b Ventilation Equipment Area

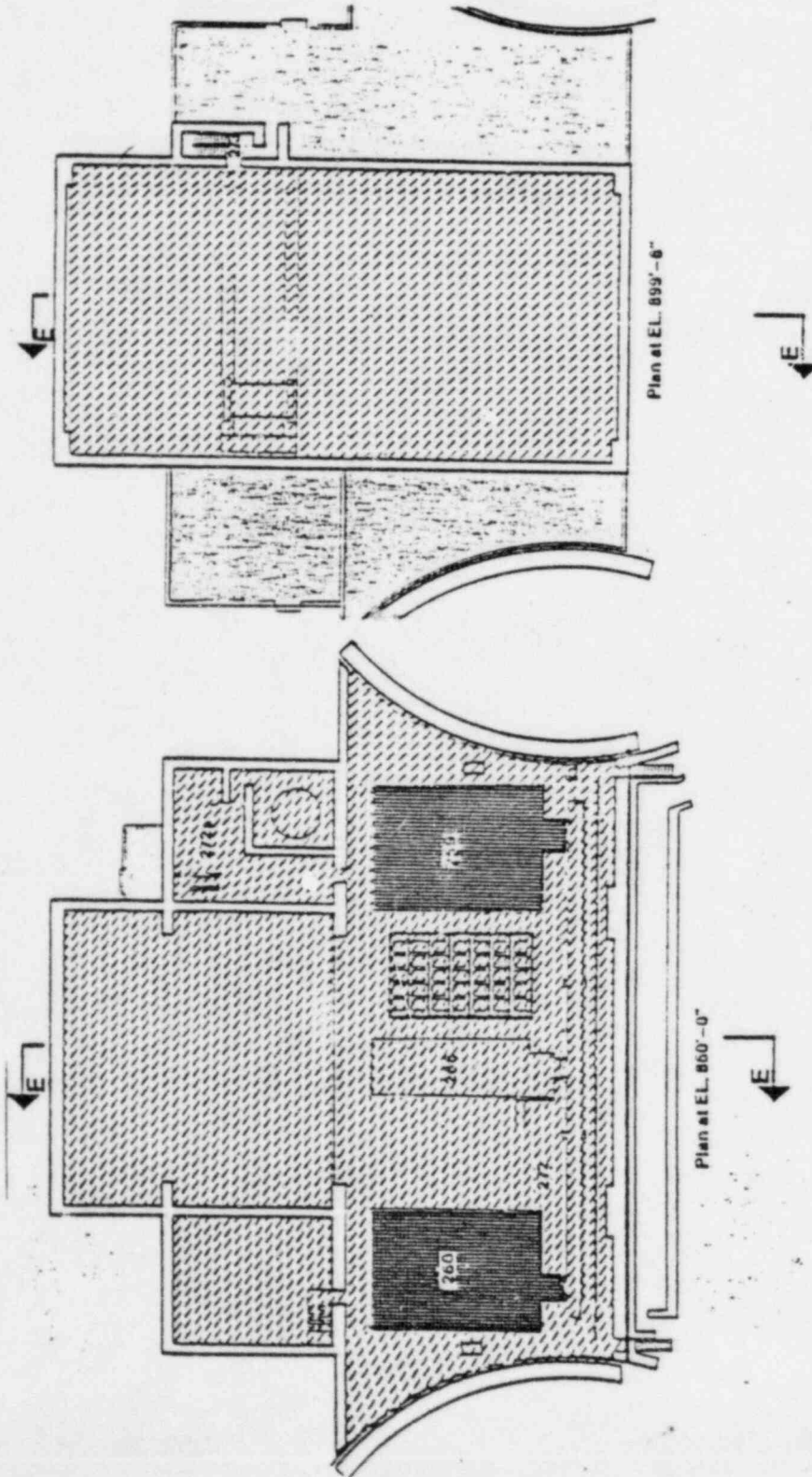


Fuel Building  
 Plans at EL. 838'-9" & EL. 841'-0"



AUG 22 1985

ATTACHMENT 7 (Cont)



Fuel Drilling  
Plants at EL. 860'-0" & EL. 899'-6"

- Plan at Elevation 860'-0"
- 259 Rim Name
  - 260 Sp. Fuel Pool No. 1
  - 266 Sp. Fuel Pool No. 2
  - 272 Wet Cask Loading Area
  - 272a Operating Floor Level
  - 272b Open Space
- Plan at Elevation 899'-6"
- 273 Stair No F-2



AUG 02 1985

## ATTACHMENT 8

Table 8-1  
SAFETY RELATED 600V  
BOLTED IN-LINE CONNECTION

<u>RAYCHEM PART NO.</u>	<u>USE RANGE</u>
NPXX-750-1000-09	750 MCM thru 1000 MCM to same
NPXX-250-500-09	350 MCM thru 500 MCM to same
NPXX-1/0-4/0-39	3/C 1/0 thru 4/0 to same
NPXX-04-01-39	3/C Triplex #4 thru #1 to same
NPXX-3/4-3/1-39	3/C #4 thru #1 to same
NPXX-3/10-3/6-39	3/C #10 thru #6 to same
NPXX-2/4-2/1-09	2/C #4 thru #1 to same
NPXX-2/10-2/6-09	2C #10 thru #6 to same
NPKX-1/0-4/0-09	1/0 thru 4/0 to same
NPKX-04-01-09	#4 thru #1 to same
NPKX-3-21A	1-3/C #4 to 3-1/C #2
NPKX-3-21B	1-3/C #10 to 3-1/C #8
NPKP-1/0-750-09	1-750 MCM to 1-4/0 AWG
NPXX-2/0-350-09	1/C 4/0 AWG to 1/C 350 MCM
NPKP-2/4-4/8-00	1-2/C #4 & 4/C #8 to 2-1/C #4 & 4-1/C #8
NPKP-03-00	3-1/C (#10, 8, or 6) to 3-1/C (#10, 8, or 6)
NPXX-1/0-2/0-09	1/C 2/0 to 1/C 4/0
NPXX-4/0-500-01	3-1/C (4/0 thru 500 MCM) to same
NPXX-04-2/0-01	3-1/C (#4 thru 2/0) to same
NPXX - 10-02-00	1-2/C (#10, 8, or 6) to 2-1/C (#10, 8, or 6)



AUG 02 1985

ATTACHMENT 8 (Cont)

Table 3-2  
 BOLTED 600V STUB ("V") MOTOR CONNECTION

<u>RAYCHEM PART NO.</u>	<u>USE RANGE</u>
N-MCK-1V-35-00	0.12" - 0.20" (1)
N-MCK-2V35-00	#8 thru #4
N-MCK-3V-35-00	#2 thru 3/0
N-MCK-4V-35-00	4/0 thru 1000 MCM
NPKV-2-10	2-1/C .11" to .33" OD
NPKV-2-14	2-1/c .10" to .20" OD
NPKV-2-16	2-1/C .06" to .12" OD
NPKV-3-14	3-1/C .12" to .24" OD
NPKV-3-16	3-1/C .06" to .12" OD

(1) CABLE OUTSIDE DIAMETERS

Table 8-3  
 BOLTED 600V "Y" MOTOR CONNECTIONS  
 (TWO CONDUCTORS PER PHASE TO ONE CABLE PER PHASE)

<u>RAYCHEM PART NO.</u>	<u>CABLE CONFIGURATIONS</u>
N-MCK-1YX-35-09	2-#10 AWG to 1-#16 AWG
N-MCK-3YX-35-09	2-#2 thru #10 to 1-#2 thru 2/0
N-MCK-4YX-35-09	2-500 MCM to 1-250 MCM thru 4/0
N-MCK-4MX-35-00	2-#2 AWG to 1-350 MCM
N-MCK-4V-35-03	2-#2 AWG to 1-4/0 AWG





AUG 02 1985

ATTACHMENT 8 (Cont)

Table 3-4  
 CONTROL 600V BUTT CONNECTIONS

<u>RAYCHEM PART NO.</u>	<u>USE RANGE</u>
NPKC-12-01	12/C #12 to same
NPKC-09-01	9/C #12 to same
NPKC-07-01	7/C #12 to same
NPKC-05-01	5/C #12 to same
NPKC-03-01	3/C #12 to same
NPKC-02-01	2/c #12 to same
NPKX-10-04-01	4/C #10 to same
NPKC-12-00	1-12/C #12 to 12-1/C #12
NPKC-09-00	1-9/C #12 to 9-1/C #12
NPKC-07-00	1-7/C #12 to 7-1/C #12
NPKC-05-00	1-5/C #12 to 5-1
NPKC-03-00	1-3/C #12 to 3-1/C #12
NPKC-02-00	1/2/C #12 to 2-1/C #12
NPKC-5-21A	1-5/C #12 to 5-1/C #12
NPKC-3-21A	1-3/C #12 to 3-1/C #12
NPKC-2-21A	1-2/C #12 to 2-1/C #12
NPKC-04-00	1-4/C #12 to 4-1/C #12

Table 3-5  
 600V INSTRUMENT BUTT CONNECTIONS

<u>RAYCHEM PART NO.</u>	<u>USE RANGE</u>
NPKX-24-16-01	24/C #16 to same
NPKX-08-16-01	8/C #16 to same
NPKS-04-01	4/C #16 to same, 1STQ to same
NPKS-02-01	2/C #15 to same, 1STP to same
NPKX-28-16-01	28/C #16 w/shield to same
NPKX-22-16-01	22/C #16 w/shield to same
NPKX-12-16-01	12/C #16 w/shield to same
NPKX-05-16-01	5/C #16 w/shield to same
NPKS-03-01	3/C #16 to same, 1STT to same
NPKS-7TP-21A	14/C (6 TP#16 & 1 TP#14) to same
NPKC-02-01	1TP #14 to same
NPKX-4-41A	1-2STP #16 to 2STP #16
NPKS-2-31A	1-STP #16 to 1 STP #16
NPKX-02-16-01	1TP #16 to same
NPKX-04-16-01	1-2TP #16 to same
NPKS-04-03	1-2STP #16 to 2 STP #16
NPKX-24/16-24/16-00	1-12 STP #16 to 12 STP #16



AUG 02 1985

## ATTACHMENT 8 (Cont)

 Table 8-6  
 600V HEAT SHRINK SLEEVES

<u>RAYCHEM PART NO. (1)</u>	<u>OUT CONTAINMENT USE RANGE</u>	<u>CONTAINMENT USE RANGE</u>
WCSF-050-N	.05" to .10"	.05" to .10"
WCSF-070-N	.07" to .19"	.07" to .14"
WCSF-0115-N	.11" to .31"	.11" to .23"
WCSF-200-N	.20" to .54"	.20" to .40"
WCSF-300-N	.31" to .81"	.31" to .60"
WCSF-500-N	.53" to 1.35"	.53" to 1.00"
WCSF-630-N	.70" to 1.75"	.70" to 1.3"
WCSF-1000-N	1.1" to 2.7"	1.1" to 2.0"
WCSF-1500-N	1.65" to 4.0"	1.65" to 3.0"
WCSF-2500-N	2.75" to 6.5"	2.75" to 5.0"

- (1) "N" suffix is for ordering only and does not appear on sleeve. Red adhesive indicates "N" material. A number preceding the "N" indicates length of tubing as supplied.
- (2) WCSF -050-N is supplied as a thin wall tubing for use as a shim or small wire jacketing. It should not be used as a splice sleeve without Engineering approval.



AUG 02 1985

ATTACHMENT 8 (Cont)

Table 8-7  
 600V END CAPS

<u>RAYCHEM PART NO.</u>	<u>USE RANGE</u>
101A-011-52/144	.08" to .16"
101A-021-52/144	.13" to .26"
101A-031-52/144	.18" to .36"
101A-041-52/144	.25" to .55"
101A-052-52/144	.37" to .78"
101A-062-52/144	.45" to .95"
101A-073-52/144	.71" to 1.5"
101A-083-52/144	.90" to 1.9"
101A-094-52/144	1.5" to 3.2"

Table 8-8  
 600V NUCLEAR JACKET REPAIR SLEEVE

<u>RAYCHEM PART NO.</u>	<u>USE RANGE</u>
NJRS-1-12	.25" to .8"
NJRS-2-12	.7" to 1.5"

NOTE: NOT for use inside containment.



AUG 02 1985

ATTACHMENT 8 (Cont)

TABLE 8-9  
CLASS 1E 8KV TERMINATION INSULATED SLEEVES  
(EXCLUDING MOTOR CONNECTIONS)

RAYCHEM PART NOS.

N-HVT-I-A-3-00  
N-HVT-I-A-2-88  
N-HVT-I-A-2-88  
N-HVT-I-A-2-00

USE RANGE

100 MCM  
500 MCM  
350 MCM  
4/0 AWG

NOTE: "GOL" suffix on Part No. indicates "ground strap kit".

TABLE 8-10  
CLASS 1E 8KV MOTOR CONNECTIONS

RAYCHEM PART NOS.

MCK-5-ILX-00

USE RANGE

for all Class 1E



AUG 02 1985

ATTACHMENT 9  
 TABLE 1

CPF-14535 EXO Sensor

Connectors to be utilized in the core cooling monitor system are manufactured by AMP Products.

AMP PRODUCTS

<u>Connector</u>	<u>Contact</u>	<u>Tool</u>	<u>Die</u>	<u>Crimp Height</u>
201345-1	66103-4	90277-1	Yellow	.039 ± .005 (1)
205-210-1	1-66506-0	90312-1	Red	.0305 ± .002 (2)
205-204-1	1-66506-0	90312-1	Red	.0305 ± .002 (2)
205-208-1	1-66506-1	90312-1	Red	.0305 ± .002 (2)

(1) Information from AMP Instruction IS7574 and EXO Sensors drawing number 112D002, Rev. A.

(2) Information from AMP Instruction IS7694 and EXO Sensors drawing number 112D002, Rev. A.

<u>CABLE STRIPPING TOOL</u>	<u>IDENTIFICATION NUMBER</u>	<u>WIRE SIZE</u>
Hand Stripper	Ideal #45-092	10 - 22 AWG
Knife (Small)	Ideal #45-127	3/16 - 3/4 O.D.
Knife (Large)	Ideal #45-129	3/4 - 1 1/2 O.D.
Amp Stripper (Prefabricated Cables)	Amp #601-827-1	12 -22 AWG



AUG 02 1985

## ATTACHMENT 9 (Cont)

TABLE 2

PIDG Radiation Resistant Insulated Terminals

Connector Gauge (AWG)	Terminal Insulation Code	Tool Identification Number	Tool Color and Code	Wire Strip Length	
				Min.	Max.
16-22 AWG	Natural Color with Red Stripe	47386 MOD R	Red and Yellow 2 Ribs, 1 Dot	13/64"	15/64"
14-16 AWG	Natural Color with Blue Stripe	47387 MOD P	Blue and Green 2 Ribs, 2 Dots	13/64"	15/64"
12-10 AWG	Natural Color with Yellow Stripe	59239-4	Yellow 1 Dot	3/16"	11/32"

Plasti-Grip Terminals

Connector Gauge (AWG)	Terminal Insulation Code	Tool Identification Number	Tool Color and Code	Wire Strip Length	
				Min.	Max.
8 AWG	Natural Color with Red Stripe	48752-1 MOD W	Red Dot Die (leaves no Dot Code)	3/8"	5/8"
6 AWG	Natural Color with Blue Stripe	48753-1 MOD W	Blue Dot Die (leaves no Dot Code)	7/16"	9/16"

Pre-Insulated Environmentally Sealed (PIES) Butt Splices

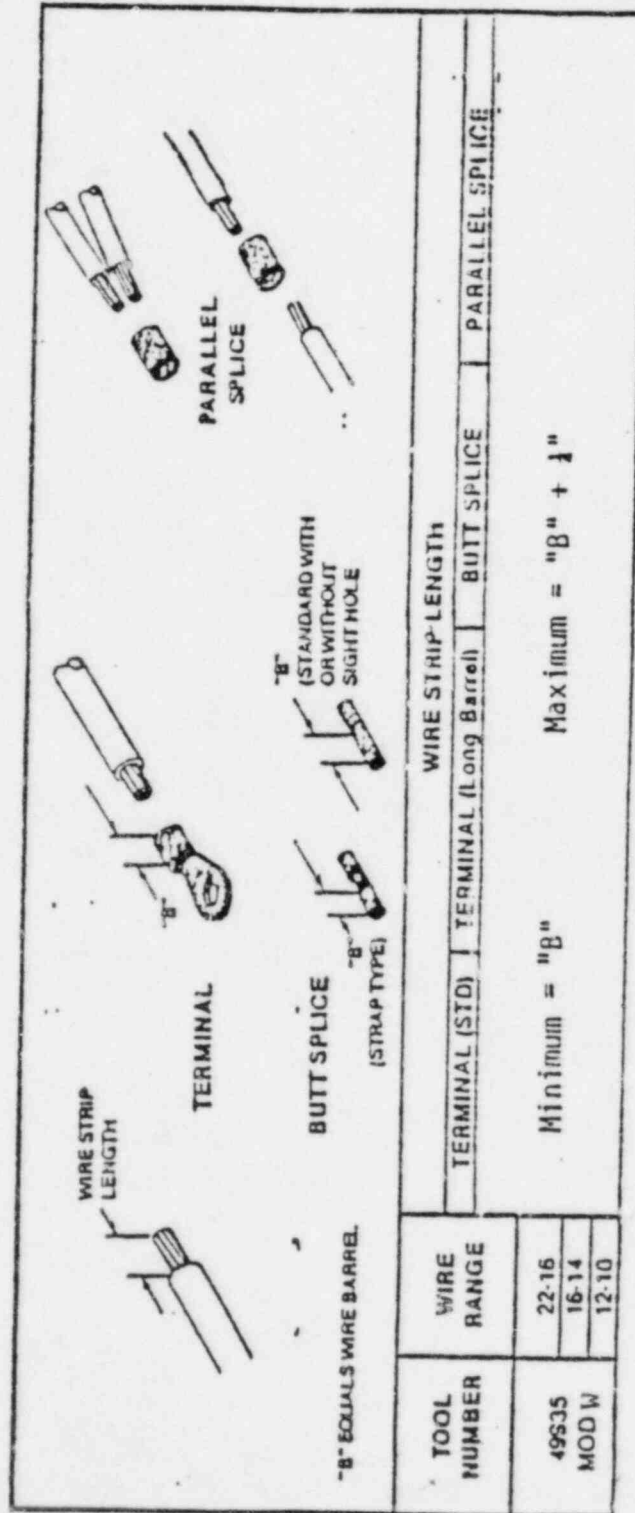
Connector Gauge (AWG)	Splice Insulation Code	Tool Identification Number	Tool Color and Code	Wire Strip Length	
				Min.	Max.
20-24 AWG	Blue with Red Liner	46121 MOD M	Red and Yellow 1 Dot	13/64"	15/64"
16-20 AWG	Blue with Blue Liner	47907-1	Blue and White 2 Dots	15/64"	17/64"
12-14 AWG	Blue with Yellow liner	47386 MOD R	Yellow and Red 1 Dot	1/4"	9/32"



AUG 02 1985

ATTACHMENT 9 (Cont)

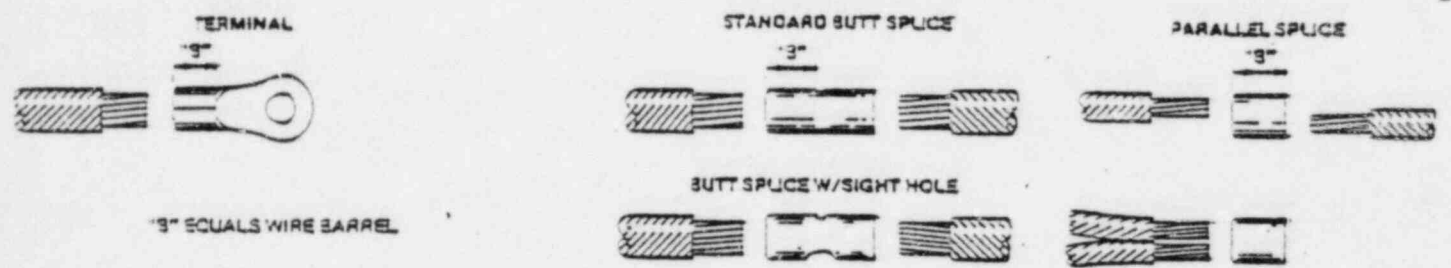
FIGURE 1





AUG 02 1985

ATTACHMENT 9 (Cont)



TOOL NUMBER	WIRE SIZE	CIRCULAR MIL AREA RANGE	WIRE STRIP LENGTH		
			TERMINAL	BUTT SPICE	PARALLEL SPICE
59355 Also used for STRATO-THERM Heat Resistant Terminals	3	13,100-20,300	Minimum = "3"      Maximum = "3" + 1/4"		

FIGURE 2





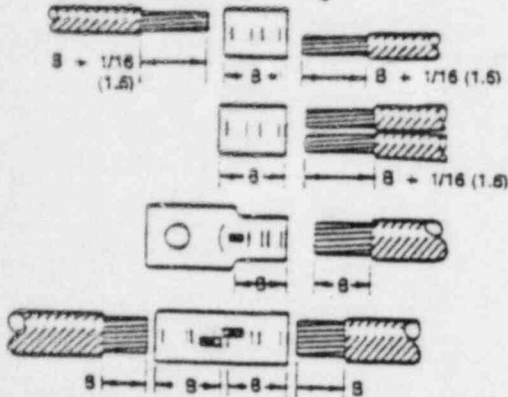
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ATTACHMENT 9 (Cont)

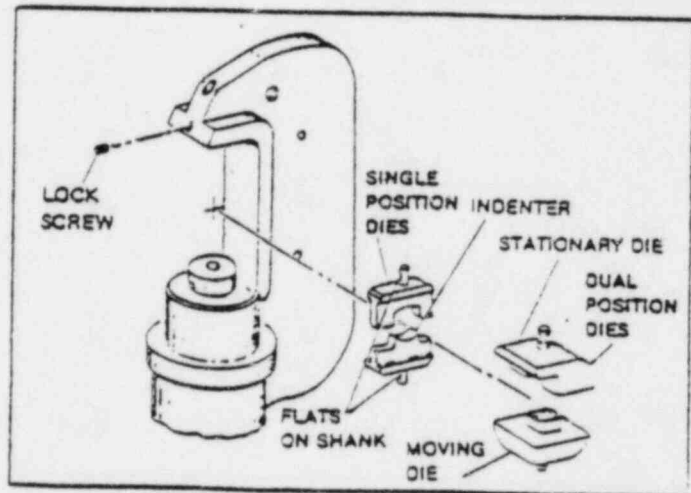
FIGURE 3

WIRE STRIP LENGTHS

Minimum Strip Length As Shown  
 Tolerance - 0" + 2"



WIRE SIZE	CMA RANGE (mm <sup>2</sup> )	SINGLE POSITION DIE SET	Crimping Head
4	33,100-52,600 (16.8-26.7)	59134-1	69099
2	52,600-83,700 (26.7-42.4)	46765-2	69099
1/0	83,700-119,500 (42.4-60.8)	46766-2	69099
2/0	119,500-150,500 (60.8-76.3)	46767-2	69099
4/0	190,000-231,000 (96.3-117)	46750-2	69099
250 MCM†	231,000-275,000 (117-139)	46751-2	69099
350 MCM	325,000-375,000 (165-190)	46753-2 Mod. D*	69099



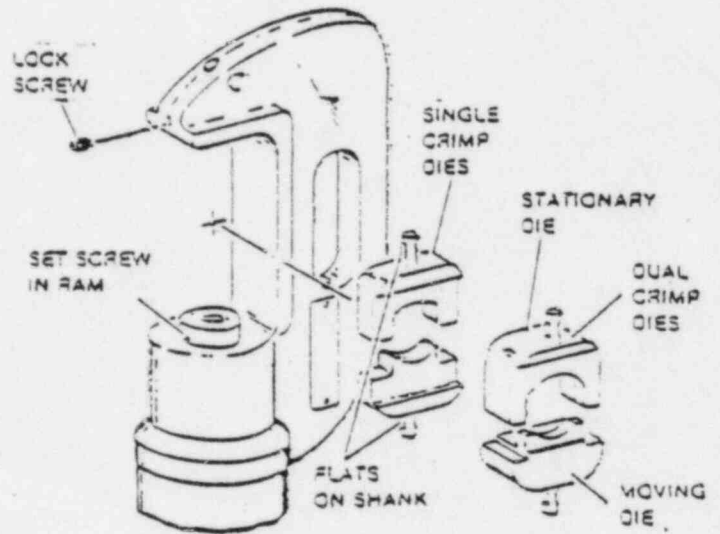
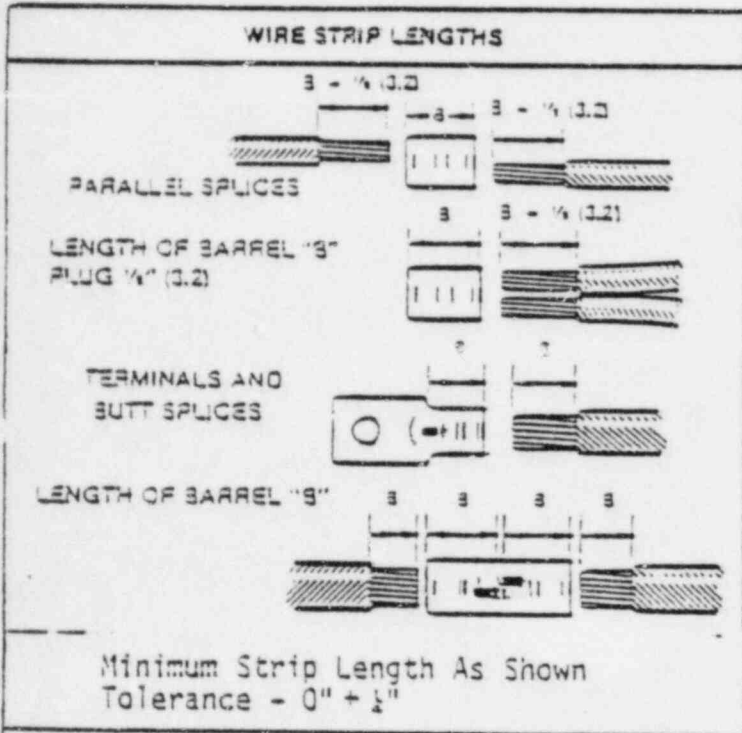
†MCM Equals Thousand Circular Mills  
 \*non-reversible dies. Always install indenter in ram



AUG 02 1985

ATTACHMENT 9 (Cont)

FIGURE 4



WIRE SIZE (MCM)	CMA RANGE (mm <sup>2</sup> )	SINGLE CRIMP DIE SET	DUAL CRIMP DIE SET	CRIMPING Head
500	450,000-550,000 (220-280)	46753-2	—	69082
700	650,000-750,000 (330-380)	—	46757-2	69082
1000	950,000-1,125,000 (480-570)	—	46760-2	69082

1MCM equals thousand circular mils.



AUG 02 1985

ATTACHMENT 9 (Cont)

Engineering justification is required to use terminals and splices not meeting all conditions shown in "Accept" column.

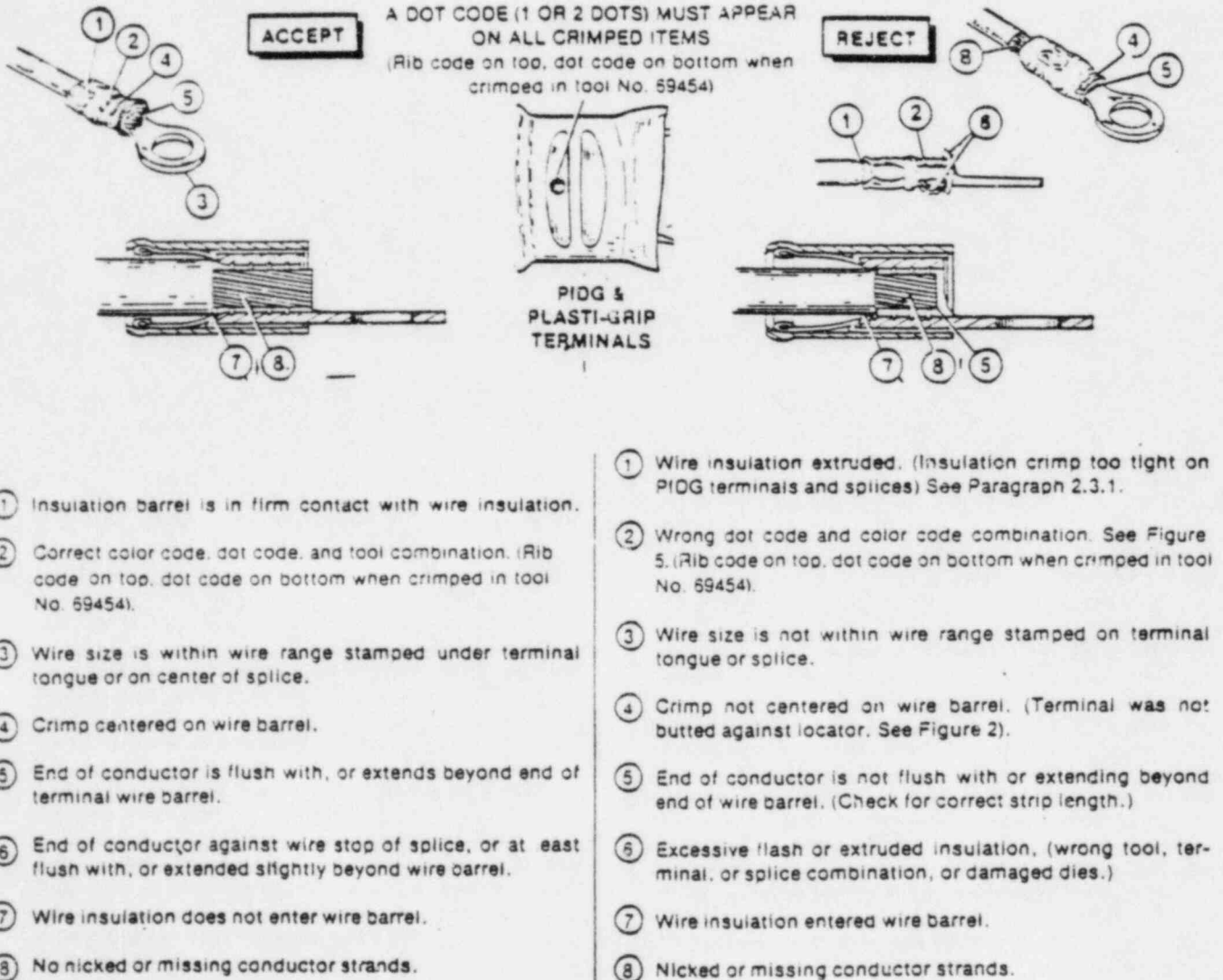


FIGURE 5



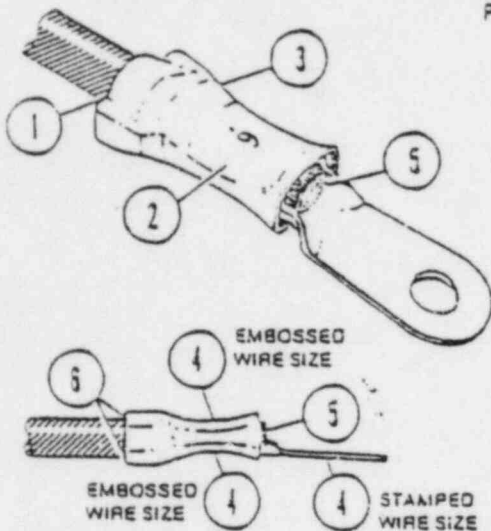
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ATTACHMENT 9 (Cont.)

FIGURE 5 (Cont.)

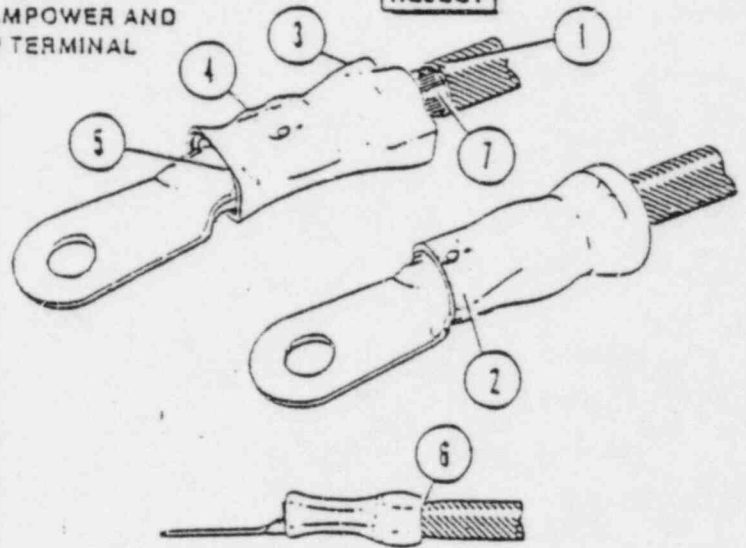
CRIMP INSPECTION OF  
 AMPLI-BOND, AMPOWER AND  
 PLASTI-GRIP TERMINAL

ACCEPT



- ① Wire fully inserted.
- ② Crimp centered on wire barrel.
- ③ Correct color code and die combination. (Terminal insulation color matches color dots on dies.)
- ④ AWG wire size being used is same as wire size embossed on terminal insulation and stamped on terminal tongue.
- ⑤ End of conductor is flush with, or extends beyond end of wire barrel of terminal.
- ⑥ Insulation barrel is in contact with wire insulation. AMPLI-BOND and Pre-insulated AMPOWER terminals provide a "grip" on wire insulation. PLASTI-GRIP terminals provide only a "support" for the wire, i.e., terminal insulation will not always touch wire insulation, but will provide "support" when wire is flexed.

REJECT



- ① Wire not fully inserted or wrong strip length.
- ② Crimp not centered on wire barrel. (AMPLI-BOND or PLASTI-GRIP terminal was not butted against locator. See Figure 3, Detail A.) (Rear of AMPOWER terminal tongue was not butted against sides of die. See Figure 3, Detail B.)
- ③ Wrong die and terminal color code combination. See chart, Figure 1.
- ④ Excessive flash or extruded insulation. (Wrong size or damaged dies.)
- ⑤ End of conductor is not flush with or extending beyond end of wire barrel of terminal.
- ⑥ Wire insulation pinched. (Insulation crimp too tight on AMPLI-BOND and AMPOWER terminals.) Refer to Paragraph 2.4.
- ⑦ Nicked or missing conductor strands.



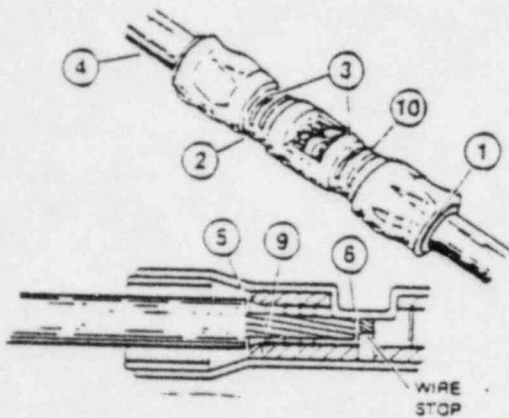
-AUG 02 1985

ATTACHMENT 9 (Cont)

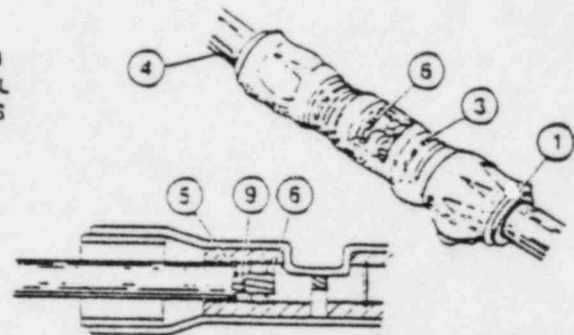
**ACCEPT**

A DOT CODE (1 OR 2 DOTS) MUST APPEAR ON ALL CRIMPED ITEMS

**REJECT**



PRE-INSULATED ENVIRONMENTAL SEALED SPLICES



- ① Correct seal liner and tool color code combinations (Pre-insulated Environmental Sealed Splice.)
- ② No flash or extruded insulation.
- ③ Correct color code, dot code, and tool combination. Dot coding disappears on sealed splices when they are heat sealed.
- ④ Correct wire size used.
- ⑤ Wire insulation does not enter wire barrel of splice.
- ⑥ End of conductor against wire stop of splice, or at least flush with, or extended slightly beyond wire barrel.
- ⑦ End of conductor bottomed in cap.
- ⑧ Full width of crimp is over wire barrel.
- ⑨ No nicked or missing conductor strands.
- ⑩ Crimp centered on wire barrel.
- ⑪ Splice insulation is in contact with wire insulation.

- ① Wrong seal liner and tool color code combination. (Pre-insulated Environmental Sealed Splices) See Figure 5.
- ② Excessive flash or extruded insulation. (Crimped in wrong tool.) Also, check for damaged dies.
- ③ Wrong dot code and color code combination. See Figure 5.
- ④ Incorrect wire size used.
- ⑤ Wire insulation entered wire barrel.
- ⑥ End of conductor is not flush with or extending beyond end of wire barrel. (Check strip length.)
- ⑦ End of conductor not bottomed in cap.
- ⑧ Half of crimp off end of wire barrel. (Cap was not bottomed in recess of locator.)
- ⑨ Nicked or missing conductor strands.
- ⑩ Crimp not centered on wire barrel. (Tool locator not seated in window indent of splice.)
- ⑪ Splice insulation is not in contact with wire insulation.

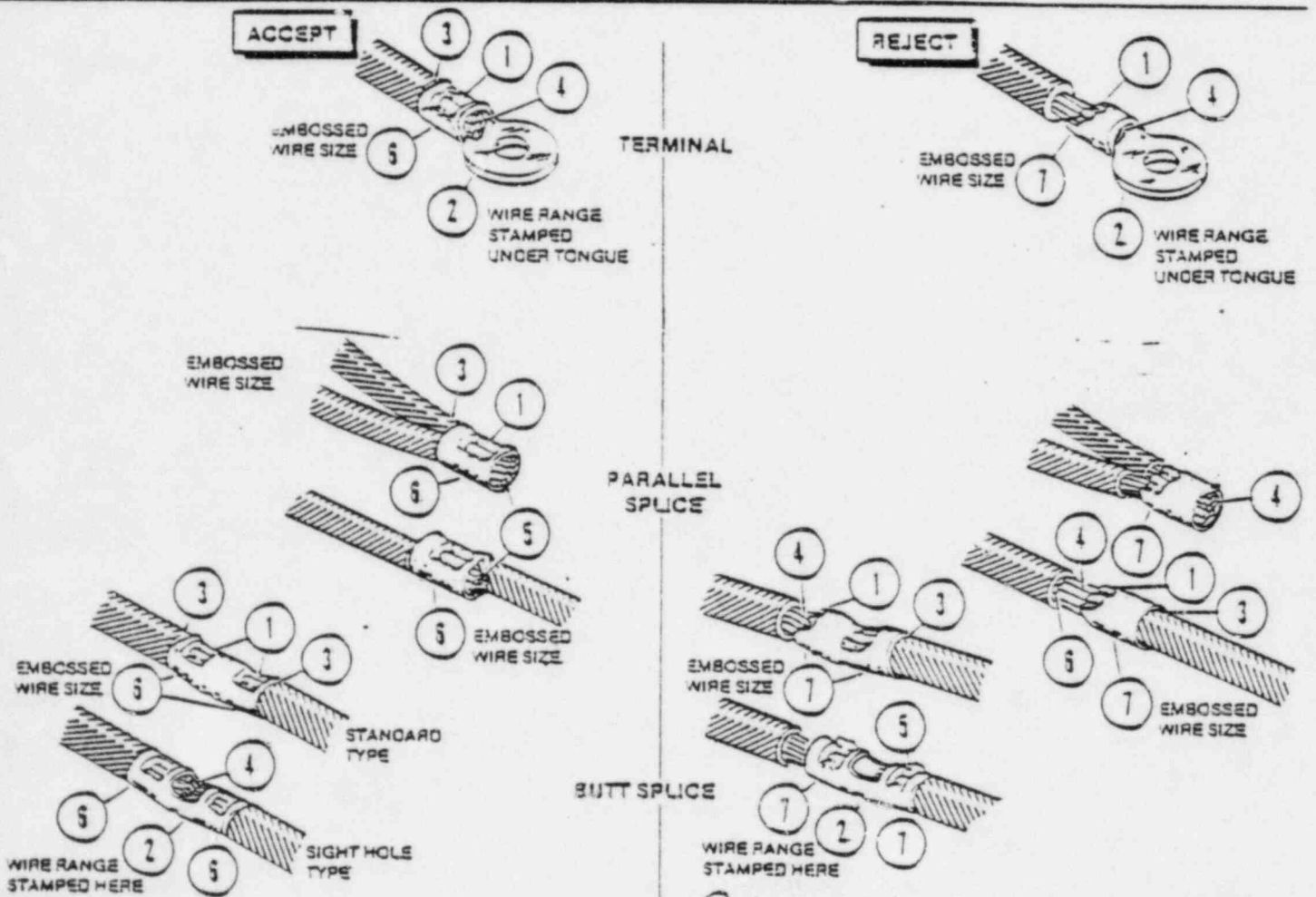
FIGURE 5 (Cont)



AUG 02 1985

ATTACHMENT 9 (Cont)

FIGURE 5 (Cont)



- ① Crimps centered. Crimps may be off center BUT NOT OFF END OF WIRE BARREL.
- ② AWG wire size being used matches wire size stamped on terminal or splice and head of crimping tool.
- ③ Insulation does not enter wire barrel.
- ④ Wire is visible through inspection hole of butt splices. Wire is flush with or extends slightly beyond end of terminal wire barrel.
- ⑤ On parallel splices, bare wire ends must be flush with or extend slightly beyond end of barrel.
- ⑥ Wire size embossed on crimped wire barrel matches wire size stamped on terminal or splice.

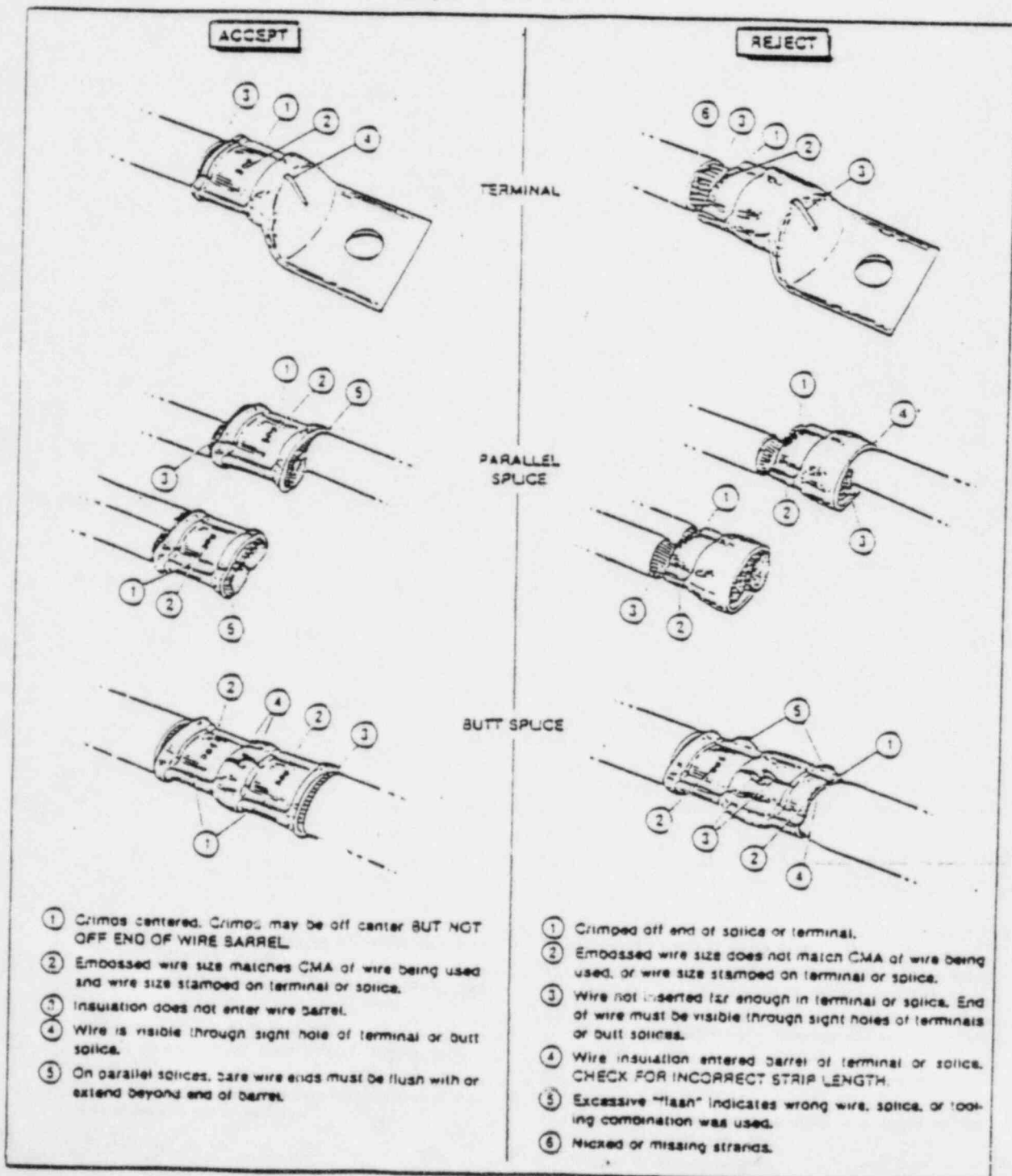
- ① Crimped off end of splice or terminal wire barrel.
- ② AWG wire size being used does not match wire size stamped on terminal or splice and head of crimping tool.
- ③ Insulation entered barrel of terminal or splice. CHECK FOR INCORRECT STRIP LENGTH.
- ④ Wire not inserted far enough in terminal or splice. End of wire must be visible through inspection hole of butt splices, and be flush with or extend slightly beyond end of terminal wire barrel or parallel splice.
- ⑤ Excessive "flash" on terminal or splice indicates wrong wire, terminal or splice, or tooling combination was used.
- ⑥ Nicked or missing strands.
- ⑦ Wire size embossed on crimped wire barrel does not match wire size stamped on terminal or splice.



AUG 02 1995

ATTACHMENT 9 (Cont)

FIGURE 5 (Cont)

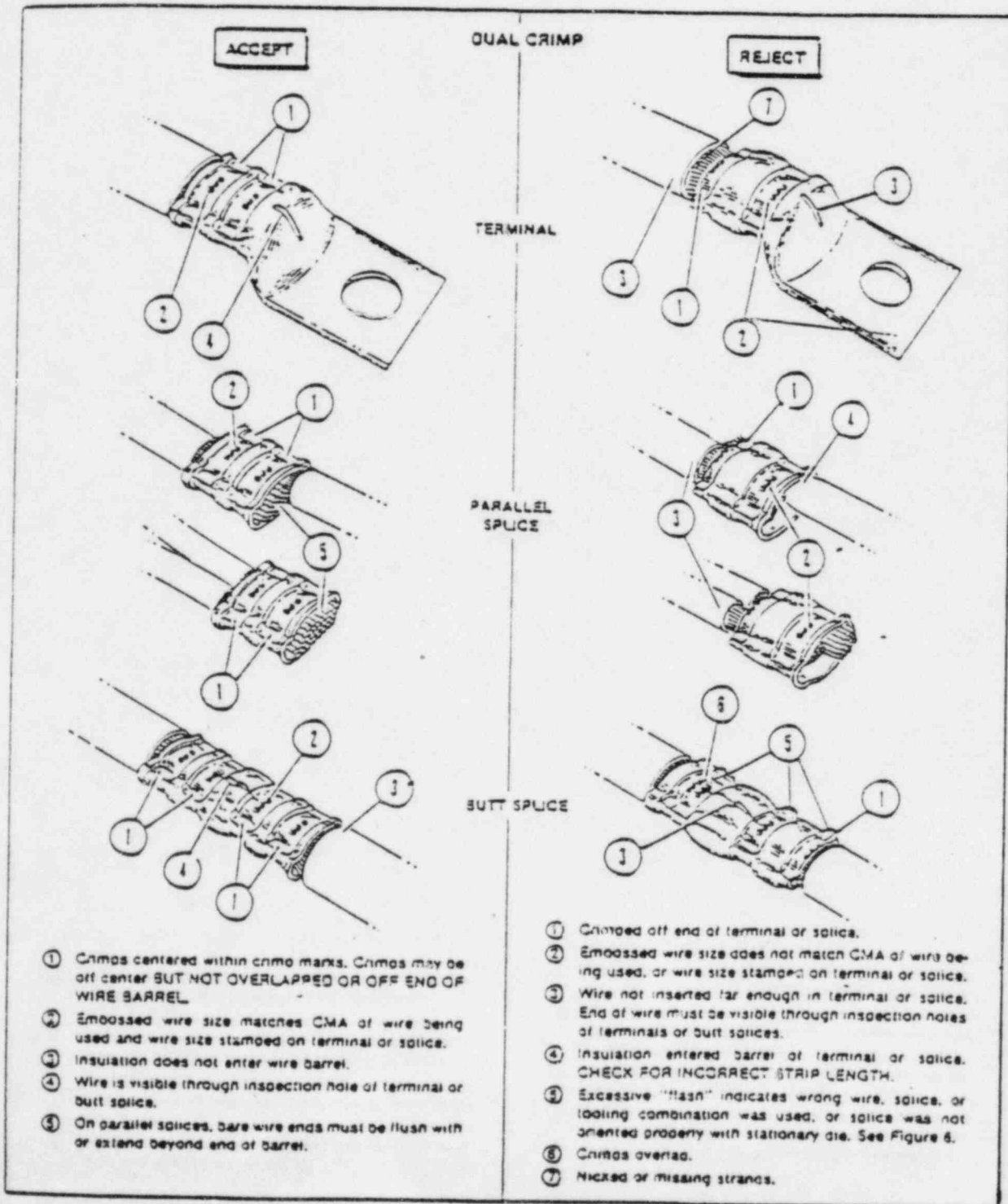




AUG 02 1995

ATTACHMENT 9 (Cont)

FIGURE 5 (Cont)







AUG 02 1965

ATTACHMENT 10

<u>Cable</u>	<u>Minimum Bending Radius</u>	<u>Maximum Outside Diameter</u>
600 Volt Power Cable *****		
1/c 750 MCM	4.48"	1.282"
1/c 500 MCM	3.21"	1.072"
1/c 350 MCM	2.82"	0.943"
1/c #4/0	1.85"	0.740"
Triplex #4/0	5.57"	1.588"
Triplex #2/0	4.73"	1.352"
1/c #2	1.30"	0.430"
Triplex #2	2.91"	0.966"
2/c #2	3.27"	1.083"
3/c #4	3.09"	1.027"
1/c #2/0	1.58"	
3/c #6	2.79"	0.928"
2/c #6	2.49"	0.831"
3/c #8	1.85"	0.737"
2/c #8	1.73"	0.693"
3/c #10	1.53"	0.611"
8KV POWER CABLE *****		
1/c 500 MCM	18.64"	1.490"
1/c 350 MCM	16.92"	1.350"
1/c #4/0	14.76"	1.180"



AUG 02 1985

ATTACHMENT 10 (Cont)

Item No.	Description	Minimum Bending Radius for Cable Being Installed Under Pulling Tension (Inches)	Minimum Bending Radius For Permanent Cable Training (Inches)	Maximum Outside Diameter (Inches)
<u>Switchyard Cable - 1000 Volt Power Cable</u>				
1	1/C #750 MCM Shielded	20.72	17.76	
2	4/C #2 Shielded	17.92	15.36	
3	2/C #6 Shielded	11.62	9.96	
<u>1000 Volt Control Cable</u>				
1	10/C #12 Shielded	14.0	12.0	
2	7/C #12 Shielded	10.92	9.36	
3	4/C #10 Shielded	10.08	8.64	
4	2/C #12 Shielded	7.70	6.60	
5	1/C #10	2.00	1.00	
6	1/C #12	1.84	.92	
7	1/C #14	1.68	.84	
<u>Switchyard Cable &amp; Lighting Cable</u>				
1	1/C #8 1000V Shielded	6.75	5.78	
2	2/C #8 1000V Shielded	9.98	8.56	
3	4/C #8 1000V Shielded	11.20	9.60	
<u>600V Copper Control Cable</u>				
1	12/C #12	1.92	1.28	0.82
2	9/C #12	1.28	.64	0.73
3	7/C #12	1.28	.64	0.63
4	5/C #12	1.28	.64	0.58
5	3/C #12	1.28	1.28	0.46
6	2/C #12	1.28	.64	0.44
7	1/C #12	1.28	.64	0.21
8	4/C #10	1.44	.72	0.60



AUG 02 1985

ATTACHMENT 10 (Cont)

Item No.	Description	Minimum Bending Radius For Cable Being Installed Under Pulling Tension (Inches)	Minimum Bending Radius For Permanent Cable Training (Inches)	Maximum Outside Diameter (Inches)
<u>300 Volt Instrument Cable</u>				
1	24/C (12 STP) #16	3.12	2.08	1.17
2	12/C ( 6 STP) #16	2.08	1.04	0.85
3	8/C ( 4 STP) #16	2.08	1.04	0.72
4	4/C ( 2 STP) #16	2.08	1.04	0.62
5	2/C ( 1 STP) #16	2.08	1.04	0.36
6	28/C #16	1.92	1.44	0.95
7	24/C #16	1.92	1.44	0.93
8	22/C #16	1.92	1.44	0.89
9	12/C #16	1.44	.96	0.67
10	5/C #16	.96	.48	0.47
11	4/C (1 Twisted Quad) #16	2.40	1.20	0.43
12	3/C (1 Twisted Triad) #16	2.16	1.08	0.40
13	2/C (1 Twisted Pair) #14	2.24	1.12	0.37
14	14/C Composite Cable (6 Pair #16 1 Pair #14)	2.24	1.12	0.81
15	14/C Composite Cable (7 Twisted Pair), 10 mil Copper Tape Shield	11.34	9.72	
16	1 Twisted Pair #16	1.92	.96	0.38
<u>300 Volt Thermocouple Extension Wire</u>				
1-4	1 STP #16 Solid	1.92	.96	
5-6	2 TP #16 Solid	1.92	.96	



AUG 02 1985

ATTACHMENT 11

Identification for Flexible Conduit

Conduit identification shall be verified by the QC Inspector to comply with the numbering on the applicable drawing and the following:

I. Marking (except Servicair)

The following are the recommended and alternative methods in identifying conduit:

- a. Recommended Method - Freehand marking of conduit with appropriate black ink marker or paint. Height of conduit number characters should be approximately 1/3 to 1/2 the conduit outside diameter and shall be visible where possible from floor level.
- b. Alternative Method, No. 1 - Adhesive markers with factory preprinted conduit numbers or conduit numbers field printed on marker before installation. Adhesive markers shall not be used inside containment.
- c. Alternative Method, No. 2 - Metal or plastic tags attached to conduit by various means, i.e., ty-raps, wire. This method is recommended for conduit stub-ups. However, for inside the containment metal tags attached with wire (preferable method) or Tefzel ty-raps shall be used.

Conduit shall be identified at both ends of each run; exposed conduit ten (10) feet or less in length may be identified at either end or middle of the run.

II. Identification shall be as indicated below (except Servicair)

Table I (Unit Number)

- 0 - Common to both units
- 1 - Unit 1
- 2 - Unit 2

Table II (Raceway Function)

- |                |   |
|----------------|---|
| 1Ø, 1G, 1K     | 6.9kV ac  |
| 2Ø, 2G, 2K     | 480 Vac & Heavy Power Feeders<br>Under 480 Vac              |
| 3Ø, 3G, 3K     | Control ac and dc and Small<br>Power Feeders Under 480V     |
| 4Ø, 4G, 4K     | Low Level Signals   |
| 4R, 4W, 4B, 4Y | Reactor Protection Instrumentation<br>Low Level Signals     |
| 5K             | 480V ac & Heavy Power Feeders<br>Under 480V (Local Control) |



AUG 02 1985

ATTACHMENT 11 (Cont)

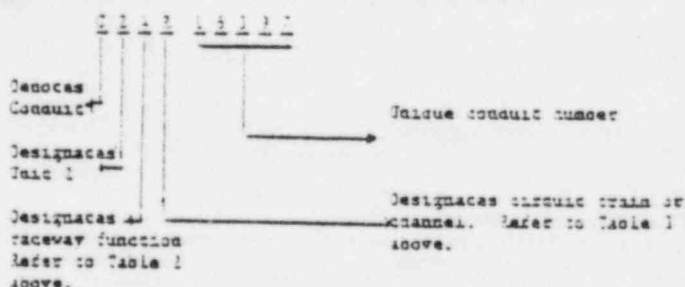
5R, 5W, 5B, 5Y	Reactor Protection Instrumentation 120V Signal
6K	Control ac & dc and Small Power Feeders Under 480V (Local Control)
6R, 6W, 6B, 6Y	Nuclear Instrumentation System
8K	Telephone and Communication

Table III (Safety Related Train)

"A" Train - Orange - Ø -	
Associated "A" Train - Orange with white stripes	
"B" Train - Green - G -	
Associated "B" Train - Green with white stripes	
"C" Train - Black - K - (Non-Q)	
Inst. Chnnel I - Red - R -	
Inst. Channel II - White - W -	
Inst. Channel III - Blue - B -	
Inst. Channel IV - Yellow - Y -	

Where a conduit contains only associated cable(s), at least one white stripe shall be applied next to each applicable train color coded marking and where possible shall be visible from floor level.

A typical conduit identification number is depicted as follows:



III. Methods of Color Coding

- a. Recommended Method - Paint exposed conduits with a full 360° band at intervals not to exceed 15 ft. (except Servicair, Ref. 3.2.1.2), and at points of entry to and exit from enclosed areas and on both sides. Paint color shall match as close as possible the appropriate cable jacket color of the safety related cables to be installed in a conduit. Paint band shall be at least one inch wide and shall be readily visible from floor level. It is recognized that for conduit installed against walls and floors, it may be impossible to obtain a full 360° band for color coding requirements. In these cases, the maximum band possible shall be made.
- b. Alternative Method - Use color coded adhesive markers with similar requirements as to color, width or marker.

Adhesive marking labels shall not be used inside containment.

ORIG DCT	DSSM	SHEET	REV	ISSUED	PUB	LETTER#	TITLE	APP
HKP	DDVEN	C-T-75-155-M	002	A	781025	CP-0420	GTN-27039	B/M COOLING UNIT
HKP	DDVEN	L-80517X40		1	800422	CP-0420	GTN-20674	FIRE WALL PLATE ASSY PHASE BUS
HKP	DDVEN	L-80517X41			841108	CP-0420	GTN-25754	150 PHASE BUS WALL PLATE & FRAME
HKP	DDVEN	L-82953X78		770826	841102	CP-0420	GTN-25754	PT COMPT WIRING DIAG
HKP	DDVEN	T-139112X23		780920	841102	CP-0420	GTN-03620	DRAWOUT P.T.COMPARTMENT
HKP	DDVEN	T-140964X30-M			771017	CP-0420	GTN-07332	150 BUS DUCT COOLING COMPT.DATA
HKP	DDVEN	T-140964X31-M			771017	CP-0420	GTN-07332	150 BUS DUCT COOLING COMPT.DATA
HKP	DDVEN	T-153440		A	791002	CP-0420	GTN-35677	NEUTRAL LEAD ENCLOSURE SUPPORTING STEEL
HKP	DDVEN	T-153440X1			800902	CP-0420	GTN-48474	GENERATOR NEUTRAL LEAD SUPPORTS
HKP	DDVEN	T-153440X1-A			800902	CP-0420	GTN-48474	GENERATOR NEUTRAL LEAD SUPPORT
HKP	DDVEN	T-170066	001	A	780712	CP-0420	GTN-25754	GEN PHASE TERMINAL ENCLOSURE
HKP	DDVEN	T-75-155		6	790814	CP-0420	GTN-38731	150 BUS DUCT COOLING UNIT ASSY NO. 1
HKP	DDVEN	T-75-155-5		D	800219	CP-0420	GTN-43511	ELECTRICAL SCHEMATIC
HKP	DDVEN	T-75-156		0	841109	CP-0420	GTN-07332	150 BUS DUCT COOL UNIT ASSY NO.2
HKP	DDVEN	U-119890	001	B	780712	CP-0420	GTN-25754	ANCHOR BOLT LAYOUT
HKP	DDVEN	U-119890	002	B	780712	CP-0420	GTN-25754	ANCHOR BOLT LAYOUT
HKP	DDVEN	U-119890X1	001		791126	CP-0420	GTN-41498	ANCHOR BOLT LAYOUT UNIT #2
HKP	DDVEN	U-119890X1	002	A	800123	CP-0420	GTN-42888	ANCHOR BOLT LAYOUT UNIT # 11
HKP	DDVEN	U-122245		7	781025	CP-0420	GTN-21728	LAYOUT OF ISOLATED PHASE GENERATOR BUS
HKP	DDVEN	U-122245	001	8	791002	CP-0420	GTN-25754	ISOL PHASE BUS SUPPORT
HKP	DDVEN	U-122245	002	6	791002	CP-0420	GTN-25754	ISOL PHASE BUS SUPPORT 5L55 390N
HKP	DDVEN	U-122245	003	4	791002	CP-0420	GTN-25754	150 PHASE BUS LAYOUT
HKP	DDVEN	U-122245	004	5	791002	CP-0420	GTN-25754	150 PHASE BUS LAYOUT
HKP	DDVEN	U-122245	005	5	791002	CP-0420	GTN-25754	150 PHASE BUS LAYOUT
HKP	DDVEN	U-122245	006	3	791002	CP-0420	GTN-25754	150 PHASE BUS LAYOUT
HKP	DDVEN	U-122245	007	4	791002	CP-0420	GTN-25754	150 PHASE BUS LAYOUT
HKP	DDVEN	U-122245	008	6	791002	CP-0420	GTN-30344	150 PHASE BUS
HKP	DDVEN	W-20479	001	B	780712	CP-0420	GTN-25754	GENERATOR MAIN BUS. LAYOUT
HKP	DDVEN	W-20479	002	B	841108	CP-0420	GTN-25754	ISOL PHASE BUS LAYOUT
HKP	DDVEN	W-20479	003	B	780712	CP-0420	GTN-25754	ISOL PHASE BUS LAYOUT
HKP	DDVEN	W-20479	004	B	780712	CP-0420	GTN-25754	GENERATOR MAIN BUS LAYOUT
HKP	DDVEN	W-20479	005	B	780712	CP-0420	GTN-25754	GENERATOR MAIN BUS LAYOUT
HKP	DDVEN	W-20479	006	B	780712	CP-0420	GTN-25754	GENERATOR MAIN BUS LAYOUT
HKP	DDVEN	W-20479	007	C	800220	CP-0420	GTN-43968	GENERATOR MAIN BUS LAYOUT
HKP	TMOMR	CP-0420-001			820519	CP-0420	BRF-09123	ISOLATED PHASE GEN BUS MANUAL
HKP	TMOMR	CP-0420-002			801204	CP-0420	BRF-10324	ISOLATED PHASE BUS AND ACCESSORIES
ITE	DDVEN	103-B-122	001	1	800410	CP-0425	GTN-03136	OUTLINE 345 KV SF6 CIRCUIT BREAKER
ITE	DDVEN	162053	001	0	800410	CP-0425	GTN-14104	A C B WIRING DIAG
ITE	DDVEN	188571	001	3	800410	CP-0425	GTN-08951	5HK, 5HK& 15HK BKRS WIRING LEGEND
ITE	DDVEN	188572		2	800410	CP-0425	GTN-08951	DC ELEV. OPER. SEQ FOR STD HK BKRS
ITE	DDVEN	2323-E1-0026-CP-0425	001	1	791101	CP-0425	GTN-25484	6.9KV THREE LINE DIA. NORMAL BUSES
ITE	DDVEN	2323-E1-0026-CP-0425	002	1	791010	CP-0425	GTN-25484	6.9KV THREE LINE DIA. NORMAL BUSES
ITE	DDVEN	2323-E1-0027-CP-0425	001	2	791010	CP-0425	GTN-20268	6.9KV SFGD BUS 1EA1 3 LINE DIA.
ITE	DDVEN	2323-E1-0027-CP-0425	002	2	790816	CP-0425		6.9 SFGD BUSES THREE LINE DIAG
ITE	DDVEN	2323-E1-0030-CP-0425	000	1	850123	CP-0425	GTN-24038	6.9 KV SMGR MISC SCH DIAG
ITE	DDVEN	2323-E1-0030-CP-0425	009	1	790816	CP-0425	GTN-23259	6.9 KV LOCK OUT REL 86/1EA1 SCH
ITE	DDVEN	2323-E1-0030-CP-0425	010	1	790816	CP-0425	GTN-25551	6.9KV BUS 1EA2 W/V AUX REL-S
ITE	DDVEN	2323-E1-0030-CP-0425	011	1	790816	CP-0425	GTN-22470	6.9 KV BUS XA1 L/O RELAY SCHEM
ITE	DDVEN	2323-E1-0030-CP-0425	012	1	790816	CP-0425	GTN-24038	6.9 KV BUS 1A1 LD RELAY SCH D
ITE	DDVEN	2323-E1-0030-CP-0425	014	1	790726	CP-0425	GTN-25484	6.9KV SWITCHGEAR BUS 1A2 LOCKOUT RELAY
ITE	DDVEN	2323-E1-0030-CP-0425	015	1	790816	CP-0425	GTN-24039	6.9 KV BUS 1A4 LD RELAY SCH DIA
ITE	DDVEN	2323-E1-0030-CP-0425	016	1	790816	CP-0425	GTN-24038	6.9 KV NORM BUS INCOMING BKRS

FOIA-86-36  
9/30

ORIG DCT	DSSN	SHEET	REV	ISSUED	PO#	LETTERS	TITLE	APP	
ITE	DDVEN	2323-E1-0030-CP-0425	017	1	790816	CP-0425	GTN-24038	6.9 K NORM BUSES 1A1 & 1A3 NV	PRE
ITE	DDVEN	2323-E1-0030-CP-0425	018	1	790816	CP-0425	GTN-24039	6.9 KV NORM BUS 1A2 & 1A4	PRE
ITE	DDVEN	2323-E1-0030-CP-0425	019	1	790816	CP-0425	GTN-23259	BUS 1EA1 U/V AUX REKATS SW DEV	PRE
ITE	DDVEN	2323-E1-0030-CP-0425	021	1	790816	CP-0425	GTN-23259	BUS 1EA1 U/V AUX RELAYS SCH DIA	PRE
ITE	DDVEN	2323-E1-0030-CP-0425	022	1	790816	CP-0425	GTN-25551	6.9 KV SWGR BUS 1EA2 L/3 RELAY	PRE
ITE	DDVEN	2323-E1-0030-CP-0425	035	1	820916	CP-0425	GTN-25551	6.9KV BUS 1EA2 U/V AUX REL SW	PRE
ITE	DDVEN	2323-E1-0030-CP-0425	038	1	790816	CP-0425	GTN-24038	6.9 KV NORM BUS 1A1,1A2,1A3,1A4	PRE
ITE	DDVEN	2323-E1-0030-CP-0425	039	2	790816	CP-0425	GTN-25557	6.9KV NORM BUS 1A1,1A2,1A3,1A4	PRE
ITE	DDVEN	2323-E1-0030-CP-0425	043	1	790816	CP-0425	GTN-23259	BUS 1EA1 INC LKR U/V AUX REL	PRE
ITE	DDVEN	2323-E1-0030-CP-0425	045	1	790816	CP-0425	GTN-23259	INC BKR 1EA1 U/V AUX REL SCH	PRE
ITE	DDVEN	2323-E1-0030-CP-0425	047	1	830701	CP-0425	GTN-25551	6.9KV BKR 1EA2-2 U/V AUX RELAY	PRE
ITE	DDVEN	2323-E1-0030-CP-0425	049	1	820916	CP-0425	GTN-25551	6.9KV BKR 1EA2-1 U/V AUX RELAY	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	001	1	790816	CP-0425	GTN-23259	6.9 KV START UP BKR 1EA1-1 SCH	004
ITE	DDVEN	2323-E1-0031-CP-0425	003	1	790816	CP-0425	GTN-23259	6.9 KV BKR 1EA1-2 SCH DIA	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	005	1	820916	CP-0425	GTN-25551	6.9KV BUS 1EA2 BKR 1EA2-1 CCHE	RFC
ITE	DDVEN	2323-E1-0031-CP-0425	007	1	820916	CP-0425	GTN-25551	6.9KV BUS 1EA2 BKR 1EA2-2 SCHEM	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	009	1	790816	CP-0425	GTN-23259	6.9 KV BUS TIE BKR BT-1EA1 SCH	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	011	1	820916	CP-0425	GTN-25551	6.9KV BUS 1EA2 BKR BT 1EA2 SCHEM	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	013	1	790816	CP-0425	GTN-23259	6.9 KV TRANSF TIEB1 FUR BKR SCH	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	015	1	790816	CP-0425	GTN-23259	6.9 KV TRANSF TIE B 3 FDR BKR SCH	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	017	1	820916	CP-0425	GTN-25551	6.9KV BUS 1EA2 BKR TIEB2 SCH DIA	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	019	1	820916	CP-0425	GTN-25551	6.9KV BUS 1EA2 BKR TIEB4 SCH DIAG	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	021	1	790816	CP-0425	GTN-23259	6.9 KV DIESEL GEN BKR 1EB1 SCH	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	023	1	820916	CP-0425	GTN-25551	6.9KV BUS 1EA2 BKR TIEB4 SCH DIAG	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	025	1	790816	CP-0425	GTN-23259	6.9KV CCM PUMP 11 BKR SCH DIAG	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	026	1	790816	CP-0425	GTN-23259	6.9 KV CCM PUMP 11 BKR SW DEVEL	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	027	1	790726	CP-0425	GTN-25551	6.9KV SWGR BUS 1EA2 CCM PP 12	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	028	1	790726	CP-0425	GTN-25551	6.9KV BUS 1EA2 BKR 1APCC2 CONN	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	029	1	790816	CP-0425	GTN-23259	6.9 KV CONT SPRAY PPM BKR SCH	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	031	1	790816	CP-0425	GTN-23259	6.9 KV CONT SPRAY PP B BK SCH	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	033	1	790726	CP-0425	GTN-25551	6.9KV BUS 1EA2 BKR 1APCS2 SCHEM	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	035	1	790808	CP-0425	GTN-25551	6.9KV BUS 1EA2 BKR 1APCS4 SCHEM	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	037	1	790816	CP-0425	GTN-23259	6.9 KV AUX FW PUMP 11 BKR SCH	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	039	1	790726	CP-0425	GTN-25551	6.9KV BUS 1EA2 BKR 1AMD2 SCHEM	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	041	1	820427	CP-0425	GTN-23259	6.9 KV SSW PUMP 11 BKR SCH DIAG	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	043	1	790726	CP-0425	GTN-25551	6.9KV BUS 1EA2 BKR 1APSW2 SCHEM	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	045	1	790816	CP-0425	GTN-23259	6.9 KV SI PUMP 11 BKR SCH DIAG	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	047	1	790726	CP-0425	GTN-25551	6.9KV BUS 1EA2 BKR 1APS12 SCHEM	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	049	1	790816	CP-0425	GTN-23259	6.9 KV RHR PUMP 11 BRK SCH DIAG	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	051	1	790726	CP-0425	GTN-25551	6.9KV BUS 1EA2 BKR 1APRH2 SCHEM	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	053	1	790816	CP-0425	GTN-23259	6.9 KV CENT CHARG PP11 BLK SCH	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	055	1	790726	CP-0425	GTN-25551	6.9KV SWGR BUS 1EA2 CHRNG PP#12	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	057	1	790815	CP-0425	GTN-23259	6.9 KV CONT CHILLER 11 BKR SCH	PRE
ITE	DDVEN	2323-E1-0031-CP-0425	059	1	790726	CP-0425	GTN-25551	6.9KV SWGR BUS 1EA2 SCHEMATIC	PRE
ITE	DDVEN	2323-E1-0032-CP-0425	001	2	790815	CP-0425	GTN-22470	6.9 KV START UP BKR XA1-1 SCH	PRE
ITE	DDVEN	2323-E1-0032-CP-0425	003	2	790815	CP-0425	GTN-22470	START-UP BKR XA1-2 SCHEM	PRE
ITE	DDVEN	2323-E1-0032-CP-0425	005	2	790815	CP-0425	GTN-24038	6.9 KV BUS 1A1 BKR 1A1-1 SCH D	PRE
ITE	DDVEN	2323-E1-0032-CP-0425	006	1	790815	CP-0425	GTN-24038	6.9 KV BUS 1A1 BKR 1A1-1 CONN D	PRE
ITE	DDVEN	2323-E1-0032-CP-0425	007	2	790815	CP-0425	GTN-24038	6.9 KV BUS 1A1 BKR 1A1-2 CONN D	PRE
ITE	DDVEN	2323-E1-0032-CP-0425	008	1	790815	CP-0425	GTN-24038	6.9 KV BUS 1A1 BKR 1A1-2 CONN D	PRE
ITE	DDVEN	2323-E1-0032-CP-0425	011	2	790815	CP-0425	GTN-22641	6.9 KV START-UP BKR 1A3.2 SCH.	PRE
ITE	DDVEN	2323-E1-0032-CP-0425	013	2	790815	CP-0425	GTN-24038	6.9 KV BUS 1A2 BKR 1A2-1 SCH.D	PRE

ORIG DCT	DSSN	SHEET	REV	ISSUED	PO#	LETTER#	TITLE	APP		
ITE	DDVEN	2323-E1-0032-CP-0425	014	1	790815	CP-0425	GTN-24038	6.9 KV BUS 1A2 BKR 1A2-1 CONN D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	015	2	790815	CP-0425	GTN-24038	6.9 KV BUS 1A2 BKR 1A2-2 SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	016	1	790815	CP-0425	GTN-24038	6.9 KV BUS 1A2 BKR 1A2-2 CONND	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	017	2	790815	CP-0425	GTN-24039	6.9 KV BUS 1A4 BKR 1A4-1 SCH.D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	019	2	790815	CP-0425	GTN-24039	6.9 KV BUS 1A4 BKR 1A4-2 SCH.D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	021	2	790815	CP-0425	GTN-24038	6.9KV BUS 1A1 TR T1B1 FDR BKR	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	022	1	790815	CP-0425	GTN-24038	6.9 KV BUS 1A1 TR T1B1 FDR BKR	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	023	2	790815	CP-0425	GTN-22641	6.9 KV SWGR TRANSF TIB 3 FDR BKR	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	025	2	790815	CP-0425	GTN-24038	6.9 KV BUS 1A2 TR T1B2 FDR BKR	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	026	1	790815	CP-0425	GTN-24038	6.9KV BUS 1A2 TR T1B2 FDR BKR	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	027	2	790815	CP-0425	GTN-24039	6.9 KV BUS 1A4 TR T1B4 FDR BKR	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	029	2	790815	CP-0425	GTN-24038	6.9 KV BUS 1A1 BKR 1APDP1 SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	030	1	790815	CP-0425	GTN-24038	6.9 KV BUS 1A1 BKR 1APDP1	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	031	2	790815	CP-0425	GTN-24038	6.9 KV BUS 1A2 BKR 1APDP2 SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	032	1	790815	CP-0425	GTN-24038	6.9KV BUS 1A2 BKR 1APD92 CD	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	033	2	790815	CP-0425	GTN-22641	6.9KV SWGR COND PP11 BKR SCH	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	035	2	790815	CP-0425	GTN-24039	6.9 KV BUS 1A4 BKR 1APCP2 SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	039	2	790815	CP-0425	GTN-24039	6.9 KV BUS 1A4 BKR 1APTIC SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	041	2	790815	CP-0425	GTN-24038	6.9 KV BUS 1A1 BKR 1APCW1 SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	042	1	790815	CP-0425	GTN-24038	6.9 KV BUS 1A1 BKR 1 APCW1 SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	044	2	790815	CP-0425	GTN-22641	6.9 KV SWGR CW PP 13 BKR SCHEM.	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	045	1	790815	CP-0425	GTN-24038	6.9 KV BUS 1A3 BKR 1APCW3 SCH	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	047	2	790815	CP-0425	GTN-24038	6.9 KV BUS 1A2 BKR 11APCW2 SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	048	1	790815	CP-0425	GTN-24038	6.9 KV BUS 1A2 BKR 1APCW2 SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	050	2	790815	CP-0425	GTN-24039	6.9 KV BUS 1A4 BKR 1AP CW4 SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	051	1	790815	CP-0425	GTN-24039	6.9 KV BUS 1A4 BKR 1AP CW4 SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	053	2	790815	CP-0425	GTN-24038	6.9 KV BUS 1A1 BKR 1PCPX1 SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	054	1	790815	CP-0425	GTN-24038	6.9 KV BUS 1A1 BKR 1PCPX1 C.O.	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	055	2	790815	CP-0425	GTN-22641	6.9 KV RC PUMP 13 BKR SCH.DIAG.	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	057	2	790815	CP-0425	GTN-24038	6.9 KV BUS 1A2 BKR PCPX2 SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	058	1	790815	CP-0425	GTN-24038	6.9 KV BUS 1A2 BKR 1PCPX2 C.O.	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	059	2	790815	CP-0425	GTN-24039	6.9 KV BUS 1A4 BKR 1PCPX4 SCH D	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	061	2	790815	CP-0425	GTN-22641	6.9 KV SERV ATR COMP 11 BKR SCH	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	063	2	790815	CP-0425	GTN-22470	6.9 KV MDPH FDR BKR 2A1-3 SCH	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	065	2	820607	CP-0425	GTN-22470	6.9 KV ST-UP BLR FOR BKR 2A1-4	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	067	1	790815	CP-0425	GTN-24038	6.9KV BUS 1A1 SFGD BUS 1 EA1	PRE	
ITE	DDVEN	2323-E1-0032-CP-0425	068	1	790815	CP-0425	GTN-24038	6.9KV BUS 1A2 SFGD BUS 1 EA2	PRE	
ITE	DDVEN	2323-ES-0005-FIG1-CP-0425			790131	CP-0425	GTN-25551	FIGURE 1	PRE	
ITE	DDVEN	2323-ES-0005-FIG2-CP-0425			790816	CP-0425	GTN-24038	6.9KV SP BKR CUB INTERNAL SCH D	PRE	
GPI	DDVEN	33-51261-B-154			3	800917	CP-0425	GTN-46840	6.9KV SWGR P/T CABINET	RFC
TUS	DDVEN	33-51261-B580			CP1	850513	CP-0425	TNE-3161	6.9KV COOL PPS POT TRANSFORM	RFC
***	DDVEN	33-51261-C0516			2	820427	CP-0425	GTN-56696	62.9KV SWGR BUS XA1 AC-DC CONT SCH	RFC
GPI	DDVEN	33-51261-C0531			3	800410	CP-0425	GTN-46840	6.9KV AC&DC CONTROL SHCME	RFC
GPI	DDVEN	33-51261-C0537			1	800410	CP-0425	GTN-46840	6.9KV SWGR BUS 1A2 CUB 3 (SPACE)	RFC
GPI	DDVEN	33-51261-C0541			2	800410	CP-0425	GTN-46840	6.9KV SWGR BUS 1A3 AC&DC CONT SCH	RFC
GPI	DDVEN	33-51261-C0560			2	800410	CP-0425	GTN-46840	6.9KV SWGR BUS 1A4 AC&DC CONTR SCH	RFC
GPI	DDVEN	33-51261-C0561			1	800410	CP-0425	GTN-46840	6.9KV SWGR BUS 1A4 CUB 7 (SPACE)	RFC
GPI	DDVEN	33-51261-C0579			1	800410	CP-0425	GTN-46840	6.9KV BUS 1E2 AC&DC SHC DIAG	RFC
TUS	DDVEN	33-51261-C1546			CP1	850523	CP-0425	TNE-3200	AC & DC CONN DIAG	RFC
GPI	DDVEN	33-51261-C1547			0	800410	CP-0425	GTN-46840	GEN NORM BUS2A2 CUB7 BKR SCHEM	RFC
TUS	DDVEN	33-51261-C1571			CP1	850523	CP-0425	TNE-3200	AC & DC CONN DIAG.	RFC
TUS	DDVEN	33-51261-C1593			CP1	850523	CP-0425	TNE-3200	AC & DC CONN DIAG	RFC



ORIG DCT	OSSN	SHEET	REV	ISSUED	PO#	LETTER#	TITLE	APP
TUS	DDVEN	33-51261-C2490		CPI 850523	CP-0425	TNE-3200	AC & DC CONN DIAG	RFC
GPI	DDVEN	33-51261-C2491		0 800410	CP-0425	GTN-46840	6.9KV BUS2A4 CUB3 FUT BKR SCH	RFC
GPI	DDVEN	33-51261-C2513		0 800410	CP-0425	GTN-46840	6.9KV BUS2EA1 AC&DC CONTROL SCHEM	RFC
GPI	DDVEN	33-51261-C2554		0 800410	CP-0425	GTN-46840	AC & DC CONTROL SCHEMES	RFC
GPI	DDVEN	33-51261-C482		4 800718	CP-0425	GTN-46840	6.9KV SWGR AC&DC CONTROL SCHEME	RFC
TUS	DDVEN	33-51261-0055		CPI 830224	CP-0425	TNEDG-031	6.9KV SWGR GEN ARRGT BUS XA1	RFC
ITE	DDVEN	33-51261-D1476		1 800410	CP-0425	GTN-46789	AS BUILT	RFC
GPI	DDVEN	33-51261-D1477		2 800410	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1478		4 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1479		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD BUS	RFC
GPI	DDVEN	33-51261-D1480		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1481		1 800410	CP-0425	GTN-29151	INDOOR METAL - CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1482		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1483		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1484		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1485		4 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1486		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1487		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1488		1 800410	CP-0425	GTN-46789	INDOOR METAL - CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1489		2 800410	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1490		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1491		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1492		1 800410	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1493		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1494		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1495		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1496		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1497		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
***	DDVEN	33-51261-D1498		3 820527	CP-0425	GTN-58788	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1499		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1500		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1501		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1502		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1503		2 800410	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1504		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1505		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1506		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1507		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1508		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1509		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1510		2 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1511		2 800410	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1512		2 800410	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1513		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1514		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1515		1 800410	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1516		3 800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1517		3 800623	CP-0425	GTN-46791	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1518		3 800623	CP-0425	GTN-46791	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1519		3 800623	CP-0425	GTN-46791	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1520		3 800623	CP-0425	GTN-46791	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-D1521		3 800623	CP-0425	GTN-46791	INDOOR METAL CLAD SWGR	RFC

ORIG DCT	DSSN	SHEET	REV	ISSUED	PO#	LETTER#	TITLE	APP
GPI	DDVEN	33-51261-01522	3	800623	CP-0425	GTN-46791	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-01523	2	800410	CP-0425	GTN-46791	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-01524	3	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A1 CUB 9	RFC
GPI	DDVEN	33-51261-01525	2	800623	CP-0425	GTN-46791	6.9KV NORMAL BUS 1A1-1A2 AUX RE	RFC
GPI	DDVEN	33-51261-01526	3	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A1 CUB 9	RFC
GPI	DDVEN	33-51261-01527	3	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A1 CUB 1	RFC
GPI	DDVEN	33-51261-01528	2	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A1 CUB 2	RFC
GPI	DDVEN	33-51261-01529	2	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A1 CUB 4	RFC
GPI	DDVEN	33-51261-01530	2	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A1 CUB 6	RFC
GPI	DDVEN	33-51261-01531	3	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A1 CUB 6	RFC
GPI	DDVEN	33-51261-01532	3	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A1 CUB 8	RFC
GPI	DDVEN	33-51261-01533	2	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A1 CUB 9	RFC
GPI	DDVEN	33-51261-01534	4	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A2 CUB 9	RFC
GPI	DDVEN	33-51261-01535	3	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A2 CUB9	RFC
GPI	DDVEN	33-51261-01536	3	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS1A2 CUB 1	RFC
GPI	DDVEN	33-51261-01537	3	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A2 CUB 2	RFC
GPI	DDVEN	33-51261-01538	3	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A2 CUB 4	RFC
GPI	DDVEN	33-51261-01539	4	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A2 CUB 6	RFC
GPI	DDVEN	33-51261-01540	3	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A2 CUB 2	RFC
GPI	DDVEN	33-51261-01541	3	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A2 CUB 8	RFC
GPI	DDVEN	33-51261-01542	2	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A2 CUB 7	RFC
GPI	DDVEN	33-51261-01543	3	800623	CP-0425	GTN-46791	6.9KV SWGR NORMAL BUS 1A1 CUB 3	RFC
ITE	DDVEN	33-51261-01548	0	800410	CP-0425	GTN-33587	6.9KV BUS2A2 CUB1 L/O RLY	AEN
ITE	DDVEN	33-51261-01549	0	800410	CP-0425	GTN-33587	6.9KV BUS2A1&2A2 UV REL SCHEM	AEN
ITE	DDVEN	33-51261-01550	0	800410	CP-0425	GTN-33587	6.9KV BUS 2A2&2A4 UV RELAY	AEN
ITE	DDVEN	33-51261-01551	0	800410	CP-0425	GTN-33587	6.9KV BUS2A1-2-3-4 SYNCK RL	AEN
ITE	DDVEN	33-51261-01552	0	800410	CP-0425	GTN-33587	6.9KV BUS2A2 BKR 2A2-1 SCHEM	AEN
ITE	DDVEN	33-51261-01553	0	800410	CP-0425	GTN-33587	6.9KV BUS2A2 BKR 2A2-2 SCHEM	AEN
ITE	DDVEN	33-51261-01554	0	800410	CP-0425	GTN-33587	6.9KV BUS2A2 XFMP T2B2 BKR	AEN
ITE	DDVEN	33-51261-01555	0	800410	CP-0425	GTN-33587	6.9KV BUS2A2 BKR 2APDP2 BKR	AEN
ITE	DDVEN	33-51261-01556	0	800410	CP-0425	GTN-33587	6.9KV BUS2A2 BKR 2AOPCW2 SCHEM	AEN
ITE	DDVEN	33-51261-01557	0	800410	CP-0425	GTN-33587	6.9KV BUS 2A2 SYN MTR EXCTR	AEN
ITE	DDVEN	33-51261-01558	0	800410	CP-0425	GTN-33587	6.9KV BUS2A2 BKR 2PCPX2 SCHEM	AEN
ITE	DDVEN	33-51261-01559	0	800410	CP-0425	GTN-33587	6.9KV BUS 2A2 MAN DISC SW	AEN
TUS	DDVEN	33-51261-01569	CP1	850513	CP-0425	TNE-3161	6.9KV BUS 2A2 CUB1-9 INTRCONN	RFC
ITE	DDVEN	33-51261-01572	0	800410	CP-0425	GTN-33587	6.9KV BUS2A1 L/O RLY SCHEM	AEN
ITE	DDVEN	33-51261-01573	0	800410	CP-0425	GTN-33587	6.9KV BUS2A1&2A3 UV AUX RLY	AEN
ITE	DDVEN	33-51261-01574	0	800410	CP-0425	GTN-33587	BUS2A1 AUX BKR 2A1-1	002
ITE	DDVEN	33-51261-01575	0	800410	CP-0425	GTN-33587	6.9KV BUS2A1 START-UP BKR	AEN
ITE	DDVEN	33-51261-01576	0	800410	CP-0425	GTN-33587	6.9KV BUS2A1 XFMR T2B1 BKR	AEN
ITE	DDVEN	33-51261-01577	0	800410	CP-0425	GTN-33587	6.9KV BUS2A1 HTR ORN PP BKR	AEN
ITE	DDVEN	33-51261-01578	0	800410	CP-0425	GTN-33587	6.9KV BUS2A1 CIRCWTR BKR SCHE	AEN
ITE	DDVEN	33-51261-01579	0	800410	CP-0425	GTN-33587	6.9KV BUS2A1 SYN MTR EXCITER	AEN
ITE	DDVEN	33-51261-01580	0	800410	CP-0425	GTN-33587	6.9KV BUS2A1 RC BKR 2PCPX1SCM	AEN
ITE	DDVEN	33-51261-01581	0	800410	CP-0425	GTN-33587	6.9KV BUS2A1 MAN DISC SW	AEN
ITE	DDVEN	33-51261-01582	0	800410	CP-0425	GTN-33587	6.9KV CUB7 SP BKR	RFC
TUS	DDVEN	33-51261-01592	CP1	850513	CP-0425	TNE-3161	6.9KV BUS2A1 CUB1-9 INTRCONN	RFC
GPI	DDVEN	33-51261-01594	1	800623	CP-0425	GTN-46791	6.9KV BUS2A3 CUB1L/O RLY SCHEM	RFC
ITE	DDVEN	33-51261-01595	0	800410	CP-0425	GTN-33904	6.9KV BUS2A3 AUX BKR2A3-1 SCH	AEN
ITE	DDVEN	33-51261-01596	0	800410	CP-0425	GTN-33904	6.9KV BUS 2A3 ST-UP BKR2A3-2	AEN
ITE	DDVEN	33-51261-01597	0	800410	CP-0425	GTN-33904	6.9KV BUS 2A3 XFMR T2B3 BKR SCH	AEN
GPI	DDVEN	33-51261-01598	1	800623	CP-0425	GTN-46791	6.9KV BUS2A3 CUNDP21 BKR SCHEM	RFC

ORIG	DCT	DSSN	SHEET	REV	ISSUED	PO#	LETTER#	TITLE	APP
GPI	DDVEN	33-51261-01599		1	800623	CP-0425	GTN-46791	6.9KV BUS 2A3 BKR2APTP1 SCHEM	RFC
GPI	DDVEN	33-51261-02476		1	800623	CP-0425	GTN-46791	6.9KV BUS2A3 CMPP23 BKR SCHEM	RFC
GPI	DDVEN	33-51261-02477		1	800623	CP-0425	GTN-46791	6.9KV BUS2A3 SYN MTR EXC SCHEM	RFC
GPI	DDVEN	33-51261-02478		1	800623	CP-0425	GTN-46791	6.9KV BUS2A3 RCPP23 BKR SCHEM	RFC
GPI	DDVEN	33-51261-02479		1	800623	CP-0425	GTN-46791	6.9KV BUS2A3 AIR COMP 21 BKR SC	RFC
TUS	DDVEN	33-51261-02489		CP1	850513	CP-0425	TNE-3161	6.9KV BUS 2A3 CUB9 INTRCON DIAG	RFC
GPI	DDVEN	33-51261-02492		1	800623	CP-0425	GTN-46791	6.9KV BUS2A4 CUB1 L/O RELY SCH	RFC
GPI	DDVEN	33-51261-02493		1	800623	CP-0425	GTN-46791	6.9KV BUS2A4 AUX BKR 2A4-1 SCHEM	RFC
GPI	DDVEN	33-51261-02494		1	800623	CP-0425	GTN-46791	6.9KV BUS2A4 ST-UP BKR 2A4-2	RFC
GPI	DDVEN	33-51261-02495		1	800623	CP-0425	GTN-46791	6.9KV BUS2A4 XFMR T284 BKR SCHEM	RFC
GPI	DDVEN	33-51261-02496		1	800623	CP-0425	GTN-46791	6.9KV BUS2A4 CPP22 BKR SCHEM	RFC
GPI	DDVEN	33-51261-02497		1	800623	CP-0425	GTN-46791	6.9KV BUS2A4 BKR2APTP2 BKR SCHEM	RFC
GPI	DDVEN	33-51261-02498		1	800623	CP-0425	GTN-46791	6.9KV BUS 2A4 CMPP24 BKR SCHEM	RFC
GPI	DDVEN	33-51261-02499		1	800623	CP-0425	GTN-46791	6.9KV BUS 2A4 SYN MTR EXC SCHEM	RFC
GPI	DDVEN	33-51261-02500		1	800623	CP-0425	GTN-46791	6.9KV BUS2A4 RCPP24 BKR SCHEM	RFC
TUS	DDVEN	33-51261-02503		CP1	850510	CP-0425	TNE-3159	6.9KV BUS2A4 CUB3 FUT BKR SCH	RFC
TUS	DDVEN	33-51261-02511		CP1	850508	CP-0425	TNE-3148	6.9KV BUS 2A4 CUB1-9 INTCON DIAG	RFC
GPI	DDVEN	33-51261-02511		1	800623	CP-0425	GTN-46791	6.9KV BUS 2A163 RCPP21623 AUX RL	RFC
GPI	DDVEN	33-51261-02512		1	800623	CP-0425	GTN-46791	6.9KV BUS2A264 RCPP 22624 AUX RLY	RFC
TUS	DDVEN	33-51261-02515		CP1	850523	CP-0425	TNE-3200	6.9KV 2 EAL CUB 1600 CONN DIAG	RFC
TUS	DDVEN	33-51261-02526		CP2	850509	CP-0425	TNE-3156	INDOOR METAL CLAD SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-02532		1	800410	CP-0425	GTN-46791	6.9KV BUS 2EA1 L/O RLY 86/2EA1	RFC
GPI	DDVEN	33-51261-02533		1	800410	CP-0425	GTN-46791	6.9KV BUS 2EA1 UV AUX RLY SW DVL	RFC
GPI	DDVEN	33-51261-02534		1	800410	CP-0425	GTN-46791	6.9KV BUS 2EA1 UV AUX RLY SCHEM	RFC
GPI	DDVEN	33-51261-02535		1	800410	CP-0425	GTN-46791	6.9KV SWGR BU2EA162 SYN AUX RLY	RFC
GPI	DDVEN	33-51261-02536		1	800410	CP-0425	GTN-46791	6.9 KV BUS 2EA1 TIE BUS2A1 UV RLY	RFC
GPI	DDVEN	33-51261-02537		1	800410	CP-0425	GTN-46791	6.9KV BKR 2EA1-1/XFMR XSTI UVRLY	RFC
GPI	DDVEN	33-51261-02538		2	800623	CP-0425	GTN-46791	6.9KV BUS 2EA1-1 SCHEM	RFC
GPI	DDVEN	33-51261-02539		1	800410	CP-0425	GTN-46791	6.9 KV BUS 2EA1 BKR 2EA1-2 SCHEM	RFC
GPI	DDVEN	33-51261-02540		1	800410	CP-0425	GTN-46791	6.9KV BUS 2EA1 TIE BKR BT2EA1 SC	RFC
GPI	DDVEN	33-51261-02541		1	800410	CP-0425	GTN-46791	6.9KV BUS 2EA1 XFMR T2E81 BKR SC	RFC
GPI	DDVEN	33-51261-02542		1	800410	CP-0425	GTN-46791	6.9KV BUS 2EA1 SFMR T2E83 BKRSCH	RFC
GPI	DDVEN	33-51261-02543		1	800410	CP-0425	GTN-46791	6.9KV BUS 2EA1 GEN BKR2EG1 SCHEM	RFC
GPI	DDVEN	33-51261-02544		1	800410	CP-0425	GTN-46789	6.9KV BUS 2EA1 BKR 2APCC1 SCHEM	RFC
GPI	DDVEN	33-51261-02545		1	800410	CP-0425	GTN-46789	6.9 KV BUS 2EA1 BKR 2APCCI SWDVL P	RFC
GPI	DDVEN	33-51261-02546		0	800410	CP-0425	GTN-46789	6.9KV SWGR SP BKR CUB INT SCHEM	RFC
GPI	DDVEN	33-51261-02550		0	800410	CP-0425	GTN-46789	6.9KV SWGR BUS 2EA2 CUB3 CONN D	RFC
TUS	DDVEN	33-51261-02558		CP1	850425	CP-0425	TNE-3106	6.9KV SWGR BUS2EA2 CYB 14 CONN	RFC
GPI	DDVEN	33-51261-02566		1	800410	CP-0425	GTN-46789	6.9KV BUS 2EA1 BKR 2A9C53 SCHEM	RFC
GPI	DDVEN	33-51261-02567		1	800410	CP-0425	GTN-46789	6.9KV BUS 2EA1 BKR 2APM01 SCHEM	RFC
GPI	DDVEN	33-51261-02568		1	800410	CP-0425	GTN-46789	6.9 KV BUS 2EA1 BKR 2APSW1 SCHEM	RFC
GPI	DDVEN	33-51261-02569		1	800410	CP-0425	GTN-46789	6.9KV BUS 2EA1 BKR 2APST1 SCHEM	RFC
GPI	DDVEN	33-51261-02570		1	800410	CP-0425	GTN-46789	6.9KV BUS 2EA1 BKR 2APRH1 SCHEM	RFC
GPI	DDVEN	33-51261-02571		1	800410	CP-0425	GTN-46789	6.9KV BUS 2EA1 BKR 2APCH1 SCHEM	RFC
GPI	DDVEN	33-51261-02572		1	800410	CP-0425	GTN-46789	6.9KV BUS 2EA1 BKR XCICE3 SCHEM	RFC
GPI	DDVEN	33-51261-02573		1	800410	CP-0425	GTN-46789	6.9KV BUS 2EA1 BKR 2APCS1 SCHEM	RFC
GPI	DDVEN	33-51261-02574		1	800410	CP-0425	GTN-46789	6.9KV BUS 2EA2 L/O RLY 8612EA2	RFC
GPI	DDVEN	33-51261-02575		1	800410	CP-0425	GTN-46789	6.9KV SWGR BUS 2EA2 UV AUX RLYS	RFC
GPI	DDVEN	33-51261-02576		1	800410	CP-0425	GTN-46789	6.9KV SWGR BUS2EA2 UV RLY SWDVP	RFC
GPI	DDVEN	33-51261-02577		1	800410	CP-0425	GTN-46789	6.9KV NOR BUS 2A2 UV AUXRLY	RFC
GPI	DDVEN	33-51261-02578		1	800410	CP-0425	GTN-46789	6.9KV SWGR XFMR XSTI UV AUX RLY	RFC
GPI	DDVEN	33-51261-02579		1	800410	CP-0425	GTN-46789	6.9KV SWGR BUS 2EA2 BKR2EA2 SCH	RFC

ORIG	DCT	DSSN	SHEET	REV	ISSUED	PO#	LETTER#	TITLE	APP
GPI	DDVEN	33-51261-02580		1	800410	CP-0425	GTN-46789	6.9 KV SWGR BUS 2EA2 BKR 2EA2-2SC	RFC
GPI	DDVEN	33-51261-02581		1	800410	CP-0425	GTN-46789	6.9KV BUS 2EA2 BKR BT-2EA2 SCHEM	RFC
ITE	DDVEN	33-51261-02582		1	800410	CP-0425	GTN-46789	6.9KV BUS 2EA2 FDR BKR T2EB2 SCH	RFC
GPI	DDVEN	33-51261-02583		1	800410	CP-0425	GTN-46789	6.9KV SWGR BUS 2EA2 BKR T2EB4SCH	RFC
GPI	DDVEN	33-51261-02584		1	800410	CP-0425	GTN-46789	6.9KV SWGR BUS 2EA2 BKR ZEG2 SCH	RFC
GPI	DDVEN	33-51261-02585		1	800623	CP-0425	GTN-46789	6.9KV SWGR BUS2EA2 CCM PP22 SCH	RFC
GPI	DDVEN	33-51261-02586		1	800414	CP-0425	GTN-46789	6.9KV SWGR BUS 2EA2 CCM PP22 CON	RFC
GPI	DDVEN	33-51261-02587		1	800414	CP-0425	GTN-46789	6.9KV SWGR BUS 2EA2 CSP# 22 SCH	RFC
GPI	DDVEN	33-51261-02588		1	800414	CP-0425	GTN-46789	6.9KV SWGR BUS 2EA2 CSPP 24 SCH	RFC
GPI	DDVEN	33-51261-02589		1	800414	CP-0425	GTN-46789	6.9 KV SWGR BUS 2EA2 AUXFMPP22SCH	RFC
GPI	DDVEN	33-51261-02590		1	800414	CP-0425	GTN-46789	6.9KV BUS 2EA2 STA SW PP22 SCHE	RFC
GPI	DDVEN	33-51261-02591		1	800414	CP-0425	GTN-46789	6.9KV BUS 2EA2 S1 PP 22 SCHEM	RFC
GPI	DDVEN	33-51261-02592		1	800414	CP-0425	GTN-46789	6.9KV SWGR BUS 2EA2 RHR PP22 SCH	RFC
GPI	DDVEN	33-51261-02593		1	800414	CP-0425	GTN-46789	6.9KV SWGR BUS 2EA2 CCHPP22 SCH	RFC
GPI	DDVEN	33-51261-02594		1	800414	CP-0425	GTN-46789	6.9KV SWGR BUS 2EA2 CHLR22 SCH	RFC
GPI	DDVEN	33-51261-0476		0	800623	CP-0425	GTN-46789	6.9KV SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-0478		0	800623	CP-0425	GTN-46789	6.9KV SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-0479		4	800623	CP-0425	GTN-46789	6.9KV SWGR BUS1EA1 SCHEM DIAG	RFC
GPI	DDVEN	33-51261-0480		2	800623	CP-0425	GTN-46789	6.9KV SWGR BUS1EA1 SWITCH DEVELOPS	RFC
TUS	DDVEN	33-51261-0484		CP2	830920	CP-0425	PMGT-108	CONN. DIAG. INDOOR METAL CLAD SW 6R	RFC
TUS	DDVEN	33-51261-0495		CP1	830627	CP-0425	TNEDG-0115	INDOOR METAL CLAD SWGR CONN DIAG	RFC
***	DDVEN	33-51261-0515		3	820427	CP-0425	GTN-56696	6.9KV SWGR BUS XA1 DEVICE INTERNA	001
GPI	DDVEN	33-51261-0518		1	800410	CP-0425	GTN-46789	6.9KV SWGR BUS XA1 CUB 2 CONN DIA	RFC
GPI	DDVEN	33-51261-0519		1	810917	CP-0425	GTN-46789	6.9KV SWGR BUS XA1 CUB 3 CONN DIA	RFC
TUS	DDVEN	33-51261-0521		CP2	850429	CP-0425	TNE-3122	SWGR BUS INTERCONN DIAG	RFC
GPI	DDVEN	33-51261-0522		3	800410	CP-0425	GTN-46789	1KV SWGR SAFEGUARD BUS UNDERVOLI	RFC
ITE	DDVEN	33-51261-0523		4	800410	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR 6.9KV	RFC
GPI	DDVEN	33-51261-0524		4	800623	CP-0425	GTN-46789	6.9KV SWGR UNDERVOLT AUX RELAY	RFC
GPI	DDVEN	33-51261-0538		4	800623	CP-0425	GTN-46789	6.9KV SWGR BUS 1EA1-1	RFC
GPI	DDVEN	33-51261-0539		3	800623	CP-0425	GTN-46789	6.9KV SWGR BUS1EA1 SCHEM DIAG	RFC
TUS	DDVEN	33-51261-0540		CP1	850523	CP-0425	TNE-3200	INT DIAG SWGR NIRM BUS	RFC
TUS	DDVEN	33-51261-0551		CP2	830627	CP-0425	TNEDG-0115	INDOOR METAL CLAD SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-0552		3	800623	CP-0425	GTN-46789	6.9KV SWGR BUS 1EA1 SCHEM DIAG	RFC
GPI	DDVEN	33-51261-0553		3	800623	CP-0425	GTN-46789	6.9KV SWGR BUS1EA1 SCHEM DIAG	RFC
GPI	DDVEN	33-51261-0554		3	800410	CP-0425	GTN-46789	INDOOR METCL SWGR 7.5HK-500 6.90V	RFC
GPI	DDVEN	33-51261-0555		3	800410	CP-0425	GTN-46789	6.9KV SWGR BUS 1EA1 SCHEM DIAG	RFC
GPI	DDVEN	33-51261-0556		5	800623	CP-0425	GTN-46789	6.9KV SWGR BS 1EA1 SCHEM DIAG	RFC
GPI	DDVEN	33-51261-0557		4	800623	CP-0425	GTN-46789	6.9KV SWGR BUS 1EA1 SCHEM DIAG	RFC
GPI	DDVEN	33-51261-0558		2	800623	CP-0425	GTN-46789	6.9KV SWGR BUS 1EA1 CONN DIAG	RFC
GPI	DDVEN	33-51261-0559		4	800623	CP-0425	GTN-46789	AS BUILT	RFC
GPI	DDVEN	33-51261-0568		1	800410	CP-0425	GTN-46789	6.9KV SWGR BUS 1A4 CUB 7 CONN DIAG	RFC
TUS	DDVEN	33-51261-0571		CP2	830627	CP-0425	TNEDG-0115	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-0575		CP1	830627	CP-0425	TNEDG-0115	INDOOR METAL CLAD SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-0584		1	801013	CP-0425	GTN-46789	6.9KV BUS 1EA2 CUB4 CONN DIAG	RFC
GPI	DDVEN	33-51261-0592		4	800623	CP-0425	GTN-46789	6.9KV SWGR BUS 1EA1 SCHEM DIAG	RFC
GPI	DDVEN	33-51261-0593		4	800623	CP-0425	GTN-46789	6.9KV SWGR BUS 1EA1 SCHEM DIAG	RFC
GPI	DDVEN	33-51261-0594		4	800623	CP-0425	GTN-46789	6.9KV SWGR BUS 1EA1 SCHEM DIAG	RFC
GPI	DDVEN	33-51261-0595		4	800623	CP-0425	GTN-46789	6.9KV SWGR BUS 1EA1 SCHEM DIAG	RFC
GPI	DDVEN	33-51261-0596		4	800623	CP-0425	GTN-46789	6.9KV SWGR BUS 1EA1 SCHEM DIAG	RFC
GPI	DDVEN	33-51261-0597		4	800623	CP-0425	GTN-46789	6.9KV SWGR BUS 1EA1 SCHEM DIAG	RFC
GPI	DDVEN	33-51261-0598		3	800410	CP-0425	GTN-46789	6.9KV SWGR BUS 1EA1 SCHEM DIAG	RFC
GPI	DDVEN	33-51261-0599		5	800623	CP-0425	GTN-46789	INDOOR METAL CLAD SWGR 6.9KV	RFC

ORIG DCT	DSSN	SHEET	REV	ISSUED	PO#	LETTER#	TITLE	APP	
TUS	DDVEN	33-51261-E051	001	CP2	830627	CP-0425	TNEDG-0115	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E052		CP2	830627	CP-0425	TNEDG-0115	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E053		CP2	830627	CP-0425	TNEDG-0115	INDOOR METAL CLAD SWGR 7-5 HK-500	RFC
TUS	DDVEN	33-51261-E054		CP2	830627	CP-0425	TNEDG-0115	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E056		CP1	830627	CP-0425	TNEDG-0106	INDOOR METAL CLAD SWGR GENERAL ARR	RFC
TUS	DDVEN	33-51261-E057		CP1	830627	CP-0425	TNEDG-0106	INDOOR METAL CLAD SWGR GENERAL ARR	RFC
TUS	DDVEN	33-51261-E058		CP1	850523	CP-0425	TNE-3200	SWGR NORM BUS GEN ARRGT	RFC
TUS	DDVEN	33-51261-E059		CP1	850523	CP-0425	TNE-3200	6.9KV SWGR GEN ARRGT BUS 2A2	RFC
TUS	DDVEN	33-51261-E060		CP1	850523	CP-0425	TNE-3200	SWGR BUS GEN ARRGT	RFC
TUS	DDVEN	33-51261-E151		CP1	850523	CP-0425	TNE-3200	SWGR BUS GEN ARRGT	RFC
TUS	DDVEN	33-51261-E152		CP2	850523	CP-0425	TNE-3200		RFC
TUS	DDVEN	33-51261-E153		CP3	850523	CP-0425	TNE-3200	SWGR BUS GEN ARRGT	RFC
TUS	DDVEN	33-51261-E1560		CP1	850508	CP-0425	TNE-3148	6.9KV BUS 2A2 CUB1 XFMR2UT BKR	RFC
TUS	DDVEN	33-51261-E1561		CP2	850425	CP-0425	TNE-3106	INDOOR METAL CLAD SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-E1562		0	800414	CP-0425	GTN-46790	6.9KV BUS2A2 CUB3 SW2DSW2	RFC
TUS	DDVEN	33-51261-E1563		CP2	850508	CP-0425	TNE-3148	INTERNL WIRE DIAG	RFC
TUS	DDVEN	33-51261-E1564		CP1	850513	CP-0425	TNE-3161	6.9KV BUS2A2 CUB5 AUX COMPT CONN	RFC
TUS	DDVEN	33-51261-E1565		CP2	850425	CP-0425	TNE-3106	6.9KV BUS2A2 CUB6 HTRDRNPP BK	RFC
GPI	DDVEN	33-51261-E1566		0	800414	CP-0425	GTN-46790	6.9KV BUS2A2 SPACE CONN DIAG	RFC
TUS	DDVEN	33-51261-E1567		CP1	850425	CP-0425	TNE-3106	6.9KV BUS2A2 CUB8 XFMR272 BK	RFC
TUS	DDVEN	33-51261-E1568		CP2	850513	CP-0425	TNE-3161	6.9KV BUS2A2 CUB9 INCOM BKR	RFC
GPI	DDVEN	33-51261-E1570		2	800623	CP-0425	GTN-46840	ELEM DIAG-2 TEST BLOCK CKT	RFC
TUS	DDVEN	33-51261-E1583		CP2	850508	CP-0425	TNE-3148	6.9KV BUS2A1 CUB1 XFBR3UT BKR	RFC
TUS	DDVEN	33-51261-E1584		CP2	850425	CP-0425	TNE-3106	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
GPI	DDVEN	33-51261-E1585		0	800414	CP-0425	GTN-46790	6.9KV BUS2A1 DISC SW2DSW1 CO	RFC
TUS	DDVEN	33-51261-E1586		CP2	850426	CP-0425	TNE-3113	6.9KV BUS 2A1 CUB4 CMPP21 BKR CONN	RFC
TUS	DDVEN	33-51261-E1587		CP2	850724	CP-0425	TNE-3410	6.9KV BUS2A1 CUB5 AUX CONN	RFC
TUS	DDVEN	33-51261-E1588		CP2	850425	CP-0425	TNE-3106	INDOOR MEDAL CONN. DIAG	RFC
TUS	DDVEN	33-51261-E1589		CP2	850425	CP-0425	TNE-3106	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E1590		CP1	850508	CP-0425	TNE-3148	6.9KV BUS2A1 CUB8 XFMR281 BK	RFC
TUS	DDVEN	33-51261-E1591		CP2	850513	CP-0425	TNE-3161	6.9KV BUS2A1 CUB9 XFMRXST2 BK	RFC
TUS	DDVEN	33-51261-E2480		CP2	850508	CP-0425	TNE-3148	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E2481		CP1	850425	CP-0425	TNE-3106	6.9KV BUS2A3 CUB2 SFMR BKR CON	RFC
TUS	DDVEN	33-51261-E2482		CP2	850508	CP-0425	TNE-3148	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E2483		CP2	850508	CP-0425	TNE-3148	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E2484		CP3	850724	CP-0425	TNE-3410	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E2485		CP2	850426	CP-0425	TNE-3113	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E2486		CP2	850508	CP-0425	TNE-3148	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E2487		CP2	850425	CP-0425	TNE-3106	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E2488		CP2	850425	CP-0425	TNE-3106	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E2501		CP2	850508	CP-0425	TNE-3148	6.9KV BUS 2A4 CUB 1 INCOM B C	RFC
TUS	DDVEN	33-51261-E2502		CP1	850513	CP-0425	TNE-3161	6.9KV BUS 2A4 CUB 2 XFMR2B4 BK	RFC
TUS	DDVEN	33-51261-E2504		CP2	850508	CP-0425	TNE-3148	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E2505		CP3	850724	CP-0425	TNE-3410	INDOOR METAL CONN. DOOR.	RFC
TUS	DDVEN	33-51261-E2506		CP2	850425	CP-0425	TNE-3106	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E2507		CP1	850508	CP-0425	TNE-3148	6.9KV BUS 2A4 CUB 7 SPARE B C	RFC
TUS	DDVEN	33-51261-E2508		CP2	850425	CP-0425	TNE-3106	INDOOR METAL CONN. DOOR.	RFC
TUS	DDVEN	33-51261-E2509		CP2	850425	CP-0425	TNE-3106	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E2514		CP1	850523	CP-0425	TNE-3200	INTERNAL W.D.	RFC
TUS	DDVEN	33-51261-E2516		CP2	850423	CP-0425	TNE-3098	6.9KV BUS 2EA1 CUB 15 CONN DIAG	RFC
GPI	DDVEN	33-51261-E2517		1	800414	CP-0425	GTN-46827	6.9KV BUS 2EA1 CUB14 CONN DIAGM	RFC
TUS	DDVEN	33-51261-E2518		CP2	850416	CP-0425	TNE-3079	INDOOR METAL CLAD SWGR CONN DIAG	RFC

ORIG DCT	DSSN	SHEET	REV	ISSUED	PO#	LETTERS	TITLE	APP
TUS	DDVEN	33-51261-E2519	CP1	850508	CP-0425	TNE-3148	6.9KV BUS 2EA1 CUB 12 CONN DIAG	RFC
TUS	DDVEN	33-51261-E2520	CP2	850508	CP-0425	TNE-3148	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E2521	CP1	850425	CP-0425	TNE-3106	6.9KV BUS 2EA1 CUB 10 CONN DIAG	RFC
TUS	DDVEN	33-51261-E2522	CP2	850416	CP-0425	TNE-3079	INDOOR METAL CLAD SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-E2523	0	800414	CP-0425	GTN-46827	6.9KV 2EA1 CUB 8 CONN DIAGRAM	RFC
TUS	DDVEN	33-51261-E2524	CP2	850423	CP-0425	TNE-3098	INDOOR METAL CLAD SWGR GEN ARRGT	RFC
TUS	DDVEN	33-51261-E2525	CP2	850423	CP-0425	TNE-3098	INDOOR METAL CLAD SWGR GEN ARRGT	RFC
GPI	DDVEN	33-51261-E2527	CP1	850423	CP-0425	TNE-3098	6.9 KV BUS 2EA1 CUB4 CONN DIAGRAM	RFC
TUS	DDVEN	33-51261-E2528	CP1	850523	CP-0425	TNE-3200	INTERNAL W.D.	RFC
TUS	DDVEN	33-51261-E2529	CP2	850423	CP-0425	TNE-3098	6.9KV BUS 2EA1 CUB2 CONN DIAGRAM	RFC
TUS	DDVEN	33-51261-E2530	CP1	850423	CP-0425	TNE-3098	6.9KV BUS 2EA1 CUB 1 CONN DIAGRA	RFC
TUS	DDVEN	33-51261-E2531	CP2	850513	CP-0425	TNE-3161	INDOOR METAL CLAD SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-E2547	0	800414	CP-0425	GTN-46827	6.9KV SWGR BUS 2EA2 CUB 6 CONN	RFC
TUS	DDVEN	33-51261-E2548	CP2	850425	CP-0425	TNE-3106	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E2549	CP1	850509	CP-0425	TNE-3156	SWGR BUS 2EA2 CUB 4 CONN	RFC
TUS	DDVEN	33-51261-E2551	CP2	850425	CP-0425	TNE-3106	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E2552	CP1	850509	CP-0425	TNE-3156	6.9KV SWGR BUS 1EA1 CUB 1 CONN	RFC
TUS	DDVEN	33-51261-E2553	CP2	850513	CP-0425	TNE-3163	INDOOR METAL CLAD SWGR INTERCONN DIAG	RFC
TUS	DDVEN	33-51261-E2555	CP2	850423	CP-0425	TNE-3098	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E2556	CP1	850509	CP-0425	TNE-3156	6.9KV SWGR BUS 2EA2 CUB 16 CONN	RFC
TUS	DDVEN	33-51261-E2557	CP2	850509	CP-0425	TNE-3156	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E2559	CP1	850523	CP-0425	TNE-3200	INTERNAL W.D.	RFC
TUS	DDVEN	33-51261-E2560	CP1	850509	CP-0425	TNE-3156	6.9KV SWGR BUS 2EA2 CUB 12 CONN	RFC
GPI	DDVEN	33-51261-E2561	1	800414	CP-0425	GTN-46827	6.9KV SWGR BUS 2EA2 CUB 11 CONN	RFC
TUS	DDVEN	33-51261-E2562	CP1	850423	CP-0425	TNE-3098	6.9KV SWGR BUS 2EA2 CUB 10 CONN	RFC
TUS	DDVEN	33-51261-E2563	CP1	850425	CP-0425	TNE-3106	6.9KV SWGR BUS 2EA2 CUB 9 CONN	RFC
GPI	DDVEN	33-51261-E2564	0	800414	CP-0425	GTN-46829	6.9KV SWGR BUS 2EA2 CUB 8 CONN	RFC
TUS	DDVEN	33-51261-E2565	CP1	850509	CP-0425	TNE-3156	6.9KV SWGR BUS 2EA2 CUB 7 CONN	RFC
GPI	DDVEN	33-51261-E477	800623	CP-0425		GTN-46827	6.9KV SWGR GEN ARR BUS 2A3	RFC
TUS	DDVEN	33-51261-E481	CP1	850523	CP-0425	TNE-3200	SWGR. BUS INT DIAG	RFC
GPI	DDVEN	33-51261-E483	3	820427	CP-0425	GTN-46827	6.9KV SWGR BUS 1EA1 CUB 1 CONN	RFC
TUS	DDVEN	33-51261-E485	CP1	840413	CP-0425	TNE-1463	SFGD BUS 1EA1 CUB 3	RFC
TUS	DDVEN	33-51261-E486	CP1	830627	CP-0425	TNEDG-0115	INDOOR METAL CLAD SWGR GENERAL ARR	RFC
TUS	DDVEN	33-51261-E487	CP2	850129	CP-0425	TNE-2925	6.9KV SWGR BUS 1EA1 CUB 5 CONN	RFC
GPI	DDVEN	33-51261-E488	3	800929	CP-0425	GTN-46827	CONNECTION DIAG	RFC
TUS	DDVEN	33-51261-E489	CP1	840413	CP-0425	TNE-1488	6.9KV SWGR BUS 1EA1 CUB 7 CONN	RFC
GPI	DDVEN	33-51261-E490	3	800929	CP-0425	GTN-46827	6.9KV SWGR BUS 1EA1 CUB 8 CONN	RFC
TUS	DDVEN	33-51261-E491	CP1	840413	CP-0425	TNE-1488	6.9KV SWGR BUS 1EA1 CUB 9 CONN	RFC
GPI	DDVEN	33-51261-E492	3	800929	CP-0425	GTN-46827	6.9KV SWGR BUS 1EA1 CUB 10 CONN	RFC
TUS	DDVEN	33-51261-E493	CP2	840626	CP-0425	TNE-1785	6.9KV SWGR BUS 1EA1 CUB 11 CONN	RFC
TUS	DDVEN	33-51261-E494	CP1	840413	CP-0425	TNE-1488	6.9KV SWGR BUS 1EA1 CUB 12 CONN	RFC
TUS	DDVEN	33-51261-E496	CP2	840718	CP-0425	TNE-1894	INDOOR METAL CAN SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-E497	5	800929	CP-0425	GTN-46827	6.9KV SWGR BUS 1EA1 CUB 15 CONN	RFC
TUS	DDVEN	33-51261-E498	CP2	840716	CP-0425	TNE-1875	6.9KV SWGR BUS 1EA1 CUB 16 CONN	RFC
TUS	DDVEN	33-51261-E499	CP2	840627	CP-0425	TNE-1814	6.9KV SWGR BUS 1EA1 CUB 17 CONN	RFC
TUS	DDVEN	33-51261-E500	CP1	840705	CP-0425	TNE-1838	6.9KV SWGR BUS 1EA1 INTERCONN	RFC
TUS	DDVEN	33-51261-E501	CP2	830928	CP-0425	PMGT-117	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
GPI	DDVEN	33-51261-E502	2	800414	CP-0425	GTN46827	6.9 KV SWGR BUS 1A1 CUB 2 CONN DIAG	RFC
GPI	DDVEN	33-51261-E503	3	800414	CP-0425	GTN-46790	6.9 KV SWGR BUS 1A1 CUB 2 CONN DIAG	RFC
GPI	DDVEN	33-51261-E504	CP1	841207	CP-0425	TNE-2799	6.9 KV SWGR BUS 1A1 CUB 4 CONN DIAG	RFC
GPI	DDVEN	33-51261-E505	4	810715	CP-0425	GTN-46790	6.9KV SWGR BUS 1A1 CUB 5 CONN DIAG	RFC
TUS	DDVEN	33-51261-E506	CP2	830920	CP-0425	RMGT-110	INDOOR METAL CIAD SW 6R CONN DIAG.	RFC

ORIG DCT	DSSN	SHEET	REV	ISSUED	PO#	LETTER#	TITLE	APP
GPI	DDVEN	33-51261-E507	4	800414	CP-0425	GTN-46790	6.9 KV SWGR BUS 1A1 CUB 7 CONN DIAG	RFC
TUS	DDVEN	33-51261-E508	CP1	830920	CP-0425	PMGT-110	INDOOR MEDAL CIAD SW 6R CONN. DIAG.	RFC
GPI	DDVEN	33-51261-E509	3	800414	CP-0425	GTN-46790	6.9 KV SWGR BUS 1A1 CUB 9 CONN DIAG	RFC
TUS	DDVEN	33-51261-E510	CP1	830815	CP-0425	PMGT-0049	INDOOR METAL SWGR INTERCONN DIAG	RFC
GPI	DDVEN	33-51261-E511	2	800414	CP-0425	GTN-46790	6.9 KV SWGR BUS 1A2 CUB 1 CONN DIAG	RFC
GPI	DDVEN	33-51261-E512	2	800414	CP-0425	GTN-46790	6.9KV SWGR BUS 1A2 CUB 2 CONN DIAG	RFC
GPI	DDVEN	33-51261-E513	2	800414	CP-0425	GTN-46790	6.9 KV SWGR BUS 1A2 CUB 3 CONN DIAG	RFC
GPI	DDVEN	33-51261-E514	CP1	841210	CP-0425	TNE-2799	6.9 KV SWGR BUS 1A2 CUB 4 CONN DIAG	RFC
GPI	DDVEN	33-51261-E517	2	800414	CP-0425	GTN-46790	6.9KV SWGR BUS XA1 CUB 1 CONN DIA	RFC
GPI	DDVEN	33-51261-E520	3	820527	CP-0425	GTN-58788	6.9KV SWGR BUS XA1 CUB 4 CONN DIA	RFC
TUS	DDVEN	33-51261-E525	CP1	830815	CP-0425	PMGT-0055	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E526	CP2	830818	CP-0425	PMGT-0053	INDOOR METAL CLAD SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-E527	3	800414	CP-0425	GTN-46790	6.9 KV CONN DIAG	RFC
TUS	DDVEN	33-51261-E528	CP1	830308	CP-0425	TNED-032	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-E529	3	800414	CP-0425	GTN-46790	6.9 KV SWGR BUS 1A2 CUB 9 CONN DIAG	RFC
TUS	DDVEN	33-51261-E530	CP2	830815	CP-0425	PMGT-0049	INDOOR METAL CLAD SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-E532	2	800414	CP-0425	GTN-46790	6.9 KV SWGR BUS 1A1 & 1A2 DEVICE INT	RFC
GPI	DDVEN	33-51261-E533	2	800414	CP-0425	GTN-46790	6.9KV SWGR BUS 1A1 CUB 1-7 REM CON	RFC
GPI	DDVEN	33-51261-E534	0	800414	CP-0425	GTN-46790	6.9SWGR BUS 1A1 CUB 8&9 REM CON	AEN
GPI	DDVEN	33-51261-E535	2	800414	CP-0425	GTN-46790	6.9KV SWGR BUS 1A2 CUB 1-7 REM CON	AEN
GPI	DDVEN	33-51261-E536	0	800414	CP-0425	GTN-46790	6.9KV SWGR BUS 1A2 CUB 8&9 REM CON	AEN
TUS	DDVEN	33-51261-E542	CP2	831121	CP-0425	PMGT-0382	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E543	CP1	830627	CP-0425	TNEDG-0115	INDOOR METAL CLAD SWGR GENERAL ARR	RFC
TUS	DDVEN	33-51261-E544	CP1	830308	CP-0425	TNED-032	INDOOR METAL CLAD SWGR	RFC
TUS	DDVEN	33-51261-E545	CP2	830815	CP-0425	PMGT-0054	INDOOR METAL CLAD SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-E546	2	810612	CP-0425	GTN-29151	6.9KV SWGR BUS 1A3 CUB 5 CONN DIA	RFC
TUS	DDVEN	33-51261-E547	CP2	841207	CP-0425	TNE-2799	INDOOR METAL CLAD SWGR	RFC
TUS	DDVEN	33-51261-E548	CP1	830224	CP-0425	TNEDG-031	INDOOR METAL CLAD SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-E549	1	800414	CP-0425	GTN-46790	6.9KV SWGR BUS 1A3 CUB 8 CONN DIA	RFC
GPI	DDVEN	33-51261-E550	2	800414	CP-0425	GTN-46790	6.9KV SWGR BUS 1A3 CUB 9 CONN DI	RFC
TUS	DDVEN	33-51261-E562	CP1	830505	CP-0425	TNEDG-033	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
TUS	DDVEN	33-51261-E563	CP1	840521	CP-0425	TNE-1648	INDOOR MET CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E564	CP1	830228	CP-0425	TNED-031	6.9KV SWGR BUS 1A4 CUB 3 CONN DIAG	RFC
TUS	DDVEN	33-51261-E565	CP2	840813	CP-0425	PMGT-0382	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E566	CP1	830627	CP-0425	TNEDG-0115	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E567	CP2	841207	CP-0425	TNE-2799	6.9KV SWGR BUS 1A4 CUB 6 CONN DIAG	RFC
GPI	DDVEN	33-51261-E569	1	800414	CP-0425	PMGT-0382	6.9 KV SWGR BUS 1A4 CUB 8 DIAG	RFC
GPI	DDVEN	33-51261-E570	2	800414	CP-0425	PMGT-0382	ELEM DIAG PK-2 TEST BLOCK CKT	RFC
GPI	DDVEN	33-51261-E572	2	800929	CP-0425	GTN-46790	6.9KV SWGR BUS 1EA2 CUB 12 CON DIA	RFC
TUS	DDVEN	33-51261-E573	CP2	850129	CP-0425	TNE-2925	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E574	CP1	830627	CP-0425	TNEDG-0113	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E576	CP1	830627	CP-0425	TNEDG-0113	INDOOR METAL CLAD SWGR CONN DIAG	RFC
GPI	DDVEN	33-51261-E577	2	800929	CP-0425	GTN-46790	INDOOR METAL CLAD SWGR	RFC
TUS	DDVEN	33-51261-E578	CP2	840727	CP-0425	TNE-1964	INDOOR METAL CLAD SWGR INTERCONN DIAG	RFC
TUS	DDVEN	33-51261-E581	CP1	830627	CP-0425	TNEDG-0115	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E582	CP1	831207	CP-0425	PMGT-411	INDOOR METAL CLAD SWGR	RFC
TUS	DDVEN	33-51261-E583	CP1	830509	CP-0425	TNEDG-067	INDOOR METAL CLAD SWGR GEN ARRGT	RFC
TUS	DDVEN	33-51261-E585	CP1	830627	CP-0425	TNEDG-0115	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E586	CP1	830627	CP-0425	TNEDG-0113	INDOOR METAL CLAD SWGR CONN DIAG	RFC
TUS	DDVEN	33-51261-E587	CP1	841008	CP-0425	TNEDG-0115	SFGD BUS 1EA2 CAB 7 UNIT 1	RFC
TUS	DDVEN	33-51261-E588	CP1	830505	CP-0425	TNEDG-033	INDOOR METAL CLAD SWGR GEN ARRANGE	RFC
GPI	DDVEN	33-51261-E589	2	800929	CP-0425	GTN-46827	6.9KV SWGR BUS 1EA2 CUB 9 CONN DIA	RFC

ORIG DCT	DSSN	SHEET	REV	ISSUED	PO#	LETTER#	TITLE	APP	
GPI	DDVEN	33-51261-E590		2	800929	CP-0425	GTN-46827	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	33-51261-E591		2	800929	CP-0425	GTN-46827	6.9KV SWGR BUS 1EAZ CUB 11 CON DIA	RFC
TUS	DDVEN	33-51261-F/M	003	CP1	850522	CP-0425	TNE-3199	BILL OF MATERIAL	RFC
TUS	DDVEN	33-51261-F/M	004	CP1	850522	CP-0425	TNE-3192	BILL OF MATERIAL	RFC
TUS	DDVEN	33-51261-G/N	003	CP1	850522	CP-0425	TNE-3192	BILL OF MATERIAL	RFC
TUS	DDVEN	33-51261-G/N	004	CP1	850522	CP-0425	TNE-3192	BILL OF MATERIAL	RFC
TUS	DDVEN	33-51261-G/N	005	CP1	850522	CP-0425	TNE-3192	BILL OF MATERIAL	RFC
TUS	DDVEN	33-51261-H/J	002	CP1	850522	CP-0425	TNE-3192	BILL OF MATERIAL	RFC
TUS	DDVEN	33-51261-H/J	004	CP1	850522	CP-0425	TNE-3192	BILL OF MATERIAL	RFC
	DDVEN	33-51261-H7-A	002		840611	CP-0425	GTN-29176	6.9KV SWGR GEN ARRGT BUS	RFC
TUS	DDVEN	33-51261-H7-H	003	CP1	850522	CP-0425	TNE-3199	NAME PLATE LEGEND	RFC
TUS	DDVEN	33-51261-H7-J	003	CP1	850522	CP-0425	TNE-3192	NAMEPLATE LIST BUS 2A2	RFC
TUS	DDVEN	33-51261-H7-K	001	CP1	850522	CP-0425	TNE-3199	NAME PLATE LEGEND	RFC
TUS	DDVEN	33-51261-H7-K	002	CP1	850522	CP-0425	TNE-3192	NAMEPLATE INFO BUS 2A3	RFC
TUS	DDVEN	33-51261-H7-K	003	CP1	850522	CP-0425	TNE-3192	NAMEPLATE INFORMATION BUS 2A3	RFC
TUS	DDVEN	33-51261-H7-L	003	CP1	850522	CP-0425	TNE-3192	VAR NAMEPLATE LIST BUS 2A4	RFC
TUS	DDVEN	33-51261-H7-M	001	CP1	850522	CP-0425	TNE-3192	VAR NAMEPLATE DATA	RFC
TUS	DDVEN	33-51261-H7-M	003	CP1	850522	CP-0425	TNE-3199	NAME PLATE LEGEND	RFC
TUS	DDVEN	33-51261-H7-M	004	CP1	850522	CP-0425	TNE-3192	VAR NAMEPLATE DATA	RFC
TUS	DDVEN	33-51261-H7-M	005	CP1	850522	CP-0425	TNE-3199	NAME PLATE LEGEND	RFC
TUS	DDVEN	33-51261-H7-N	001	CP1	850522	CP-0425	TNE-3192	VAR NAMEPLATE DATA	RFC
TUS	DDVEN	33-51261-H7-N	002	CP1	850522	CP-0425	TNE-3199	NAME PLATE LEGEND	RFC
TUS	DDVEN	33-51261-H7-N	004	CP1	850522	CP-0425	TNE-3192	VAR NAMEPLATE DATA	RFC
TUS	DDVEN	33-51261-H7-N	005	CP1	850522	CP-0425	TNE-3199	NAME PLATE LEGEND	RFC
G-H	DDVEN	33-51261-ITEM-A6B	001	8	841026	CP-0425	GTN-29176	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-A6B	002	9	841026	CP-0425	GTN-29176	BILL OF MATERIAL	PRE
TUS	DDVEN	33-51261-ITEM-A6B	003	CP1	850225	CP-0425	TNE-2977	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-A6B	004	8	841026	CP-0425	GTN-29176	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-A6B	005	7	841026	CP-0425	GTN-29176	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-C6D	001	6	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-C6D	002	8	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
TUS	DDVEN	33-51261-ITEM-C6D	003	CP1	850225	CP-0425	TNE-2977	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-C6D	004	4	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-C6D	005	3	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-E	001	6	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-E	002	5	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-E	003	7	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-E	004	1	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-E	005		780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-F6M	001	4	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-F6M	002	5	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-F6M	006	7	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
ITE	DDVEN	33-51261-ITEM-G		5	850530	CP-0425	GTN-46840	NAMEPLATE INFO	RFC
G-H	DDVEN	33-51261-ITEM-G&N	001	4	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-G&N	002	4	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-G&N	006	3	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-H&J	001	4	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-H&J	003	11	780501	CP-0425	GTN-26221	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-H&J	005	5	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-K&L	001	4	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-K&L	003	6	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-K&L	005	5	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE



ORIG DCT	DSSN	SHEET	REV	ISSUED	PO#	LETTER#	TITLE	APP	
G-H	DDVEN	33-51261-ITEM-PQRS	001	2	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-PQRS	002	1	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
G-H	DDVEN	33-51261-ITEM-PQRS	003	1	780720	CP-0425	GTN-24217	BILL OF MATERIAL	PRE
TUS	DDVEN	33-51261-K/L	002		CP1 850522	CP-0425	TNE-3199	NAME PLATE LEGEND	RFC
TUS	DDVEN	33-51261-K/L	004		CP1 850522	CP-0425	TNE-3192	BILL OF MATERIAL	RFC
GPI	DDVEN	54666-B-0401	001	1	810721	CP-0425		ELET BILL OF MATERIAL	PRE
GPI	DDVEN	54666-B-0401	002	1	810721	CP-0425		ELET BILL OF MATERIAL	PRE
GPI	DDVEN	54666-B-0401	003	0	810721	CP-0425		ELET BILL OF MATERIAL	PRE
GPI	DDVEN	54666-B-0401	004	1	810721	CP-0425		ELECT BILL OF MATERIAL	PRE
GPI	DDVEN	54666-B-0401	005	0	810721	CP-0425		ELET BILL OF MATERIAL	PRE
GPI	DDVEN	54666-B-0401	003A	0	810721	CP-0425		ELET BILL OF MATERIAL	PRE
GPI	DDVEN	54666-B-0401	004A	0	810721	CP-0425		ELET BILL OF MATERIAL	PRE
GPI	DDVEN	54666-B-0402	001	0	810721	CP-0425		NAMEPLATE INFORMATION	PRE
GPI	DDVEN	54666-D-0276		4	831121	CP-0425	PMGT 1616	ELEMENTARY & SCHEMATIC DIAGRAM	RFC
***	DDVEN	54666-D-0277		2	820428	CP-0425	GTN-56696	CONNECTION DIAGRAM	RFC
***	DDVEN	54666-D-0278		1	820428	CP-0425	GTN-56696	CONNECTION DIAGRAM	RFC
TUS	DDVEN	55097-E-0276			CP1 830826	CP-0425	PMGT-0057	INDOOR METSL CLAD SWGR WIRE CONN DIAG	RFC
TUS	DDVEN	55097-E-0277			CP1 830826	CP-0425	PMGT-0057	SFGD BUS 1EA2 CUB 5616 CONN DIAG	RFC
GPI	DDVEN	808755	001	5	800623	CP-0425	GTN-46840	9 KV 3 LINE DIAG SFGD BASES	RFC
TUS	DDVEN	808756			CP1 830503	CP-0425	TNED-032	INDOOR METAL CLAD SWGR	RFC
TUS	DDVEN	808757	002		CP1 830308	CP-0425	TNED-032	INDOOR METAL CLAD SWGR	RFC
GPI	DDVEN	808758		4	800623	CP-0425	GTN-46840	THREE LINE DIAG	RFC
GPI	DDVEN	808759		1	800623	CP-0425	GTN-46840	NORM BUS 2A163 THREE LN DIAG	RFC
GPI	DDVEN	808760		1	800623	CP-0425	GTN-46840	NORM BUS 2A264 THRE LINE DIAG	RFC
GPI	DDVEN	808761		2	800623	CP-0425	GTN-46840	SFGD BUS 2EA1	RFC
GPI	DDVEN	808762		2	800623	CP-0425	GTN-46840	THREE LINE DIA SFGD BUS	RFC
ITE	DDVEN	819648			800414	CP-0425	GTN-14104	NAMEPLATE	PRE
ITE	DDVEN	819946		0	800414	CP-0425	GTN-08951	LV, 5HK & 15HK W/1 OR 2 CUTOFF SW'S	PRE
ITE	DDVEN	823735		24	800414	CP-0425	GTN-24205	SWGR SPOTWELP	PRE
ITE	DDVEN	824608	012	6	800414	CP-0425	GTN-14104	TEST STA & JACK DWG INDEX	PRE
ITE	DDVEN	824638		0	800414	CP-0425	GTN-08951	SWGR DIAG LEGEND & ONE LINE SYMBOL	PRE
ITE	DDVEN	836864			831121	CP-0425	PMGT-0305	FRM & REAR DOOR ASSY OUTDOOR ENCLOSURE	RFC
***	DDVEN	837695		1	810226	CP-0425	GTN-51700	SWITCHGEAR DIAGRAM LEGEND	PRE
***	DDVEN	838515		1	810226	CP-0425	GTN-51700	MANUFACTURER & EQUIPMENT CODE	PRE
ITE	DDVEN	870159		4	800414	CP-0425	GTN-14104	TEST STATION WIRING DIAG	PRE
ITE	DDVEN	870160	001	4	800414	CP-0425	GTN-08951	TEST STA & JACK (7.5HK BKR) WIRING	AEM
ITE	DDVEN	9930853	001	1	800414	CP-0425	GTN-41153	SCHEMATIC DIAG 345 KV SF 6 GAS BREAKER	RFC
HUB	DDVEN	8-68142			800410	CP-0425	GTN-10078	GROUNDING RESISTOR OUTLINE	RFC
ITE	DDVEN	H7-A	001	6	790201	CP-0425	GTN-29176	NAME PLATE INFORMATION	RFC
ITE	DDVEN	H7-A	002	3	790201	CP-0425	GTN-29176	NAME PLATE INFORMATION	RFC
ITE	DDVEN	H7-A	003	5	790201	CP-0425	GTN-29176	NAME PLATE INFORMATION	RFC
ITE	DDVEN	H7-B	001	6	790201	CP-0425	GTN-29176	NAMEPLATE INFORMATION	RFC
ITE	DDVEN	H7-B	002	3	830630	CP-0425	GTN-29176	NAME PLATE INFORMATION	RFC
ITE	DDVEN	H7-B	003	4	790201	CP-0425	GTN-29176	NAME PLATE INFORMATION	RFC
ITE	DDVEN	H7-C	001	3	790201	CP-0425	GTN-24217	NAMEPLATE LIST BUS 1A3	RFC
ITE	DDVEN	H7-C	002	2	830630	CP-0425	GTN-24217	NAMEPLATE LIST BUS 1A3	RFC
ITE	DDVEN	H7-C	003	5	841026	CP-0425	GTN-24217	NAMEPLATE INFORMATION BUS 1A3	AEM
ITE	DDVEN	H7-D	001	3	790201	CP-0425	GTN-24217	NAMEPLATE LIST BUS 1A4	RFC
ITE	DDVEN	H7-D	002	2	830630	CP-0425	GTN-24217	NAMEPLATE LIST BUS 1A4	RFC
ITE	DDVEN	H7-D	003	5	780317	CP-0425	GTN-24217	NAMEPLATE INFORMATION BUS 1A4	AEM
ITE	DDVEN	H7-E	001	5	790629	CP-0425	GTN-24217	NAMEPLATE LIST BUS XAL	AEM
ITE	DDVEN	H7-F	001	5	830630	CP-0425	GTN-26221	VAR NAMEPLATE DATA	RFC

ORIG	DCT	DSSN	SHEET	REV	ISSUED	PO#	LETTER#	TITLE	APP
ITE	DDVEN	H7-F	002	6	790201	CP-0425	GTN-24217	NAMEPLATE INFO BUS 1EA1	RFC
ITE	DDVEN	H7-F	003	8	790620	CP-0425	GTN-26221	VAR NAMEPLATE DATA	RFC
ITE	DDVEN	H7-F	004	2	790620	CP-0425	GTN-26221	VAR NAMEPLATE DATA	RFC
ITE	DDVEN	H7-F	005	1	790620	CP-0425	GTN-26221	VAR NAMEPLATE DATA	RFC
ITE	DDVEN	H7-G	001	4	790620	CP-0425	GTN-26221	VAR NAMEPLATE DATA	RFC
ITE	DDVEN	H7-G	002	5	790201	CP-0425	GTN-24217	NAMEPLATE INFO BUS 1EA2	RFC
ITE	DDVEN	H7-G	003	6	820916	CP-0425	GTN-26221	NAMEPLATE DATA	RFC
ITE	DDVEN	H7-G	004	2	830701	CP-0425	GTN-26221	NAMEPLATE INFO BUS 1EA2	RFC
ITE	DDVEN	H7-G	005	1	790620	CP-0425	GTN-26221	VAR NAMEPLATE DATA	RFC
ITE	DDVEN	H7-H	001	6	790620	CP-0425	GTN-24930	BILL OF MATERIAL	AEN
ITE	DDVEN	H7-H	002	2	790201	CP-0425	GTN-24217	NAMEPLATE LIST BUS 2A1	RFC
ITE	DDVEN	H7-J	001	6	790620	CP-0425	GTN-24930	H7-J SHEET 1 OF 2	AEN
ITE	DDVEN	H7-J	002	2	790201	CP-0425	GTN-24217	NAMEPLATE LIST BUS 2A2	RFC
ITE	DDVEN	H7-L	001	6	790201	CP-0425	GTN-24217	NAMEPLATE INFO BUS 2A4	RFC
ITE	DDVEN	H7-L	002	4	790620	CP-0425	GTN-26767	VAR NAMEPLATE LIST BUS 2A4	RFC
ITE	DDVEN	H7-M	002	5	790201	CP-0425	GTN-24217	NAMEPLATE INFO BUS 2EA1	RFC
ITE	DDVEN	H7-N	003	6	790620	CP-0425	GTN-26221	VAR NAMEPLATE DATA	RFC
ITE	DDVEN	H7-P	001	1	850123	CP-0425	GTN-24217	9KV SWGR NAMEPLATE INFO.	PRE
ITE	DDVEN	H7-R	001	1	790620	CP-0425	GTN-26439	9KV SWGR NAMEPLATE	AEN
HUB	DDVEN	R-19010			800414	CP-0425	GTN-10078	GROUNDING RESISTOR	RFC
ITE	DDVEN	S-16616		2	790816	CP-0425	GTN-08951	GROUND & TEST DEVICE OUTLINE DWG	PRE
TUS	DDVEN	TNE-33-51261-E2528	001	CP1	850620	CP-0425	TNE-3330	6.9 SWGR CUB 3 IWD	RFC
TUS	DDVEN	TNE-33-51261-E2559	001	CP1	850620	CP-0425	TNE-3330	6.9 SWGR AUX COMPT IWD	RFC
TUS	DDVEN	TNE-33-51261-F/M	007	CP1	850522	CP-0425	TNE-3199	BILL OF MATERIAL	RFC
TUS	DDVEN	TNE-33-51261-G/M	007	CP1	850522	CP-0425	TNE-3192	SWGR BUS BILL MATERIAL	RFC
TUS	DDVEN	TNE-33-51261-H/J	006	CP1	850522	CP-0425	TNE-3192	BILL OF MATERIAL	RFC
TUS	DDVEN	TNE-33-51261-K/L	006	CP1	850522	CP-0425	TNE-3199	BILL OF MATERIAL	RFC
ITE	TMOMR	CP-0425-001			800929	CP-0425	TUS-01597	INSTRUCTIONS AND MAINTENANCE MANUAL FOR	RFC
MEC	DDVEN	1442F01		3	800123	CP-0430	GTN-26766	480V SWGR BUS 1B1 & 1B3 ONE LINE	AEN
MEC	DDVEN	1442F02		3	800915	CP-0430	GTN-26766	480V SWGR BUS 1B2 & 1B4 ONE LINE	AEN
MEC	DDVEN	1442F03		7	810818	CP-0430	GTN-53967	480V SWGR INTERNAL SCHEMATIC DIA	RFC
MEC	DDVEN	1442F04		10	810818	CP-0430	GTN-53967	480V SWGR ENG REFERENCE HEATERS	RFC
MEC	DDVEN	1442F05		7	800915	CP-0430	GTN-46384	480V SWGR BUS 1B1 CONN DIAG UNIT 1	RFC
MEC	DDVEN	1442F06		8	800915	CP-0430	GTN-46384	480V SWGR BUS 1B1 CONN DIAG UNIT 2	RFC
MEC	DDVEN	1442F07		5	800915	CP-0430	GTN-27443	480V SWGR BUS 1B1 CONN DIA UNIT 3	RFC
MEC	DDVEN	1442F08		5	800915	CP-0430	GTN-27443	480V SWGR BUS 1B1 CONN DIA UNIT 4	RFC
MEC	DDVEN	1442F09		7	810818	CP-0430	GTN-53967	480V SWGR BUS 1B1 CONN DIA UNIT 5	RFC
MEC	DDVEN	1442F10		5	800915	CP-0430	GTN-27443	SWGR BUS 1B3 CONN DIA UNIT 6	RFC
MEC	DDVEN	1442F11		5	800915	CP-0430	GTN-27443	480V SWGR BUS 1B3 CONN DIA UNIT 7	RFC
MEC	DDVEN	1442F12		5	800915	CP-0430	GTN-27443	480V SWGR BUS 1B3 CONN DIA UNIT 3	RFC
MEC	DDVEN	1442F13		5	800915	CP-0430	GTN-27443	480V SWGR BUS 1B3 CONN DIA UNIT 9	RFC
MEC	DDVEN	1442F14		5	800915	CP-0430	GTN-27443	480V SWGR BUS 1B3 CONN DIA UNIT 10	RFC
MEC	DDVEN	1442F15		9	810818	CP-0430	GTN-53967	480V SWGR BUS 1B3 CONN DIA UNIT 11	RFC
MEC	DDVEN	1442F16		7	800915	CP-0430	GTN-46384	480V SWGR BUS 1B3 CONN DIA UNIT 12	RFC
MEC	DDVEN	1442F17		7	800915	CP-0430	GTN-46384	480V SWGR BUS 1B2 CONN DIAG UNIT 1	RFC
MEC	DDVEN	1442F18		7	800915	CP-0430	GTN-27443	480V SWGR BUS 1B2 CONN DIA UNIT 2	RFC
MEC	DDVEN	1442F19		5	800915	CP-0430	GTN-27443	480V SWGR BUS 1B2 CONN DIA UNIT 3	RFC
MEC	DDVEN	1442F20		5	800915	CP-0430	GTN-27443	480V SWGR BUS 1B2 CONN DIA UNIT 4	RFC
MEC	DDVEN	1442F21		7	810818	CP-0430	GTN-53967	480V SWGR BUS 1B2 CONN DIA UNIT 5	RFC
MEC	DDVEN	1442F22		5	800915	CP-0430	GTN-27443	SWGR BUS 1B2 CONN DIA UNIT 6	RFC
MEC	DDVEN	1442F23		7	810818	CP-0430	GTN-53967	480V SWGR BUS 1B4 CONN DIA UNIT 7	RFC
MEC	DDVEN	1442F24		5	800915	CP-0430	GTN-27443	480V SWGR BUS 1B4 CONN DIA UNIT 8	RFC