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February 22, 1977

Dr. J. Venn Leeds, Jr.
10807 Atwell
Houston, Texas

Dr. Emmeth A. Luebke
Atomic Safety & Licensing
Board Panel
U.S. Nuclear Regulatory
Commission
Washington D. C. 20555

Frederic J. Coufal, Esq., Chairman
Atomic Safety & Licensing
Board Panel
U.S. Nuclear Regulatory Commission
Washington D. C. 20555

RE: Midland Proceeding

Gentlemen:

Pursuant to this Board's rulings at Transcript 4333-4338 and 4348-4349, regarding Consumers Power Company's proprietary claims on internally estimated costs of the components of the nuclear fuel cycle, I am attaching an Affidavit of Charles E. Bayless. That Affidavit identifies each of the documents which Consumers Power claims to be proprietary, their interrelationship, and the justification for the proprietary claim.

Based on this Affidavit, and the argument of counsel for Consumers Power at Transcript 3171, 3175-3182, 3185-3187, 3190-3192, 3338-3339, 3457-3464, 3852-3853, 3953-3963, 3967-3977, 4338-4342 and 4349-4351, Consumers Power respectfully requests that the documents identified in the Affidavit be held as proprietary and released to the parties under an appropriate protective order. Should this Board determine that in its view the documents are not proprietary, Consumers Power would again, for the same reasons as set forth at Transcript 4338-4342, request that such a ruling be certified directly to the Appeal Board.

Respectfully submitted,

R. Rex Renfrow, III

RRR/rf
Enclosure w/held per Lieberman
cc: Service List (w/Encls.)

do not release enclosures to PDR

8006060 636

RELATED CORR.

AFFIDAVIT OF CHARLES E. BAYLESS

I, Charles E. Bayless, being first duly sworn on oath, depose and state that:

1. I am Director of Nuclear Fuel Supply for Consumers Power Company.

2. I received a Bachelor of Science degree in electrical engineering from West Virginia Institute of Technology in 1968, a Master of Science degree in electrical engineering from West Virginia University in 1971, a law degree (J.D.) from West Virginia University in 1972 and expect to receive my M.B.A. degree from the University of Michigan in December, 1977. During my work towards my Masters degree I took courses in nuclear engineering. I joined the legal department of Consumers Power Company on June 19, 1972, where my practice included nuclear and finance related matters and became the Director of Nuclear Fuel Supply on November 1, 1976. In this position, I am responsible for securing, at the minimum obtainable cost, an adequate and timely supply of nuclear fuel for the Company's nuclear plants.

3. In order to calculate the costs and schedules of the various components of the nuclear fuel cycle, Consumers Power Company utilizes the Nuclear Materials Management Computer Program (NM^2 Document No. FC-019). When this document was given to the Board, the identifying number was not copied. However it can be identified by the fact that it consists of

717 numbered pages, the first of which is attached hereto as Exhibit A. This program has as input data the projected cost of each of the components of the nuclear fuel cycle by year, initial and discharge physics, conversion losses, fabrication losses, lead times for scheduling the various components, etc. From these inputs the program calculates the cost and schedules by year and batch of each of the components of the nuclear fuel cycle. The NM^2 program was written and developed by Consumers Power personnel, and is held in confidence by the Company and its agents, Nuclear Assurance Corporation (NAC) of Atlanta, Georgia, which has been retained to market this program to the utility industry in a modified form. It is expected that the first sale of NM^2 will be consummated within the next two months. The price of such sale is expected to be $50,000. If NM^2 were released to the public, Consumers Power Company would lose the potential revenue from this sale and future sales. NAC estimates that a total of about four such sales can be made in 1977.

4. The output of NM^2 (Document Nos. FC-001 through and including FC-018) is used for budgeting purposes, material acquisition schedules and as the data base for estimates of future Consumers Power Company nuclear fuel costs. This output contains Consumers Power Company's projections of the fair market value for each of the components of the nuclear fuel cycle by year and batch through the year 2005. Since Consumers Power Company contracts for the various components of the nuclear fuel

cycle by negotiating terms and prices with various suppliers, it believes that releasing this type of data in today's market to the general public would be detrimental to the Company and its ratepayers. This belief is based on the fact that, except for conversion, a sellers' market currently exists with respect to the various components of the nuclear fuel cycle. In such a market, if Consumers Power Company's projected estimates of the fair market value of the components were released to the public, it would be extremely difficult for Consumers Power Company to negotiate a price lower than that which a seller knew had been projected as the Company's estimate of fair market value. Although the measure of damages is impossible to precisely determine, it would be the difference between the price paid the suppliers if the suppliers had access to this data and the lower price which could be negotiated with such suppliers if the suppliers did not have access to such data. The output of NM^2 is held in confidence by Consumers Power Company.

5. The output of NM^2 is also used as the data base for Consumers Power Company's Nuclear Fuel Cycle program (CONFUCY Document No. FC30-025). The CONFUCY program calculates fuel cycle costs for future nuclear units such as Midland. The CONFUCY Program is not claimed to be proprietary by Consumers Power Company, and is released by attaching the Program to this Affidavit as Exhibit B. However, the output of CONFUCY contains the same type of projected fair market values for the

components of the nuclear fuel cycle as the output of NM^2. In order to calculate the projected nuclear fuel costs for Midland 1 and 2, seven runs of the CONFUCY Program were made. The outputs of these runs are contained in Document Nos. FC30-018, FC30-019, FC30-020, FC30-021, FC30-023, FC30-024 and FC30-026. In addition, the unnumbered attachment of 7 pages, which was identified at Transcript 3852 as the input for calculations set forth in Document No. 130-A001, are pages taken from the CONFUCY outputs listed above. Document No. FC30-010 contains the same type of projected fair market values for components of the nuclear fuel cycle and is based on the output of NM^2. Therefore, the release to the public of the documents listed in this paragraph, except for the CONFUCY Program, would be detrimental to Consumers Power Company for the reasons set forth in paragraph 4 above. The output of CONFUCY is held in confidence by Consumers Power Company.

6. The output of NM^2 is also used as the data base for Consumers Power Company's Q & D computer program. This Program calculates the nuclear fuel cycle costs for Consumers Power Company's operating nuclear units such as Palisades. The Q & D Program is not claimed to be proprietary by Consumers Power Company, and has already been released to the parties. However, the output of Q & D contains the same type of projected fair market values of the components of the nuclear fuel cycle as does the output of NM^2. In order to calculate the differential power costs for this proceeding, it was

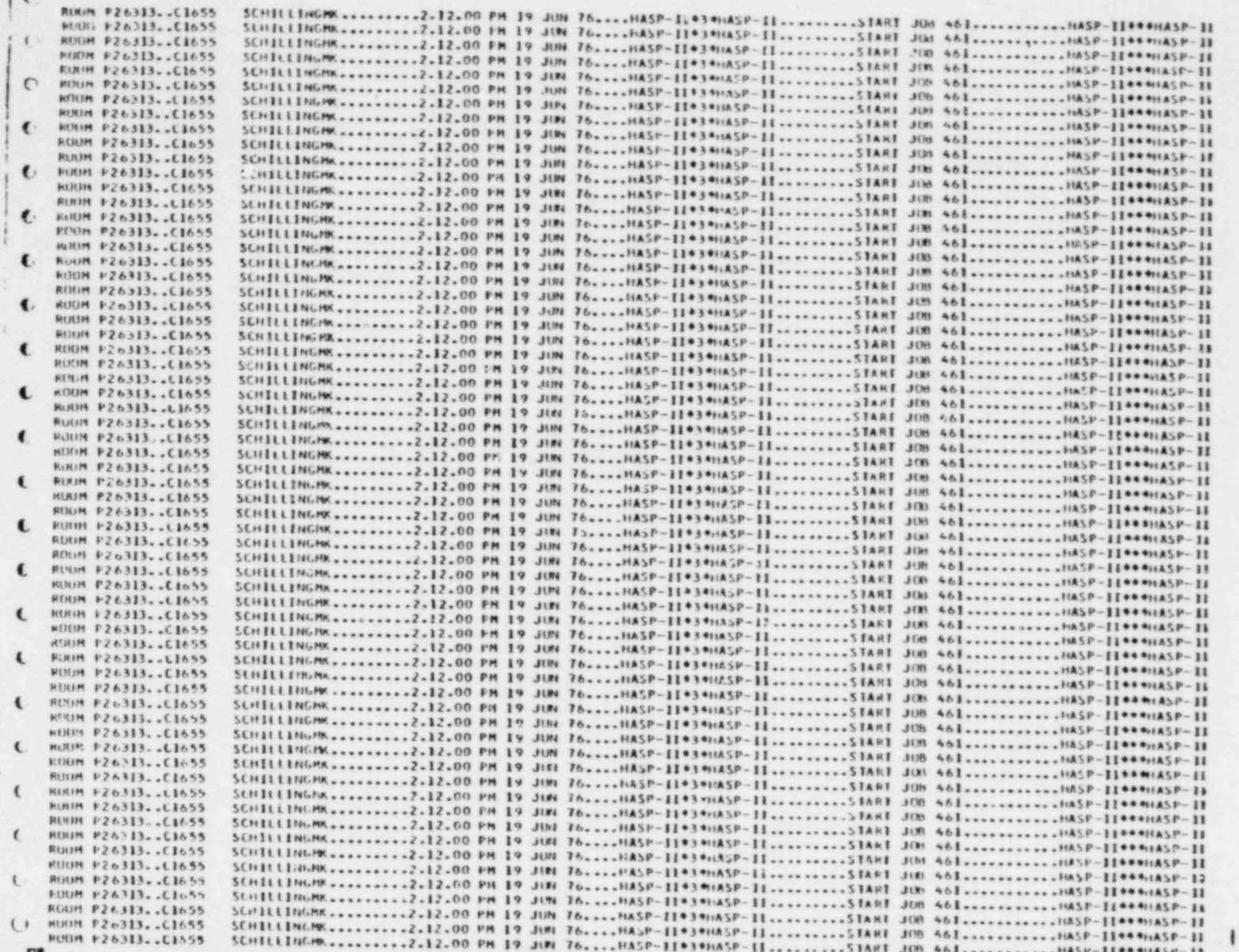
necessary to calculate, using the Q & D Program, the nuclear fuel costs for Palisades using different sets of assumptions. The output of these runs are set forth in Doc. Nos. FC30-014, FC30-015, FC30-016 and FC30-017. Since these documents contain the same type of projected fair market values for components of the nuclear fuel cycle as does the output of NM^2, the release of these documents to the public would be detrimental to Consumers Power Company for the same reasons as set forth in paragraph 4 above. The output of Q & D is held in confidence by Consumers Power Company.

Dated this 18th day of February, 1977.

Charles E. Bayless
Director of Nuclear Fuel Supply
Consumers Power Company

Subscribed and sworn to
before me this 18 day
of February, 1977.

Notary Public


ROOM P26313..C1655 SCHILLINGMK.....2.12.00 PM 19 JUN 76....HASP-II*3*HASP-II.....START JOB 461.....HASP-II***HASP-II

FC30-025

Exhibit B

HASP JOB LOG

```
$20.36.44 JOB   93 -- C9130    -- BEGINNING EXEC - INIT A - CLASS P
 20.36.58 JOB   93 START  4911197  WALKEPWA              77.034  20.36.59   C9130
 20.47.39 JOB   93 END    4911197  SYSTEM 158-01         77.034  20.47.38   C9130
$20.47.39 JOB   93 END EXECUTION.

---- HASP-II JOB STATISTICS ----

      95 CARDS READ

   4,005 SYSOUT PRINT RECORDS

       0 SYSOUT PUNCH RECORDS

   10.93 MINUTES EXECUTION TIME
```

```
//C9130    JOB (9130,          9130              9130                    JOB   93
// 4911187,C,0014.P,*24305.20,20.31,WALKERWA,CLASS=E,TIME=3
//STP1 EXEC PANM1
//SYSIN     DD *                    GENERATED STATEMENT
EXC2351 ************ ALLOCATION FOR C9130   .STP1     .STP1     ************** (STEP 001) *******  EXECUTOR V  V2 L2
    001     PANCNT       242     3675  DISK      CP.PANCNT
    002     PAND01       147     3675  DISK      CP.SOURCE
    003     PAND02       123     3675  DISK      SYS77034.T203646.RV353.C9130.WORK
    004     SYSUDUMP     D41     1403  PRT       SYS77034.T203646.RV353.C9130.R0000001
    005     SYSPRINT     D42     1403  PRT       SYS77034.T203646.RV353.C9130.R0000002
    006     SYSPUNCH     166     3675  DISK      SYS77034.T203646.RV353.C9130.PUNCH
    007     SYSIN        D01     2540  RDR       SYS77034.T203646.RV353.C9130.R0000003
//STP2 EXEC FORTHCL,REGION=214K
//FORT.SYSIN DD DSN=&&WORK,DISP=(OLD,DELETE)
EXC2351 ************ ALLOCATION FOR C9130   .FORT     .STP2     ************** (STEP 002) *******  EXECUTOR V  V2 L2
    001     SYSLIN       142     3675  DISK      SYS77034.T203646.RV353.C9130.LOADSET
    002     SYSPRINT     D41     1403  PRT       SYS77034.T203646.RV353.C9130.R0000004
    003     SYSPUNCH    DUMMY                    NULLFILE
    004     SYSIN        133     3675  DISK      SYS77034.T203646.RV353.C9130.WORK
//LKED.SYSLMOD DD DSNAME=CP.TEST.LOAD(P491187),DISP=SHR
EXC2361 ************ ALLOCATION FOR C9130   .LKED     .STP2     ************** (STEP 003) *******  EXECUTOR V  V2 L2
    001     SYSLIB       130     3675  DISK      SYS1.FORTLIB
    002                  130     3675  DISK      SYS1.SUBLIB
    003     SYSLIN       142     3675  DISK      SYS77034.T203646.RV353.C9130.LOADSET
    004                 DUMMY                    NULLFILE
    005     SYSLMOD      152     3675  DISK      CP.TEST.LOAD
    006     SYSPRINT     D61     1403  PRT       SYS77034.T203646.RV353.C9130.R0000005
    007     SYSUT1       155     3675  DISK      SYS77034.T203646.RV353.C9130.&TMP0001
//  EXEC PGM=P491187,REGION=316K
//STEPLIB  DD  DSN=CP.TEST.LOAD,DISP=SHR
//SYSUDUMP DD SYSOUT=A
//FT03F001 DD SYSOUT=A,
//            DCB=(RECFM=FA,BLKSIZE=133)
//FT01F001 DD *
EXC2361 ************ ALLOCATION FOR C9130   .          .         ************** (STEP 004) *******  EXECUTOR V  V2 L2
    001     STEPLIB      142     3675  DISK      CP.TEST.LOAD
    002     SYSUDUMP     DA1     1403  PRT       SYS77034.T203646.RV353.C9130.R0000006
    003     FT03F001     D42     1403  PRT       SYS77034.T203646.RV353.C9130.R0000007
    004     FT01F001     D01     2540  RDR       SYS77034.T203646.RV353.C9130.R0000004
* THE EXECUTOR (TM) HIGH SPEED JOB PROCESSOR IS A PROPRIETARY PRODUCT OF THE ALLEN SERVICES CORPORATION.


--001-- MESSAGES FOR STEP STI      .STP1
EXC1561 STEP ATTACHED AT 20.35.59
EXC4561 C9130   .STI     .STP1     CCODE 000C0  TIME 20.38.01
EXC2351 PANCNT           4 CP.PANCNT                                    KEPT                CPSYSS.
EXC2351 PAND01          59 CP.SOURCE                                    KEPT                CPSYSJ.
EXC2351 PAND02         125 SYS77034.T203646.RV353.C9130.WORK           PASSED              E76AC1.
EXC2351 SYSUDUMP         0 SYS77034.T203646.RV353.C9130.R0000001       DELETED
EXC2351 SYSPRINT        14 SYS77034.T203646.RV353.C9130.R0000002       DELETED
EXC2351 SYSPUNCH         0 SYS77034.T203646.RV353.C9130.PUNCH          PASSED              E76A02.
EXC2351 SYSIN            7 SYS77034.T203646.RV353.C9130.R0000003       DELETED
EXC3741 STEP STI      /  77.034  20.36.59 - 20.38.02/  CPU      2.80 SEC/  SIOR     112K VIRT
***     EXCP COUNT
***              4
***             59
***            125
***              0
***             14
***              0
***              7
***     40% CPU
```

J2

```
--002-- MESSAGES FOR STEP FORT     .STP2
EXC185I STEP ATTACHED AT 20.39.02
EXC450I C9130   .FORT     .STP2      CCODE 00000  TIME 20.45.27
EXC295I SYSLIN          1667 SYS77034.T203646.RV353.C9130.LOADSET          PASSED              CPSYSL.
EXC295I SYSPRINT        3241 SYS77034.T203646.RV353.C9130.R0000004         DELETED
EXC295I SYSPUNCH           0 NULLFILE                                      DELETED
EXC295I SYSIN            126 SYS77034.T203646.RV353.C9130.WORK             DELETED             E76A01.
EXC374I STEP FORT     /  77.034  20.39.02 - 20.45.27/  CPU     27.85 SEC/  STOR    256K VIRT
***     EXCP COUNT
***           1,667
***           3,241
***           DUMMY
***             126
***     37% CPU

--003-- MESSAGES FOR STEP LKED     .STP2
EXC185I STEP ATTACHED AT 20.45.29
EXC450I C9130   .LKED     .STP2      CCODE 00000  TIME 20.47.09
EXC295I SYSLIB          121 SYS1.FORTLIB                                                KEPT                CPSYSL.
EXC295I                   0 SYS1.SUBLIB                                                 KEPT                CPSYSL.
EXC295I SYSLIN         1668 SYS77034.T203646.RV353.C9130.LOADSET                        DELETED             CPSYSL.
EXC295I                   0 NULLFILE                                                    KEPT
EXC295I SYSLMOD          76 CP.TEST.LOAD                                                KEPT                CPSYSL.
EXC295I SYSPRINT         54 SYS77034.T203646.RV353.C9130.R0000005                       DELETED
EXC295I SYSUT1          123 SYS77034.T203646.RV353.C9130.*IMP0001                       DELETED             E76A02.
EXC374I STEP LKED     /  77.034  20.45.27 - 20.47.09/  CPU      3.09 SEC/  STOR    124K VIRT
REGION7$REGION7$REGION7$REGION7$REGION7&REGION7$REGION7$REGION7$  AAA
***     EXCP COUNT
***           121
***             0
***         1,668
***         DUMMY
***            75
***            64
***           123
***     6% CPU

--004-- MESSAGES FOR STEP
EXC185I STEP ATTACHED AT 20.47.11
EXC450I C9130   .         .        CCODE 00000  TIME 20.47.38
EXC295I SYSLIB            0 CP.TEST.LOAD
EXC295I SYSUDUMP          0 SYS77034.T203646.RV353.C9130.R0000006                KEPT                CPSYSL.
EXC295I FT03F001        565 SYS77034.T203646.RV353.C9130.R0000007                DELETED
EXC295I FT01F001         78 SYS77034.T203646.RV353.C9130.R0000009                DELETED
EXC374I STEP          /  77.034  20.47.09 - 20.47.38/  CPU      2.97 SEC/  STOR    284K VIRT
***     EXCP COUNT
***             0
***             0
***           565
***            78
***     6% CPU
EXC285I PASSED STEP 001     SYS77034.T203646.RV353.C9130.PUNCH                     DELETED             E76A02.
EXC375I JOB  C9130   /  77.034  20.38.59 - 20.47.38/  CPU     36.71 SEC
***  RUN ON MOD 158-01
```

JR

PANVALET
THE PROGRAM MANAGEMENT AND SECURITY SYSTEM


```
++UPDATE 9491187PLS,91
++C 1804,1804
      BGIN =(1.0 - RATIN(1,1))/365.                    01804      ***DELETED***
++C 1805
      BGIN = (1.0 - RATIN(1,1))*365.
    1991 STATEMENT(S)     16 BLOCK(S)    32.19 AVERAGE BYTES   LEVEL  92
***** ABOVE ACTION SATISFACTORILY COMPLETED *****

++WRITE WORK,9491187PLS
***** ABOVE ACTION SATISFACTORILY COMPLETED *****
```

```
LEVEL 21.7 ( JAN 73 )                    OS/360  FORTRAN H                    DATE  77.034/20.38.07

          COMPILER OPTIONS - NAME=  MAIN,OPT=00,LINECNT=59,SIZE=0000K,
                             SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOPOIT.ID,NOXREF
                C          DATA SET 94911A7PLS AT LEVEL 092 AS OF 02/03/77
                C     PROGRAM CHANGE TO ALLOW FOR PLUTONIUM RECYCLE                    00001
                C     MAIN PROGRAM                                                    00002
  ISN 0002            DIMENSION HRIE(15),CPF(30),TOWTIN(70)                          00003
  ISN 0003            DIMENSION TMWT(30),HRATE(30)                                   00004
  ISN 0004            DIMENSION LYEAR(5),MYEAR(5)                                    00005
  ISN 0005            DIMENSION CF(70,30),SUMCF(70)                                  00006
  ISN 0006            DIMENSION FINTR(30),RFINTR(30),UINTR(30),RINTR(30),RLINTR(30)  00007
  ISN 0007            DIMENSION CPFCIX(30),TMWTX(30),HRATEX(30),USINTX(30),FPINTX(30) 00008
  ISN 0008            DIMENSION SFINTX(30),RLINTX(30)                                00009
  ISN 0009            COMMON/ONE/TITLE(20)                                           00010
  ISN 0010            COMMON JMAX,IY,IYEAR,KYEAR,MY,CLTIM,RPTIM,UCONLD,UTRU,ETRN     00011
  ISN 0011            COMMON IDCU,IICORE,UNIR,RCNTR,FRINT,USINT,JMAXX,ICONLD         00012
  ISN 0012            COMMON RGTEM(70),UFTIM(70),FCCST(70),FCOST(70),CCCST(70)       00013
  ISN 0013            COMMON FC(30),CC(30),CD(30),RPCST(30),UTDCTM,CPTIM,CNPTM       00014
  ISN 0014            COMMON TACST(30),SHCST(30),MOI(70,5),IDAYI(70,5),IYRI(70,5)    00015
  ISN 0015            COMMON CNCST(70),UFOUT(70),UWTIN(70),CSTOT(70),CSTIN(70)       00016
  ISN 0016            COMMON FBCST(30),PVALU(30),CPFCT(30),SCRAPL(70),CNCST(30)      00017
  ISN 0017            COMMON MOT(70,5),IDAYO(70,5),IYRO(70,5),CSLPE(70),FSLPE(70)    00018
  ISN 0018            COMMON SUMOP(30),FBDEP(30),FITOT(30),DITOT(30),SFCHG(30)       00019
  ISN 0019            COMMON SALOC(30),FVALP(70,30),FVALE(70,30),FVLINN(70,5)        00020
  ISN 0020            COMMON FVLOUT(70,5),VALIN(70,5),VALOT(70,5),FVALOT(70,5)       00021
  ISN 0021            COMMON UVALOT(70,5),UVALS(70,30),UVALR(70,30),UDFPL(70,30)     00022
  ISN 0022            COMMON FDPEL(70,30),UVALC(70,30),FVALC(70,30),RUOUT(70)        00023
  ISN 0023            COMMON CLOSS,ULOSS,PLOSS,FMINT,CYTIME,KMONTH,RMONTH            00024
  ISN 0024            COMMON KAZOO,ICORE,NFCDP,NOPT,NRCYCL,LRCYCL,KSUN               00025
  ISN 0025            COMMON RCHIN(70),RCHOT(70),XXWF(30),FAPPEN(30)                 00026
  ISN 0026            COMMON JNI(30),RATIN(70,5),RATOT(70,5),MASSM(70)               00027
  ISN 0027            COMMON RPCHG(30),TRCHG(30),PCRDT(30),RALOC(30),TALOC(30)       00028
  ISN 0028            COMMON PALOC(30),CFAVE(70),CRTIM(70),RPRCH,IFPRC               00029
  ISN 0029            COMMON/CON/CFC(20),CONCD(20),CONCC(20),CONFB(20),KY,KS,KC,NF   00030
  ISN 0030            COMMON SPSDP,SFEDP,SPUCG,SPECG,SPSCG,SPSAL,SPREG,SPRAL,SPTCG,SPTAL00031
  ISN 0031            COMMON SPRCT,SPPAL,WTHSP,SPBTU,SPKWH,NEWK,IDISC,LAZOO,INT,LAST 00032
  ISN 0032          5 FORMAT(10X,I7)                                                 00033
  ISN 0033            L = 1                                                          00034
  ISN 0034            LL = 3                                                         00035
  ISN 0035       1005 FORMAT(30X,20A4)                                               00036
  ISN 0036            KRUN = 1                                                       00037
  ISN 0037            NEWK = 1                                                       00038
  ISN 0038         52 RMONTH = 0.0                                                   00039
  ISN 0039            DO 60 J=1,70                                                   00040
  ISN 0040            CFAVE(J) = 0.0                                                 00041
  ISN 0041         60 CONTINUE                                                       00042
  ISN 0042        520 CONTINUE                                                       00043
  ISN 0043            DO 50 K=1,30                                                   00044
  ISN 0044            TMWT(K)=0.0                                                    00045
  ISN 0045            HRATE(K)=0.0                                                   00046
  ISN 0046            RLINTR(K) = 0.0                                                00047
  ISN 0047            FINTR(K) = 0.0                                                 00048
  ISN 0048            RFINTR(K) = 0.0                                                00049
  ISN 0049            UINTR(K) = 0.0                                                 00050
  ISN 0050            RINTR(K) = 0.0                                                 00051
  ISN 0051            SUMOP(K) = 0.0                                                 00052
  ISN 0052            FBDEP(K) = 0.0                                                 000
```

```
ISN 0053          EITOT(K) = 0.0                                          00054
ISN 0054          SECHG(K) = 0.0                                          00055
ISN 0055          BRCHG(K) = 0.0                                          00056
ISN 0056          TRCHG(K) = 0.0                                          00057
ISN 0057          RCOST(K) = 0.0                                          00058
ISN 0058          SALOC(K) = 0.0                                          00059
ISN 0059          TALOC(K) = 0.0                                          00060
ISN 0060          PALOC(K) = 0.0                                          00061
ISN 0061          RALOC(K) = 0.0                                          00062
ISN 0062       50 CONTINUE                                                00063
ISN 0063          CALL READ(IMWT,HRTE)                                    00064
ISN 0064          GO TO 522                                               00065
ISN 0065      100 CONTINUE                                                00066
ISN 0066          DO 2060 K=1,KAZOO                                       00067
ISN 0067     2060 HRATE(K) = HRTE(3)                                      00068
ISN 0068          DO 40 J=1,JMAX                                          00069
ISN 0069          CRTIM(J)=0.0                                            00070
ISN 0070          JNN=JN(J)                                               00071
ISN 0071          DO 40 N=1,JNN                                           00072
ISN 0072          CRTIM(J)=CRTIM(J)+RATOT(J,N)-BATIN(J,N)                 00073
ISN 0073       40 CONTINUE                                                00074
ISN 0074          DO 19 J = 1,70                                          00075
ISN 0075          SUMCF(J)=0.0                                            00076
ISN 0076          DO 19 K=1,30                                            00077
ISN 0077          CF(J,K)=0.0                                             00078
ISN 0078          USINIX(K) = FRCST(K)                                    00079
ISN 0079       19 CONTINUE                                                00080
ISN 0080          DO 30 J=1,JMAX                                          00081
ISN 0081          JNN=JN(J)                                               00082
ISN 0082          DO 26 N=1,JNN                                           00083
ISN 0083          KB=BATIN(J,N)+1.0                                       00084
ISN 0084          KE=BATOT(J,N)+1.0                                       00085
ISN 0085          IF(BATOT(J,N)+1.0-FLOAT (KE))20,20,21                   00086
ISN 0086       20 KE=KE-1                                                 00087
ISN 0087       21 IF(KE-KB)23,22,23                                       00088
ISN 0088       22 CF(J,KB)=CF(J,KB)+(CPFCT(KB+MY)*(BATOT(J,N)-BATIN(J,N)))00089
ISN 0089          GO TO 26                                                00090
ISN 0090       23 CONTINUE                                                00091
ISN 0091          CF(J,KB)=CF(J,KB)+(CPFCT(KB+MY)*(FLOAT (KB)-BATIN(J,N)))00092
ISN 0092          KE=KE-1                                                 00093
ISN 0093          CF(J,KE)=CF(J,KE)+(CPFCT(KE+MY)*(BATOT(J,N)-FLOAT (KE)))00094
ISN 0094          IF(KE-KB)26,26,24                                       00095
ISN 0095       24 KBB=KB+1                                                00096
ISN 0096          DO 25 K=KBB,KE                                          00097
ISN 0097       25 CF(J,K)=CF(J,K)+CPFCT(K+MY)                             00098
ISN 0098       26 CONTINUE                                                00099
ISN 0099          KBB=BATIN(J,1)+1.0                                      00100
ISN 0100          KEE=BATOT(J,JNN)+1.0                                    00101
ISN 0101          IF(BATOT(J,JNN)+1.0-FLOAT (KEE))27,27,28                00102
ISN 0102       27 KEE=KEE-1                                               00103
ISN 0103       28 DO 29 K=KBB,KEE                                         00104
ISN 0104       29 SUMCF(J)=SUMCF(J)+CF(J,K)                               00105
ISN 0105          CRAVE(J)=SUMCF(J)/CRTIM(J)                              00106
ISN 0106       30 CONTINUE                                                00107
ISN 0107     1360 FORMAT(39X,42HPHYSICS ASSUMPTIONS USED ON A YEARLY BASIS/)00108
ISN 0108     1361 FORMAT(5X,4HYEAR2X,8HCAPACITY2X,5HPLANT)                 00109
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ISN 0109      1362 FORMAT(11X,6HFACTOR4X,4HHEAT)                                  00110
ISN 0110      1363 FORMAT(21X,4HRATE/)                                            00111
ISN 0111      1364 FORMAT(14X,14H5X,9HBTU/KLBR/)                                  00112
ISN 0112      1365 FORMAT(5X,I4,4X,F3.0,4X,F6.0)                                  00113
ISN 0113           WRITE(LL,1359)                                                 00114
ISN 0114           WRITE(LL,1360)                                                 00115
ISN 0115           WRITE(LL,1361)                                                 00116
ISN 0116           WRITE(LL,1362)                                                 00117
ISN 0117           WRITE(LL,1363)                                                 00118
ISN 0118           WRITE(LL,1364)                                                 00119
ISN 0119           DO 1366 K = 1, KAZOO                                           00120
ISN 0120           JYEAR = KYEAR - MY + K - 1                                     00121
ISN 0121      1366 WRITE(LL,1365) JYEAR,CPFCT(K),HRATE(K)                         00122
ISN 0122           CALL COST                                                      00123
ISN 0123      1350 FORMAT(48X,31HCOST DATA USED ON A BATCH BASIS/)                00124
ISN 0124      1351 FORMAT(5X,5HBATCH3X,4HTIME4X,7HINITIAL3X,5HFINAL3X,7HFABRICA3X,00125
                  1 6HPRESS3X,6HCONVER3X,6HFINISH)                              00126
ISN 0125      1352 FORMAT(5X,6HNUMBER2X,7HIN CORE2X,5HBATCH4X,5HBATCH4X,4HTION5X, 00127
                  1 4HCOST3X,4HSTON5X,4HENT)                                    00128
ISN 0126      1353 FORMAT(22X,4HCOST5X,4HCOST5X,4HCOST5X,4HCOST5X,4HCOST/)        00129
ISN 0127      1354 FORMAT(14X,5HYEARS3X,4H$/KG5X,4H$/KG6X,4H$/KG4X,4H$/LS4X,4H$/LB5X,00130
                  1 5H$/SHO/)                                                   00131
ISN 0128      1355 FORMAT(7X,I2,6X,F5.3,2X,F7.2,2X,F7.2,3X,F6.2,2X,F6.2,4X,F4.2,4X,00132
                  1 F6.2)                                                       00133
ISN 0129       846 FORMAT(1H0,44X,16HCONTRACT VALUES ,4I5)                       00134
ISN 0130           WRITE(LL,1000)                                                 00135
ISN 0131           WRITE (LL,1350)                                                00136
ISN 0132           WRITE (LL,1351)                                                00137
ISN 0133           WRITE (LL,1352)                                                00138
ISN 0134           WRITE (LL,1353)                                                00139
ISN 0135           WRITE (LL,1354)                                                00140
ISN 0136           DO 1356 J = 1 , JMAX                                           00141
ISN 0137       840 LCON = 0                                                       00142
ISN 0138           KYL  = 0                                                       00143
ISN 0139           KFL  = 0                                                       00144
ISN 0140           KSL  = 0                                                       00145
ISN 0141           KCL  = 0                                                       00146
ISN 0142       841 IF(KY .NE. J)GO TO 842                                         00147
ISN 0144           LCON = KY                                                      00148
ISN 0145           KYL  = KY                                                      00149
ISN 0146       842 IF(KC .NE. J)GO TO 843                                         00150
ISN 0148           LCON = KC                                                      00151
ISN 0149           KCL  = KC                                                      00152
ISN 0150       843 IF(KS .NE. J)GO TO 844                                         00153
ISN 0152           LCON = KS                                                      00154
ISN 0153           KSL  = KS                                                      00155
ISN 0154       844 IF(NF .NE. J)GO TO 1493                                        00156
ISN 0156           LCON = NF                                                      00157
ISN 0157           KFL  = NF                                                      00158
ISN 0158      1483 I = J                                                          00159
ISN 0159           IF(INF .NE. 3)GO TO 1484                                       00160
ISN 0161           I = J + LAST                                                   00161
ISN 0162      1484 WRITE(LL,1355)I,CRTIM(J),CSTIM(J),CTOT(J),FCOST(J),FCCST(J),  00162
                  1 CCCST(J),CDCST(J)                                           00163
ISN 0163       845 IF(LCON)1356,1356,848                                         00164
ISN 0164       848 WRITE(LL,846)KYL,KCL,KSL,KFL                                  00165
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ISN 0165      1356 CONTINUE                                                          00155
ISN 0166           GO TO 324                                                         00167
ISN 0167      1000 FORMAT(1HI,11H************************************CONSUMERS P 00164
                  1OWER NUCLEAR FUEL CYCLE COST PROGRAM************************** 00169
                  2***//)                                                           00170
ISN 0168      1010 FORMAT(43X,32HINPUT DATA *** ALL URANIUM CYCLE***)               00171
ISN 0169       310 FORMAT(39X,40HINPUT DATA *** PLUTONIUM - URANIUM CYCLE***)       00172
ISN 0170      1020 FORMAT(39X,43HECONOMIC ASSUMPTIONS USED ON A YEARLY BASIS/)      00173
ISN 0171      1030 FORMAT(5X,4HYEAR4X,4HFEED4X,3HU 05X,5HSEPAR4X,5HFABR15X,5HREPRO4X,00174
                  1SHUNH T02X,9HTRANSPORT1X,6HCHARGE1X,6HPLUTON)                    00175
ISN 0172       305 FORMAT(5X,4HYEAR4X,4HFEED4X,3HU 05X,5HSEPAR4X,5HFABR15X,5HREPRO4X,00176
                  1SHUNH T02X,9HTRANSPORT1X,6HCHARGE1X,6HPLUTON4X,5HFABR14X,5HPLANT3X00177
                  2,5HTAILS)                                                        00178
ISN 0173      1040 FORMAT(5X,9X,6HCOST5X,3H3 04X,5HATIVE4X,6HCATION4X,4HCESS5X,     00179
                  1 2HUF23X,3HIUM)                                                  00180
ISN 0174       306 FORMAT(5X,8X,6HCOST5X,3H3 04X,5HATIVE4X,6HCATION4X,4HCESS5X,2HUF2300181
                  1X,2HIU47X,6HCATION3X,6HRATING2X,5HASSAY)                         00182
ISN 0175       339 FORMAT(5X,9X,F13.F9X,1H612X,3HIU41SX,6HSION15X,1H615X,3HIUM)      00183
ISN 0176      1050 FORMAT(5X,9X,2HAS13X,6HWORK5X,4HCOST6X,3HING3X,1H65X,5HSPENT5X,  00184
                  1SHUNH +2X,5HCREDIT)                                              00185
ISN 0177       307 FORMAT(5X,9X,2HAS13X,6HWORK5X,4HCOST6X,3HING3X,1H65X,5HSPENT3X,  00186
                  1SHUNH +3X,5HCREDIT4X,7HPENALTY)                                  00187
ISN 0178      1060 FORMAT(5X,8X,3HU 04X,5HTO UF4X,6HCOST15X,6HCHARGE3X,6HCONVER3X,  00188
                  14HFUEL6X,2HU$)                                                   00189
ISN 0179      1070 FORMAT(5X,9X,3H3 05X,1H631X,4HSION15X,1H6)                       00190
ISN 0180      1080 FORMAT(5X,15X,6HCONVER31X,4HCOST)                                00191
ISN 0181      1090 FORMAT(5X,15X,4HSION)                                            00192
ISN 0182      1100 FORMAT(5X,16X,4HCOST/)                                           00193
ISN 0183      1110 FORMAT(5X,8X,4H$/L54X,4H$/LB4X,4H$/KG6X,4H$/KG6X,4H$/KG5X,       00194
                  14H$/KG5X,4H$/KG4X,4H$/KG5X,4H$/GM)                               00195
ISN 0184       309 FORMAT(5X,8X,4H$/L54X,4H$/LB4X,4H$/KG5X,4H$/KG5X,4H$/KG5X,       00196
                  14H$/KG4X,5H$/ASSM4X,4H$/KG4X,4H$/GM7X,1H45X,5HM W T3X,5HFRAC.)   00197
ISN 0185       309 FORMAT(5X,8X,3HU 04X5HTO UF4X,4HCOST5X,4HURANSX,6HCHARGE3X,6HCONVE00198
                  1R3X,4HFUEL4X,2HUF16X,6HPLUTON)                                   00199
ISN 0186      1140 FORMAT(5X,I4,4X,F6.2,4X,F4.2,3X,F6.2,4X,F6.2,4X,F6.2,3X,         00200
                  1F5.2,4X,F5.0,4X,F4.2,4X,F5.2)                                    00201
ISN 0187       321 FORMAT(5X,I4,4X,F6.2,4X,F4.2,3X,F6.2,4X,F6.2,4X,F7.2,3X,         00202*90
                  1F5.2,4X,F7.3,3X,F4.2,4X,F5.2,4X,F7.3,2X,F5.0,2X,F6.4)            00203*91
ISN 0188       522 WRITE(LL,1000)                                                    00204
ISN 0189           WRITE(LL,1005)(TITLE(I),I = 1,20)                                 00205
ISN 0190           GO TO (323,324),NECOP                                             00206
ISN 0191       323 WRITE(LL,1010)                                                    00207
ISN 0192           WRITE(LL,1020)                                                    00208
ISN 0193           WRITE(LL,1030)                                                    00209
ISN 0194           WRITE(LL,1040)                                                    00210
ISN 0195           WRITE(LL,1050)                                                    00211
ISN 0196           WRITE(LL,1060)                                                    00212
ISN 0197           WRITE(LL,1070)                                                    00213
ISN 0198           GO TO 325                                                         00214
ISN 0199       324 WRITE(LL,310)                                                     00215
ISN 0200           WRITE(LL,305)                                                     00216
ISN 0201           WRITE(LL,306)                                                     00217
ISN 0202           WRITE(LL,307)                                                     00218
ISN 0203           WRITE (LL, 309)                                                   00219
ISN 0204           WRITE(LL,339)                                                     00220
ISN 0205       325 WRITE(LL,1080)                                                    00221
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ISN 0205          WRITE(LL,1090)                                          00222
ISN 0207          WRITE(LL,1100)                                          00223
ISN 0208          GO TO (326,327),NECOP                                   00224
ISN 0209      326 WRITE(LL,1110)                                          00225
ISN 0210          GO TO 3?                                                00226
ISN 0211      327 WRITE(LL,308)                                           00227
ISN 0212      328 CONTINUE                                                00228
ISN 0213          DO 1150 K=1,KAZOO                                       00229
ISN 0214          JYEAR=KYEAR-MY+K-1                                      00230
ISN 0215          GO TO (329,322),NECOP                                   00231
ISN 0216      329 WRITE(LL,1140) JYEAR,EC(K),CC(K),CD(K),FBCST(K),RPCST(K),00232
                 1CNCST(K),TRCST(K),SHCST(K),PVALU(K)                     00233
ISN 0217          GO TO 1150                                              00234
ISN 0218      322 WRITE(LL,321)JYEAR,EC(K),CC(K),CD(K),FBCST(K),RPCST(K), 00235
                 1CNCST(K),TRCST(K),SHCST(K),PVALU(K),FABPEN(K),IMWT(K),XWWF(K)00236
ISN 0219     1150 CONTINUE                                                00237
ISN 0220      820 FORMAT(1HO,4X,83HTHE TIME INTERVAL BETWEEN PURCHASE OF YELLOWLAKE 00238
                 1AND DELIVERY TO CONVERSION SITE IS,F4.1,8H MONTHS./)    00239
ISN 0221      821 FORMAT(1HO,4X,35HTHE TIME REQUIRED FOR CONVERSION IS,F4.1,8H MONTH00240
                 1S./)                                                   00241
ISN 0222      822 FORMAT(1HO,4X,46HTHE TIME REQUIRED FOR ENRICHMENT OF URANIUM IS, 00242
                 1F4.1,8H MONTHS./)                                      00243
ISN 0223          UTOCTM = UTOCTM * 12.0                                  00244
ISN 0224          CONTM  = CONTM  * 12.0                                  00245
ISN 0225          ENRTM  = ENRTM  * 12.0                                  00246
ISN 0226          WRITE(LL,820)UTOCTM                                     00247
ISN 0227          WRITE(LL,821)CONTM                                      00248
ISN 0228          WRITE(LL,822)ENRTM                                      00249
ISN 0229      823 FORMAT(1HO,4X,36HTHE INTEREST DURING CONSTRUCTION IS ,F5.2, 00250
                 1H PERCENT.)                                            00251
ISN 0230      824 FORMAT(1HO,4X,51HTHE INTEREST CHARGE ON FUEL THAT IS ON SITE BEFO00252
                 1E LOADING IS,F6.2,9H PERCENT.)                         00253
ISN 0231      825 FORMAT(1HO,4X,34HTHE CARRYING CHARGE ON URANIUM IS ,F5.2, 00254
                 1H PERCENT.)                                            00255
ISN 0232      826 FORMAT(1HO,4X,38HTHE CARRYING CHARGE ON FABRICATION IS ,F5.2, 00256
                 1H PERCENT.)                                            00257
ISN 0233      829 FORMAT(1HO,4X,55HINTEREST DURING CONSTRUCTION WAS DELETED FROM THI00258
                 1S RUN.)                                                00259
ISN 0234     1260 FORMAT(1HO,4X,47HTHE PRESENT WORTH FACTOR USED IN THIS STUDY IS , 00260
                 1F5.4)                                                  00261
ISN 0235      833 FORMAT(1HO,4X,62HTHE LEAD TIME FOR RELOAD FABRICATION THAT IS NOT 00262
                 1CONTRACTED IS,F5.3,10H YEARS AT ,F5.2,1H PERCENT INTEREST.)    00263
ISN 0236      834 FORMAT(1HO,4X,61HTHE LEAD TIME FOR RELOAD YELLOWCAKE THAT IS NOT C00264
                 1ONTRACTED IS,F6.3,10H YEARS AT ,F5.2,1H PERCENT INTEREST.)     00265
ISN 0237          WRITE(LL,823)UNTR                                       00266
ISN 0238          WRITE(LL,824)RCNTR                                      00267
ISN 0239          WRITE(LL,825)USINT                                      00268
ISN 0240          WRITE(LL,826)FBINT                                      00269
ISN 0241          WRITE(LL,833)ECONLD,ETRN                                00270
ISN 0242          WRITE(LL,834)UCONLD,UTRN                                00271
ISN 0243          IF(IDCU)830,830,831                                     00272
ISN 0244      831 WRITE(LL,829)                                           00273
ISN 0245      830 CONTINUE                                                00274
ISN 0246          UTOCTM = UTOCTM /12.0                                   00275
ISN 0247          CONTM  = CONTM  /12.0                                   00276
ISN 0248          ENRTM = ENRTM/12.0                                      00277
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ISN 0249          WRITE(LL,1250) PRINT                                      00278
ISN 0250      1280 FORMAT(45X,34HPHYSICS DATA USED ON A BATCH BASIS/)        00279
ISN 0251      1290 FORMAT(5X,5HBATCH2X,5HBATCH5X,7HINITIAL3X,7HURANIUM5X,5HFINAL4X,  00280
                  15HFINAL4X,7HFISSILE3X,7HTIME IN3X,4HTIME3X,4HDTY.)         00281
ISN 0252      1300 FORMAT(5X,5HNUMBER1X,5HWEIGHT2X,10HENRICHMENT2X,5HSCRAP4X,  00282
                  110HENRICHMENT2X,5HTOTAL3X,4HPLUTONIUM2X,7HFABRICA2X,7HOW SITE3X,  00283
                  22HOF)                                                    00284
ISN 0253      1310 FORMAT(32X,5HALLOW.14X,7HURANIUM13X,4HTION5X,5HBEFORE3X,5HASSM.)  00285
ISN 0254      1320 FORMAT(81X,7HLOADING/)                                   00286
ISN 0255      1330 FORMAT(14X,2HKG6X,5HWEIGHT4X,6HWEIGHT4X,6HWEIGHT4X,6HWEIGHT3X,  00287
                  16HWEIGHT5X,5HYEARS4X,5HYEARS)                            00288
ISN 0256      1340 FORMAT(21X,7HPERCENT4X,7HPERCENT3X,7HPERCENT3X,9HFRACTION2X,  00289
                  17HPERCENT/)                                              00290
ISN 0257      1370 FORMAT(7X,I2,4X,F6.0,5X,F5.3,5X,F5.3,5X,F5.3,4X,F6.4,3X,F5.4,5X,  00291
                  1F5.3,3X,F5.3,3X,I4)                                      00292
ISN 0258      1380 FORMAT(1H0,4X,43HTHE TIME REQUIRED FOR COOLING THE SPENT FUEL ON SC00293
                  1ITE,PLUS SHIPPING TIME TO THE REPROCESSOR IS,F4.1,8H MONTHS./)  00294
ISN 0259      1390 FORMAT(5X,44HTHE TIME REQUIRED FOR REPROCESSING SPENT FUEL IS,  00295
                  1F4.1,6H MONTHS./)                                        00296
ISN 0260      1400 FORMAT(5X,35HTHE ASSUMED URANIUM LOSS DURING CONVERSION PHASES, AS00297
                  1W/O OF TOTAL INITIAL CONTAINED URANIUM.IS,F4.2,9H PERCENT./)  00298
ISN 0261      1410 FORMAT(5X,91HTHE ASSUMED URANIUM LOSS DURING REPROCESSING, AS W/O C0299
                  1OF TOTAL INITIAL CONTAINED URANIUM, IS,F5.2,9H PERCENT./)  00300
ISN 0262      1420 FORMAT(5X,45HTHE ASSUMED PLUTONIUM LOSS DURING THE PLUTONIUM RECO00301
                  1ERY PHASE AS PERCENT OF TOTAL PLUTONIUM IS,F4.2,9H PERCENT.)  00302
ISN 0263      1421 FORMAT(5X,101HTHE EXPECTED YEAR OF CHANGE-OVER OF REPROCESSING SER00303
                  1VICES TO DELIVERY AS HEXAFLUORIDE AND DIOXIDE IS ,I4,1H./)  00304
ISN 0264      1422 FORMAT(5X,83HTHIS IS A SET-UP RUN TO ESTABLISH INITIAL VALUES FOR  00305
                  1THE SUBSEQUENT IN-PROCESS RUN./)                         00306
ISN 0265      1423 FORMAT(5X,24HTHE TERMINATION YEAR IS ,I4,1H./)           00307
ISN 0266      1424 FORMAT(5X,52HTHIS IS AN IN-PROCESS RUN.  THE PREVIOUS TERMINATION  00308
                  1YEAR WAS ,I4,1H./)                                       00309
ISN 0267          WRITE (LL,1000)                                           00310
ISN 0268          WRITE (LL,1230)                                           00311
ISN 0269          WRITE (LL,1290)                                           00312
ISN 0270          WRITE (LL,1300)                                           00313
ISN 0271          WRITE (LL,1310)                                           00314
ISN 0272          WRITE (LL,1320)                                           00315
ISN 0273          WRITE (LL,1330)                                           00316
ISN 0274          WRITE (LL,1340)                                           00317
ISN 0275          DO 1430 J=1,JMAX                                          00318
ISN 0276          I = J                                                     00319
ISN 0277          IF(INT .NE. 3)GO TO 1445                                  00320
ISN 0278          I = J + LAST                                              00321
ISN 0279      1445 WRITE(LL,1370)I,UKTIN(J),RCMIN(J),SCRAPL(J),RCMOT(J),UFOUT(J),  00322
                  1PUOUT(J),UPTIM(J),BGTIM(J),MASSM(J)                      00323
ISN 0281      1430 CONTINUE                                                 00324
ISN 0282       380 CLTIM = CLTIM * 12.0                                     00325
ISN 0283          RPTIM=RPTIM* 12.0                                         00326
              C   ****************   ****************                      00327
ISN 0284          WRITE (LL,1380)CLTIM                                      00328
ISN 0285          WRITE (LL,1390)RPTIM                                      00329
ISN 0286          WRITE(LL,1400)CLOSS                                       00330
ISN 0287          CLTIM=CLTIM/12.0                                          00331
ISN 0288          RPTIM=RPTIM/12.0                                          00332
              C   ****************   ****************                      00333
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ISN 0289            WRITE (LL,1419)ULOSS                                        00334
ISN 0290            WRITE (LL,1420)PLOSS                                        00335
ISN 0291            WRITE(LL,1421)IRPRC                                         00336
ISN 0292            GO TO (1442,1441,1443),INT                                  00337
ISN 0293          1441 WRITE(LL,1422)                                           00338
ISN 0294            WRITE(LL,1423)IDISC                                         00339
ISN 0295            GO TO 1442                                                  00340
ISN 0296          1443 WRITE(LL,1424)IDISC                                      00341
ISN 0297          1442 CONTINUE                                                 00342
ISN 0298          1440 FORMAT(5X,5HBATCH3X,5HBATCH4X,4HYEAR3X,5HBATCH4X,4HYEAR3X,5HBATCH 00343
                      14X,4HYEAR3X,5HBATCH4X,4HYEAR3X,5HBATCH4X,4HYEAR3X,5HBATCH4X,4HYEAR00344
                      2)                                                        00345
ISN 0299          1450 FORMAT(5X,6HNUMBER3X,2HIN7X,2HIN5X,3HOUT5X,3HOUT5X,2HIN7X,2HIN5X, 00346
                      13HOUT5X,3HOUT5X,2HIN7X,2HIN5X,3HOUT5X,3HOUT)             00347
ISN 0300          1460 FORMAT(5X,8X,4HTIME12X,4HTIME12X,4HTIME12X,4HTIME12X,4HTIME12X, 00348
                      14HTIME//////)                                            00349
ISN 0301          1470 FORMAT(5X,9X,5HYEARS11X,5HYEARS11X,5HYEARS11X,5HYEARS11X,5HYEARS 00350
                      111X,5HYEARS///)                                          00351
ISN 0302          1480 FORMAT(5X,2X,I2,3X,F6.3,3X,I4,3X,F6.3,3X,F6.3,3X,I4,3X,F6.3,3X,I4,3X,F6.3 00352
                      1,3X,I4,3X,F6.3,3X,I4,3X,F6.3,3X,I4)                      00353
ISN 0303          1490 FORMAT(1H0,4X,39HTHE NUMBER OF BATCHES IN THIS STUDY IS ,I2/) 00354
ISN 0304          1500 FORMAT(5X,29HOPERATION BEGINS AT .I2,2H - 1 - ,I4)       00355
ISN 0305           440 FORMAT(54X,19HDATED FUEL SCHEDULE/)                      00356
ISN 0306           441 FORMAT(5X,5HBATCH4X,9HBATCH IN4X,9HBATCH OUT3X,9HBATCH IN4X,9HBATC00357
                      1H OUT3X,8HBATCH IN4X,9HBATCH OUT)                        00358
ISN 0307           442 FORMAT(5X,6HNUMBER5X,4HDATE8X,4HDATE8X,4HDATE8X,4HDATE8X,4HDATE8X,00359
                      14HDATE8X,4HDATE8X,4HDATE/)                               00360
ISN 0308           443 FORMAT(7X,I2,2X,3(I4,1X,I2,1X,I4,2X,I2,1X,I2,1X,I4))     00361
ISN 0309               GO TO(444,445),IRDOP                                     00362
                   C   DATED FUEL SCHEDULE                                      00363
ISN 0310           445 WRITE(LL,1000)                                           00364
ISN 0311               WRITE(LL,440)                                            00365
ISN 0312               WRITE(LL,441)                                            00366
ISN 0313               WRITE(LL,442)                                            00367
ISN 0314               DO 457 J = 1, JMAXB                                      00368
ISN 0315               JNN = JN(J)                                              00369
ISN 0316               I = J                                                    00370
ISN 0317               IF(INT .NE. 3)GO TO 1481                                 00371
ISN 0319               I = J + LAST                                             00372
ISN 0320          1481 WRITE(LL,443)I,(MOI(J,N),IDAYI(J,N),IYRI(J,N),MOO(J,N),IDAYO(J,N),00373
                      1IYRO(J,N),N = I,JNN)                                     00374
ISN 0321           457 CONTINUE                                                00375
ISN 0322           444 WRITE(LL,1000)                                          00376
ISN 0323               GO TO (2061,2062),NFCOP                                 00377
ISN 0324          2062 WRITE(LL,310)                                           00378
ISN 0325               GO TO 2063                                              00379
ISN 0326          2061 CONTINUE                                                00380
ISN 0327               WRITE(LL,1010)                                          00381
ISN 0328          2063 CONTINUE                                                00382
ISN 0329               WRITE(LL,1440)                                          00383
ISN 0330               WRITE(LL,1450)                                          00384
ISN 0331               WRITE(LL,1460)                                          00385
ISN 0332               WRITE(LL,1470)                                          00386
ISN 0333               DO 1510 J=1,JMAX                                        00387
ISN 0334               JNN=JN(J)                                               00388
ISN 0335               DO 1520 N=1,JNN                                         00389
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ISN 0336          LMN=BATIN(J,N)                                                00390
ISN 0337          LYEAR(N)=KYEAR+LMN                                            00391
ISN 0338          MNP=BATOT(J,N)                                                00392
ISN 0339       1520 MYEAR(N)=KYEAR+MNP                                          00393
ISN 0340          I = J                                                         00394
ISN 0341          IF(INT .NE. 3)GO TO 1482                                      00395
ISN 0343          I = J + LAST                                                  00396
ISN 0344       1492 WRITE(LL,1430)I,(BATIN(J,N),LYEAR(N),BATOT(J,N),MYEAR(N),N=1,JNN) 00397
ISN 0345       1510 CONTINUE                                                    00398
ISN 0346          WRITE(LL,1490) JMAX                                           00399
ISN 0347          WRITE(LL,1500)MONTH,KYEAR                                     00400
ISN 0348          GO TO 100                                                     00401
ISN 0349        524 CONTINUE                                                    00402
ISN 0350          DO 920 K = 1 , 30                                             00403
ISN 0351          RLINIT(K) = RPCST(K)                                          00404
ISN 0352          FINIT(K) = CNCST(K)                                           00405
ISN 0353          RFINIT(K) = TRCST(K)                                          00406
ISN 0354          UINIT(K) = SHCST(K)                                           00407
ISN 0355          RINIT(K) = PVALU(K)                                           00408
ISN 0356          CPECT(K) = CPECT(K)                                           00409
ISN 0357          TMATE(K) = TMAT(K)                                            00410
ISN 0358          HRATE(K) = HRATE(K)                                           00411
ISN 0359          DO 920 J = 1,70                                               00412
ISN 0360          UVALOT(J,K) = 0.0                                             00413
ISN 0361          FVALOT(J,K) = 0.0                                             00414
ISN 0362          UDEPL(J,K) = 0.0                                              00415
ISN 0363          FDPEL(J,K) = 0.0                                              00416
ISN 0364          FVALE(J,K) = 0.0                                              00417
ISN 0365          FVALC(J,K) = 0.0                                              00418
ISN 0366          UVALC(J,K) = 0.0                                              00419
ISN 0367        920 CONTINUE                                                    00420
ISN 0368          KAZOO=KAZOO-MY                                                00421
ISN 0369          DO 999 K=1,KAZOO                                              00422
ISN 0370          RPCST(K) = RPCST(K + MY)                                      00423
ISN 0371          CNCST(K) = CNCST(K + MY)                                      00424
ISN 0372          TRCST(K) = TRCST(K + MY)                                      00425
ISN 0373          SHCST(K) = SHCST(K + MY)                                      00426
ISN 0374          PVALU(K) = PVALU(K + MY)                                      00427
ISN 0375          CPECT(K)=CPECT(K+MY)                                          00428
ISN 0376          TMAT(K)=TMAT(K+MY)                                            00429
ISN 0377          HRATE(K)=HRATE(K+MY)                                          00430
ISN 0378        999 CONTINUE                                                    00431
ISN 0379          GO TO (130,432),NFCOP                                         00432
ISN 0380        130 NOPT = 1                                                    00433
ISN 0381          GO TO 431                                                     00434
ISN 0382        432 NOPT = 2                                                    00435
ISN 0383        431 CONTINUE                                                    00436
ISN 0384          GO TO (85,88),IYEAR                                           00437
ISN 0385         88 IY = IY + 1                                                 00438
ISN 0386         85 CALL UDPL                                                   00439
ISN 0387          CALL FDPL                                                     00440
ISN 0388          CALL CCHS                                                     00441
ISN 0389          CALL SPEL                                                     00442
ISN 0390       283 DO 294 I = 1,JMAX                                            00443
ISN 0391       294 TOWIN(I) = 0.0                                               00444
ISN 0392          DO 280 J = 1 , JMAX                                           00445
```

```
ISN 0393            IF (NOST .NE. 2160 TO 80                                    00446
ISN 0395            TOWTIN(J) = UWTIN(J) * (UFOUT(J)+(UFOUT(J)*PUOUT(J)/100.)) 00447
ISN 0396            GO TO 290                                                   00448
ISN 0397         80 TOWTIN(J) = UWTIN(J) + UFOUT(J)                             00449
ISN 0398        290 CONTINUE                                                    00450
ISN 0399            CALL PCHG(TOWTIN)                                           00451
ISN 0400            CALL TC G(TOWTIN)                                           00452
ISN 0401         15 CALL PCOI                                                   00453
ISN 0402            IF(IYEAR .EQ. 1)GO TO 901                                   00454
ISN 0404            IY = IY - 1                                                 00455
ISN 0405        901 CONTINUE                                                    00456
ISN 0406        215 CALL PRNT(TMWT,HRATE)                                       00457
ISN 0407            KAZOO = IY + 10                                             00458
ISN 0408            DO 900 K = 1,KAZOO                                          00459
ISN 0409            RPCST(K) = RLIMTR(K)                                        00460
ISN 0410            CNCST(K) = FINTR(K)                                         00461
ISN 0411            TRCST(K) = RFINTR(K)                                        00462
ISN 0412            SHCST(K) = UINTR(K)                                         00463
ISN 0413            PVALU(K) = RINTR(K)                                         00464
ISN 0414            CPECT(K) = CPECTX(K)                                        00465
ISN 0415            TMWT(K) = TMWTX(K)                                          00466
ISN 0416            FOCST(K) = USINTX(K)                                        00467
ISN 0417            HRATE(K) = 0.0                                              00468
ISN 0419        900 CONTINUE                                                    00469
ISN 0419       6000 FORMAT(20X,10HEEEEEEEEEE/)                                  00470
ISN 0420            READ (1,5) KRUN                                             00471
ISN 0421            GO TO (101,520,52),KRUN                                     00472
ISN 0422        101 CONTINUE                                                    00473
ISN 0423            STOP                                                        00474
ISN 0424            END                                                         00475
```

NAME	TAG		TYPE	ADD.
I	SF		I*4	0013C0
N	SF		I*4	0013D0
FC	F	C	R*4	0005C0
KC	F	C	I*4	000140
KY	F	C	I*4	000140
CFC		C	R*4	N.R.
KGB	SF		I*4	0013E8
KSL	SF		I*4	0013F8
KNP	SF		I*4	001408
COST	SF	XF	R*4	000000
IDCU		C	I*4	000028
KRUN	SF	C	I*4	015F78
NOPT	S	C	I*4	015F6C
READ	SF	XF	R*4	000000
UOPL	SF	XF	R*4	000000
BAIN	F	C	R*4	016394
PINIR	SF		R*4	003BA4
CLOSS	F	C	R*4	015944
CONCO		C	R*4	N.R.
CSTIM	SF	C	R*4	0173A4
DITOT		C	R*4	N.R.
FBINT	F	C	R*4	000038
FINTR	SF		R*4	003610
FVALC	S	C	R*4	013350
IDAYI	F	C	I*4	000E14
IPPSC	F	C	I*4	0174C0
KAZOO	SF	C	I*4	015F50
MYEAR	SF		I*4	003720
PCRDI	S	C	R*4	017DAC
PWINT	F	C	R*4	015F50
RPCHG	S	C	R*4	016F9C
SALOC	S	C	R*4	001554
SPECG		C	R*4	N.R.
SPECT		C	R*4	N.R.
SPSCG		C	R*4	N.R.
SPUCG		C	R*4	N.R.
TITLE	F	C	R*4	000000
UDEPL	S	C	R*4	0003EC
ULOSS	F	C	R*4	015F48
UVALE		C	R*4	N.R.
WTESP		C	R*4	N.R.
FABEEN	F	C	R*4	016224
FVLINX		C	R*4	N.R.
IICOPE		C	I*4	N.R.
RLINTR	SF		R*4	0013A4
SFINIX			R*4	N.R.
UTOCTM	SF	C	R*4	0037A0

NAME	TAG		TYPE	ADD.
J	SF		I*4	0013C4
CC	F	C	R*4	000633
IY	SF	C	I*4	000004
KE	SFA		I*4	001339
LL	SF		I*4	0013E3
CPF			R*4	N.R.
KCL	SF		I*4	0013FC
KUD	SF		I*4	0013FC
POI	F	C	I*4	00339C
FDPL	SF	XF	R*4	000000
IYRI	F	C	I*4	001380
LAST	F	C	I*4	017610
PCDT	SF	XF	R*4	000000
SPFL	SF	XF	R*4	000000
UNTR	F	C	R*4	000330
BAIOT	F	C	R*4	01592C
CCCST	F	C	R*4	0004A8
CLTIM	SF	C	R*4	000014
CMSG		C	R*4	N.R.
CSLPS		C	R*4	N.R.
EDTIM	SF	C	R*4	0007A8
FCCST	F	C	R*4	000278
FITOT	S	C	R*4	0034EC
FVALB	S	C	R*4	0057A0
IDAYO	F	C	I*4	002650
IYEAR	F	C	I*4	000008
KYEAR	F	C	I*4	000000
NASSM	F	C	I*4	016584
PLOSS	F	C	R*4	015F4C
RALOC	S	C	R*4	017124
RPCST	SF	C	R*4	000728
SECHG	S	C	R*4	0035EC
SPIOP		C	R*4	N.R.
SPRAL		C	R*4	N.R.
SPSOP		C	R*4	N.R.
SUMCF	SF		R*4	003734
TMWTX	SF		R*4	0037AC
UFCUT	F	C	R*4	001A1C
USINT	F	C	R*4	000038
UWIIN	F	C	R*4	001B34
BFINTR	SF		R*4	00393C
FBINIX			R*4	N.R.
FVLOUT		C	R*4	N.R.
KMONTH	F	C	I*4	015F54
RLINIX			R*4	N.R.
TOWIIN	SFA		R*4	00391C
UVALOT	S	C	R*4	029304

NAME	TAG		TYPE	ADD.
K	SF		I*4	0013C8
CJ	F	C	R*4	003680
JN	F	C	I*4	016F9C
KE	SFA		I*4	001390
KY	F	C	I*4	000010
LNI	F	C	I*4	017F9C
KEF	SFA		I*4	0013F0
KYL	SF		I*4	001400
MOD	F	C	I*4	002174
FIRN	F	C	R*4	000024
IYRO	F	C	I*4	002C64
LCON	S		I*4	01740C
PRNT	SF	XF	R*4	000000
TCHG	SF	XF	R*4	000000
UTRN	F	C	R*4	000020
BSAIR	F	C	R*4	000034
CDCST	F	C	R*4	001F04
CNCST	SF	C	R*4	0020EC
CPTIM	SF	C	R*4	0037A4
CSTIN	F	C	R*4	001364
FBCST	SF	C	R*4	001E7C
FCOST	F	C	R*4	000390
FSLPE		C	R*4	N.R.
HEATE	SFA		R*4	063594
IDISC	F	C	I*4	017534
JUAKA	F	C	I*4	000040
LAZOO		C	I*4	N.R.
NECOP	F	C	I*4	015F68
PUPUT	F	C	R*4	01592C
RCMIN	F	C	R*4	015F7C
RPSCH		C	R*4	N.R.
SPCST	SF	C	R*4	000624
SPSNH		C	R*4	N.R.
SPSSG		C	R*4	N.R.
SPTAL		C	R*4	N.R.
SUMOP	S	C	R*4	00340C
TPCHG	S	C	R*4	017034
UFTIM	F	C	R*4	000160
UVALB		C	R*4	N.R.
VALIN		C	R*4	N.R.
CPECIX	SF		R*4	003984
FCONLD	F	C	R*4	000044
HRATEX	S		R*4	003A2C
LPCYCL		C	I*4	N.R.
RMONTH	S	C	R*4	015F5C
UCONLD	F	C	R*4	000010

NAME	TAG		TYPE	ADD.
L	SF		I*4	0013CC
OF	SF		R*4	001418
KB	SFA		I*4	001304
KS	F	C	I*4	000144
NF	F	C	I*4	000140
JNI	SF		I*4	0013E4
KFL	SF		I*4	0013F4
LNI	SF		I*4	001404
CCHG	SF	XF	R*4	000000
HRTE	SFA		R*4	0034EC
JMAX	F	C	I*4	000000
NEWK	S	C	I*4	017500
RCHG	SF	XF	R*4	000000
TMWT	SFA		R*4	00352C
XWKF	F	C	R*4	0161AC
BGTIM	F	C	R*4	000048
CPAVE	S	C	R*4	017280
[illegible]		C	R*4	N.R.
CPECI	SF	C	R*4	001F5C
CSTOT	F	C	R*4	001C40
FDELP	S	C	R*4	0034B4
FDPEL	S	C	R*4	00F98C
FVALB		C	R*4	N.R.
ICOPE		C	I*4	N.R.
IRDCP	F		I*4	001410
JYEAR	SF		I*4	001414
LYEAR	SF		I*4	003700
PALLC	S	C	R*4	017214
PVALU	SF	C	R*4	001EF4
RCHGT	F	C	R*4	015094
RPTIM	SF	C	R*4	000018
SPRIU		C	R*4	N.R.
SPRAL		C	R*4	N.R.
SPTCG		C	R*4	N.R.
TALOC	S	C	R*4	03714C
TPCST	SF	C	R*4	0037AC
UINTR	SF		R*4	0038C4
UVALC	S	C	R*4	011C5C
VALOT		C	R*4	N.R.
CYTIME		C	R*4	N.R.
FVALOT	S	C	R*4	0085EC
IBCOMM	F	XF	I*4	000000
NRCYCL		C	I*4	N.R.
SCRAPL	F	C	R*4	001FE4
USINIX	SF		R*4	0038C4

***** COMMON INFORMATION *****

NAME OF COMMON BLOCK * ONE* SIZE OF BLOCK 000050 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.

TITLE R*4 000000

NAME OF COMMON BLOCK * * SIZE OF BLOCK 017514 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.
JMAX	I*4	000000	IY	I*4	000004	IYEAR	I*4	000008	KYEAR	I*4	00000C
MY	I*4	000010	CLTIM	R*4	000014	RPTIM	R*4	000018	UCONLD	R*4	00001C
UTRN	R*4	000020	FTRN	R*4	000024	IDCU	I*4	000028	IICORE	I*4	N.R.
UVTR	R*4	000030	EGNTR	R*4	000034	FRINT	R*4	000038	USINT	R*4	00003C
JMAX9	I*4	000040	FCONLD	R*4	000044	RGTIM	R*4	000048	UFTIM	R*4	000160
FCOST	R*4	000278	FCOST	R*4	000390	CCOST	R*4	0004A8	FC	R*4	0005C0
CC	R*4	000639	CO	R*4	000590	SPCST	R*4	000728	UTOCIM	R*4	000740
CONIM	R*4	0007A4	ENSTM	R*4	0007A8	TRCST	R*4	0007AC	SHCST	R*4	000324
MOI	I*4	00099C	IDAYI	I*4	000E14	IYRI	I*4	001380	CDCST	R*4	001904
UFOUT	R*4	001A1C	UWTIN	R*4	001B34	CSTOT	R*4	001C4C	CSTIN	R*4	001D64
FDCST	R*4	001E7C	PVALU	R*4	001F54	CPFCT	R*4	001F6C	SCRAPL	R*4	001FE4
CNCST	R*4	002058	MUO	I*4	002174	IDAYO	I*4	0026FC	IYRO	I*4	002C64
CSLPE	R*4	N.R.	FSLPE	R*4	N.R.	SUMDP	R*4	002A0C	FBDEP	R*4	003484
FIIOT	R*4	0034FC	IIIOT	R*4	N.R.	SFCHG	R*4	003F5C	SALDC	R*4	003664
FVALB	R*4	N.R.	FVALE	R*4	0057AC	FVLIPN	R*4	N.R.	FVLOUT	R*4	N.R.
VALIN	R*4	N.R.	VALOT	R*4	N.R.	FVALOT	R*4	003F5C	UVALOT	R*4	004304
UVALE	R*4	N.R.	UVALB	R*4	N.R.	UDEPC	R*4	004AEC	FDPEL	R*4	00F99C
UVALC	R*4	011C3C	FVALC	R*4	013D5C	PGAIN	R*4	015E2C	CLOSS	R*4	015E44
ULOSS	R*4	C.3F48	PLOSS	R*4	015E4C	PAINT	R*4	015E5C	CYTIME	R*4	N.R.
KMONTH	I*4	015E58	RMONTH	R*4	015E5C	KAZOO	I*4	015E60	ICOPE	I*4	N.R.
NECOP	I*4	015E68	NOPT	I*4	015E6C	NECYCL	I*4	N.R.	LRCYCL	I*4	N.R.
KRUN	I*4	015E78	PCHIN	R*4	015E7C	PCHOT	R*4	015094	XWHF	R*4	0151AC
FAPPEN	R*4	016224	JN	I*4	01629C	RATIN	R*4	015384	RATOT	R*4	01697C
N&SSM	I*4	016EA4	APCHG	R*4	015EBC	TSCHG	R*4	017034	PCROT	R*4	0170AC
RALOC	R*4	017124	TALOC	R*4	01719C	PALOC	R*4	017214	CFAVE	R*4	01728C
CRTIM	R*4	0173A4	RPRCH	R*4	N.R.	IRPSC	I*4	0174C0	SPSDP	R*4	N.R.
SPEDP	R*4	N.R.	SPUCG	R*4	N.R.	SPECG	R*4	N.R.	SPSCG	R*4	N.R.
SPTAL	R*4	N.R.	SPRCG	R*4	N.R.	SPREL	R*4	N.R.	SPTCG	R*4	N.R.
SPRTU	R*4	N.R.	SPPCT	R*4	N.R.	SPPAL	R*4	N.R.	WTHSP	R*4	N.R.
LAZOO	I*4	N.R.	SPKWH	R*4	N.R.	NEWK	I*4	017500	IDISC	I*4	017504
			INT	I*4	017508	LAST	I*4	017510			

NAME OF COMMON BLOCK * CON* SIZE OF BLOCK 000150 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.
CFC	R*4	N.R.	CONCD	R*4	N.R.	CONCC	R*4	N.R.	CONFF	R*4	N.R.
KY	I*4	000140	KS	I*4	000144	KC	I*4	000148	NF	I*4	00014C

LABEL	ADDR		LABEL	ADDR		LABEL	ADDR		LABEL	ADDR	
52	003E58		60	003E80		520	003F96		59	004006	
100	004100		2060	004108		40	004158		17	004230	
20	0043C4		21	004400		22	004435		23	004498	
24	004634		25	004644		26	004688		27	00473A	
28	004736		29	0047BE		30	004854		1356	00490C	
840	0049F8		841	004A10	NR	842	004A32		843	004A54	
844	004A76		1493	00[illegible]		1494	004AC2		845	004B00	NR
848	004B4C		1355	004[illegible]0		522	004EC0		323	004C38	
324	004CCA		325	004D44		326	004D9E		327	00403A	
328	004D00		329	004E0E		322	004E8A		1150	004F0C	
831	005139		830	00514C		1445	005265		1430	005334	
360	00534E		1441	005456		1443	005493		1442	005494	
445	0054CE		1481	005566		457	00567A		444	005694	
2062	005CC6		2061	005AE2		2063	005C53		1520	005919	
1482	00537C		1510	00592A		524	005995		920	005B0C	
999	005DB3		130	005D88		432	005DCA		431	005D06	
98	005DF4		85	005E04		283	005E34	NR	234	005E3C	
80	005EF6		280	005F32		15	005F63	NR	901	005F96	
215	005F96	NR	900	00610C		101	006162				

OPTIONS IN EFFECT NAME= MAIN,OPT=00,LINECNT=58,SIZE=0000K,

OPTIONS IN EFFECT SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF

STATISTICS SOURCE STATEMENTS = 423 ,PROGRAM SIZE = 24980

STATISTICS NO DIAGNOSTICS GENERATED

****** END OF COMPILATION ****** 61K BYTES OF CORE NOT USED

```
COMPILER OPTIONS - NAME= MAIN,OPT=00,LINECNT=58,SIZE=0000K,
                   SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF
ISN 0002          SUBROUTINE READ(IMAT,NRTE)                                    00476
ISN 0003          DIMENSION IMAT(30),NRTE(6)                                    00477
ISN 0004          DIMENSION NUMB(11),NEWRD(11)                                  00478
ISN 0005          COMMON/ONE/TITLE(20)                                          00479
ISN 0006          COMMON JMAX,IY,IYEAR,KYEAR,MY,CLTIM,BPTIM,NCRYCL,NERN,ETRN    00480
ISN 0007          COMMON IPCD,IICORE,UNIT,ECHO,PRINT,USINT,JMAXX,ECONLD         00481
ISN 0008          COMMON BGTIM(70),UFTIM(70),FCOST(70),FCOST(70),CCCST(70)      00482
ISN 0009          COMMON FC(30),CC(30),CD(30),RPCST(30),UTDCTM,CONTM,ENRTM      00483
ISN 0010          COMMON TRCST(30),SHCST(30),MDI(70,5),IDAYI(70,5),IYRI(70,5)   00484
ISN 0011          COMMON CDCST(70),UFOUT(70),UNTIM(70),CSTOT(70),CSTIN(70)      00485
ISN 0012          COMMON FRCST(30),PVALUE(30),CPFCT(30),SCRAPL(70),CNCST(30)    00486
ISN 0013          COMMON MDO(70,5),IDAYO(70,5),IYRO(70,5),CSLPE(70),FSLPS(70)   00487
ISN 0014          COMMON SUMOP(30),FSOEP(30),FITOT(30),OITOT(30),SFCHG(30)      00488
ISN 0015          COMMON SALOC(30),FVAL3(70,30),FVALE(70,30),FVLINN(70,5)       00489
ISN 0016          COMMON FVLOUT(70,5),VALIN(70,5),VALOT(70,5),FVALOT(70,5)      00490
ISN 0017          COMMON UVALOT(70,5),UVALE(70,30),UVALO(70,30),UOSPL(70,30)    00491
ISN 0018          COMMON FOPSL(70,30),HVALC(70,30),FVALC(70,30),PUDUT(70)       00492
ISN 0019          COMMON CLOSS,OLOSS,PLOSS,PWINT,CYTIME,KMONTH,KMONTH           00493
ISN 0020          COMMON KAZOO,ICORE,NECOP,NORT,NRCYCL,LRCYCL,KRUN              00494
ISN 0021          COMMON RCHIN(70),ECHOT(70),XWWE(30),FABPEN(30)                00495
ISN 0022          COMMON JN(70),BATIN(70,5),BATOT(70,5),MASSA(70)               00496
ISN 0023          COMMON RPCHG(30),TRCHG(30),PCSDI(30),RALOC(30),TALOC(30)      00497
ISN 0024          COMMON PALOC(30),CFAVE(70),CRTIM(70),RPRCH,ISPRC              00498
ISN 0025          COMMON/CDM/CFC(20),CONCD(20),CONCC(20),CONFB(20),CY,KS,KC,NF  00499
ISN 0026          COMMON SPSDP,SPFDP,SPUCG,SPFCG,SPSCG,SPSAL,SPRCG,SPRAL,SPTCG,SPTAL00500
ISN 0027          COMMON SPPCT,SPPAL,WTHSP,SPBTU,SPKWH,NEWK,IDISC,LAZOO,INT,LAST 00501
ISN 0028       64 FORMAT(20A4)                                                  00502
ISN 0029        2 FORMAT(12X,5F12.0)                                            00503
ISN 0030        3 FORMAT(10X,10F7.0)                                            00504
ISN 0031        6 FORMAT(10X,10I7)                                              00505
ISN 0032        5 FORMAT(10X,I7)                                                00506
ISN 0033        4 FORMAT(10X,14I5)                                              00507
ISN 0034       65 FORMAT(10X,7I5,F10.0)                                         00508
ISN 0035      425 FORMAT(10X,5(I4,I3,1X,I4))                                    00509
ISN 0036      427 FORMAT(10X,3I5,2F10.1)                                        00510
ISN 0037     1000 FORMAT(20X,10HAAAAAAAAAA/)                                    00511
ISN 0038     1004 FORMAT(10X,10F10.4)                                           00512
ISN 0039       12 FORMAT(12X,5F12.0)                                            00513
ISN 0040       13 FORMAT(10X,5F12.0)                                            00514
ISN 0041        7 FORMAT(5X,5F12.0)                                             00515
ISN 0042          SPWTH=0.0                                                     00516
ISN 0043          SPSDP=0.0                                                     00517
ISN 0044          SPFDP=0.0                                                     00518
ISN 0045          SPFCG=0.0                                                     00519
ISN 0046          SPSCG=0.0                                                     00520
ISN 0047          SPSAL=0.0                                                     00521
ISN 0048          SPRCG=0.0                                                     00522
ISN 0049          SPRAL=0.0                                                     00523
ISN 0050          SPTCG=0.0                                                     00524
ISN 0051          SPTAL=0.0                                                     00525
ISN 0052          SPPCT=0.0                                                     00526
ISN 0053          SPPAL=0.0                                                     00527
ISN 0054          SPWTH=0.0                                                     00528
ISN 0055          SPBTU=0.0                                                     00529
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ISN 0056          SPKWH=0.0                                                  00510
ISN 0057          WTHSP=0.0                                                  00511
ISN 0058          NTT = 1                                                    00512
ISN 0059          KT = 1                                                     00513
ISN 0060          KNTT = 1                                                   00514
ISN 0061          L = 1                                                      00515
ISN 0062          LL = 3                                                     00516
ISN 0063          GO TO (410,413,410),KRUN                                   00517
ISN 0064        413 READ(L,4) KEND, (NEWRD(J), J = 1, KEND)                  00518
ISN 0065          DO 631 I=1,11                                              00519
ISN 0066          DO 600 J = 1,KEND                                          00520
ISN 0067          IF (NEWRD(J) .NE. I)GO TO 632                              00521
ISN 0069          NUMB(I) = 2                                                00522
ISN 0070          GO TO 631                                                  00523
ISN 0071        632 NUMB(I) = 1                                              00524
ISN 0072        600 CONTINUE                                                 00525
ISN 0073        631 CONTINUE                                                 00526
ISN 0074          GO TO 607                                                  00527
ISN 0075        410 DO 605 I=1,11                                            00528
ISN 0076        605 NUMB(I) = 2                                              00529
ISN 0077        607 READ(L,44)(TITLE(I),I = 1,20)                            00530
ISN 0078          IF(NUMB(1) .NE. 2)GO TO 606                                00531
ISN 0080          READ(L,6)NFCOP,IDCU,IRDOP,INT,IDISC,NEWK,LAST              00532
ISN 0081        606 GO TO(9,509,8),KRUN                                      00533
ISN 0082          9 READ(L,5) IY                                             00534
ISN 0083        207 LY = IY + 10                                             00535
ISN 0084          KAZOO=LY                                                   00536
ISN 0085          READ(L,3) (FC(K),K = 1 , KAZOO)                            00537
ISN 0086          READ(L,3) (CC(K),K = 1 , KAZOO)                            00538
ISN 0087          READ(L,3) (CD(K),K = 1 , KAZOO)                            00539
ISN 0088          READ(L,3) (FRCST(K),K = 1,KAZOO)                           00540
ISN 0089          READ(L,3) (RRCST(K),K = 1,KAZOO)                           00541
ISN 0090          READ(L,3) (CRCST(K),K = 1,KAZOO)                           00542
ISN 0091          READ(L,3) (IRCST(K),K = 1,KAZOO)                           00543
ISN 0092          READ(L,3) (SHCST(K),K = 1,KAZOO)                           00544
ISN 0093          READ(L,3) (PVALU(K),K = 1,KAZOO)                           00545
ISN 0094          READ(L,3) (XWWR (K),K = 1,KAZOO)                           00546
ISN 0095        610 READ(L,3)CLTIM,RPTIM,CLOSS,ULOSS,PLOSS,PWINT,UTOCTM,CONTM,ENRTM  00547
ISN 0096          READ(L,3)RTIMI,RGTRR,UFTMI,UFTMR,SCRPR,UNTR,RGNTR,USINT,FBINT  00548
ISN 0097          GO TO(609,52),NFCOP                                        00549
ISN 0098         52 READ(L,3) (FABPLM(K), K = 1 , KAZOO)                     00550
ISN 0099        609 IF(NUMB(2) .NE. 2)GO TO 718                              00551
ISN 0101         23 READ(L,3) (CPECT(K) , K = 1 , KAZOO)                     00552
ISN 0102        718 IF(NUMB(3) .NE. 2)GO TO 716                              00553
ISN 0104         21 READ(L,3) (TMWT(K)  , K = 1 , KAZOO)                     00554
ISN 0105         22 READ(L,3) (RRTE(I)  , I = 1 , 16)                        00555
ISN 0106        715 IF(NUMB(4) .NE. 2)GO TO 709                              00556
ISN 0108          READ(L,55)JMAX,IICORE,ICORE,NOEQL,NOEQBA,KBAT,NRSYS,CYTIME  00557
ISN 0109          IF(KBAT .EQ. 1)GO TO 416                                   00558
ISN 0111          JMAXB = KBAT                                               00559
ISN 0112          GO TO 590                                                  00560
ISN 0113        416 JMAXB = JMAX                                             00561
ISN 0114        580 IF(NOEQL .EQ. 1)GO TO 411                                00562
ISN 0116          JMAXA = NOEQL                                              00563
ISN 0117          GO TO 709                                                  00564
ISN 0119        411 JMAXA = JMAX                                             00565
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ISN 0119        709 IF(NUM3(5) .NE. 2)GO TO 710                                   00636
ISN 0121            READ(L,5)KMONTH,KYEAR,KY,IYEAR,IRPRC                          00637
ISN 0122            MONTH = KMONTH - 1                                            00638
ISN 0123            SMONTH = (FLOAT(MONTH))/12.                                   00639
ISN 0124            KNTT = 2                                                      00640
ISN 0125        710 IF(NUM3(6) .NE. 2)GO TO 712                                   00641
ISN 0127            READ(L,5)KY,KC,KS,NF                                          00642
ISN 0128        712 IF(NUM3(7) .NE. 2)GO TO 611                                   00643
ISN 0130            DO 780 J = 1,JMAX                                             00644
ISN 0131            RCHIN(J) = 0.0                                                00645
ISN 0132            RCHOT(J) = 0.0                                                00646
ISN 0133            UWTIN(J) = 0.0                                                00647
ISN 0134            UFOUT(J) = 0.0                                                00648
ISN 0135            PUOUT(J)  = 0.0                                               00649
ISN 0136            JN(J) = 1                                                     00650
ISN 0137        780 CONTINUE                                                      00651
ISN 0138            KT = 2                                                        00652
ISN 0139            READ(L,3) (RCHIN(J), J = 1 , JMAXA)                           00653
ISN 0140            READ(L,3) (RCHOT(J), J = 1 , JMAXA)                           00654
ISN 0141            READ(L,3) (UWTIN(J), J = 1 , JMAXA)                           00655
ISN 0142            READ(L,3) (UFOUT(J), J = 1 , JMAXA)                           00656
ISN 0143            READ(L,3) (PUOUT(J), J = 1 , JMAXA)                           00657
ISN 0144            READ(L,6) (NAME(J) , J = 1 , JMAXA)                           00658
ISN 0145        611 IF (NUM3(8) .NE. 2)GO TO 209                                  00659
ISN 0147            READ(L,3)SWETMI,SWETMR,SSCRPI,SSCRPR,FCONLD,UCONLD,FTRN,UTRN  00660
ISN 0148            GO TO (749,209,749),KRUN                                      00661
ISN 0149        209 IF (NUM3(9) .NE. 2)GO TO 749                                  00662
ISN 0151            READ(L,3)RSTMIS,RSTMRS                                        00663
ISN 0152        749 IF(NUM3(10) .NE. 2)GO TO 891                                  00664
ISN 0154            DO 55 J = 1,JMAXB                                             00665
ISN 0155            JNN=JN(J)                                                     00666
ISN 0156            NTT = 2                                                       00667
ISN 0157            GO TO (50,420),IRDOP                                          00668
ISN 0159        420 READ(L,425)(MOI(J,N),IDAYI(J,N),IYRI(J,N),N = 1,JNN)          00669
ISN 0159            READ(L,425)(MOO(J,N),IDAYO(J,N),IYRO(J,N),N = 1,JNN)          00670
ISN 0160            DO 1001 N = 1 , JNN                                           00671
ISN 0161            MTH = MOI(J,N) - 1                                            00672
ISN 0162            SMTH = (FLOAT(MTH))/12.                                       00673
ISN 0163            MTHO = MOO(J,N) - 1                                           00674
ISN 0164            SMTHO = (FLOAT(MTHO))/12.                                     00675
ISN 0165            NDAY = IDAYI(J,N) - 1                                         00676
ISN 0165            SDAY = (FLOAT(NDAY))/365.                                     00677
ISN 0167            NDAY = IDAYO(J,N) - 1                                         00678
ISN 0168            SDAYO = (FLOAT(NDAY))/365.                                    00679
ISN 0169            IF(J .GT. 1 .OR. N .GT. 1)GO TO 421                           00680
ISN 0171            BSTART = FLOAT((IYRI(1,1)) + SMTH + SDAY                      00681
ISN 0172        421 BATIN(J,N) = FLOAT((IYRI(J,N)) + SMTH + SDAY - BSTART         00682
ISN 0173            BATOT(J,N) = FLOAT((IYRO(J,N)) + SMTHO+ SDAYO - BSTART        00683
ISN 0174       1001 CONTINUE                                                      00684
ISN 0175            GO TO 55                                                      00685
ISN 0176         50 READ(L,3) (BATIN(J,N) ,N = 1,JNN)                             00686
ISN 0177         51 READ(L,3) (BATOT(J,N) ,N = 1,JNN)                             00687
ISN 0178         55 CONTINUE                                                      00688
ISN 0179        891 IF(NUM3(11) .NE. 2)GO TO 601                                  00689
ISN 0181        591 IF (KY)592,592,597                                            00690
ISN 0182        597 KON = KY                                                      00691
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ISN 0183          READ(L,3)(CFC(I) ,I = 1,KON)                                  00642
ISN 0184       592 IF (KC)593,593,598                                           00643
ISN 0185       598 KON = KC                                                     00644
ISN 0186          READ(L,3)(CONCC(I) ,I = 1,KON)                                00645
ISN 0187       593 IF(KS)599,594,599                                            00646
ISN 0188       599 KON = KS                                                     00647
ISN 0189          READ(L,3)(CONCD(I) , I = 1,KON)                               00648
ISN 0190       594 IF(NF)601,601,602                                            00649
ISN 0191       602 KON = NF                                                     00650
ISN 0192          READ(L,3)(CONSR(I) , I = 1,KON)                               00651
ISN 0193       601 CONTINUE                                                     00652
ISN 0194       892 DO 540 J = 1, JMAX                                           00653
ISN 0195           IF(J .GT. IICORE)GO TO 643                                   00654
ISN 0197           GO TO(641,642,641),KRUN                                      00655
ISN 0198       641 BGTIM(J) = BGTMI                                             00656
ISN 0199           UFTIM(J) = UFTMI                                             00657
ISN 0200       642 IF(NUM3(8) .NE. 2)GO TO 216                                  00658
ISN 0202           UFTIM(J) = SUFTMI                                            00659
ISN 0203           SCRAP(J) = SSCRPI                                            00660
ISN 0204       216 GO TO (543,656,643),KRUN                                     00661
ISN 0205       656 IF(NUM3(9) .NE. 2)GO TO 643                                  00662
ISN 0207           BGTIM(J) = BGTMIS                                            00663
ISN 0208       643 IF(J .LE. IICORE .OR. J .GT. ICORE)GO TO 651                 00664
ISN 0210           GO TO (644,645,644),KRUN                                     00665
ISN 0211       644 BGTIM(J) = BGTMR                                             00666
ISN 0212           UFTIM(J) = UFTMR                                             00667
ISN 0213       645 IF(NUM3(8) .NE. 2)GO TO 646                                  00668
ISN 0215           UFTIM(J) = SUFTMR                                            00669
ISN 0216           SCRAP(J)= SSCRPR                                             00670
ISN 0217       646 GO TO(651,650,651),KRUN                                      00671
ISN 0218       650 IF(NUM3(9) .NE. 2)GO TO 651                                  00672
ISN 0220           BGTIM(J) = BGTMRS                                            00673
ISN 0221       651 IF(J .LE. ICORE)GO TO 640                                    00674
ISN 0223           BGTIM(J) = BGTMR                                             00675
ISN 0224           UFTIM(J) = UFTMR                                             00676
ISN 0225           SCRAP(J) = SCRPR                                             00677
ISN 0226       640 CONTINUE                                                     00678
ISN 0227           IF (NOFOL .EQ. 1)GO TO 414                                   00679
ISN 0229       560 IF (KT .EQ. 1)GO TO 414                                      00680
ISN 0231       561 KCY = JMAXA + 1                                              00681
ISN 0232           DO 412 J = KCY,JMAX                                          00682
ISN 0233           KNK = J - NOSYA                                              00683
ISN 0234       555 RCHIN(J) = RCHIN(KNK)                                        00684
ISN 0235       566 RCHOT(J) = RCHOT(KNK)                                        00685
ISN 0236       567 UWTIN(J) = UWTIN(KNK)                                        00686
ISN 0237       563 UFOUT(J) = UFOUT(KNK)                                        00687
ISN 0238       569 PUOUT(J) = PUOUT(KNK)                                        00688
ISN 0239           NASSM(J) = NASSM(KNK)                                        00689
ISN 0240       412 CONTINUE                                                     00690
ISN 0241       414 IF (KRAT .EQ. 1)GO TO 510                                    00691
ISN 0243       542 GO TO(510,541),NTT                                           00692
ISN 0244       541 LCY = JMAXB + 1                                              00693
ISN 0245           DO 551 J = LCY , JMAX                                        00694
ISN 0246           LNK = J - NBSYS                                              00695
ISN 0247           JN(J) = JN(LNK)                                              00696
ISN 0249           JNN = JN(J)                                                  00697
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ISN 0249          DO 552 N = 1 , JNN                                    00699
ISN 0250      556 BATIN(J,N) = BATIN(LNK,N) + CYTIME                    00700
ISN 0251      557 BATOT(J,N) = BATOT(LNK,N) + CYTIME                    00701
ISN 0252      552 CONTINUE                                              00702
ISN 0253      551 CONTINUE                                              00703
ISN 0254      510 IF(KNTT .NE. 2 .AND. NTT .NE. 2)GO TO 577             00704
ISN 0256          IF(KNTT .NE. 2)GO TO 10                               00705
ISN 0258          RPRCH = FLOAT(IRPRC) - FLOAT(IYRI(1,1))               00706
ISN 0259       10 GO TO (521,856),NTT                                   00707
ISN 0260      856 RMONTH = 0.0                                          00708
ISN 0261      521 DO 531 J = 1 , JMAX                                   00709
ISN 0262          JNN = JN(J)                                           00710
ISN 0263          DO 527 N = 1 , JNN                                    00711
ISN 0264      539 BATOT(J,N) = BATOT(J,N) +SMONTH - RMONTH              00712
ISN 0265      537 BATIN(J,N) = BATIN(J,N) +SMONTH - RMONTH              00713
ISN 0266      527 CONTINUE                                              00714
ISN 0267      531 CONTINUE                                              00715
ISN 0268          RMONTH = SMONTH                                       00716
ISN 0269      577 CONTINUE                                              00717
ISN 0270          DO 682 I = 1,12                                       00718
ISN 0271      682 NUMB(I) = 1                                           00719
ISN 0272          GO TO (23,24,27),INT                                  00720
ISN 0273       24 LRCYCL = IDISC - KYEAR + 1                            00721
ISN 0274          CKYR = FLOAT(LRCYCL)                                  00722
ISN 0275          DO 25 J = 1 , JMAX                                    00723
ISN 0276          JNN = JN(J)                                           00724
ISN 0277          IF(BATOT(J,1) .GT. CKYR)GO TO 26                      00725
ISN 0279       25 CONTINUE                                              00726
ISN 0280       26 LAST = J - 1                                          00727
ISN 0281          JNN = JN(LAST)                                        00728
ISN 0282          IY = BATOT(LAST,JNN) + CLTIM + RPTIM + 1.0            00729
ISN 0283          NEW = J                                               00730
ISN 0284          NWYR = BATIN(NEW,1) + KYEAR                           00731
ISN 0285          NEWK = NWYR - KYEAR + 1                               00732
ISN 0286          LAZOO = LRCYCL-NEWK+1                                 00733
ISN 0287          WRITE(LL,6)LAST,NEW,NWYR,NEWK,LAZOO,LRCYCL            00734
ISN 0288          GO TO 23                                              00735
ISN 0289       27 LAZOO = IDISC - KYEAR + 1                             00736
ISN 0290          READ(L,2) (SUMDP(K) ,K = 1,LAZOO)                     00737
ISN 0291          WRITE(3,7)(SUMDP(K) ,K = 1,LAZOO)                     00738
ISN 0292          READ(L,2) (ORDER(K) ,K = 1,LAZOO)                     00739
ISN 0293          WRITE(3,7)(ORDER(K) ,K = 1,LAZOO)                     00740
ISN 0294          READ(L,2) (FITOT(K) ,K = 1,LAZOO)                     00741
ISN 0295          WRITE(3,7)(FITOT(K) ,K = 1,LAZOO)                     00742
ISN 0296          READ(L,2) (SECHG(K) ,K = 1,LAZOO)                     00743
ISN 0297          WRITE(3,7)(SECHG(K) ,K = 1,LAZOO)                     00744
ISN 0298          READ(L,2) (RPCHG(K) ,K = 1,LAZOO)                     00745
ISN 0299          WRITE(3,7)(RPCHG(K) ,K = 1,LAZOO)                     00746
ISN 0300          READ(L,2) (TRCHG(K) ,K = 1,LAZOO)                     00747
ISN 0301          WRITE(3,7)(TRCHG(K) ,K = 1,LAZOO)                     00748
ISN 0302          READ(L,2) (PCRDT(K) ,K = 1,LAZOO)                     00749
ISN 0303          WRITE(3,7)(PCRDT(K) ,K = 1,LAZOO)                     00750
ISN 0304          READ(L,2) (SALOC(K) ,K = 1,LAZOO)                     00751
ISN 0305          WRITE(3,7)(SALOC(K) ,K = 1,LAZOO)                     00752
ISN 0306          READ(L,2) (RALOC(K) ,K = 1,LAZOO)                     00753
ISN 0307          WRITE(3,7)(RALOC(K) ,K = 1,LAZOO)
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ISN 0308          READ(L,2) (TALOC(K) ,K = 1,LAZOO)                      00754
ISN 0309          WRITE(3,7)(TALOC(K) ,K = 1,LAZOO)                      00755
ISN 0310          READ(L,2) (PALOC(K) ,K = 1,LAZOO)                      00756
ISN 0311          WRITE(3,7)(PALOC(K) ,K = 1,LAZOO)                      00757
ISN 0312          READ(L,12)SPSDP,SPEDP,SPECG,SPSCG                      00758
ISN 0313          WRITE(L,13)SPSDP,SPEDP,SPECG,SPSCG                     00759
ISN 0314          READ(L,12)SPSAL,SPECG,SPRAL,SPICG,SPTAL                00760
ISN 0315          WRITE(L,13)SPSAL,SPECG,SPRAL,SPICG,SPTAL               00761
ISN 0316          READ(L,12)SPPCT,SPPAL,WTHSP,SPBTU,SPKWH                00762
ISN 0317          WRITE(L,13)SPPCT,SPPAL,WTHSP,SPBTU,SPKWH               00763
ISN 0318       23 CONTINUE                                               00764
ISN 0319          RETURN                                                 00765
ISN 0320          END                                                    00766
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NAME	TAG	TYPE	ADD.	NAME	TAG	TYPE	ADD.	NAME	TAG	TYPE	ADD.	NAME	TAG	TYPE	ADD.
I	SF	I*4	000214	J	SFA	I*4	000218	K	F	I*4	00021C	L	SF	I*4	000220
N	SFA	I*4	000224	CC	S C	R*4	000638	CD	S C	R*4	000630	FC	S C	R*4	000550
IY	SF C	I*4	000004	JN	SF C	I*4	015290	KC	SF C	I*4	000148	KS	SF C	I*4	000144
KT	S	I*4	000228	KY	SF C	I*4	000140	LL	SF	I*4	000220	LY	SF	I*4	000230
MY	S C	I*4	000210	NF	SF C	I*4	00014C	OFC	S C	R*4	000300	INT	SF C	I*4	017500
JNV	SF	I*4	000214	NCY	SF	I*4	000238	KNK	SF	I*4	000230	KON	SF	I*4	000240
LCY	SF	I*4	000244	LNK	SF	I*4	000248	MDI	SF C	I*4	00024C	MUO	SF C	I*4	002174
MIH	SFA	I*4	00024C	NEW	SF	I*4	000250	NII	SF	I*4	000254	CKYR	S	R*4	000258
RTRN	S C	R*4	000024	NRTE	S XR	R*4	000000	IDCU	S C	I*4	000028	IYRI	SFA C	I*4	00133C
IYRO	SFA C	I*4	000254	JMAX	SF C	I*4	000000	KRAY	SF	I*4	00025C	KEND	SF	I*4	000260
KNTT	S	I*4	000264	KRUN	F C	I*4	015F78	LAST	SF C	I*4	017310	MDAY	SFA	I*4	000268
MIHO	SFA	I*4	00026C	NDAY	SFA	I*4	000270	NEWR	SF C	I*4	017500	NOPT	C	I*4	N.R.
NUMB	S	I*4	000200	NHYR	SF	I*4	000274	READ		R*4	000278	SDAY	SF	R*4	000270
SMIH	SF	R*4	000280	TMNT	S XR	R*4	000000	UNTR	S C	R*4	000030	UTRN	S C	R*4	000020
XWWF	S C	R*4	0161AC	BATIN	SF C	R*4	016364	BATOT	SF C	R*4	01692C	BCNTR	S C	R*4	000034
BGTIM	S C	R*4	000049	BGIMI	SF	R*4	000284	BGTMR	SF	R*4	000288	CCCST	C	R*4	N.R.
CDCST	C	R*4	N.R.	CFAVE	C	R*4	N.R.	CLOSS	S C	R*4	015F44	CLTIM	SF C	R*4	000314
CNCST	S C	R*4	0020EC	COMCC	S C	R*4	0021A0	CRCCD	S C	R*4	000050	CONFB	S C	R*4	0000F0
CONTM	S C	R*4	0007A4	CPFCT	S C	R*4	001F6C	CRTEM	C	R*4	N.R.	CSLPE	C	R*4	N.R.
CSTIN	C	R*4	N.R.	CSTOT	C	R*4	N.R.	DITOT	C	R*4	N.R.	ENRTM	S C	R*4	000748
FRCST	S C	R*4	001570	FBUEP	SF C	R*4	003494	FRINT	S C	R*4	000339	FCCST	C	R*4	N.R.
FCCST	C	R*4	N.R.	FBPFL	C	R*4	N.R.	FITOT	SF C	R*4	0034EC	FSLPE	C	R*4	N.R.
FVALS	C	R*4	N.R.	FVALC	C	R*4	N.R.	FVALE	C	R*4	N.R.	ICSPE	S C	I*4	015F54
IDAYI	SF C	I*4	000314	IDAYO	SF C	I*4	0026EC	IDISC	SF C	I*4	017504	IRDTP	SF	I*4	00025C
IRPRC	SFA C	I*4	017300	IYEAR	S C	I*4	000038	JMAXA	SF	I*4	000290	JMAX3	SF C	I*4	000340
KAZED	SF C	I*4	015F60	KYEAR	SF C	I*4	00003C	LAZOD	SF C	I*4	017508	MONTH	SFA	I*4	000294
NASSM	SF C	I*4	015F84	NRSYS	SF	I*4	000298	NEWRD	S	I*4	000309	NFCUP	SF C	I*4	015F68
NOEOL	SF	I*4	00029C	PALOC	SF C	R*4	017214	PCRDI	SF C	R*4	01704C	PLOSS	S C	R*4	015F4C
PUCUF	SF C	R*4	015E2C	PVALU	S C	R*4	001554	PWINT	S C	R*4	015F50	RELUC	SF C	R*4	017124
RCMIN	SF C	R*4	015F7C	RCMOT	SF C	R*4	01660A	RPCHG	SF C	R*4	016F8C	RPCST	S C	R*4	000728
RPECH	S C	R*4	017480	RPTIM	SF C	R*4	000018	SALOC	SF C	R*4	003664	SCRAR	SF	R*4	0002A0
SDAYO	SF	R*4	0002A4	SECHG	SF C	R*4	0035EC	SHCST	S C	R*4	003624	SMIHO	SF	R*4	000248
SPETH	SF C	R*4	0174F8	SPFCG	SF C	R*4	017400	SPFDP	SF C	R*4	0174CB	SPKNH	SF C	R*4	0174FC
SPPAL	SF C	R*4	017450	SPTCT	SF C	R*4	0174EC	SPRAL	SF C	R*4	0174E0	SPSCL	SF C	R*4	0174DC
SPSAL	SF C	R*4	017408	SPSCG	SF C	R*4	017404	SPSDP	SF C	R*4	0174C4	SPTAL	SF C	R*4	0174E8
SPTCG	SF C	R*4	0174F4	SPUCG	C	R*4	N.R.	SPWTH	S	R*4	0002AC	SUMOP	SF C	R*4	003400
TALOC	SF C	R*4	01719C	TITLE	S C	R*4	000000	TRCHG	SF C	R*4	017034	TRCST	S C	R*4	0007AC
UDEPL	C	R*4	N.R.	UFOUT	SF C	R*4	001A1C	UFTIM	S C	R*4	003160	UFTMI	SF	R*4	000280
UFTHR	SF	R*4	000294	ULOSS	S C	R*4	015F43	USINT	S C	R*4	00303C	UVALB	C	R*4	N.R.
UVALC	C	R*4	N.R.	UVALE	C	R*4	N.R.	VATIN	SF C	R*4	021B34	VALIN	C	R*4	N.R.
VALOT	C	R*4	N.R.	WTHSP	SF C	R*4	017454	BGTIMS	SF	R*4	000258	BGTIMS	SF	R*4	00025C
BSTART	SF	R*4	0002C0	CYTIME	SF C	R*4	015F54	FARRIN	S C	R*4	015224	FCONLD	S C	R*4	000044
FVALOT	C	R*4	N.R.	FVLINN	C	R*4	N.R.	FVLOUT	C	R*4	N.R.	IBCOM*	F XF	I*4	000000
IICOPE	S C	I*4	0C002C	KMONTH	SF C	I*4	015F59	LRCYCL	SFA C	I*4	015F74	NOEOEA	SF	I*4	0002C4
NRCYCL	C	I*4	N.R.	RMONTH	SF C	R*4	015F5C	SCRAPL	S C	R*4	001FE4	SMONTH	SF	R*4	0002C8
SSCRPI	SF	R*4	0002CC	SSCRPR	SF	R*4	0002D0	SUFTMI	SF	R*4	0002D4	SUFTMR	SF	R*4	0002D8
UCONLD	S C	R*4	00001C	UTOCTM	S C	R*4	0007A0	UVALOT	C	R*4	N.R.				

***** COMMON INFORMATION *****

NAME OF COMMON BLOCK * ONE* SIZE OF BLOCK 000950 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.

TITLE P*4 000000

NAME OF COMMON BLOCK * * SIZE OF BLOCK 017514 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.
JMAX	I*4	000000	IY	I*4	000004	IYEAR	I*4	000008	KYEAR	I*4	00000C
MY	I*4	000010	CLTIM	R*4	000014	KPTIM	R*4	000018	UCONLD	R*4	00001C
UIRN	R*4	000020	FTRN	R*4	000024	IDCU	I*4	000028	IICORE	I*4	00002C
UNTR	R*4	000030	EGNTR	R*4	000034	PRINT	R*4	000038	USINT	R*4	00003C
JMAXR	I*4	000040	FCONLD	R*4	000044	BGTIM	R*4	000048	UFTIM	R*4	000160
FCOST	R*4	N.R.	FCOST	R*4	N.R.	CCCST	R*4	N.R.	FC	R*4	0005C0
CC	R*4	000638	CD	R*4	000680	RHCST	R*4	000728	UTOCTM	R*4	000780
CDBTM	R*4	000784	FXRTM	R*4	0007E8	IPCST	R*4	000838	SHCST	R*4	000824
MDI	I*4	000890	IDAYI	I*4	000E14	IYRI	I*4	001330	CDCST	R*4	N.R.
UFCUT	R*4	001A1C	UWTIN	R*4	001334	CSTOT	R*4	N.R.	CSTIN	R*4	N.R.
FRCST	R*4	001E7C	PVALU	R*4	001EE4	CPFCT	R*4	001F6C	SCRAPL	R*4	001FE4
CHCST	R*4	002BFC	JMD	I*4	002174	IDAYJ	I*4	0026EC	IYRO	I*4	002C64
CSLPE	R*4	N.R.	FSLPE	R*4	N.R.	SUMDP	R*4	00340C	FBDSP	R*4	003484
FITOT	R*4	0034FC	DITOT	R*4	N.R.	SPCHG	R*4	0035EC	SALDC	R*4	003664
FVALB	R*4	N.R.	FVALE	R*4	N.R.	FVLTIN	R*4	N.R.	FVLOUT	R*4	N.R.
VALIN	R*4	N.R.	VALOT	R*4	N.R.	FVLOT	R*4	N.R.	UVALOT	R*4	N.R.
UVALE	R*4	N.R.	UVALB	R*4	N.R.	UDCPL	R*4	N.R.	FDPEL	R*4	N.R.
UVALC	R*4	N.R.	FVALC	R*4	N.R.	PUDDT	R*4	015E2C	CLOSS	R*4	015E44
ULOSS	R*4	015E48	PLOSS	R*4	015E4C	PHINT	R*4	015E50	CYTIME	R*4	015E54
KMONTH	I*4	015E58	RMONTH	R*4	015E5C	KAZOO	I*4	015E60	ICOAE	I*4	015E64
NECOP	I*4	015E64	NOPT	I*4	N.R.	NRCYCL	I*4	N.R.	LRCYCL	I*4	015E74
KRUN	I*4	015E78	RCHIN	R*4	015E7C	RCROT	R*4	016094	XMAF	R*4	0161AC
FARPEN	R*4	016224	JN	I*4	01629C	EATIN	R*4	016384	EATOT	R*4	01692C
NASSM	I*4	016E84	EPCHG	R*4	015E9C	TRCHG	R*4	017034	PCROT	R*4	0170AC
RALOC	R*4	017124	TALOC	R*4	01719C	PALOC	R*4	017214	CFAVE	R*4	N.R.
CPTIM	R*4	N.R.	EPRCH	R*4	017498	IRPFC	I*4	0174C0	SPSOP	R*4	0174C4
SPEOP	R*4	0174CP	SPUCG	R*4	N.R.	SPECG	R*4	0174D0	SPSCG	R*4	0174D4
SPSAL	R*4	0174D8	SPRCG	R*4	0174DC	SPPAL	R*4	0174E0	SPICG	R*4	0174E4
SPTAL	R*4	0174E8	SPECT	R*4	0174EC	SPPAL	R*4	0174F0	WTHSP	R*4	0174F4
SPOTU	R*4	0174FP	SPXWH	R*4	0174FC	NEWK	I*4	017500	IDISC	I*4	017504
LAZOO	I*4	017508	INT	I*4	01750C	LAST	I*4	017510			

NAME OF COMMON BLOCK * CON* SIZE OF BLOCK 000150 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.
CFC	R*4	000000	CONCD	R*4	000050	CONCC	R*4	0000A0	CONF9	R*4	0000F0
KY	I*4	000140	KS	I*4	000144	KC	I*4	000148	NF	I*4	00014C

LABEL	ADDR		LABEL	ADDR		LABEL	ADDR		LABEL	ADDR	
413	000785		632	000816		520	003425		531	000830	
410	000953		605	000860		607	000546		606	000934	
8	000952		207	000974	NR	510	000C2E	NR	52	000862	
608	000DAA		20	000DB8		718	000E02		21	000E10	
22	000E5A	NR	716	000EA2		416	000F2C		590	000F53	
411	000F54		709	000F50		710	000F6E		712	001044	
760	001006		611	001296		209	00131A		749	00134C	
420	001394		421	001596		1001	0017EE		50	001744	
51	001804	NR	55	001B5C		891	001876		591	001884	
597	001894		592	0019E6		598	001945		593	00194A	
599	00195A		594	001A2E		602	001A3E		601	001A12	
893	001A12	NR	641	001A4A		542	001A5E		216	001AA4	
656	001AC2		643	001AE4		644	001B76		545	001B4A	
645	001B90		650	001B9E		651	001BC0		649	001CDA	
560	001C32		561	001C40		555	001C5C	NR	556	001C90	NR
567	001CA4	NR	568	001CC8	NR	569	001CEC	NR	412	001D34	
414	001D45		542	001D5C		541	001D76		556	001DD2	
557	001E1C	NR	552	001E56		551	001E7C		510	001E9e	
10	001E2E		956	001E43		521	001F54		538	001F78	
537	001FC6	NR	527	002014		531	002024		577	002050	
692	002059		24	002099		25	002110		26	00212A	
27	00219A		23	002A5C							

OPTIONS IN EFFECT NAME= MAIN,OPT=00,LINECNT=58,SIZE=0000K,

OPTIONS IN EFFECT SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF

STATISTICS SOURCE STATEMENTS = 319 ,PROGRAM SIZE = 10926

STATISTICS NO DIAGNOSTICS GENERATED

****** END OF COMPILATION ****** 49K BYTES OF CORE NOT USED

J25 !

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COMPILER OPTIONS - NAME= MAIN,OPT=00,LINECNT=59,SIZE=0000K,
                   SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF
                C     INITIAL AND FINAL UNLOADED VALUES OF U                                  00767
ISN 0002                SUBROUTINE COST                                                       00768
ISN 0003                DIMENSION XWW(70)                                                     00769
ISN 0004                DIMENSION FCCS(70),CCCS(70),CDCS(70)                                  00770
ISN 0005                COMMON/ JMAX,IY,IYEAR,KYEAR,MY,CLTIM,RPTIM,UCONLD,UTOM,ETRN           00771
ISN 0006                COMMON/ IOCU,IICORE,UNIT,EGNTR,PRINT,USINT,JMAXX,FCONLD               00772
ISN 0007                COMMON BGTIM(70),UFTIM(70),FCCST(70),FCOST(70),CCCST(70)               00773
ISN 0008                COMMON FC(30),CC(30),CD(30),RPCST(30),UTOCTM,CONTM,ENRTM               00774
ISN 0009                COMMON TRCST(30),SHCST(30),MOI(70,5),IDAYI(70,5),IYRI(70,5)           00775
ISN 0010                COMMON CDCST(70),MFOUT(70),UNITU(70),CSTOT(70),CSTIN(70)              00776
ISN 0011                COMMON FRCST(30),PVALU(30),CPFCT(30),SCRAPL(70),CRCST(30)             00777
ISN 0012                COMMON MDO(70,5),IDAYO(70,5),IYRO(70,5),CSLPE(70),FSLPE(70)           00778
ISN 0013                COMMON SUMOP(30),ESDEP(30),FITOT(30),DITOT(30),SECMG(30)              00779
ISN 0014                COMMON SALOC(30),EVALO(70,30),EVLPE(70,30),EVLINN(70,5)               00780
ISN 0015                COMMON EVLOUT(70,5),VALIN(70,5),VALOT(70,5),EVALOT(70,5)              00781
ISN 0016                COMMON UVALOT(70,5),UVALE(70,30),UVALR(70,30),UDEFL(70,30)            00782
ISN 0017                COMMON EDPSL(70,30),UVALO(70,30),EVALO(70,30),PROUT(70)               00783
ISN 0018                COMMON CLOSS,ULOSS,PLOSS,PWINT,CYTIME,XMONTH,RMONTH                   00784
ISN 0019                COMMON KAZOO,ICOPE,NECOP,NOPT,NRECYCL,LRCYCL,KRUN                     00785
ISN 0020                COMMON RCHIN(70),RCHOT(70),XWWS(30),FABRSN(30)                        00786
ISN 0021                COMMON JN(70),RATIM(70,5),RATOT(70,5),NASSM(70)                       00787
ISN 0022                COMMON RPCHG(30),ISCHG(30),PCROT(30),RALOC(30),TALOC(30)              00788
ISN 0023                COMMON PALOC(30),CFAVE(70),CRTIM(70),SPRCH,IRPRC                      00789
ISN 0024                COMMON/COM/SFC(20),CONCO(20),CONCC(20),CONFB(20),XY,KS,KC,NF          00790
ISN 0025                COMMON SPSOP,SPEDP,SPUCG,SPFCG,SPSCG,SPSAL,SPPCG,SPRAL,SPTCG,SPTAL00791
ISN 0026                COMMON SPRCT,SPRAL,WTHSP,SPBTU,SPKWH,NEWK,IDISC,LAZOO,INT,LAST        00792
                C     ***************     **********************  ******************          00793
ISN 0027                LL = 3                                                                00794
ISN 0028              1004 FORMAT(20X,I2,4X,F20.6)                                            00795
ISN 0029              1005 FORMAT(30X,I2)                                                     00796
ISN 0030              1006 FORMAT(1HX,I2,4X,3F20.6)                                           00797
ISN 0031              1011 FORMAT(1H0,20X,13HCHECK POINT 1)                                   00798
ISN 0032              1012 FORMAT(1H0,20X,13HCHECK POINT 2)                                   00799
ISN 0033              1013 FORMAT(1H0,20X,13HCHECK POINT 3)                                   00800
ISN 0034              1014 FORMAT(1H0,20X,13HCHECK POINT 4)                                   00801
ISN 0035                   XF=.007115                                                         00802
ISN 0036                   SAVE=0.0                                                           00803
ISN 0037                   IF(KY)560,560,501                                                  00804
ISN 0038               560 IF(KC)501,501,519                                                  00805
ISN 0039               519 KS = KC                                                            00806
ISN 0040                   GO TO 521                                                          00807
ISN 0041               501 KC = KY                                                            00808
ISN 0042               521 CONTINUE                                                           00809
ISN 0043                   J=JMAX                                                             00810
ISN 0044                 1 RATINN=RATIN(J,1)+FLOAT(MY)                                        00811
ISN 0045                   YKK=RATINN-BGTIM(J)-UFTIM(J)                                       00812
ISN 0046                   YKS = YKK - ENRTM                                                  00813
ISN 0047                   YKC = YKS - CONTM                                                  00814
ISN 0048                   YKE = YKC - UTOCTM                                                 00815
ISN 0049                   ZKE = YKE - UCONLD                                                 00816
ISN 0050                   ZKK = YKK - FCONLD                                                 00817
ISN 0051                   KKE = ZKE + 1.0                                                    00818
ISN 0052                   KKC = YKC + 1.0                                                    00819
ISN 0053                   KKE = YKE + 1.0                                                    00820
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ISN 0054          KKK = ZKK + 1.0                                                    00821
ISN 0055        3 IF(KY)100,100,108                                                  00822
ISN 0056      108 IF(J .GT. KY)GO TO 100                                             00823
ISN 0058          FCCST(J) =CFC(J)                                                   00824
ISN 0059          GO TO 101                                                          00825
ISN 0060      100 FCCST(J) = FC(KKF)                                                 00826
ISN 0061      101 IF(KS)102,102,109                                                  00827
ISN 0062      109 IF(J .GT.KS)GO TO 102                                              00828
ISN 0064          CDCST(J) = CONCD(J)                                                00829
ISN 0065          GO TO 103                                                          00830
ISN 0066      102 CDCST(J) = CD(KKE)                                                 00831
ISN 0067      103 IF(KC)104,104,110                                                  00832
ISN 0068      110 IF(J .GT. KC)GO TO 104                                             00833
ISN 0070          CCCST(J) = CONCC(J)                                                00834
ISN 0071          GO TO 105                                                          00835
ISN 0072      104 CCCST(J) = CC(KKC)                                                 00836
ISN 0073      105 IF(NF)106,106,111                                                  00837
ISN 0074      111 IF(J .GT. NF)GO TO 106                                             00838
ISN 0076          FCOST(J) = CONFB(J)                                                00839
ISN 0077          GO TO 107                                                          00840
ISN 0078      106 GO TO (200,210),NFCOP                                              00841
ISN 0079      210 FCOST(J) = FBCST(KKK) * (1.0+(FABPEN(KKK)/100.))                   00842
ISN 0080          GO TO 107                                                          00843
ISN 0081      200 FCOST(J) = FBCST(KKK)                                              00844
ISN 0082      107 IF(KKS-1)321,320,320                                               00845
ISN 0083      321 XWWH(J) = XWWF(1)                                                  00846
ISN 0084          GO TO 322                                                          00847
ISN 0085      320 XWWH(J) = XWWF(KKE)                                                00848
ISN 0086      322 IF(KG)120,120,528                                                  00849
ISN 0087      528 IF (J - KY)118,118,120                                             00850
ISN 0088      120 FCCST(J) = FCCST(J) * (1.0 + (UTRN/100.)* UCONLD)                  00851
ISN 0089      118 IF(UCU)116,116,117                                                 00852
ISN 0090      116 CONTINUE                                                           00853
ISN 0091          IF (J - KY)570,570,561                                             00854
ISN 0092      561 CONTINUE                                                           00855
ISN 0093          FCCST(J) = FCCST(J) * (1.0 + (UNTR/100.)* (CONTM+ENRTM))           00856
ISN 0094      570 IF (J - KC)117,117,562                                             00857
ISN 0095      562 CONTINUE                                                           00858
ISN 0096          CCCST(J) = CCCST(J)*(1.0+(UNTR/100.) * ENRTM)                      00859
ISN 0097      117 CONTINUE                                                           00860
ISN 0098          IF(NF)523,523,524                                                  00861
ISN 0099      524 IF(J - NF)525,525,523                                              00862
ISN 0100      523 FCOST(J) = FCOST(J) * (1.0 + (FTRN/100.)* FCONLD)                  00863
ISN 0101      525 CONTINUE                                                           00864
              C   ********************      **************************   ********** 00865
              C   ********************      *********   ************   ********** 00866
ISN 0102        4 J=J-1                                                            00867
ISN 0103          IF(J-1)5,1,1                                                     00868
ISN 0104        5 DO 15 J=1,JMAX                                                   00869
ISN 0105          CF=(FCCST(J)*(842.0/714.0)*(1.0+CLOSS/100.)+CCCST(J))*2.2046     00870
ISN 0106          AA=CF*CDCST(J)*XF                                                00871
ISN 0107          IF(AA-SAVE)6,12,6                                                00872
ISN 0108        6 SAVE=AA                                                          00873
ISN 0109          CO=CF/CDCST(J)                                                   00874
ISN 0110          PIF = (2.0*XF-1.0)*ALOG(XF/(1.0-XF))                             00875
ISN 0111       14 XWW = XWWH(J)                                                    00876
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ISN 0112          17 PIW=(2.0*XWW-1.0)*ALOG(XWW/(1.0-XWW))                                00877
ISN 0113             DPIW=(PIF-PIW-CO)/(XF-XWW)                                          00878
ISN 0114          12 IF(RCHIN(J)/100.0-XWW)13,19,19                                      00879
ISN 0115          13 CSTIN(J)=0.0                                                        00880
ISN 0116             GO TO 15                                                            00881
ISN 0117          19 PIP=((2.0*(RCHIN(J)/100.0))-1.0)*ALOG((RCHIN(J)/100.0)/            00882
                     1(1.0-(RCHIN(J)/100.0)))                                           00883
ISN 0118             CSTIN(J)=CDCST(J)*(PIP-PIW-(RCHIN(J)/100.0-XWW)*DPIW)              00884
                     1*(1.0 + SCRAPL(J)/100.)                                           00885
ISN 0119             IF(IDCW)550,550,15                                                  00886
ISN 0120       550 IF (J - KS)563,563,564                                                00887
ISN 0121       564 CONTINUE                                                            00888
ISN 0122             CSTIN(J) = CSTIN(J) * (1.0+(UNTR/100.)*UFTIM(J))                   00889
ISN 0123       563 IF (J - KG)565,565,566                                              00890
ISN 0124       566 CONTINUE                                                            00891
ISN 0125             CSTIN(J) = CSTIN(J) * (1.0 +(BGNTR/100.) * BGTIM(J))               00892
ISN 0126       565 IF (J - NF)15,15,567                                                00893
ISN 0127       567 CONTINUE                                                            00894
ISN 0128             FCOST(J) =FCOST(J) *(1.0 + (BGNTR/100.)* BGTIM(J))                 00895
ISN 0129          15 CONTINUE                                                          00896
ISN 0130             J=JMAX                                                          00897
ISN 0131          20 JNN=JN(J)                                                       00898
ISN 0132             CLAG = (BATOT(J,JNN) + CLTIM + RPTIM)                           00899
ISN 0133             KK = CLAG                                                       00900
ISN 0134             KKK = KK + 1 + MY                                               00901
ISN 0135             IF(KKK - KAZOO)421,421,424                                      00902
ISN 0136       424 KKK = KAZOO                                                       00903
ISN 0137       421 CONTINUE                                                          00904
ISN 0138             FCCS(J) = FC(KKK)                                               00905
ISN 0139             CDCS(J) = CD(KKK)                                               00906
ISN 0140             CCCS(J) = CC(KKK)                                               00907
ISN 0141             XWW(J) = XWWF(KKK)                                              00908
                C    ****************       **********************   ****************00909
ISN 0142       305 J = J - 1                                                         00910
ISN 0143             IF(J-1)33,20,20                                                 00911
ISN 0144          33 DO 59 J=1,JMAX                                                  00912
ISN 0145             CF = (FCCS(J) *(942./714.) + CCCS(J))*2.2046                    00913
ISN 0146             AA = CF * CDCS(J) * XF                                          00914
ISN 0147             IF(AA-SAVE)34,80,34                                             00915
ISN 0148          34 SAVE=AA                                                         00916
ISN 0149             CO = CF/CDCS(J)                                                 00917
ISN 0150             PIF = (2.0*XF-1.0)*ALOG(XF/(1.0-XF))                            00918
ISN 0151          30 XWW = XWW(J)                                                    00919
ISN 0152          35 PIW=(2.0*XWW-1.0)*ALOG(XWW/(1.0-XWW))                           00920
ISN 0153             DPIW=(PIF-PIW-CO)/(XF-XWW)                                      00921
ISN 0154          80 IF(RCHOT(J)/100.0-XWW)81,82,82                                  00922
ISN 0155          81 CSTOT(J)=0.0                                                    00923
ISN 0156             GO TO 59                                                        00924
ISN 0157          82 PIP=((2.0*(RCHOT(J)/100.0))-1.0)*ALOG((RCHOT(J)/100.0)/        00925
                     2(1.0-(RCHOT(J)/100.0)))                                       00926
                C    ****************       **********************   ****************00927
ISN 0158             CSTOT(J)=CDCST(J)*(PIP-PIW-(RCHOT(J)/100.0-XWW)*DPIW)           00928
ISN 0159             CSTOT(J) = CSTOT(J)/(1.0 + PWINT)**(CLAG - BATOT(J,JNN))        00929
ISN 0160          59 CONTINUE                                                        00930
                C    ****************       **********************   ****************00931
ISN 0161             RETURN                                                          00932
```

ISN 0162 END

GG933

NAME	TAG		TYPE	ADD.
J	SFA		I*4	000154
CF	SF		R*4	000150
JN	F	C	I*4	016790
KS		C	I*4	000144
NS		C	I*4	000140
JMN	SF		I*4	000174
KKK	SF		I*4	000134
PIP	SF		R*4	000198
YKE	SF		R*4	000190
ZKK	SF		R*4	0001A0
COST			R*4	000184
IOCU		C	I*4	000028
KRUN		C	I*4	N.R.
SAVE	S		R*4	000180
XWW4	SF		R*4	000500
BGTIM	F	C	R*4	000048
CLOSS	F	C	R*4	015544
CONCD	F	C	R*4	000050
CRTIM		C	R*4	N.R.
DITOT		C	R*4	N.R.
FRINT		C	R*4	N.R.
FITOT		C	R*4	N.R.
FVALF		C	R*4	N.R.
IDISC		C	I*4	N.R.
KAZOO	F	C	I*4	015560
NECOP	F	C	I*4	015F68
PUCUT		C	R*4	N.R.
RCHIN	FA	C	R*4	015F7C
RPECH		C	R*4	N.R.
SHCST		C	R*4	N.R.
SPKWH		C	R*4	N.R.
SPRCG		C	R*4	N.R.
SPTAL		C	R*4	N.R.
TALOC		C	R*4	N.R.
UFCUT		C	R*4	N.R.
UVALB		C	R*4	N.R.
VALIN		C	R*4	N.R.
ALCG		XF	R*4	000000
FCONLD	F	C	R*4	000344
IICORE		C	I*4	N.R.
RMONTH		C	R*4	N.R.
UVALOT		C	R*4	N.R.

NAME	TAG		TYPE	ADD.
AA	SF		R*4	000158
CD	SF		R*4	000160
KC	F	C	I*4	000148
KY	F	C	I*4	000140
XF	SFA		R*4	000170
ACC	SF		I*4	000178
MDI		C	I*4	N.R.
PIW	SF		R*4	000190
YKF	SF		R*4	0001A0
CCCS	SF		R*4	0001C4
DFIW	SF		R*4	000188
IYRI		C	I*4	N.R.
LAST		C	I*4	N.R.
UNIR	F	C	R*4	000030
RATIN	F	C	R*4	015394
CDCST	SF	C	R*4	0004A8
CLTIM	F	C	R*4	000014
CONCR	F	C	R*4	0000F0
CSLPE		C	R*4	N.R.
EMPTM	F	C	R*4	0007A8
FCCST	SF	C	R*4	000278
FSLPE		C	R*4	N.R.
ICERE		C	I*4	N.R.
IRPRC		C	I*4	N.R.
KYEAR		C	I*4	N.R.
PALOC		C	R*4	N.R.
PVALU		C	R*4	N.R.
RCHOT	FA	C	R*4	016394
RPTIM	F	C	R*4	000018
SPRIU		C	R*4	N.R.
SPRAL		C	R*4	N.R.
SRSAL		C	R*4	N.R.
SPICG		C	R*4	N.R.
TPCHG		C	R*4	N.R.
UFTIM	F	C	R*4	000160
UVALC		C	R*4	N.R.
VALOT		C	R*4	N.R.
BATINN	SF		R*4	0001C0
FVALDT		C	R*4	N.R.
KMONTH		C	I*4	N.R.
SCRAPL	F	C	R*4	001FE4

NAME	TAG		TYPE	ADD.
CC	F	C	R*4	000438
FC	F	C	R*4	0004C0
KG	S		I*4	000154
LL	S		I*4	000160
CFC	F	C	R*4	000300
KKF	SF		I*4	00017C
MDO		C	I*4	N.R.
XUW	SFA		R*4	000194
YKK	SF		R*4	0001A4
CDCS	SF		R*4	0007DC
FCCS	SF		R*4	0003F4
IYSO		C	I*4	N.R.
NEWK		C	I*4	N.R.
UTRN	F	C	R*4	000020
RATDI	F	C	R*4	01692C
CDCST	SF	C	R*4	001934
CNCST		C	R*4	N.R.
CPNTM	F	C	R*4	0007A4
CSTIM	SF	C	R*4	001364
FCCST	F	C	R*4	001570
FCOST	SF	C	R*4	000390
FVALB		C	R*4	N.R.
IDAYI		C	I*4	N.R.
IYEAR		C	I*4	N.R.
LAZOO		C	I*4	N.R.
PCPOT		C	R*4	N.R.
PWINT	F	C	R*4	015F50
RPCHG		C	R*4	N.R.
SALOC		C	R*4	N.R.
SPECG		C	R*4	N.R.
SPPCT		C	R*4	N.R.
SPSCG		C	R*4	N.R.
SPWCG		C	R*4	N.R.
TPCST		C	R*4	N.R.
ULOSS		C	R*4	N.R.
UVALC		C	R*4	N.R.
WTHSP		C	R*4	N.R.
CYTIME		C	R*4	N.R.
FVLINN		C	R*4	N.R.
LRCYCL		C	I*4	N.R.
UCONLD	F	C	R*4	000C1C

NAME	TAG		TYPE	ADD.
CD	F	C	R*4	000690
IY		C	I*4	N.R.
KK	SF		I*4	000168
MY	FA	C	I*4	000010
INT		C	I*4	N.R.
KKF	SF		I*4	000180
PIF	SF		R*4	000198
YKC	SF		R*4	000198
ZKF	SF		R*4	0001A8
CLAG	SF		R*4	000100
FIRN	F	C	R*4	000024
JMAX	F	C	I*4	000000
NUPT		C	I*4	N.R.
XWWF	F	C	R*4	0151AC
BGNTR	F	C	R*4	000034
CRAVE		C	R*4	N.R.
CONCC	F	C	R*4	000040
CPECT		C	R*4	N.R.
CSTOT	SF	C	R*4	001C4C
FBDEP		C	R*4	N.R.
FDPEL		C	R*4	N.R.
FVALC		C	R*4	N.R.
IDAYO		C	I*4	N.R.
JMAX3		C	I*4	N.R.
NASSM		C	I*4	N.R.
PLOSS		C	R*4	N.R.
RALOC		C	R*4	N.R.
RPCST		C	R*4	N.R.
SECNG		C	R*4	N.R.
SPEEP		C	R*4	N.R.
SPRAL		C	R*4	N.R.
SPSDP		C	R*4	N.R.
SUMOP		C	R*4	N.R.
UDEPL		C	R*4	N.R.
USINT		C	R*4	N.R.
UWTIN		C	R*4	N.R.
FRXPRA		XF	R*4	000000
FAPPEN	F	C	R*4	016224
FVLOUT		C	R*4	N.R.
NRCYCL		C	I*4	N.R.
UTOCTM	F	C	R*4	0007A0

***** COMMON INFORMATION *****

NAME OF COMMON BLOCK * * SIZE OF BLOCK 017514 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.
JMAX	I*4	000000
MY	I*4	000010
UTRN	R*4	000020
UNIR	R*4	000030
JMAX3	I*4	N.R.

VAR. NAME	TYPE	REL. ADDR.
IY	I*4	N.R.
CLTIM	R*4	000014
FIRN	R*4	000024
FGNTR	R*4	000034
FCONLD	R*4	000044

VAR. NAME	TYPE	REL. ADDR.
IYEAR	I*4	N.R.
RPTIM	R*4	000018
IOCU	I*4	000028
FRINT	R*4	N.R.
RCTIM	R*4	000040

VAR. NAME	TYPE	REL. ADDR.
KYEAR	I*4	N.R.
UCONLD	R*4	00001C
IICORE	I*4	N.R.
USINT	R*4	N.R.
UFTIM	R*4	000160

FCCST	R*4	000278	FCOST	R*4	000390	CCCST	R*4	0004A8	FC	R*4	0005C0
CC	R*4	0005E8	CO	R*4	000600	KFC_T	R*4	N.R.	UTOCIM	R*4	0007A0
CONTM	R*4	0007A4	ENRIM	R*4	0007A8	IPCST	R*4	N.R.	SHCST	R*4	N.R.
MOI	I*4	N.R.	IDAYT	I*4	N.R.	IYRT	I*4	N.R.	COCST	R*4	0019C4
UFORT	R*4	N.R.	UNTIM	R*4	N.R.	CSIGT	R*4	001C4C	CSTIN	R*4	001D64
FPCST	R*4	001E7C	FVALU	R*4	N.R.	CPECT	R*4	N.R.	SCRAPL	R*4	001FE4
CNCST	R*4	N.R.	MOD	I*4	N.R.	IDAYD	I*4	N.R.	IYRD	I*4	N.R.
CSLPE	R*4	N.R.	FSLPE	R*4	N.R.	SUMDP	R*4	N.R.	FSDEP	R*4	N.R.
FITOT	R*4	N.R.	DITOT	R*4	N.R.	SFCHG	R*4	N.R.	SALOC	R*4	N.R.
FVALR	R*4	N.R.	FVALE	R*4	N.R.	FVLINN	R*4	N.R.	FVLOUT	R*4	N.R.
VALIN	R*4	N.R.	VALOT	R*4	N.R.	FVALOT	R*4	N.R.	UVALOT	R*4	N.R.
UVALE	R*4	N.R.	UVALR	R*4	N.R.	UDEPL	R*4	N.R.	FDPEL	R*4	N.R.
UVALC	R*4	N.R.	FVALC	R*4	N.R.	PROUT	R*4	N.R.	CLOSS	R*4	013F44
ULOSS	R*4	N.R.	PLOSS	R*4	N.R.	PKINT	R*4	013F50	CYTIME	R*4	N.R.
KMONTH	I*4	N.R.	RMONTH	R*4	N.R.	KAZOO	I*4	013F60	ICORE	I*4	N.R.
NECOP	I*4	013F68	NOPT	I*4	N.R.	NECYCL	I*4	N.R.	LRCYCL	I*4	N.R.
KRUN	I*4	N.R.	RCHIN	R*4	013F7C	RCHOT	R*4	013094	XWAF	R*4	0161AC
FARPEN	R*4	016224	JN	I*4	01629C	ESTIN	R*4	0163B4	BATOT	R*4	01692C
NASSM	I*4	N.R.	RPCHG	R*4	N.R.	TRCHG	R*4	N.R.	PCROT	R*4	N.R.
PALOC	R*4	N.R.	TALOC	R*4	N.R.	PALOC	R*4	N.R.	CFAVS	R*4	N.R.
CPTIM	R*4	N.R.	RPRCH	R*4	N.R.	IRPRC	I*4	N.R.	SPSDP	R*4	N.R.
SPSDP	R*4	N.R.	SPUCG	R*4	N.R.	SPECG	R*4	N.R.	SPSCG	R*4	N.R.
SPSAL	R*4	N.R.	SPRCG	R*4	N.R.	SPRAL	R*4	N.R.	SPTCG	R*4	N.R.
SPTAL	R*4	N.R.	SPPCT	R*4	N.R.	SPPAL	R*4	N.R.	WTHSP	R*4	N.R.
SPBTU	R*4	N.R.	SPKWH	R*4	N.R.	NEWK	I*4	N.R.	IDISC	I*4	N.R.
LAZOO	I*4	N.R.	INT	I*4	N.R.	LAST	I*4	N.R.			

NAME OF COMMON BLOCK * CON* SIZE OF BLOCK 000150 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.
CFC	R*4	000000	CONCD	R*4	000020	CONCC	R*4	0000A0	CONFB	R*4	0000F0
KY	I*4	000140	KS	I*4	000144	KC	I*4	000148	NF	I*4	00014C

LABEL	ADDR	LABEL	ADDR	LABEL	ADDR	LABEL	ADDR
560	000784	519	000704	501	000746	521	000752
1	000758	3	000934 NR	153	000944	100	000934
101	000948	109	000948	102	000948	103	000820
110	000A30	104	000A70	105	000A94	111	000AA4
106	000AE4	210	000E02	200	000E50	107	000E78
321	000986	320	000B4A	322	000C0E	528	000C2d
120	00065A	119	000C26	116	000C34	561	000C48
570	000C90	562	000CA2	117	000CDE	524	000CEE
523	000D00	525	000D3C	4	000D3C NR	5	000D52
6	000D08	14	000E3E NR	17	000E4E NR	12	000F8A
13	000E09	19	000EF2	550	000FF4	544	001006
563	00105A	566	001068	565	00108C	567	0010CE
15	001118	20	001140	424	0011C2	421	0011CE
305	001256 NR	33	00126C	34	0012CE	30	001330 NR
35	001340 NR	80	0013AC	81	0013CA	82	0013E4
59	001532						

OPTIONS IN EFFECT NAME= MAIN,OPT=00,LINECNT=58,SIZE=0000K,

OPTIONS IN EFFECT SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF

STATISTICS SOURCE STATEMENTS = 161 ,PROGRAM SIZE = 5490

STATISTICS NO DIAGNOSTICS GENERATED

****** END OF COMPILATION ******

101K BYTES OF CORE NOT USED

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COMPILER OPTIONS - NAME= MAIN,OPT=00,LINECNT=58,SIZE=0000K,
                   SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF
              C     *******     **********     ***********     *******
              C     *******     **********     ***********     *******
              C     U DEPLETION
  ISN 0002          SUBROUTINE UDPL
  ISN 0003          DIMENSION CRTM(70,5)
  ISN 0004          COMMON JMAX,IY,IYEAR,KYEAR,MY,CLTIM,RPTIM,UCONLD,UTRN,FTRN
  ISN 0005          COMMON IOCU,IICORE,UMIR,BSNIR,FPINT,USINT,JMAX9,SCONLD
  ISN 0006          COMMON BGTIM(70),UFTIM(70),FCCST(70),FCOST(70),CCCST(70)
  ISN 0007          COMMON FC(30),CC(30),CD(30),RPCST(30),UFDCTM,CONIK,ENRIM
  ISN 0008          COMMON TRCST(30),SHCST(30),MOI(70,5),IDAYI(70,5),IYRI(70,5)
  ISN 0009          COMMON CDCST(70),UFOUT(70),UWTIN(70),CSTOT(70),CSTIN(70)
  ISN 0010          COMMON FRCST(30),PVALU(30),CPFCT(70),SCRAPL(70),CHCST(30)
  ISN 0011          COMMON MOO(70,5),IDAYO(70,5),IYRO(70,5),CSLPE(70),FSLPE(70)
  ISN 0012          COMMON SUMSP(30),FEOEP(30),FITOT(30),DITOT(30),SICHG(30)
  ISN 0013          COMMON SALOC(30),FVALB(70,30),FVALS(70,30),FVLINN(70,5)
  ISN 0014          COMMON FVLOUT(70,5),VALIN(70,5),VALOT(70,5),FVALOI(70,5)
  ISN 0015          COMMON UVALOT(70,5),UVALE(70,30),UVALB(70,30),UDEPL(70,30)
  ISN 0016          COMMON FDPEL(70,30),UVALC(70,30),FVALC(70,30),PUOUT(70)
  ISN 0017          COMMON CLOSS,ULOSS,PLOSS,PWINT,CYTIME,KMONTH,RMONTH
  ISN 0018          COMMON KAZOO,ICORE,NFCOP,NOPT,NRCYCL,LRCYCL,KRUN
  ISN 0019          COMMON RCHIN(70),RCHOT(70),XWWF(30),FABPEN(30)
  ISN 0020          COMMON JN(70),BATIN(70,5),BATOT(70,5),NASSM(70)
  ISN 0021          COMMON RPCHG(30),TRCHG(30),PCRDT(30),RALOC(30),TALOC(30)
  ISN 0022          COMMON PALOC(30),CFAVE(70),CRTIM(70),RPRCH,IRPRC
  ISN 0023          COMMON SPSOP,SPFOP,SPUCG,SPFCG,SPSCG,SPSAL,SPRCG,SPRAL,SPTCG,SPTAL
  ISN 0024          COMMON SPPCT,SPPAL,WTHSP,SPBTU,SPKWH,NEWK,IDISC,LAZOO,INT,LAST
              C     ****************
  ISN 0025          DO 32 J=1,JMAX
              C     ****************
  ISN 0026      120 CRTM(J,1)=BATOT(J,1)-BATIN(J,1)
  ISN 0027          JNN = JN(J)
  ISN 0028          DO 200 L = 1,JNN
  ISN 0029          VALIN(J,L) = 0.0
  ISN 0030          VALOT(J,L) = 0.0
  ISN 0031          UVALE(J,L) = 0.0
  ISN 0032          UVALB(J,L) = 0.0
  ISN 0033          UDEPL(J,L) = 0.0
  ISN 0034      200 CONTINUE
  ISN 0035          VALIN(J,1) = CSTIN(J)*UWTIN(J)
  ISN 0036          CSLPE(J) = (UFOUT(J)*UWTIN(J)*CSTOT(J)-VALIN(J,1))/CRTIM(J)
  ISN 0037          VALOT(J,1)=CSLPE(J)*CRTM(J,1)+VALIN(J,1)
  ISN 0038          IF(JN(J)-1)38,39,38
  ISN 0039       38 JNN=JN(J)
  ISN 0040          DO 21 L=2,JNN
  ISN 0041          CRTM(J,L)=CRTM(J,L-1)+BATOT(J,L)-BATIN(J,L)
  ISN 0042          VALIN(J,L)=VALOT(J,L-1)
  ISN 0043          VALOT(J,L)=CSLPE(J)*CRTM(J,L)+VALIN(J,1)
  ISN 0044       21 CONTINUE
  ISN 0045       39 JNN=JN(J)
  ISN 0046          DO 18 N=1,JNN
  ISN 0047          KB=BATIN(J,N)+1.0
  ISN 0048          KE  ATOT(J,N)+1.0
  ISN 0049          IF(BATOT(J,N)+1.0-FLOAT (KE))22,22,23
  ISN 0050       22 KE=KE-1
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J 33

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ISN 0051          23 IF(KE-KB)25,24,25
ISN 0052          24 UVALE(J,KB)=VALOT(J,N)
ISN 0053             GO TO 18
ISN 0054          25 CONTINUE
ISN 0055             UVALE(J,KB)=CSLPE(J)*FLOAT(KB)+(VALOT(J,N)-CSLPE(J)*BATOT(J,N))
ISN 0056             KE=KE-1
ISN 0057             UVALE(J,KE)=CSLPE(J)*FLOAT(KE)+(VALOT(J,N)-CSLPE(J)*BATOT(J,N))
ISN 0058             UVALE(J,KE)=VALOT(J,N)
ISN 0059             IF(KE-KB)18,18,26
ISN 0060          26 KUD=KB+1
ISN 0061             DO 17 K=KUD,KE
ISN 0062          17 UVALE(J,K)=CSLPE(J)*FLOAT(K)+(VALOT(J,N)-CSLPE(J)*BATOT(J,N))
ISN 0063          18 CONTINUE
ISN 0064             KBE=BATIN(J,1)+1.0
ISN 0065             JNN=JN(J)
ISN 0066             KEE=BATOT(J,JNN)+1.0
ISN 0067             IF(BATOT(J,JNN)+1.0-FLOAT(KEE))27,27,28
ISN 0068          27 KEE=KEE-1
ISN 0069          28 KEE=KEE-1
ISN 0070             DO 37 I=KBB,KEE
ISN 0071             IF(UVALE(J,I))37,36,37
ISN 0072          36 UVALE(J,I)=UVALE(J,I-1)
ISN 0073          37 CONTINUE
ISN 0074             IF(INT .EQ. 2 .AND. J .GT. LAST)GO TO 32
ISN 0076             UDEPL(J,KBB)=(VALIN(J,1)-UVALE(J,KBB))*(CPFCT(KBB)/CFAVE(J))
ISN 0077             IF(KEE-KBB)30,29,30
ISN 0078          29 GO TO 32
ISN 0079          30 UDEPL(J,KEE)=(UVALE(J,KEE)-VALOT(J,JNN))*(CPFCT(KEE)/CFAVE(J))
ISN 0080             IF(KEE-KBB)32,32,35
ISN 0081          35 KAD=KBB+1
ISN 0082             DO 31 K=KAD,KEE
ISN 0083             KK=K-1
ISN 0084             UVALB(J,K)=UVALE(J,KK)
ISN 0085          31 UDEPL(J,K)=(UVALB(J,K)-UVALE(J,K))*(CPFCT(K)/CFAVE(J))
ISN 0086          32 CONTINUE
ISN 0087             DO 14 K = 1,IY
ISN 0088             IF(INT .EQ. 2 .AND. K .GT. LRCYCL)GO TO 15
ISN 0090             DO 16 J = 1,JMAX
ISN 0091             SUMDP(K) = SUMDP(K) + UDEPL(J,K)
ISN 0092          16 CONTINUE
ISN 0093          14 CONTINUE
ISN 0094          15 CONTINUE
ISN 0095         117 FORMAT(30X,2HAA/)
ISN 0096             RETURN
ISN 0097             END
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NAME	TAG		TYPE	ADD.	NAME	TAG		TYPE	ADD.	NAM	TAG		TYPE	ADD.	NAM	TAG		TYPE	ADD.
I	SF		I*4	0000AC	J	SF		I*4	0000B0	K	SFA		I*4	000094	L	SF		I*4	000098
N	SF		I*4	0000BC	CC		C	R*4	N.R.	CD		C	R*4	N.R.	FC		C	R*4	N.R.
IY	F	C	I*4	000004	JN	F	C	I*4	016294	KS	SFA		I*4	0000C0	KS	SFA		I*4	0000C4
KS	SFA		I*4	0000C8	KK	SF		I*4	0000CC	MY		C	I*4	N.R.	JNT		C	I*4	017500
JMN	SF		I*4	000000	KAD	SF		I*4	000004	KBR	SF		I*4	000008	KEE	SFA		I*4	0000DC
KFF	SF		I*4	0000E0	KUD	SF		I*4	0000E4	MOI		C	I*4	N.R.	MO		C	I*4	N.R.
CRTM	SF		R*4	0000EC	FTRN		C	R*4	N.R.	IDCU		C	I*4	N.R.	IYRI		C	I*4	N.R.
IYRO		C	I*4	N.R.	JMAX	F	C	I*4	000000	KRUN		C	I*4	N.R.	LAST		C	I*4	017510
NEWK		C	I*4	N.R.	NOPT		C	I*4	N.R.	UDPL			R*4	0000E8	UNTR		C	R*4	N.R.
UTRN		C	R*4	N.R.	XINF		C	R*4	N.R.	BATIN	F	C	R*4	016384	BATOT	F	C	R*4	016920
BGNTR		C	R*4	N.R.	BGTIM		C	R*4	N.R.	CCCST		C	R*4	N.R.	CDCST		C	R*4	N.R.
CFAVF	F	C	R*4	017290	CLCSS		C	R*4	N.R.	CLTIM		C	R*4	N.R.	CMCST		C	R*4	N.R.
CONTM		C	R*4	N.R.	CPFCT	F	C	R*4	001F6C	CRTIM	F	C	R*4	017284	CSLPE	SF	C	R*4	0031DC
CSTIN	F	C	R*4	001D54	CSTOT	F	C	R*4	001C4C	DITOT		C	R*4	N.R.	ENRTM		C	R*4	N.R.
FFCST		C	R*4	N.R.	FDPEP		C	R*4	N.R.	FAINT		C	R*4	N.R.	FCCST		C	R*4	N.R.
FCOST		C	R*4	N.R.	FDPEL		C	R*4	N.R.	FITOT		C	R*4	N.R.	FSLPE		C	R*4	N.R.
FVALB		C	R*4	N.R.	FVALC		C	R*4	N.R.	FWALS		C	R*4	N.R.	ICCPE		C	I*4	N.R.
IDAYI		C	I*4	N.R.	IDAYO		C	I*4	N.R.	IDISC		C	I*4	N.R.	IPPRC		C	I*4	N.R.
IYEAR		C	I*4	N.R.	JMAXB		C	I*4	N.R.	KAZOO		C	I*4	N.R.	KYEAR		C	I*4	N.R.
LAZOO		C	I*4	N.R.	NASSM		C	I*4	N.R.	NFCOP		C	I*4	N.R.	PALOC		C	R*4	N.R.
PCPDT		C	R*4	N.R.	PLOSS		C	R*4	N.R.	PUPUT		C	R*4	N.R.	PVALU		C	R*4	N.R.
PWENT		C	R*4	N.R.	RALOC		C	R*4	N.R.	RCHIN		C	R*4	N.R.	RCHOT		C	R*4	N.R.
RPCHG		C	R*4	N.R.	RPCST		C	R*4	N.R.	RPRCH		C	R*4	N.R.	PPTIM		C	R*4	N.R.
SALOC		C	R*4	N.R.	SFCHG		C	R*4	N.R.	SPCST		C	R*4	N.R.	SPGIU		C	R*4	N.R.
SPECG		C	R*4	N.R.	SPEDP		C	R*4	N.R.	SPKWH		C	R*4	N.R.	SPPAL		C	R*4	N.R.
SPPCT		C	R*4	N.R.	SPPAL		C	R*4	N.R.	SPSCG		C	R*4	N.R.	SPSAL		C	R*4	N.R.
SPSCG		C	R*4	N.R.	SPSDP		C	R*4	N.R.	SPTAL		C	R*4	N.R.	SPTCG		C	R*4	N.R.
SPUCG		C	R*4	N.R.	SUPDP	SF	C	R*4	003400	TALOC		C	R*4	N.R.	TRCHG		C	R*4	N.R.
TRCST		C	R*4	N.R.	UDEPL	SF	C	R*4	000A5C	UFOUT	F	C	R*4	001A1C	UFTIM		C	R*4	N.R.
ULOSS		C	R*4	N.R.	USINT		C	R*4	N.R.	UVALB	SF	C	R*4	000A1C	UVALC		C	R*4	N.R.
UVALE	SF	C	R*4	00094C	UWTIN	F	C	R*4	001B34	VALIN	SF	C	R*4	00036C	VALOE	SF	C	R*4	0088E4
WTHSP		C	R*4	N.R.	CYTIME		C	R*4	N.R.	FABREN		C	R*4	N.R.	FCONLD		C	R*4	N.R.
FVALDT		C	R*4	N.R.	FVLINN		C	R*4	N.R.	FVLOUT		C	R*4	N.R.	IICORE		C	I*4	N.R.
KMONTH		C	I*4	N.R.	LRCYCL		C	I*4	015574	NSCYCL		C	I*4	N.R.	RMONTH		C	R*4	N.R.
SCRAPL		C	R*4	N.R.	UCONLD		C	R*4	N.R.	UTOCTM		C	R*4	N.R.	UVALDT		C	R*4	N.R.

***** COMMON INFORMATION *****

NAME OF COMMON BLOCK * * SIZE OF BLOCK 017514 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.
JMAX	I*4	000000	IY	I*4	000004	IYEAR	I*4	N.R.	KYEAR	I*4	N.R.
MY	I*4	N.R.	CLTIM	R*4	N.R.	BRTIM	R*4	N.R.	UCONLD	R*4	N.R.
UTRN	R*4	N.R.	FTRN	R*4	N.R.	IDCU	I*4	N.R.	IICORE	I*4	N.R.
UNTR	R*4	N.R.	FCONTR	R*4	N.R.	FAINT	R*4	N.R.	USINT	R*4	N.R.
JMAXB	I*4	N.R.	FCONLD	R*4	N.R.	BSTIM	R*4	N.R.	UFTIM	R*4	N.R.
FCCST	R*4	N.R.	FCOST	R*4	N.R.	CCCST	R*4	N.R.	FC	R*4	N.R.
CC	R*4	N.R.	CD	R*4	N.R.	RPCST	R*4	N.R.	UTOCTM	R*4	N.R.
CONTM	R*4	N.R.	ENRTM	R*4	N.R.	TRCST	R*4	N.R.	SHCST	R*4	N.R.
MOI	I*4	N.R.	IDAYI	I*4	N.R.	IYRI	I*4	N.R.	CDCST	R*4	N.R.
UFOUT	R*4	001A1C	UWTIN	R*4	001B34	CSTOT	R*4	001C4C	CSTIN	R*4	001D64
FSCST	R*4	N.R.	PVALU	R*4	N.R.	CPFCT	R*4	001F6C	SCRAPL	R*4	N.R.

CNEST	R*4	N.R.	MOD	I*4	N.R.	IMAXD	I*4	N.R.	IYRD	I*4	N.R.
CSLFE	R*4	003108	PSLPE	R*4	N.R.	SINSP	R*4	003408	PLOEP	R*4	N.R.
FITOT	R*4	N.R.	PITOT	R*4	N.R.	SLOPE	R*4	N.R.	SALNC	R*4	N.R.
FVALB	R*4	N.R.	FVALE	R*4	N.R.	FVLINN	R*4	N.R.	FVLOUT	R*4	N.R.
VALIN	R*4	0095BC	VALOT	R*4	0098B4	FVALOT	R*4	N.R.	UVALOT	R*4	N.R.
UVALF	R*4	0094AC	UVALR	R*4	0098A8	WIDPL	R*4	003AEC	FOPEL	R*4	N.R.
UVALC	R*4	N.R.	FVALC	R*4	N.R.	PUMIT	R*4	N.R.	CLOSS	R*4	N.R.
ULOSS	R*4	N.R.	PLOSS	R*4	N.R.	PWINT	R*4	N.R.	CYTIAS	R*4	N.R.
KMONTH	I*4	N.R.	RMONTH	R*4	N.R.	KAZOO	I*4	N.R.	ICORE	I*4	N.R.
NECOP	I*4	N.R.	NOPT	I*4	N.R.	NOCYCL	I*4	N.R.	LRCYCL	I*4	015F74
XRUN	I*4	N.R.	RCHIN	R*4	N.R.	PCHIT	R*4	N.R.	XWHF	R*4	N.R.
FARREN	R*4	N.R.	JN	I*4	01629C	BATIN	R*4	016384	BATOT	R*4	01592C
NASSM	I*4	N.R.	FPCHG	R*4	N.R.	TRCHG	R*4	N.R.	PCROT	R*4	N.R.
RALOC	R*4	N.R.	TALOC	R*4	N.R.	PALOC	R*4	N.R.	CFAVE	R*4	01726C
CRTIM	R*4	0173A4	RPPCN	R*4	N.R.	IRPSC	I*4	N.R.	SPSDP	R*4	N.R.
SPEDP	R*4	N.R.	SPUCG	R*4	N.R.	SPECG	R*4	N.R.	SPSCG	R*4	N.R.
SPSAL	R*4	N.R.	SPRCG	R*4	N.R.	SPRAL	R*4	N.R.	SPTCG	R*4	N.R.
SPTAL	R*4	N.R.	SPPCT	R*4	N.R.	SPPAL	R*4	N.R.	WTHSP	R*4	N.R.
SPRTU	R*4	N.R.	SPKWH	R*4	N.R.	NEWK	I*4	N.R.	IDISC	I*4	N.R.
LAZOO	I*4	N.R.	INT	I*4	01750C	LAST	I*4	017510			

T2C

LABEL	ADDR	LABEL	ADDR	LABEL	ADDR	LABEL	ADDR
120	000770	200	000342	39	000962	21	000754
28	000964	22	000C6E	23	000C7A	24	000C08
25	000C08	26	000CEC	17	000F7C	18	000FEA
27	001056	28	001072	36	001130	37	00117A
29	001254	30	00125A	35	00130C	31	001372
32	00142C	16	0014CC	14	001456	15	001500

OPTIONS IN EFFECT NAME= MAIN,OPT=00,LINECNT=58,SIZE=0000K,

OPTIONS IN EFFECT SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF

STATISTICS SOURCE STATEMENTS = 96 ,PROGRAM SIZE = 5414

STATISTICS NO DIAGNOSTICS GENERATED

****** END OF COMPILATION ****** 109K BYTES OF CORE NOT USED

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         COMPILER OPTIONS - NAME=  MAIN,OPT=00,LINECNT=58,SIZE=0000K,
                            SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF
                  C     *******        **********        **********        *******
                  C     *******        **********        **********        *******
                  C     FAB DEPLETION                                                  01033
                        SUBROUTINE FDPL                                                01034
                        DIMENSION CRTM(70,5),FVLIN(70)                                 01035
                        COMMON JMAX,IY,IYEAR,KYEAR,MY,CLTIM,RQTIM,UCOMLD,UTRN,STRN     01036
                        COMMON IDCU,IICORE,UNTR,BCNTR,PRINT,USINT,JMAXP,RCONLD         01037
                        COMMON BGTIM(70),WETIM(70),FCOST(70),SCOST(70),COCST(70)       01038
                        COMMON FC(30),CC(30),CD(30),RPCST(30),UTOCTM,CONTA,ENPTM       01039
                        COMMON IRCST(30),SRCST(30),MDE(70,5),IDAYE(70,5),IRE(70,5)     01040
                        COMMON CDCST(70),UFOUT(70),UNTIN(70),CSTOT(70),CSTIN(70)       01041
                        COMMON FRCST(30),PVALU(30),CPECT(30),SCRAPL(70),CICST(30)      01042
                        COMMON MDI(70,5),IDAYD(70,5),IYRD(70,5),CSLPE(70),FSLPE(70)    01043
                        COMMON SUMOP(30),FSDEP(30),FITOT(30),DITOT(30),SECHG(30)       01044
                        COMMON SALOC(30),FVALP(70,30),FVALS(70,30),FVLINN(70,5)        01045
                        COMMON FVLOUT(70,5),VALIN(70,5),VALOT(70,5),SVALOT(70,5)       01046
                        COMMON UVALOT(70,5),UVALS(70,30),UVALB(70,30),UDEPL(70,30)     01047
                        COMMON EDPEL(70,30),UVALC(70,30),FVALC(70,30),PURUT(70)        01048
                        COMMON CLOSS,ULOSS,PLOSS,PWINT,CYTIME,KMONTH,RMONTH            01049
                        COMMON KAZOO,ICORE,NECOP,NOPT,NRCYCL,LRCYCL,KRUN               01050
                        COMMON RCHIN(70),SCHOT(70),XKWE(30),EASPEN(30)                 01051
                        COMMON JN(70),BATIN(70,5),BATOT(70,5),NASSM(70)                01052
                        COMMON RPCHG(30),IRCHG(30),PCRDT(30),RALOC(30),TALOC(30)       01053
                        COMMON PALOC(30),CFAVE(70),CRTIM(70),RPRCH,IRPRC               01054
                        COMMON SPSDP,SPFDP,SPUCG,SPFCG,SPSCG,SPSAL,SPRCG,SPRAL,SPTCG,SPTAL01055
                        COMMON SPPCT,SPPAL,WTHSP,SPBTU,SPKWH,NEWX,IDISC,LAZOO,INT,LAST 01056
                        DO 70 J=1,JMAX                                                 01057
                        FVLIN(J) = 0.0                                                 01058
                        JNN = JN(J)                                                    01059
                        DO 210 L = 1,JNN                                               01060
                        FVLINN(J,L) = 0.0                                              01061
                        FVLOUT(J,L) = 0.0                                              01062
                        FVALS (J,L) = 0.0                                              01063
                        FVALB (J,L) = 0.0                                              01064
                        EDPEL (J,L) = 0.0                                              01065
                    210 CONTINUE                                                       01066
                        FVLIN (J) = FCOST(J) + UNTIN(J)                                01067
                        FSLPE(J) = (0.0 - FVLIN (J))/CRTIM(J)                          01068
                        FVLINN(J,1) = FVLIN(J)                                         01069
                        CRTM(J,1)=BATOT(J,1)-BATIN(J,1)                                01070
                        FVLOUT(J,1) = FSLPE(J) * CRTM(J,1) + FVLIN (J)                 01071
                        IF(JN(J)-1)50,52,50                                            01072
                    50  JNN=JN(J)                                                      01073
                        DO 51 L=2,JNN                                                  01074
                        CRTM(J,L)=CRTM(J,L-1)+BATOT(J,L)-BATIN(J,L)                    01075
                        FVLINN(J,L)=FVLOUT(J,L-1)                                      01076
                        FVLOUT(J,L) = FSLPE(J)*CRTM(J,L) + FVLIN(J)                    01077
                    51  CONTINUE                                                       01078
                    52  JNN=JN(J)                                                      01079
                        FVLOUT(J,JNN)=0.0                                              01080
                        DO 60 N=1,JNN                                                  01081
                        KB=BATIN(J,N)+1.0                                              01082
                        KE=BATOT(J,N)+1.0                                              01083
                        IF(BATOT(J,N)+1.0-FLOAT (KE))53,53,54                          01084
                                                                                       01085
                                                                                       01086
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ISN 0053          53 KE=KE-1
ISN 0054          54 IF(KE-KB)56,55,56
ISN 0055          55 FVALE(J,KB)=FVLOUT(J,N)
ISN 0056             GO TO 60
ISN 0057          56 CONTINUE
ISN 0058             FVALE(J,KB)=FSLPE(J)*FLOAT (KB)+(FVLOUT(J,N)-FSLPE(J)*BATOT(J,N))
ISN 0059             KE=KE-1
ISN 0060             FVALE(J,KE)=FSLPE(J)*FLOAT (KE)+(FVLOUT(J,N)-FSLPE(J)*BATOT(J,N))
ISN 0061             FVALE(J,KE)=FVLOUT(J,N)
ISN 0062             IF(KE-KB)60,60,57
ISN 0063          57 KUD=KB+1
ISN 0064             DO 58 K=KUD,KE
ISN 0065          58 FVALE(J,K)=FSLPE(J)*FLOAT (K)+(FVLOUT(J,N)-FSLPE(J)*BATOT(J,N))
ISN 0066          60 CONTINUE
ISN 0067             KBB=BATIN(J,1)+1.0
ISN 0068             JNN=JN(J)
ISN 0069             KEE=BATOT(J,JNN)+1.0
ISN 0070             IF(BATOT(J,JNN)+1.0-FLOAT (KEE))61,61,62
ISN 0071          61 KEE=KEE-1
ISN 0072          62 KFF=KEE-1
ISN 0073             DO 63 I=KBB,KFF
ISN 0074             IF(FVALE(J,I))63,64,63
ISN 0075          64 FVALE(J,I)=FVALE(J,I-1)
ISN 0076          63 CONTINUE
ISN 0077             IF(INT .EQ. 2 .AND. J .GT. LAST)GO TO 70
ISN 0079             FDPEL(J,KBB)=(FVLINN(J,1)-FVALE(J,KBB))*(CPFCT(KBB)/CFAVE(J))
ISN 0080             IF(KEE-KBB)66,65,66
ISN 0081          65 GO TO 70
ISN 0082          66 FDPEL(J,KEE)=(FVALE(J,KFF)-FVLOUT(J,JNN))*(CPFCT(KEE)/CFAVE(J))
ISN 0083             IF(KFF-KBB)70,70,67
ISN 0084          67 KAD=KBB+1
ISN 0085             DO 68 K=KAD,KFF
ISN 0086             KK=K-1
ISN 0087             FVALB(J,K)=FVALE(J,KK)
ISN 0088          68 FDPEL(J,K)=(FVALB(J,K)-FVALE(J,K))*(CPFCT(K)/CFAVE(J))
ISN 0089          70 CONTINUE
ISN 0090             DO 69 K = 1,IY
ISN 0091             IF(INT .EQ. 2 .AND. K .GT. LRCYCL)GO TO 80
ISN 0093             DO 85 J = 1,JMAX
ISN 0094             FBDEP(K) = FBDEP(K) + FDPEL(J,K)
ISN 0095          85 CONTINUE
ISN 0096          69 CONTINUE
ISN 0097          80 CONTINUE
ISN 0098          17 FORMAT(30X,2HBB/)
ISN 0099             RETURN
ISN 0100             END
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NAME	TAG		TYPE	ADD.
I	SF		I*4	0000AC
N	SF		I*4	0000BC
IY	F	C	I*4	000004
KE	SFA		I*4	0000C8
JMX	SF		I*4	0000D0
KEE	SF		I*4	0000E0
CRTM	SF		R*4	000204
IY2I		C	I*4	N.R.
LAST		C	I*4	017510
UTRN		C	R*4	N.R.
BGNTR		C	R*4	N.R.
CFAVE	F	C	R*4	01729C
CONTM		C	R*4	N.R.
CSTIN		C	R*4	N.R.
FRCST		C	R*4	N.R.
FCOST	F	C	R*4	000390
FVALB	SF	C	R*4	0036DC
ICORE		C	I*4	N.R.
IRREC		C	I*4	N.R.
KYEAR		C	I*4	N.R.
PALIC		C	R*4	N.R.
PVALU		C	R*4	N.R.
RCMGT		C	R*4	N.R.
RPTIM		C	R*4	N.R.
SPETU		C	R*4	N.R.
SPPAL		C	R*4	N.R.
SPSAL		C	R*4	N.R.
SPTCG		C	R*4	N.R.
TRCHG		C	R*4	N.R.
UFTIM		C	R*4	N.R.
UVALC		C	R*4	N.R.
VALGT		C	R*4	N.R.
FCONLD		C	R*4	N.R.
IICORE		C	I*4	N.R.
RMONTH		C	R*4	N.R.
UVALGT		C	R*4	N.R.

NAME	TAG		TYPE	ADD.
J	SF		I*4	003040
CC		C	R*4	N.R.
JM	F	C	I*4	01429C
KK	SF		I*4	0000C0
MMD	SF		I*4	0000D4
KUD	SF		I*4	0000E4
FDPL			R*4	0000E8
IYPD		C	I*4	N.R.
NEWK		C	I*4	N.R.
XWNF		C	R*4	N.R.
BGTIM		C	R*4	N.R.
CLOSS		C	R*4	N.R.
CPECT	F	C	R*4	001F6C
CSTGT		C	R*4	N.R.
FRMFP	SF	C	R*4	003494
FDFEL	SF	C	R*4	00F89C
FVALC		C	R*4	N.R.
IDAYI		C	I*4	N.R.
IYEAR		C	I*4	N.R.
LAZDD		C	I*4	N.R.
PCROT		C	R*4	N.R.
PWINT		C	R*4	N.R.
RPCHG		C	R*4	N.R.
SALDC		C	R*4	N.R.
SPECG		C	R*4	N.R.
SPPCT		C	R*4	N.R.
SPSCG		C	R*4	N.R.
SPUCG		C	R*4	N.R.
TRCST		C	R*4	N.R.
ULOSS		C	R*4	N.R.
UVALF		C	R*4	N.R.
WTPSP		C	R*4	N.R.
FVALGT		C	R*4	N.R.
KMONTH		C	I*4	N.R.
SCRAPL		C	R*4	N.R.

NAME	TAG		TYPE	ADD.
K	SFA		I*4	0000B4
CD		C	R*4	N.R.
KB	SFA		I*	0000C0
MY		C	I*4	N.R.
KBB	SF		I*4	0000D8
MDI		C	I*4	N.R.
FIRM		C	R*4	N.R.
JMAX	F	C	I*4	003C90
NOPT		C	I*4	N.R.
RATIN	F	C	R*4	015384
CCCST		C	R*4	N.R.
CLTIM		C	R*4	N.R.
CRTIM	F	C	R*4	017BA4
DITOT		C	R*4	N.R.
FPINT		C	R*4	N.R.
FITOT		C	R*4	N.R.
FVALE	SF	C	R*4	0057AC
IDAYD		C	I*4	N.R.
JMAXB		C	I*4	N.R.
NASSM		C	I*4	N.R.
PLOSS		C	R*4	N.R.
RALOC		C	R*4	N.R.
RFCST		C	R*4	N.R.
SFCHG		C	R*4	N.R.
SPEOP		C	R*4	N.R.
SPPAL		C	R*4	N.R.
SPSOP		C	R*4	N.R.
SUMOP		C	R*4	N.R.
UCOPL		C	R*4	N.R.
USINT		C	R*4	N.R.
UWTIN	F	C	R*4	001B34
CYTIME		C	R*4	N.R.
FVLINN	SF	C	R*4	00787C
LRCYCL		C	I*4	015F74
UCONLD		C	R*4	N.R.

NAME	TAG		TYPE	ADD.
L	SF		I*4	0000B8
FC		C	R*4	N.R.
KE	SFA		I*4	0000C4
MM		C	I*4	017500
KEE	SFA		I*4	0000DC
MDD		C	I*4	N.R.
IDCU		C	I*4	N.R.
KRUN		C	I*4	N.R.
UNTR		C	R*4	N.R.
RATOT	F	C	R*4	01592C
CDCST		C	R*4	N.R.
CNCST		C	R*4	N.R.
CSLPE		C	R*4	N.R.
ENRTM		C	R*4	N.R.
FCCST		C	R*4	N.R.
FSLPE	SF	C	R*4	0032F4
FVLIN	SF		R*4	0030EC
IGISC		C	I*4	N.R.
KAZDD		C	I*4	N.R.
NFCOP		C	I*4	N.R.
PUOUT		C	R*4	N.R.
RCMIN		C	R*4	N.R.
RPEOP		C	R*4	N.R.
SHCST		C	R*4	N.R.
SPKWH		C	R*4	N.R.
SPRCG		C	R*4	N.R.
SPTAL		C	R*4	N.R.
TALIC		C	R*4	N.R.
UFOUT		C	R*4	N.R.
UVALB		C	R*4	N.R.
VALIN		C	R*4	N.R.
FABPEN		C	R*4	N.R.
FVLOUT	SF	C	R*4	0070F4
NRCYCL		C	I*4	N.R.
UTOCTM		C	R*4	N.R.

******* COMMON INFORMATION *******

NAME OF COMMON BLOCK * * SIZE OF BLOCK 017514 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.
JMAX	I*4	000000
MY	I*4	N.R.
UTRN	R*4	N.R.
UNTR	R*4	N.R.
JMAXB	I*4	N.R.
FCCST	R*4	N.R.
CC	R*4	N.R.
CONTM	R*4	N.R.
MDI	I*4	N.R.
UFOUT	R*4	N.R.
FRCST	R*4	N.R.

VAR. NAME	TYPE	REL. ADDR.
IY	I*4	000004
CLTIM	R*4	N.R.
FIRM	R*4	N.R.
BGNTR	R*4	N.R.
FCONLD	R*4	N.R.
FCOST	R*4	000390
CD	R*4	N.R.
ENRTM	R*4	N.R.
IDAYI	I*4	N.R.
UWTIN	R*4	001B34
PVALU	R*4	N.R.

VAR. NAME	TYPE	REL. ADDR.
IYEAI	I*4	N.R.
RPTIM	R*4	N.R.
IOCU	I*4	N.R.
FPINT	R*4	N.R.
FGTIM	R*4	N.R.
CCCST	R*4	N.R.
RRCST	R*4	N.R.
TRCST	R*4	N.R.
IYPI	I*4	N.R.
CSTOT	R*4	N.R.
CPECT	R*4	001F6C

VAR. NAME	TYPE	REL. ADDR.
KYEAR	I*4	N.R.
UCONLD	R*4	N.R.
IICORE	I*4	N.R.
USINT	R*4	N.R.
UFTIM	R*4	N.R.
FC	R*4	N.R.
UTOCTM	R*4	N.R.
SHCST	R*4	N.R.
CDCST	R*4	N.R.
CSTIN	R*4	N.R.
SCRAPL	R*4	N.R.

TAA

CNCST	R*4	N.R.		FOO	I*4	N.R.		IDAYO	I*4	N.R.	
CSLPE	R*4	N.R.		FSLPF	R*4	003284		SPEDP	R*4	N.R.	
FIDT	R*4	N.R.		DIDT	R*4	N.R.		SSCHG	R*4	N.R.	
FVALB	R*4	0035DC		FVALE	R*4	0057AC		FVLINN	R*4	00787C	
VALIN	R*4	N.R.		VALDT	R*4	N.R.		FVALDT	R*4	N.R.	
UVALB	R*4	N.R.		UVALB	R*4	N.R.		UDPBL	R*4	N.R.	
UVALC	R*4	N.R.		FVALC	R*4	N.R.		PUBDT	R*4	N.R.	
ULOSS	R*4	N.R.		PLOSS	R*4	N.R.		PWINT	R*4	N.R.	
KMONTH	I*4	N.R.		RMONTH	R*4	N.R.		KAZOO	I*4	N.R.	
NFCOP	I*4	N.R.		NOPT	I*4	N.R.		NRCYCL	I*4	N.R.	
KRUN	I*4	N.R.		RCMIN	R*4	N.R.		RCHDT	R*4	N.R.	
FAPGEN	R*4	N.R.		JN	I*4	01629C		BATIN	R*4	016384	
NASSM	I*4	N.R.		RPCHG	R*4	N.R.		TPCHG	R*4	N.R.	
RALOC	R*4	N.R.		IALOC	R*4	N.R.		PALOC	R*4	N.R.	
CRTIM	R*4	0173A4		RPRCH	R*4	N.R.		IRPRC	I*4	N.R.	
SPEDP	R*4	N.R.		SPUCG	R*4	N.R.		SPECG	R*4	N.R.	
SPSAL	R*4	N.R.		SPRCG	R*4	N.R.		SPRAL	R*4	N.R.	
SPTAL	R*4	N.R.		SPPCT	R*4	N.R.		SPPAL	R*4	N.R.	
SPBTU	R*4	N.R.		SPKWH	R*4	N.R.		NEWK	I*4	N.R.	
LAZOO	I*4	N.R.		INT	I*4	01750C		LAST	I*4	017510	

IYRO	I*4	N.R.		FDPSP	R*4	003494					
SALOC	R*4	N.R.		UVALDT	R*4	N.R.					
FDPFL	R*4	00F96C		CLOSS	R*4	N.R.					
CYTIME	R*4	N.R.		ICOPE	I*4	N.R.					
LRCYCL	I*4	015F74		XWWF	R*4	N.R.					
BATOT	R*4	016920		PCFDT	R*4	N.R.					
CFAVE	R*4	01729C		SPSDP	R*4	N.R.					
SPSCG	R*4	N.R.		SPTCG	R*4	N.R.					
WTHSP	R*4	N.R.		IDISC	I*4	N.R.					

LABEL	ADDR	LABEL	ADDR	LABEL	ADDR	LABEL	ADDR
210	000072	50	000ACA	51	000C34	52	000C4A
53	000D74	54	000D90	55	000DA5	56	000DDE
57	000FF2	58	001092	60	0011F0	61	0011EC
62	0011F8	64	001236	63	001260	65	00135A
66	001360	67	001413	69	001470	70	001532
85	001592	69	0015EC	80	001606		

OPTIONS IN EFFECT NAME= MAIN,OPT=00,LINECNT=58,SIZE=0000K,

OPTIONS IN EFFECT SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF

STATISTICS SOURCE STATEMENTS = 99 ,PROGRAM SIZE = 5676

STATISTICS NO DIAGNOSTICS GENERATED

****** END OF COMPILATION ******

109K BYTES OF CORE NOT USED

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COMPILER OPTIONS - NAME=  MAIN,OPT=00,LINECNT=58,SIZE=0000K,
                   SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOSEQ,ID,NOXREF
      C     *******       **********       ***********       *******
      C     ********      **********       ***********       *******
      C     U AND EAR CARRYING CHARGES
ISN 0002      SUBROUTINE CCHG
ISN 0003      DIMENSION FIPER(70,30),UIPER(70,30)
ISN 0004      COMMON JMAX,IY,IYEAR,KYEAR,MY,CLTIM,PPTIM,UCUMLD,UTRN,FTRN
ISN 0005      COMMON IDCH,IICORE,UNTR,FGNTR,FPINT,USINT,JMAXX,FCONLD
ISN 0006      COMMON PGTIM(70),UPTIM(70),FCOST(70),FCBST(70),CFCST(70)
ISN 0007      COMMON FC(30),CC(30),CD(30),RPCST(30),UTOCIM,CONTM,FNRTM
ISN 0008      COMMON TRCST(30),SHCST(30),MOI(70,5),IDAYI(70,5),IYRI(70,5)
ISN 0009      COMMON CDCST(70),UPOUT(70),UWTIN(70),CSTOT(70),CSTIN(70)
ISN 0010      COMMON FRCST(30),FVALU(30),CPFCT(30),SCRAPL(70),CPCST(30)
ISN 0011      COMMON MOO(70,5),IDAYO(70,5),IYRO(70,5),CSLPE(70),ESLPE(70)
ISN 0012      COMMON SUMOP(30),FRGEP(30),FIIOT(30),OTIOT(30),SPCHG(30)
ISN 0013      COMMON SALOC(30),FVALB(70,30),FVALF(70,30),FVLINN(70,5)
ISN 0014      COMMON FVLOUT(70,5),VALIN(70,5),VALOT(70,5),FVALOT(70,5)
ISN 0015      COMMON UVALOT(70,5),UVALF(70,30),UVALB(70,30),UDEPL(70,30)
ISN 0016      COMMON FDPEL(70,30),UVALC(70,30),FVALC(70,30),PUOUT(70)
ISN 0017      COMMON CLOSS,ULOSS,PLOSS,PWINT,CYTIME,KMONTH,RMONTH
ISN 0018      COMMON KAZOO,ICORE,NFCOP,NOPT,NRCYCL,LRCYCL,KRUN
ISN 0019      COMMON RCHIN(70),RCHOT(70),XWHF(30),FABPEN(30)
ISN 0020      COMMON JNI(70),RATIN(70,5),RATOT(70,5),NASSM(70)
ISN 0021      COMMON RPCHG(30),TPCHG(30),PCRDT(30),RALOC(30),TALOC(30)
ISN 0022      COMMON RALPC(30),CFAVE(70),CRTIM(70),SPRCH,IRPRC
ISN 0023      COMMON SPSOP,SPFOP,SPUCG,SPFCG,SPSCG,SPSAL,SPRCG,SPRAL,SPTCG,SPTAL
ISN 0024      COMMON SPPCT,SPPAL,WTHSP,SPBTU,SPKWH,NEWK,IDISC,LAZOO,INT,LAST
ISN 0025      DO  5 J = 1,70
ISN 0026      DO 5 K=1,30
ISN 0027      FIPER(J,K)=0.0
ISN 0028      UIPER(J,K)=0.0
ISN 0029    5 CONTINUE
ISN 0030      DO 162 J=1,JMAX
ISN 0031      JNN=JNI(J)
ISN 0032      KBB=RATIN(J,1)+1.0
ISN 0033      KEE=RATOT(J,JNN)+1.0
ISN 0034      FVALC(J,KBB)=FVLINN(J,1)-FDPEL(J,KBB)
ISN 0035      UVALC(J,KBB)=VALIN(J,1)-UDEPL(J,KBB)
ISN 0036      FVALC(J,KEE)=FVLOUT(J,JNN)
ISN 0037      UVALC(J,KEE)=VALOT(J,JNN)
ISN 0038      IF(KEE-KBB)159,159,160
ISN 0039    159 GO TO 162
ISN 0040    160 KAA=KBB+1
ISN 0041      KFF=KEE-1
ISN 0042      DO 161 K=KAA,KFF
ISN 0043      KK=K-1
ISN 0044      FVALC(J,K)=FVALC(J,KK)-FDPEL(J,K)
ISN 0045    161 UVALC(J,K)=UVALC(J,KK)-UDEPL(J,K)
ISN 0046    162 CONTINUE
ISN 0047      DO 166 J=1,JMAX
ISN 0048      JNN=JNI(J)
ISN 0049      DO 166 N=1,JNN
ISN 0050      IF(N-JNN)163,164,164
ISN 0051    163 KY=RATOT(J,N)+1.0
ISN 0052      KW=KY-1
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ISN 0053          AA=RATIOT(J,N)-FLOAT(KW)                                    01187
ISN 0054          UVALOT(J,N)=UVALC(J,KW)+((CSLPE(J))*(AA)*(CPECT(KY,J))/(CFAVE(J))  01188
ISN 0055          FVALOT(J,N)=FVALC(J,KW)+((FSLPE(J))*(AA)*(CPECT(KY)))/(CFAVE(J))   01189
ISN 0056          GO TO 165                                                   01190
ISN 0057      164 UVALOT(J,N)=VALOT(J,N)                                      01191
ISN 0058          FVALOT(J,N)=0.0                                             01192
ISN 0059          GO TO 166                                                   01193
ISN 0060      165 CONTINUE                                                    01194
ISN 0061      166 CONTINUE                                                    01195
ISN 0062          DO 155 J=1,JMAX                                             01196
ISN 0063          IF(IUT .EQ. 2 .AND. J .GT. LAST)GO TO 155                   01197
ISN 0065          JNN=JN(J)                                                   01198
ISN 0066          DO 155 N=1,JNN                                              01199
ISN 0067          KB=RATIN(J,N)+1.0                                           01200
ISN 0068          KE=RATOT(J,N)+1.0                                           01201
ISN 0069          IF(RATOT(J,N)+1.0-FLOAT(KE))150,150,151                     01202
ISN 0070      150 KE=KE-1                                                     01203
ISN 0071      151 IF(KE-KB)149,149,153                                        01204
ISN 0072      149 FIPER(J,KE)=((FVLINN(J,N)+FVLOUT(J,N))/2.)*(FBINT/100.)*    01205
                 1(RATOT(J,N)-RATIN(J,N))                                     01206
ISN 0073          UIPER(J,KB)=((VALIN(J,N)+UVALOT(J,N))/2.)*(USINT/100.)*     01207
                 1(RATOT(J,N)-RATIN(J,N))                                     01208
ISN 0074          GO TO 155                                                   01209
ISN 0075      153 AA=KB                                                       01210
ISN 0076          AB=AA-RATIN(J,N)                                            01211
ISN 0077          FIPER(J,KB)=((FVLINN(J,N)+FVALC(J,KB))/2.)*(FBINT/100.)*AB  01212
ISN 0078          UIPER(J,KB)=((VALIN(J,N) +UVALC(J,KB))/2.)*(USINT/100.)*AB  01213
ISN 0079          KE=KE-1                                                     01214
ISN 0080          AA=KE                                                       01215
ISN 0081          AB=RATOT(J,N)-AA                                            01216
ISN 0082          FIPER(J,KE)=((FVALC(J,KE)+FVALOT(J,N))/2.)*(FBINT/100.)*AB  01217
ISN 0083          UIPER(J,KE)=((UVALC(J,KE)+UVALOT(J,N))/2.)*(USINT/100.)*AB  01218
ISN 0084          IF(KE-KB)155,155,154                                        01219
ISN 0085      154 KEAB=KB+1                                                   01220
ISN 0086          DO 156 K=KEAB,KE                                            01221
ISN 0087          KK=K-1                                                      01222
ISN 0088          FIPER(J,K)=((FVALC(J,KK)+FVALC(J,K))/2.)*(FBINT/100.)       01223
ISN 0089      156 UIPER(J,K)=((UVALC(J,KK)+UVALC(J,K))/2.)*(USINT/100.)       01224
ISN 0090      155 CONTINUE                                                    01225
ISN 0091          DO 157 K=1,IY                                               01226
ISN 0092          IF(INT .EQ. 2 .AND. K .GT. LRCYCL)GO TO 177                 01227
ISN 0094          DO 158 J = 1,JMAX                                           01228
ISN 0095          FITOT(K)=FITOT(K) + FIPER(J,K) + UIPER(J,K)                 01229
ISN 0096      158 CONTINUE                                                    01230
ISN 0097      157 CONTINUE                                                    01231
ISN 0098      177 CONTINUE                                                    01232
ISN 0099          RETURN                                                      01233
ISN 0100          END                                                         01234
```

NAME	TAG		TYPE	ADD.	NAME	TAG		TYPE	ADD.	NAME	TAG		TYPE	ADD.	NAME	TAG		TYPE	ADD.
J	SF		I*4	000BAC	K	SF		I*4	000090	[illegible]	SF		I*4	000084	AA	SF		R*4	000088
AB	SF		R*4	000B8C	CC		C	R*4	N.R.	CD		C	R*4	N.R.	FC		C	R*4	N.R.
IY	F	C	I*4	000004	JN	F	C	I*4	01529C	KS	SF		I*4	000BC0	KE	SFA		I*4	000BC4
KF	SF		I*4	000BCB	KK	SF		I*4	000BCC	KM	SFA		I*4	000000	KY	SF		I*4	000BD4
MY		C	I*4	N.R.	INT		C	I*4	01750C	JNN	SF		I*4	000BD9	KAA	SF		I*4	000BDC
KRP	SF		I*4	000BE0	KEE	SF		I*4	000BE4	KFF	SF		I*4	000BE8	MOI		C	I*4	N.R.
MOO		C	I*4	N.R.	CCHG			R*4	000BEC	FIRM		C	R*4	N.R.	IDCU		C	I*4	N.R.
IYRI		C	I*4	N.R.	IYRO		C	I*4	N.R.	JMAX	F	C	I*4	000000	KEAB	SF		I*4	000BF0
KRUN		C	I*4	N.R.	LAST		C	I*4	017510	NEWK		C	I*4	N.R.	NORT		C	I*4	N.R.
UNTR		C	R*4	N.R.	UTRN		C	R*4	N.R.	XWWF		C	R*4	N.R.	BATIN	F	C	R*4	016384
BATCT	F	C	R*4	01A92C	BGNTR		C	R*4	N.R.	EGTIM		C	R*4	N.R.	CCCST		C	R*4	N.R.
CDCST		C	R*4	N.R.	CEAVE	F	C	R*4	C17230	CLOSS		C	R*4	N.R.	CLTIM		C	R*4	N.R.
CNCST		C	R*4	N.R.	CONIM		C	R*4	N.R.	CPECT	F	C	R*4	001F6C	CRTIM		C	R*4	N.R.
CSLPE	F	C	R*4	00310C	CSTIN		C	R*4	N.R.	CSTOT		C	R*4	N.R.	DITOT		C	R*4	N.R.
ENRIM		C	R*4	N.R.	FBCST		C	R*4	N.R.	FBGTP		C	R*4	N.R.	FBINT	F	C	R*4	000038
FCCST		C	R*4	N.R.	FCOST		C	R*4	N.R.	FIPSL	F	C	R*4	00FF8C	FIPSP	SF		R*4	000BF4
FITOT	SF	C	R*4	0034FC	FSLPE	F	C	R*4	0032F4	FVALS		C	R*4	N.R.	FVALC	SF	C	R*4	013D5C
FVALE		C	R*4	N.R.	ICCAE		C	I*4	N.R.	IDAYI		C	I*4	N.R.	IDAYO		C	I*4	N.R.
IDISC		C	I*4	N.R.	IFFRC		C	I*4	N.R.	IYEAR		C	I*4	N.R.	JMAXB		C	I*4	N.R.
KAZDD		C	I*4	N.R.	KYEAR		C	I*4	N.R.	LAZDD		C	I*4	N.R.	NASSM		C	I*4	N.R.
NSCOP		C	I*4	N.R.	PALCC		C	R*4	N.R.	PCRDT		C	R*4	N.R.	PLOSS		C	R*4	N.R.
PUCUT		C	R*4	N.R.	PVALU		C	R*4	N.R.	PWINT		C	R*4	N.R.	RALCC		C	R*4	N.R.
RCMIN		C	R*4	N.R.	RCMOT		C	R*4	N.R.	RPCHG		C	R*4	N.R.	RPCST		C	R*4	N.R.
RPRCH		C	R*4	N.R.	RPTIM		C	R*4	N.R.	SALOC		C	R*4	N.R.	SFCHG		C	R*4	N.R.
SHCST		C	R*4	N.R.	SPRIU		C	R*4	N.R.	SPECG		C	R*4	N.R.	SPEOP		C	R*4	N.R.
SPKWH		C	R*4	N.R.	SPPAL		C	R*4	N.R.	SPPCT		C	R*4	N.R.	SPRAL		C	R*4	N.R.
SPRCG		C	R*4	N.R.	SPSAL		C	R*4	N.R.	SPSCG		C	R*4	N.R.	SPSHP		C	R*4	N.R.
SPTAL		C	R*4	N.R.	SPTCG		C	R*4	N.R.	SPUCG		C	R*4	N.R.	SUMJP		C	R*4	N.R.
TALOC		C	R*4	N.R.	TRCHG		C	R*4	N.R.	TRCST		C	R*4	N.R.	UPEPL	F	C	R*4	00DAEC
UFCUT		C	R*4	N.R.	UFTIM		C	R*4	N.R.	UIPSR	SF		R*4	0021C4	ULOSS		C	R*4	N.R.
USINT	F	C	R*4	00003C	UVALB		C	R*4	N.R.	UVALC	SF	C	R*4	011C8C	UVALE		C	R*4	N.R.
UWTIN		C	R*4	N.R.	VALIN	F	C	R*4	00926C	VALOT	F	C	R*4	0C8994	WTHSP		C	R*4	N.R.
CYTIME		C	R*4	N.R.	FADPEN		C	R*4	N.R.	FCONLD		C	R*4	N.R.	FVALOI	SF	C	R*4	0C6E5C
FVLINN	F	C	R*4	00797C	FVLOUT	F	C	R*4	0070F4	IICOPE		C	I*4	N.R.	KMONTH		C	I*4	N.R.
LACYCL		C	I*4	015574	NRCYCL		C	I*4	N.R.	RMONTH		C	R*4	N.R.	SCRAPL		C	R*4	N.R.
UCONLD		C	R*4	N.R.	UTOCTM		C	R*4	N.R.	UVALOT	SF	C	R*4	009304					

***** COMMON INFORMATION *****

NAME OF COMMON BLOCK * * SIZE OF BLOCK 017514 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.
JMAX	I*4	000000	IY	I*4	000004	IYEAR	I*4	N.R.	KYEAR	I*4	N.R.
MY	I*4	N.R.	CLTIM	R*4	N.R.	RPTIM	R*4	N.R.	UCONLD	R*4	N.R.
UTRN	R*4	N.R.	FIRM	R*4	N.R.	IDCU	I*4	N.R.	IICOPE	I*4	N.R.
UNTR	R*4	N.R.	BGNTR	R*4	N.R.	JBINT	R*4	000038	USINT	R*4	00003C
JMAXB	I*4	N.R.	FCONLD	R*4	N.R.	BGTIM	R*4	N.R.	UFTIM	R*4	N.R.
FCCST	R*4	N.R.	FCOST	R*4	N.R.	CCCST	R*4	N.R.	FC	R*4	N.R.
CC	R*4	N.R.	CD	R*4	N.R.	RPCST	R*4	N.R.	UTOCTM	R*4	N.R.
CONTM	R*4	N.R.	ENRTM	R*4	N.R.	TRCST	R*4	N.R.	SHCST	R*4	N.R.
MOI	I*4	N.R.	IDAYI	I*4	N.R.	IYRI	I*4	N.R.	CDCST	R*4	N.R.
UFCUT	R*4	N.R.	UWTIN	R*4	N.R.	CSTOT	R*4	N.R.	CSTIN	R*4	N.R.
FBCST	R*4	N.R.	FVALU	R*4	N.R.	CPECT	R*4	001F6C	SCRAPL	R*4	N.R.

CNEST	R*4	N.R.	MDO	I*4	N.R.	IDAYO	I*4	N.R.	IYRO	I*4	N.R.
CSLPE	R*4	0031DC	FSLPE	R*4	0032E4	SOEC?	R*4	N.R.	FLOP	R*4	N.R.
FITOT	R*4	0034EC	DITOT	R*4	N.R.	SEGHG	R*4	N.R.	SALOC	R*4	N.R.
FVALB	R*4	N.R.	FVALE	R*4	N.R.	FVLIMN	R*4	00787C	FVLOUT	R*4	0070F4
VALIN	R*4	00936C	VALOT	R*4	0094E4	FVSLOT	R*4	009E5C	UVALOT	R*4	009304
UVALE	R*4	N.R.	UVALB	R*4	N.R.	UOPEL	R*4	0094EC	FOPEL	R*4	00195C
UVALC	R*4	01108C	FVALC	R*4	01305C	PHOUT	R*4	N.R.	CLOSS	R*4	N.R.
ULOSS	R*4	N.R.	PLOSS	R*4	N.R.	PWINT	R*4	N.R.	CYTIME	R*4	N.R.
KMONTH	I*4	N.R.	RMONTH	R*4	N.R.	KAZOO	I*4	N.R.	ICORE	I*4	N.R.
NECOP	I*4	N.R.	NOPT	I*4	N.R.	NRCYCL	I*4	N.R.	LRCYCL	I*4	015F74
KRUN	I*4	N.R.	RCMIN	R*4	N.R.	RCHOT	R*4	N.R.	XWWF	R*4	N.R.
FAEPEN	R*4	N.R.	JN	I*4	01629C	BATIN	R*4	0163B4	BATOT	R*4	01692C
NASSM	I*4	N.R.	FPCHG	R*4	N.R.	TRCHG	R*4	N.R.	PCROT	R*4	N.R.
RALOC	R*4	N.R.	TALOC	R*4	N.R.	PALOC	R*4	N.R.	CFAVF	R*4	01726C
CPTIM	R*4	N.R.	PPRCH	R*4	N.R.	IPPSC	I*4	N.R.	SPSOP	R*4	N.R.
SPFOP	R*4	N.R.	SPOCG	R*4	N.R.	SPFCG	R*4	N.R.	SPSLG	R*4	N.R.
SPSAL	R*4	N.R.	SPPCG	R*4	N.R.	SPPAL	R*4	N.R.	SPICG	R*4	N.R.
SPTAL	R*4	N.R.	SPPCT	R*4	N.R.	SPPAL	R*4	N.R.	WTHSP	R*4	N.R.
SPBTU	R*4	N.R.	SPKWH	R*4	N.R.	NEWK	I*4	N.R.	IDISC	I*4	N.R.
LAZOO	I*4	N.R.	INT	I*4	01750C	LAST	I*4	017510			

LABEL	ADDR	LABEL	ADDR	LABEL	ADDR	LABEL	ADDR
5	004359	159	00461C	160	004622	161	0046C2
162	00474C	163	0047x0	164	004x70	165	00497E
166	004BF4	150	004B3E	151	004C5A	149	004B58
153	004D12	154	005018	156	0050EC	155	00515A
158	00523A	157	005254	177	00526E		

OPTIONS IN EFFECT NAME= MAIN,OPT=00,LINECNT=58,SIZE=0000K,

OPTIONS IN EFFECT SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF

STATISTICS SOURCE STATEMENTS = 99 ,PROGRAM SIZE = 21144

STATISTICS NO DIAGNOSTICS GENERATED

****** END OF COMPILATION ******

109K BYTES OF CORE NOT USED

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          COMPILER OPTIONS - NAME=  MAIN,OPT=00,LINECNT=58,SIZE=0000K,
                             SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF
                    C      *******        **********        ***********        *******
                    C      *******        **********        ***********        *******
                    C      STANDBY AND SPENT FUEL CARRYING CHARGE
ISN 0002                   SUBROUTINE SPFL
ISN 0003                   DIMENSION SFEXP(70,30),PWEXP(70),ALCST(30)
ISN 0004                   COMMON JMAX,IY,IYEAR,KYEAR,MY,CLTIM,RPTIM,UCONLD,UTRN,FTRN
ISN 0005                   COMMON IDCU,IICORE,UNIT,BGNIR,FSINT,USINT,JMAXB,FCONLD
ISN 0006                   COMMON BGTIM(70),UFTIM(70),FCCST(70),FCOST(70),CCCST(70)
ISN 0007                   COMMON FC(30),CC(30),CD(30),RPCST(30),UTOCTM,CONTM,FNRTM
ISN 0008                   COMMON TPCST(30),S   T(30),MOI(70,5),IDAYI(70,5),IYRI(70,5)
ISN 0009                   COMMON CDCST(70),U    (70),UNTIN(70),CSTOT(70),CSTIN(70)
ISN 0010                   COMMON FRCST(30),PVAL(30),CPFCT(30),SCRAPL(70),CNCST(30)
ISN 0011                   COMMON MOO(70,5),IDAYO(70,5),IYRO(70,5),CSLPF(70),FSLPF(70)
ISN 0012                   COMMON SUMDP(30),FIDEP(30),FITOT(30),GITOT(30),SFCHG(30)
ISN 0013                   COMMON SALOC(30),FVALB(70,30),FVALE(70,30),FVLINN(70,5)
ISN 0014                   COMMON FVLOUT(70,5),VALIN(70,5),VALOT(70,5),FVALOT(70,5)
ISN 0015                   COMMON UVALOT(70,5),UVALE(70,30),UVALS(70,30),UDEPL(70,30)
ISN 0016                   COMMON FDPSL(70,30),UVALC(70,30),FVALC(70,30),PUROT(70)
ISN 0017                   COMMON CLOSS,ULOSS,PLOSS,PWINT,CYTIME,KMONTH,FMONTH
ISN 0018                   COMMON KAZOO,ICORE,NFCOP,NOPT,NRCYCL,LRCYCL,KRUN
ISN 0019                   COMMON RCHIN(70),RCHOT(70),XW4F(30),FARPEN(30)
ISN 0020                   COMMON JN(70),BATIN(70,5),BATOT(70,5),NASSM(70)
ISN 0021                   COMMON RPCHG(30),TECHG(30),PCRDT(30),RALOC(30),TALOC(30)
ISN 0022                   COMMON PALOC(30),CFAVE(70),CRTIM(70),RPRCH,IPPRC
ISN 0023                   COMMON SPSDP,SPFDP,SPUCG,SPFCG,SPSCG,SPSAL,SPRCG,SPRAL,SPTCG,SPTAL
ISN 0024                   COMMON SPPCT,SPPAL,WTHSP,SPBTU,SPKWH,NEWK,IDISC,LAZOO,INT,LAST
ISN 0025                   DO  5 J = 1,70
ISN 0026                   DO 5 K=1,30
ISN 0027                   SFEXP(J,K)=0.0
ISN 0028                   PWEXP(J)=0.0
ISN 0029                   ALCST(K)= SALOC(K)
ISN 0030                 5 CONTINUE
ISN 0031                   DO 170  J=1,JMAX
ISN 0032                   JNN=JN(J)
ISN 0033                   IF(INT .EQ. 2 .AND. J .GT. LAST)GO TO 170
ISN 0035                   DO 160  N=1,JNN
ISN 0036                   IF(N-JNN)30,10,10
ISN 0037                10 KY=BATOT(J,JNN)+1.0
ISN 0038               205 KZ = BATOT(J,JNN) + CLTIM + RPTIM + 1.0
ISN 0039               207 CONTINUE
ISN 0040                   IF(BATOT(J,JNN)+CLTIM+RPTIM+1.0-FLOAT(KZ))20,20,30
ISN 0041                20 KZ=KZ-1
ISN 0042                30 KX=KZ-1
ISN 0043              1007 FORMAT(5X,I4)
ISN 0044              1006 FORMAT(5X,3I4)
ISN 0045                   IF(KZ-KY)40,40,50
ISN 0046                40 SFEXP(J,KY)=(VALOT(J,JNN)*(CLTIM+RPTIM)*USINT/100.)
ISN 0047                   PWEXP(J)=PWEXP(J)+(SFEXP(J,KY)/(1.0+PWINT)**(BATOT(J,JNN)+CLTIM+
                          1RPTIM-BATIN(J,1)))
ISN 0048              1004 FORMAT(5X,I4,2X,I4,4X,2F15.2)
ISN 0049                   GO TO 160
ISN 0050                50 SFEXP(J,KY)=(VALOT(J,JNN)*(FLOAT(KY)-BATOT(J,JNN))*
                          1USINT/100.)
ISN 0051                   PWEXP(J)=PWEXP(J)+(SFEXP(J,KY)/(1.0+PWINT)**(FLOAT(KY)-
```

```
                1BATIN(J,1)))                                                    01289
ISN 0052        KT = 33                                                          01290
ISN 0053        IF(KZ .LT. 30)KT = KZ                                            01291
ISN 0055        KT = 30                                                          01292
ISN 0056        IF(KX .LT. 30)KT = KX                                            01293
ISN 0058        SFEXP(J,KI)=(VALOT(J,JNN)*(BATOT(J,JNN)+CLTIM+RPTIM-FLOAT(KT))*  01294
               1USINT/100.)                                                      01295
ISN 0059        PWEXP(J)=PWEXP(J)+(SFEXP(J,KI)/(1.0+PWINT)**(BATOT(J,JNN)+       01296
               1CLTIM+RPTIM-BATIN(J,1)))                                         01297
ISN 0060        IF(KX-KY)160,160,60                                              01298
ISN 0061     60 KUD=KY+1                                                         01299
ISN 0062        DO 70 K=KUD,KX                                                   01300
ISN 0063        I = 30                                                           01301
ISN 0064        IF(K .LT. 30)I = K                                               01302
ISN 0066        SFEXP(J,I)=(VALOT(J,JNN)*USINT/100.)                             01303
ISN 0067     70 PWEXP(J)=PWEXP(J)+(SFEXP(J,I)/(1.0+PWINT)**(FLOAT(I)-BATIN(J,1))) 01304
ISN 0068        GO TO 160                                                        01305
ISN 0069     80 KY=BATOT(J,N)+1.0                                                01306
ISN 0070        KZ=BATIN(J,N+1)+1.0                                              01307
ISN 0071        IF(BATIN(J,N+1)+1.0-FLOAT(KZ))90,90,100                          01308
ISN 0072     90 KZ=KZ-1                                                          01309
ISN 0073    100 KX=KZ-1                                                          01310
ISN 0074        IF(KZ-KY)110,110,120                                             01311
ISN 0075    110 SFEXP(J,KY)=(UVALOT(J,N)*(BATIN(J,N+1)-BATOT(J,N))*              01312
               1USINT/100.)+(EVALOT(J,N)*(BATIN(J,N+1)-BATOT(J,N))*EBINT/100.)   01313
ISN 0076        PWEXP(J)=PWEXP(J)+(SFEXP(J,KY)/(1.0+PWINT)**(BATIN(J,N+1)-       01314
               1BATIN(J,1)))                                                     01315
ISN 0077        GO TO 140                                                        01316
ISN 0078    120 SFEXP(J,KY)=(UVALOT(J,N)*(FLOAT(KY)-BATOT(J,N))*                 01317
               1USINT/100.)+(EVALOT(J,N)*(FLOAT(KY)-BATOT(J,N))*EBINT/100.)      01318
ISN 0079        PWEXP(J)=PWEXP(J)+(SFEXP(J,KY)/(1.0+PWINT)**(FLOAT(KY)-          01319
               1BATIN(J,1)))                                                     01320
ISN 0080        SFEXP(J,KZ)=(UVALOT(J,N)*(BATIN(J,N+1)-FLOAT(KX))*               01321
               1USINT/100.)+(EVALOT(J,N)*(BATIN(J,N+1)-FLOAT(KX))*EBINT/100.)    01322
ISN 0081        PWEXP(J)=PWEXP(J)+(SFEXP(J,KZ)/(1.0+PWINT)**(BATIN(J,N+1)-       01323
               1BATIN(J,1)))                                                     01324
ISN 0082        IF(KX-KY)150,160,130                                             01325
ISN 0083    130 KUD=KY+1                                                         01326
ISN 0084        DO 135 K=KUD,KX                                                  01327
ISN 0085        SFEXP(J,K)=(UVALOT(J,N)*USINT/100.)+(EVALOT(J,N)*EBINT/100.)     01328
ISN 0086        PWEXP(J)=PWEXP(J)+(SFEXP(J,K)/(1.0+PWINT)**(FLOAT(K)-BATIN(J,1))) 01329
ISN 0087    135 CONTINUE                                                         01330
ISN 0088    160 CONTINUE                                                         01331
ISN 0089    170 CONTINUE                                                         01332
ISN 0090    140 DO 150 K=1,IY                                                    01333
ISN 0091        DO 150 J=1,JMAX                                                  01334
ISN 0092    150 SFCHG(K) = SFCHG(K)+SFEXP(J,K)                                   01335
ISN 0093    155 CONTINUE                                                         01336
ISN 0094        CALL LLAC(PWEXP,ALCST)                                           01337
ISN 0095        DO 180 K=1,IY                                                    01338
ISN 0096        IF(INT .EQ. 2 .AND. K .GT. LRCYCL)GO TO 190                      01339
ISN 0098    180 SALOC(K)=ALCST(K)                                                01340
ISN 0099    190 CONTINUE                                                         01341
ISN 0100        RETURN                                                           01342
ISN 0101        END                                                              01343
```

NAME	TAG	TYPE	ADD.	NAME	TAG	TYPE	ADD.	NAME	TAG	TYPE	ADD.	NAME	TAG	TYPE	ADD.
I	SFA	I*4	000110	J	SF	I*4	000114	K	SFA	I*4	000118	M	SF	I*4	00011C
CC	C	R*4	N.R.	CD	C	R*4	N.R.	EC	C	R*4	N.R.	IY	F C	I*4	000004
JM	F C	I*4	01629C	KI	SF	I*4	000120	KI	SFA	I*4	000124	KX	SFA	I*4	000128
KY	SFA	I*4	000120	KZ	SFA	I*4	000130	MY	C	I*4	N.R.	IDT	C	I*4	01750C
JMN	SF	I*4	000134	XUD	SF	I*4	000138	MOI	C	I*4	N.R.	MDO	C	I*4	N.R.
FIRN	C	R*4	N.R.	IICU	C	I*4	N.R.	IYRI	C	I*4	N.R.	IYEO	C	I*4	N.R.
JMAX	F C	I*4	000000	KRUN	C	I*4	N.R.	LAST	C	I*4	017510	LLAC	SF XF	I*4	000003
NEWK	C	I*4	N.R.	NOPT	C	I*4	N.R.	SPEL		R*4	00013C	UNTR	C	R*4	N.R.
UTRN	C	R*4	N.R.	XWKF	C	R*4	N.R.	ALCST	SFA	R*4	000140	BATIN	F C	R*4	016364
BATOT	F C	R*4	01692C	BGNTR	C	R*4	N.R.	BGTIM	C	R*4	N.R.	CCCST	C	R*4	N.R.
CDCST	C	R*4	N.R.	CFAVE	C	R*4	N.R.	CLOSS	C	R*4	N.R.	CLTIM	F C	R*4	000014
CNCST	C	R*4	N.R.	CONTM	C	R*4	N.R.	CPECT	C	R*4	N.R.	CPTIM	C	R*4	N.R.
CSLPE	C	R*4	N.R.	CSTIN	C	R*4	N.R.	CSTOT	C	R*4	N.R.	DITOT	C	R*4	N.R.
ENRTM	C	R*4	N.R.	FBCST	C	R*4	N.R.	FBDLP	C	R*4	N.R.	FBTIM	F C	R*4	000038
FCCST	C	R*4	N.R.	FCOST	C	R*4	N.R.	FDPEL	C	R*4	N.R.	FITCT	C	R*4	N.R.
FSLPE	C	R*4	N.R.	FVALB	C	R*4	N.R.	FVALC	C	R*4	N.R.	FVALE	C	R*4	N.R.
ICCFE	C	I*4	N.R.	IDAYI	C	I*4	N.R.	IDAYO	C	I*4	N.R.	IDISC	C	I*4	N.R.
IRPRC	C	I*4	N.R.	IYEAR	C	I*4	N.R.	JMAXS	C	I*4	N.R.	KAZOO	C	I*4	N.R.
KYEAR	C	I*4	N.R.	LAZOO	C	I*4	N.R.	NASSM	C	I*4	N.R.	NFCLP	C	I*4	N.R.
PALOC	C	R*4	N.R.	PCPDI	C	R*4	N.R.	PLOSS	C	R*4	N.R.	PUMUT	C	R*4	N.R.
PVALU	C	R*4	N.R.	PWEXP	SFA	R*4	000188	PWINT	F C	R*4	015450	RALCC	C	R*4	N.R.
RCHIN	C	R*4	N.R.	RCHOT	C	R*4	N.R.	RPCHG	C	R*4	N.R.	RPCST	C	R*4	N.R.
RPRCH	C	R*4	N.R.	RPTIM	F C	R*4	000018	SALOC	SF C	R*4	003664	SPCHG	SF C	R*4	00350C
SPEXP	SF	R*4	000200	SHCST	C	R*4	N.R.	SPATU	C	R*4	N.R.	SPECS	C	R*4	N.R.
SPFDP	C	R*4	N.R.	SPKWH	C	R*4	N.R.	SPPAL	C	R*4	N.R.	SPPLT	C	R*4	N.R.
SPSAL	C	R*4	N.R.	SPRCG	C	R*4	N.R.	SPSAL	C	R*4	N.R.	SPSEG	C	R*4	N.R.
SPSDP	C	R*4	N.R.	SPTAL	C	R*4	N.R.	STICG	C	R*4	N.R.	SPUCG	C	R*4	N.R.
SUMDP	C	R*4	N.R.	TALOC	C	R*4	N.R.	TFCHC	C	R*4	N.R.	TRCST	C	R*4	N.R.
UDEPL	C	R*4	N.R.	UFCUT	C	R*4	N.R.	UFTIM	C	R*4	N.R.	ULOSS	C	R*4	N.R.
USINT	F C	R*4	000030	UVALB	C	R*4	N.R.	UVALC	C	R*4	N.R.	UVALE	C	R*4	N.R.
UWTIN	C	R*4	N.R.	VALIN	C	R*4	N.R.	VELOT	F C	R*4	008BE4	WTHSP	C	R*4	N.R.
ERXPR*	XF	R*4	000060	CYTIME	C	R*4	N.R.	EAFRLN	C	R*4	N.R.	FCONLD	C	R*4	N.R.
FVALOT	F C	R*4	00F65C	FVLINN	C	R*4	N.R.	FVLOUT	C	R*4	N.R.	IICORE	C	I*4	N.R.
KMONTH	C	I*4	N.R.	LRCYCL	C	I*4	015F74	NRCYCL	C	I*4	N.R.	RMONTH	C	R*4	N.R.
SCRAPL	C	R*4	N.R.	UCONLD	C	R*4	N.R.	UTOCTM	C	R*4	N.R.	UVALOT	F C	R*4	009304

***** COMMON INFORMATION *****

NAME OF COMMON BLOCK * * SIZE OF BLOCK 017514 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.
JMAX	I*4	000000	IY	I*4	000004	IYEAR	I*4	N.R.	KYEAR	I*4	N.R.
MY	I*4	N.R.	CLTIM	R*4	000014	RPTIM	R*4	000018	UCONLD	R*4	N.R.
UTRN	R*4	N.R.	FIRN	R*4	N.R.	IDCU	I*4	N.R.	IICORE	I*4	N.R.
UNTR	R*4	N.R.	BGNTR	R*4	N.R.	FNINT	R*4	000034	USINT	R*4	000030
JMAXS	I*4	N.R.	FCONLD	R*4	N.R.	FCTIM	R*4	N.R.	UFTIM	R*4	N.R.
FCCST	R*4	N.R.	FCOST	R*4	N.R.	CCCST	R*4	N.R.	FC	R*4	N.R.
CC	R*4	N.R.	CD	R*4	N.R.	RPCST	R*4	N.R.	UTOCTM	R*4	N.R.
CONTM	R*4	N.R.	ENRTM	R*4	N.R.	TRCST	R*4	N.R.	SHCST	R*4	N.R.
MOI	I*4	N.R.	IDAYI	I*4	N.R.	IYRI	I*4	N.R.	CDCST	R*4	N.R.
UFCUT	R*4	N.R.	UWTIN	R*4	N.R.	CSTOT	R*4	N.R.	CSTIN	R*4	N.R.
FBCST	R*4	N.R.	PVALU	R*4	N.R.	CPECT	R*4	N.R.	SCRAPL	R*4	N.R.

CNCST	R*4	N.R.	NBIO	I*4	N.R.	IDAYO	I*4	N.R.	IYRO	I*4	N.R.
CSLPE	R*4	N.R.	FSLPE	R*4	N.R.	SUMUP	R*4	N.R.	FLOEP	R*4	N.R.
FTIOT	R*4	N.R.	PTIOT	R*4	N.R.	SECOG	R*4	0035EC	SALOC	R*4	003654
FVALR	R*4	N.R.	FVALE	R*4	N.R.	FVLINX	R*4	N.R.	FVLOUT	R*4	N.R.
VALIN	R*4	N.R.	VALOT	R*4	0058E4	FVALOT	R*4	00BE5C	UVALOT	R*4	009304
UVALE	R*4	N.R.	UVALB	R*4	N.R.	IDELL	R*4	N.R.	FOPLL	R*4	N.R.
UVALC	R*4	N.R.	FVALC	R*4	N.R.	PWOUT	R*4	N.R.	CLOSS	R*4	N.R.
ULOSS	R*4	N.R.	PLOSS	R*4	N.R.	PWINT	R*4	015F50	CYTIME	R*4	N.R.
KMONTH	I*4	N.R.	KMONTH	R*4	N.R.	KAZOO	I*4	N.R.	ICORE	I*4	N.R.
NFCOP	I*4	N.R.	NOPT	I*4	N.R.	NPCYCL	I*4	N.R.	LRCYCL	I*4	015F74
KSUN	I*4	N.R.	PCHIN	R*4	N.R.	SCHOI	R*4	N.R.	XWWF	R*4	N.R.
FAPPEN	R*4	N.R.	JN	I*4	01629C	PATIN	R*4	016384	BATDT	R*4	01692C
NASSM	I*4	N.R.	RPCHG	R*4	N.R.	IRCHG	R*4	N.R.	PCRDT	R*4	N.R.
RALOC	R*4	N.R.	TALOC	R*4	N.R.	PALOC	R*4	N.R.	CRAVE	R*4	N.R.
CRTIM	R*4	N.R.	RPRCH	R*4	N.R.	IRRC	I*4	N.R.	SPSDP	R*4	N.R.
SPEDP	R*4	N.R.	SPUCG	R*4	N.R.	SPECG	R*4	N.R.	SPSCG	R*4	N.R.
SPSAL	R*4	N.R.	SPPCG	R*4	N.R.	SPRAL	R*4	N.R.	SPTCG	R*4	N.R.
SPTAL	R*4	N.R.	SPPCT	R*4	N.R.	SPPAL	R*4	N.R.	WTHSP	R*4	N.R.
SPRTU	R*4	N.R.	SPKWH	R*4	N.R.	NSWK	I*4	N.R.	IDISC	I*4	N.R.
LAZOO	I*4	N.R.	INT	I*4	01750C	LAST	I*4	017510			

LABEL	ADDR	LABEL	ADDR	LABEL	ADDR	LABEL	ADDR
5	002516	10	002594	205	002550 NR	207	002638 NR
20	002686	30	0026B4	40	0026C8	50	002748
60	00281C	70	002898	80	0028AA	90	002952
100	00295E	110	002D78	120	002E50	130	003342
135	003490	160	0034A6	170	0034BC	140	003406
150	003456	155	002564	180	00359E	190	0035DC

OPTIONS IN EFFECT NAME= MAIN,OPT=00,LINECNT=58,SIZE=0000K,

OPTIONS IN EFFECT SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF

STATISTICS SOURCE STATEMENTS = 100 ,PROGRAM SIZE = 13830

STATISTICS NO DIAGNOSTICS GENERATED

****** END OF COMPILATION ******

109K BYTES OF CORE NOT USED

```
      COMPILER OPTIONS - NAME=  MAIN,OPT=00,LINECNT=59,SIZE=0000K,
                         SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF
                C     ******        **********        **********        ******                01344
                C     ******        **********        **********        ******                01345
                C     ******        **********        **********        ******                01346
                C     REPROCESSING CHANGE                                                   01347
ISN 0002        C     SUBROUTINE RCHG(ITOW)                                                 01348
ISN 0003              DIMENSION ITOW(70)                                                    01349
ISN 0004              DIMENSION RPEXP(70,30),PWEXP(70),ALCST(30)                            01350
ISN 0005              COMMON JMAX,IY,IYEAR,KYEAR,MY,CLTIM,RPTIM,UCOMLB,UTRN,FTRN            01351
ISN 0006              COMMON IDCU,IICORE,UNTR,FGNTR,FRINT,USINT,JMAXR,FCOMLB                01352
ISN 0007              COMMON AGTIM(70),UFTIM(70),FCCST(70),FCOST(70),CCCST(70)              01353
ISN 0009              COMMON FC(30),CC(30),CD(20),RPCST(30),UTOCTM,CONTM,SMPTM              01354
ISN 0009              COMMON TPCST(30),SPCST(30),MDI(70,5),IDAYI(70,5),IYRI(70,5)           01355
ISN 0010              COMMON CPCST(70),UPOUT(70),UWTIN(70),CSTOT(70),CSTIN(70)              01356
ISN 0011              COMMON FPCST(30),PVALU(30),CPFCT(30),SCRAPL(70),CMCST(30)             01357
ISN 0012              COMMON MDO(70,5),IDAYO(70,5),IYRO(70,5),CSLPE(70),FSLPE(70)           01358
ISN 0013              COMMON SUSOP(30),FRDEP(30),FIIOT(30),DITOT(30),SFCHG(30)              01359
ISN 0014              COMMON SALOC(30),FVALB(70,30),FVALE(70,30),FVLINN(70,5)               01360
ISN 0015              COMMON FVLOUT(70,5),VALIN(70,5),VALOT(70,5),FVALSI(70,5)              01361
ISN 0016              COMMON UVALOT(70,5),UVALE(70,30),UVALB(70,30),UDEPL(70,30)            01362
ISN 0017              COMMON FDPEL(70,30),UVALC(70,30),FVALC(70,30),PWOUT(70)               01363
ISN 0018              COMMON CLOSS,ULOSS,PLOSS,PWINT,CYTIME,KMONTH,RMONTH                   01364
ISN 0019              COMMON KAZOO,ICORE,NFCOP,NOPT,NRCYCL,LRCYCL,KRUN                      01365
ISN 0020              COMMON RCMIN(70),RCHOT(70),XWWF(30),FABREN(30)                        01366
ISN 0021              COMMON JN(70),BATIN(70,5),BATOT(70,5),WASSM(70)                       01367
ISN 0022              COMMON RPCHG(30),TPCHG(30),PCRDT(30),RALOC(30),TALOC(30)              01368
ISN 0023              COMMON PALOC(30),CFAVE(70),CRTIM(70),RPRCH,IPPRC                      01369
ISN 0024              COMMON SPSUP,SPEDP,SPUCG,SPECG,SPSCG,SPSAL,SPRCG,SPRAL,SPTCG,SPTAL    01370
ISN 0025              COMMON SPPCT,SPPAL,WTHSP,SPBTU,SPKWH,NEWX,IDISC,LAZOO,INT,LAST        01371
ISN 0026              DO 5 K=1,30                                                           01372
ISN 0027              DO   J = 1,70                                                         01373
ISN 0028              PWEXP(K)=0.0                                                          01374
ISN 0029              ALCST(K) = RALOC(K)                                                   01375
ISN 0030              RPEXP(J,K)=0.0                                                        01376
ISN 0031            5 CONTINUE                                                              01377
ISN 0032              KI = RPRCH + 1.0                                                      01378
ISN 0033              DO 20 J=1,JMAX                                                        01379
ISN 0034              IF(INT .EQ. 2 .AND. J .GT. LAST)GO TO 20                              01380
ISN 0036              RI = 1.0                                                              01381
ISN 0037              JNN=JN(J)                                                             01382
ISN 0038              KR=BATOT(J,JNN)+1.0+CLTIM+RPTIM                                       01383
ISN 0039              IF(BATOT(J,JNN)+1.0+CLTIM+RPTIM-FLOAT(KR))10,10,15                    01384
ISN 0040           10 KR=KR-1                                                               01385
ISN 0041           15 IF(KI .GE. KR)RI = 0.0                                                01386
ISN 0043              KI = KR                                                               01387
ISN 0044              IF(KR .LT. 30)KI = KR                                                 01388
ISN 0046              RPEXP(J,KI) = TOTWT(J)*(RPCST(KI)+((1.0-ULOSS/100.-CLOSS/100.)*       01389
                     1CNCST(KI))*RI) +(ULOSS/100.*CSTOT(J)))                                01390
ISN 0047              PWEXP(J)=RPEXP(J,KI)/(1.0+PWINT)**(BATOT(J,JNN)+CLTIM+RPTIM-          01391
                     1BATIN(J,I))                                                           01392
ISN 0048              RPCHG(KI)=RPCHG(KI)+RPEXP(J,KI)                                       01393
ISN 0049           20 CONTINUE                                                              01394
ISN 0050              CALL LLAC(PWEXP,ALCST)                                                01395
ISN 0051              DO 30 K=1,IY                                                          01396
ISN 0052              RALOC(K)=ALCST(K)                                                     01397
ISN 0053              IF(INT .EQ. 2 .AND. K .GT. LRCYCL)GO TO 50
```

```
ISN 0055          30 CONTINUE                                    01398
ISN 0056          50 CONTINUE                                    01399
ISN 0057             RETURN                                      01400
ISN 0058             END                                         01401
```

NAME	TAG		TYPE	ADD.
J	SF		I*4	0C6088
FC		C	R*4	N.R.
RR	SFA		I*4	0023E4
INT		C	I*4	017500
FIRN		C	R*4	N.R.
JMAX	F	C	I*4	000000
NEWS		C	I*4	N.R.
UTRN		C	R*4	N.R.
BATOT	F	C	R*4	016920
CDCST		C	R*4	N.R.
CNCST	F	C	R*4	0020FC
CSLFE		C	R*4	N.R.
ENRTM		C	R*4	N.R.
FCCST		C	R*4	N.R.
FSLPE		C	R*4	N.R.
ICCFE		C	I*4	N.R.
IPPC		C	I*4	N.R.
KYEAR		C	I*4	N.R.
PALCC		C	R*4	N.R.
PVALU		C	R*4	N.R.
RCHIN		C	R*4	N.R.
RPEXP	SF		R*4	000268
SFCHG		C	R*4	N.R.
SPFDP		C	R*4	N.R.
SPRAL		C	R*4	N.R.
SPSDP		C	R*4	N.R.
SUMDP		C	R*4	N.R.
TPCST		C	R*4	N.R.
ULOSS	F	C	R*4	015F48
UVALF		C	R*4	N.R.
WTPSP		C	R*4	N.R.
FCONLD		C	R*4	N.R.
IICORE		C	I*4	N.R.
RMONTH		C	R*4	N.R.
UVALOT		C	R*4	N.R.

NAME	TAG		TYPE	ADD.
K	SF		I*4	005C9C
IY	F	C	I*4	000004
KT	S		I*4	000CC8
MM	SF		I*4	000000
IFCU		C	I*4	N.R.
KRUN		C	I*4	N.R.
NOPT		C	I*4	N.R.
XWWF		C	R*4	N.R.
BCNTR		C	R*4	N.R.
CFAVE		C	R*4	N.R.
CONTM		C	R*4	N.R.
CSTIN		C	R*4	N.R.
FRCST		C	R*4	N.R.
FCOST		C	R*4	N.R.
FVALR		C	R*4	N.R.
IDAYI		C	I*4	N.R.
IYEAR		C	I*4	N.R.
LAZOO		C	I*4	N.R.
PCRDT		C	R*4	N.R.
PWEXP	SFA		R*4	000150
RCHGT		C	R*4	N.R.
RPECH	F	C	R*4	01746C
SHCST		C	R*4	N.R.
SPRWM		C	R*4	N.R.
SPRCG		C	R*4	N.R.
SPTAL		C	R*4	N.R.
TALOC		C	R*4	N.R.
UDSPL		C	R*4	N.R.
USINT		C	R*4	N.R.
UWTIN		C	R*4	N.R.
FRXPR#		XF	R*4	000000
FVALOT		C	R*4	N.R.
KMONTH		C	I*4	N.R.
SCRAPL		C	R*4	N.R.

NAME	TAG		TYPE	ADD.
CC		C	R*4	N.R.
JN	F	C	I*4	015270
MY		C	I*4	N.R.
NDI		C	I*4	N.R.
IYRI		C	I*4	N.R.
LAST		C	I*4	017510
RCHG			R*4	000004
ALCST	SFA		R*4	0000D8
NCTIM		C	R*4	N.R.
CLOSS	F	C	R*4	015F44
CPECT		C	R*4	N.R.
CSTOT	F	C	R*4	001C4C
FSOLP		C	R*4	N.R.
FSPEL		C	R*4	N.R.
FVALC		C	R*4	N.R.
IDAYO		C	I*4	N.R.
JMAXB		C	I*4	N.R.
NCSSM		C	I*4	N.R.
PLOSS		C	R*4	N.R.
PWINT	F	C	R*4	015F50
RPCHG	SF	C	R*4	015F9C
SPTIM	F	C	R*4	000019
SPRTU		C	R*4	N.R.
SPRAT		C	R*4	N.R.
SPSAL		C	R*4	N.R.
SPTCG		C	R*4	N.R.
TOTNT	F	XR	R*4	000000
UFCUT		C	R*4	N.R.
UVALB		C	R*4	N.R.
VALIN		C	R*4	N.R.
CYTIME		C	R*4	N.R.
FVLINN		C	R*4	N.R.
LRCYCL		C	I*4	015F74
UCONLD		C	R*4	N.R.

NAME	TAG		TYPE	ADD.
CD		C	R*4	N.R.
KI	SF		I*4	C0C0C0
PI	SF		R*4	C0C0CC
MCD		C	I*4	N.R.
IYRD		C	I*4	N.R.
LLAC	SF XF		I*4	000000
UNTR		C	R*4	N.R.
BATIN	F	C	R*4	016354
CCCST		C	R*4	N.R.
CLTIM	F	C	R*4	C0J014
CRTIM		C	R*4	N.R.
DITNT		C	R*4	N.R.
FRINT		C	R*4	N.R.
FITOT		C	R*4	N.R.
FVALE		C	R*4	N.R.
IDISC		C	I*4	N.R.
KAZOO		C	I*4	N.R.
NFSEP		C	I*4	N.R.
POROT		C	R*4	N.R.
RALLC	SF	C	R*4	C17124
RPCST	F	C	R*4	003728
SALOC		C	R*4	N.R.
SPFCG		C	R*4	N.R.
SPPCT		C	R*4	N.R.
SPSCG		C	R*4	N.R.
SPUCG		C	R*4	N.R.
TRCHG		C	R*4	N.R.
UFTIM		C	R*4	N.R.
UVALC		C	R*4	N.R.
VALOT		C	R*4	N.R.
FABPEN		C	R*4	N.R.
FVLOUT		C	R*4	N.R.
NRCYCL		C	I*4	N.R.
UTOCTM		C	R*4	N.R.

******* COMMON INFORMATION *******

NAME OF COMMON BLOCK * * SIZE OF BLOCK 017514 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.
JMAX	I*4	000000	IY	I*4	000004	IYEAR	I*4	N.R.	KYEAR	I*4	N.R.
MY	I*4	N.R.	CLTIM	R*4	000014	RPTIM	R*4	000018	UCONLD	R*4	N.R.
UTRN	R*4	N.R.	FIRN	R*4	N.R.	IDCU	I*4	N.R.	IICORE	I*4	N.R.
UNTR	R*4	N.R.	FGNTR	R*4	N.R.	FRINT	R*4	N.R.	USINT	R*4	N.R.
JMAXB	I*4	N.R.	FCONLD	R*4	N.R.	NCTIM	R*4	N.R.	UFTIM	R*4	N.R.
FCCST	R*4	N.R.	FCOST	R*4	N.R.	CCCST	R*4	N.R.	FC	R*4	N.R.
CC	R*4	N.R.	CD	R*4	N.R.	RPCST	R*4	003728	UTOCTM	R*4	N.R.
CONTM	R*4	N.R.	ENRTM	R*4	N.R.	TRCST	R*4	N.R.	SHCST	R*4	N.R.
MOI	I*4	N.R.	IDAYI	I*4	N.R.	IYRI	I*4	N.R.	CDCST	R*4	N.R.
UFCUT	R*4	N.R.	UWTIN	R*4	N.R.	CSTOT	R*4	001C4C	CSTIN	R*4	N.R.
FRCST	R*4	N.R.	PVALU	R*4	N.R.	CPECT	R*4	N.R.	SCRAPL	R*4	N.R.
CNCST	R*4	0020FC	MOD	I*4	N.R.	IDAYO	I*4	N.R.	IYRO	I*4	N.R.

CSLPE	R*4	N.R.	FSLPE	R*4	N.R.	SUMMP	R*4	N.R.	FSDEP	R*4	N.R.
FJTOT	R*4	N.R.	GFTOT	R*4	N.R.	[illegible]	R*4	N.R.	SALOC	R*4	N.R.
FVALB	R*4	N.R.	FVALS	R*4	N.R.	FVLTIN	R*4	N.R.	FVLTOT	R*4	N.R.
VALIN	R*4	N.R.	VALOT	R*4	N.R.	FVALOT	R*4	N.R.	UVALOT	R*4	N.R.
UVALE	R*4	N.R.	UVALB	R*4	N.R.	UDEPL	R*4	N.R.	FDPEL	R*4	N.R.
UVALC	R*4	N.R.	FVALC	R*4	N.R.	FPOUT	R*4	N.R.	CLOSS	R*4	015F44
ULOSS	R*4	015F49	PLOSS	R*4	N.R.	PWINT	R*4	015F52	CYTIME	R*4	N.R.
KMONTH	I*4	N.R.	RMONTH	R*4	N.R.	KAZOO	I*4	N.R.	ICORE	I*4	N.R.
NECOP	I*4	N.R.	NOPT	I*4	N.R.	NWCYCL	I*4	N.R.	LFCYCL	I*4	015F74
KRUN	I*4	N.R.	FCLIN	R*4	N.R.	PCHDT	R*4	N.R.	XSWF	R*4	N.R.
FARPEN	R*4	N.R.	JN	I*4	01629C	FATIN	R*4	0153B4	BATOT	R*4	01592C
NASSM	I*4	N.R.	RPCHG	R*4	016FBC	TFCHG	R*4	N.R.	PCRDT	R*4	N.R.
RALOC	R*4	017124	TALOC	R*4	N.R.	PXLOC	R*4	N.R.	CFAVF	R*4	N.R.
CPTIM	R*4	N.R.	FPFCH	R*4	0174BC	IRSC	I*4	N.R.	SPSUP	R*4	N.R.
SFEDP	R*4	N.R.	SPUCG	R*4	N.R.	SPFCG	R*4	N.R.	SPSCG	R*4	N.R.
SPSAL	R*4	N.R.	SPRCG	R*4	N.R.	SPRAL	R*4	N.R.	SPTCG	R*4	N.R.
SPTAL	R*4	N.R.	SPPCT	R*4	N.R.	SPPAL	R*4	N.R.	WTHSP	R*4	N.R.
SPBTU	R*4	N.R.	SPKWH	R*4	N.R.	NEWK	I*4	N.R.	IDISC	I*4	N.R.
LAZOO	I*4	N.R.	INT	I*4	01750C	LAST	I*4	017510			

LABEL	ADDR	LABEL	ADDR	LABEL	ADDR	LABEL	ADDR
5	002456	10	002584	15	0025C0	20	0027A8
30	00281C	50	002836				

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*OPTIONS IN EFFECT*     NAME= MAIN,OPT=00,LINECNT=58,SIZE=0000K,
*OPTIONS IN EFFECT*     SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF
*STATISTICS*    SOURCE STATEMENTS =     57 ,PROGRAM SIZE =    10358
*STATISTICS*  NO  DIAGNOSTICS GENERATED
****** END OF COMPILATION ******

125K BYTES OF CORE NOT USED
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      COMPILER OPTIONS - NAME=  MAIN,OPT=00,LINECNT=58,SIZE=0000K,
                         SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF
                C     ******        **********        **********        ******          01402
                C     ******        **********        **********        ******          01403
                C     ******        **********        **********        ******          01404
                C     TRANSPORTATION CHARGE                                           01405
ISN 0002              SUBROUTINE TCHG (ITNT)                                          01406
ISN 0003              DIMENSION TREXP(70,30),PWEXP(70),ALCST(30),SHEXP(70,30),TOWT(70)01407
ISN 0004              COMMON JMAX,IY,IYEAR,KYEAR,MY,CLTIM,RPTIM,UCCNLD,UTRN,FTRN      01408
ISN 0005              COMMON IDCU,IICORE,UNIR,EGNTR,FBINT,USINT,JMAXS,FCCNLD          01409
ISN 0006              COMMON BGTIM(70),UFTIM(70),FCOST(70),ECOST(70),CCOST(70)         01410
ISN 0007              COMMON EC(30),CC(30),CD(30),RPCST(30),UTOCTM,CONTX,SNRTM        01411
ISN 0008              COMMON TPCST(30),SHCST(30),MDI(70,5),IDAY(70,5),IYR(70,5)       01412
ISN 0009              COMMON CPCST(70),UFOUT(70),UFTIN(70),CSTOT(70),CSTIN(70)        01413
ISN 0010              COMMON FPCST(30),FVALU(30),CPFCT(30),SCRAPL(70),SNCST(30)       01414
ISN 0011              COMMON MDI(70,5),IDAYR(70,5),IYRO(70,5),CSLPE(70),FSLPE(70)     01415
ISN 0012              COMMON SUMOP(30),FEDEP(30),FITOT(30),DITOT(30),SPCHG(30)        01416
ISN 0013              COMMON SALOC(30),FVALE(70,30),FVALS(70,30),FVLINW(70,5)         01417
ISN 0014              COMMON FVLOUT(70,5),VALIN(70,5),VALOT(70,5),FVALQ(70,5)         01418
ISN 0015              COMMON UVALOT(70,5),UVALE(70,30),UVALB(70,20),UDEPLE(70,30)     01419
ISN 0016              COMMON EDPEL(70,30),UVALC(70,30),FVALC(70,30),PUDIT(70)         01420
ISN 0017              COMMON CLOSS,ULOSS,PLOSS,FWINT,CYTIME,KMONTH,FMONTH             01421
ISN 0018              COMMON KAZOO,ICORE,NECOP,NOPI,NRCYCL,LRCYCL,KRUN                01422
ISN 0019              COMMON RCHIN(70),RCHOT(70),XWAE(30),FABRSM(30)                  01423
ISN 0020              COMMON JN(70),BATIN(70,5),BATOT(70,5),NASSM(70)                 01424
ISN 0021              COMMON PPCHG(30),TPCHG(30),PCROT(30),BALOC(30),TALOC(30)        01425
ISN 0022              COMMON PALOC(30),CFAVE(70),CRTIM(70),RPRCH,IPPRC                01426
ISN 0023              COMMON SPSOP,SPEOP,SPUCG,SPECG,SPSCG,SPSAL,SPRCG,SPRAL,SPTCG,SPTAL01427
ISN 0024              COMMON SPPCT,SPPAL,WTHSP,SPBTU,SPKWH,NEWK,IDISC,LAZOO,INT,LAST  01428
ISN 0025                DO  5 J = 1,70                                                01429
ISN 0026                PWEXP(J)=0.0                                                  01430
ISN 0027                DO 5 K=1,30                                                   01431
ISN 0028                SHEXP(J,K)=0.0                                                01432
ISN 0029                ALCST(K) = TALOC(K)                                           01433
ISN 0030                TREXP(J,K)=0.0                                                01434
ISN 0031              5 CONTINUE                                                      01435
ISN 0032                DO 60 J=1,JMAX                                                01436
ISN 0033                IF(INT .EQ. 2 .AND. J .GT. LAST)GO TO 60                      01437
ISN 0035                JNN=JN(J)                                                     01438
ISN 0036                KR = RPRCH + 1.0                                              01439
ISN 0037                KT=BATOT(J,JNN)+1.0+CLTIM                                     01440
ISN 0038                IF(BATOT(J,JNN)+1.0+CLTIM-FLOAT(KT))20,20,30                  01441
ISN 0039             20 KT=KT-1                                                       01442
ISN 0040             30 KS=BATOT(J,JNN)+1.0+CLTIM+RPTIM                               01443
ISN 0041                IF(BATOT(J,JNN)+1.0+CLTIM+RPTIM-FLOAT(KS))40,40,50            01444
ISN 0042             40 KS=KS-1                                                       01445
ISN 0043             50 CONTINUE                                                      01446
ISN 0044                KL = 30 .                                                     01447
ISN 0045                KI = 70                                                       01448
ISN 0046                IF(KT .LT. 30)KI = KT                                         01449
ISN 0048                IF(KS .LT. 30)KL = KS                                         01450
ISN 0050                TREXP(J,KI) = NASSM(J) * TPCST(KI)                            01451
ISN 0051                PWEXP(J)=PWEXP(J)+(TREXP(J,KI)/(1.0+PWINT)**(BATOT(J,JNN)+CLTIM -01452
                       1BATIN(J,1)))                                                  01453
ISN 0052                SHEXP(J,KL)=  TOWT(J)*SHCST(KL)*1.48                          01454
ISN 0053                IF(KT .GE. KR)SHEXP(J,KL)= 0.0                                01455
ISN 0055                PWEXP(J)=PWEXP(J)+(SHEXP(J,KL)/(1.0+PWINT)**(BATOT(J,JNN)+CLTIM+
```

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                  IRPTIM-PATIN(J,1)))                                    01456
ISN 0056        50 CONTINUE                                              01457
ISN 0057           CALL CLAC(PWEXP,ALCST)                                01458
ISN 0058           DO 70 K = 1,TY                                        01459
ISN 0059           IF(IN1 .EQ. 2 .AND. K .GT. LRCYCL)GO TO 90            01460
ISN 0061           TALOC(K) = ALCST(K)                                   01461
ISN 0062        90 CONTINUE                                              01462
ISN 0063           DO 80 J = 1,JMAX                                      01463
ISN 0064           TRCHG(K)=TRCHG(K)+TREXP(J,K)+SHEXP(J,K)               01464
ISN 0065        80 CONTINUE                                              01465
ISN 0066        70 CONTINUE                                              01466
ISN 0067           RETURN                                                01467
ISN 0068           END                                                   01468
```

NAME	TAG		TYPE	ADD.
J	SF		I*4	0000C0
FC		C	R*4	N.R.
KL	SF		I*4	0000CC
MY		C	I*4	N.R.
MOD		C	I*4	N.R.
IYRO		C	I*4	N.R.
LLAC	SF	XF	I*4	000000
TOWT	F	XR	R*4	000000
ALCST	SFA		R*4	0000E4
BGTIM		C	R*4	N.R.
CLOSS		C	R*4	N.R.
CPECT		C	R*4	N.R.
CSTOT		C	R*4	N.R.
EBDEP		C	R*4	N.R.
EDPEL		C	R*4	N.R.
EVALC		C	R*4	N.R.
IDAYO		C	I*4	N.R.
JMAXB		C	I*4	N.R.
MASSM	F	C	I*4	016EA4
PLOSS		C	R*4	N.R.
PWINT	F	C	R*4	015E50
RPCHG		C	R*4	N.R.
SALOC		C	R*4	N.R.
SPBTU		C	R*4	N.R.
SPBAL		C	R*4	N.R.
SPSAL		C	R*4	N.R.
SPTCG		C	R*4	N.R.
TRCHG	SF	C	R*4	017034
UEOUT		C	R*4	N.R.
UVALB		C	R*4	N.R.
VALIN		C	R*4	N.R.
CYTIME		C	R*4	N.R.
EVLINM		C	R*4	N.R.
LRCYCL		C	I*4	015E74
UCONLD		C	R*4	N.R.

NAME	TAG		TYPE	ADD.
K	SF		I*4	0000C4
IY	F	C	I*4	000004
KF	S		I*4	0000D0
INI		C	I*4	01750C
FIRN		C	R*4	N.R.
JMAX	F	C	I*4	000000
NEWK		C	I*4	N.R.
UNIR		C	R*4	N.R.
BATIN	F	C	R*4	016394
CCCST		C	R*4	N.R.
CLTIM	F	C	R*4	000014
CRTIM		C	R*4	N.R.
DITOT		C	R*4	N.R.
FBINT		C	R*4	N.R.
FITOT		C	R*4	N.R.
FVALE		C	R*4	N.R.
IDISC		C	I*4	N.R.
KAZOO		C	I*4	N.R.
NFCOP		C	I*4	N.R.
PUTOT		C	R*4	N.R.
RALOC		C	R*4	N.R.
RPCST		C	R*4	N.R.
SPCHG		C	R*4	N.R.
SPICG		C	R*4	N.R.
SPFCT		C	R*4	N.R.
SPSCG		C	R*4	N.R.
SPUCR		C	R*4	N.R.
TRCST	F	C	R*4	0007AC
UETIM		C	R*4	N.R.
UVALC		C	R*4	N.R.
VALOT		C	R*4	N.R.
FABPEN		C	R*4	N.R.
FVLCUT		C	R*4	N.R.
NRCYCL		C	I*4	N.R.
UTOCTM		C	R*4	N.R.

NAME	TAG		TYPE	ADD.
CC		C	R*4	N.R.
JM	F	C	I*4	016A9C
KS	SFA		I*4	0000D4
JNK	SF		I*4	00000C
IDCU		C	I*4	N.R.
KRUN		C	I*4	N.R.
NOPT		C	I*4	N.R.
UIRN		C	R*4	N.R.
BATOT	F	C	R*4	01692C
CPCST		C	R*4	N.R.
CRCST		C	R*4	N.R.
CSLPE		C	R*4	N.R.
ENRTM		C	R*4	N.R.
FCCST		C	R*4	N.R.
FSLPE		C	R*4	N.R.
ICORE		C	I*4	N.R.
IEPRC		C	I*4	N.R.
KYEAR		C	I*4	N.R.
PALOC		C	R*4	N.R.
PVALU		C	R*4	N.R.
RCHIN		C	R*4	N.R.
RPISH	F	C	R*4	01748C
SHCST	F	C	R*4	000324
SPSDP		C	R*4	N.R.
SPRTL		C	R*4	N.R.
SRSDP		C	R*4	N.R.
SUMDP		C	R*4	N.R.
TRSXP	SF		R*4	002344
ULOSS		C	R*4	N.R.
UVALE		C	R*4	N.R.
WIRSP		C	R*4	N.R.
FCONLD		C	R*4	N.R.
IICORE		C	I*4	N.R.
KMONTH		C	I*4	N.R.
UVALOT		C	R*4	N.R.

NAME	TAG		TYPE	ADD.
CD		C	R*4	N.R.
KI	SF		I*4	0000C8
KT	SFA		I*4	0000D8
MOI		C	I*4	N.R.
IYRI		C	I*4	N.R.
LAST		C	I*4	017510
TCHG			R*4	0000E0
XMWF		C	R*4	N.R.
BGNIR		C	R*4	N.R.
CRAVE		C	R*4	N.R.
CONTM		C	R*4	N.R.
CSTIN		C	R*4	N.R.
FBCST		C	R*4	N.R.
FCOST		C	R*4	N.R.
FVALB		C	R*4	N.R.
IDAYI		C	I*4	N.R.
IYEAR		C	I*4	N.R.
LAZOO		C	I*4	N.R.
PCRDT		C	R*4	N.R.
PWEXP	SFA		R*4	000150
RCHOT		C	R*4	N.R.
RPTIM	F	C	R*4	000018
SHEXP	SF		R*4	000274
SPSAM		C	R*4	N.R.
SPRCG		C	R*4	N.R.
SPTAL		C	R*4	N.R.
TALOC	SF	C	R*4	01719C
UDSPL		C	R*4	N.R.
USINT		C	R*4	N.R.
UWTIN		C	R*4	N.R.
FRXPR*		XF	R*4	000000
FVALOT		C	R*4	N.R.
KMONTH		C	I*4	N.R.
SCRAPL		C	R*4	N.R.

***** COMMON INFORMATION *****

NAME OF COMMON BLOCK * * SIZE OF BLOCK 017514 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.
JMAX	I*4	000000
MY	I*4	N.R.
UIRN	R*4	N.R.
UWTR	R*4	N.R.
JMAXB	I*4	N.R.
FCCST	R*4	N.R.
CC	R*4	N.R.
CONTM	R*4	N.R.
MOI	I*4	N.R.
UEOUT	R*4	N.R.
FBCST	R*4	N.R.
CNCST	R*4	N.R.

VAR. NAME	TYPE	REL. ADDR.
IY	I*4	000004
CLTIM	R*4	000014
FIRN	R*4	N.R.
BGNIR	R*4	N.R.
FCONLD	R*4	N.R.
FCOST	R*4	N.R.
CD	R*4	N.R.
ENRTM	R*4	N.R.
IDAYI	I*4	N.R.
UWTIN	R*4	N.R.
PVALU	R*4	N.R.
MOD	I*4	N.R.

VAR. NAME	TYPE	REL. ADDR.
IYEAR	I*4	N.R.
RPTIM	R*4	000018
IDCU	I*4	N.R.
FBINT	R*4	N.R.
UCTIM	R*4	N.R.
CCCST	R*4	N.R.
RPCST	R*4	N.R.
TRCST	R*4	0007AC
IYRI	I*4	N.R.
CSTOT	R*4	N.R.
CPECT	R*4	N.R.
IDAYO	I*4	N.R.

VAR. NAME	TYPE	REL. ADDR.
KYEAR	I*4	N.R.
UCONLD	R*4	N.R.
IICORE	I*4	N.R.
USINT	R*4	N.R.
UETIM	R*4	N.R.
FC	R*4	N.R.
UTOCTM	R*4	N.R.
SHCST	R*4	000324
CDCST	R*4	N.R.
CSTIN	R*4	N.R.
SCRAPL	R*4	N.R.
IYRO	I*4	N.R.

CSLPE	R*4	N.R.	FSLPE	R*4	N.R.	SUMDP	R*4	N.R.	FPDEP	R*4	N.R.
FTIDT	R*4	N.R.	DTIDT	R*4	N.R.	SFSHG	R*4	N.R.	SSLPG	R*4	N.R.
FVALR	R*4	N.R.	TVALF	R*4	N.R.	FVLTDT	R*4	N.R.	FVLPDT	R*4	N.R.
VALIN	R*4	N.R.	VALCT	R*4	N.R.	FVALDT	R*4	N.R.	UVALDT	R*4	N.R.
UVALE	R*4	N.R.	UVALR	R*4	N.R.	TDPPL	R*4	N.R.	FDPFL	R*4	N.R.
UVALC	R*4	N.R.	FVALC	R*4	N.R.	PTDDT	R*4	N.R.	CLOUS	R*4	N.R.
ULOSS	R*4	N.R.	PLOSS	R*4	N.R.	PRENT	R*4	015F50	CYTIME	R*4	N.R.
KMONTH	I*4	N.R.	RMONTH	R*4	N.R.	RZZDP	I*4	N.R.	ICURE	I*4	N.R.
NFCOP	I*4	N.R.	NDPT	I*4	N.R.	NRCYCL	I*4	N.R.	LRCYCL	I*4	015F74
KRUN	I*4	N.R.	RCMIN	R*4	N.R.	RSNDT	R*4	N.R.	XWWF	R*4	N.R.
FARREN	R*4	N.R.	JN	I*4	016??C	RETIN	R*4	016384	RATDT	R*4	016?2C
NRSSM	I*4	016FA4	FPCHG	R*4	N.R.	TPCHG	R*4	017034	PCRDT	R*4	N.R.
RALOC	R*4	N.R.	TALOC	R*4	0171?C	PALOC	R*4	N.R.	CRAVE	R*4	N.R.
CRTIM	R*4	N.R.	RPRCH	R*4	01749C	IPPRC	I*4	N.R.	SPSDP	R*4	N.R.
SPFDP	R*4	N.R.	SPUCG	R*4	N.R.	SPFCG	R*4	N.R.	SPSCG	R*4	N.R.
SPSAL	R*4	N.R.	SPRCG	R*4	N.R.	SPRAL	R*4	N.R.	SPTCG	R*4	N.R.
SPTAL	R*4	N.R.	SPPCT	R*4	N.R.	SPPAL	R*4	N.R.	WTHSP	R*4	N.R.
SPRTU	R*4	N.R.	SPKWH	R*4	N.R.	NEWK	I*4	N.R.	IDISC	I*4	N.R.
LAZOD	I*4	N.R.	INT	I*4	01750C	LAST	I*4	017510			

TG1

LABEL	ADDR	LABEL	ADDR	LABEL	ADDR	LABEL	ADDR
5	004590	20	0046D2	30	00465E	40	00479E
50	0047AA	59	004A54	90	004ACC	89	00464C
70	004866						

```
*OPTIONS IN EFFECT*      NAME=  MAIN,OPT=00,LINECNT=58,SIZE=000CK,
*OPTIONS IN EFFECT*      SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF
*STATISTICS*     SOURCE STATEMENTS =      67 ,PROGRAM SIZE =    19392
*STATISTICS* NO  DIAGNOSTICS GENERATED
****** END OF COMPILATION ******                    117K BYTES OF CORE NOT USED
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JG2

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COMPILER OPTIONS - NAME=  MAIN,OPT=00,LINECNT=58,SIZE=0000K,
                   SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF
          C       *******        **********       ***********        *******           01469
          C       *******        **********       ***********        *******           01470
          C       PLUTONIUM CREDIT                                                     01471
ISN 0002          SUBROUTINE PCDT                                                      01472
ISN 0003          DIMENSION  PWCDT(70),ALCDT(30),PLCDT(70,30)                          01473
ISN 0004          COMMON JMAX,IY,IYEAR,KYEAR,MY,CLTIM,RPTIM,UCONLD,UTRN,FTRN           01474
ISN 0005          COMMON IDCO,IICORE,UNIR,RGNTR,FBINT,USINT,JMAXP,FCONLD               01475
ISN 0006          COMMON RGTIM(70),UFTIM(70),FCCST(70),FCOST(70),CCCST(70)             01476
ISN 0007          COMMON FC(30),CC(30),CM(30),RPCST(30),UTOCTM,CONTM,ENRTM             01477
ISN 0008          COMMON TRCST(30),SHCST(30),MOI(70,5),IDAYI(70,5),IYRI(70,5)          01478
ISN 0009          COMMON COCST(70),UFOUT(70),UNTIN(70),CSTDI(70),CSTIM(70)             01479
ISN 0010          COMMON FPCST(30),PVALU(30),CPFCT(30),SCRAPL(70),CNCST(30)            01480
ISN 0011          COMMON MOD(70,5),IDAYO(70,5),IYRO(70,5),CSLPF(70),FSLPF(70)          01481
ISN 0012          COMMON SUTOP(30),FEDEP(30),FITOT(30),DITOT(30),SFCHG(30)             01482
ISN 0013          COMMON SALOC(30),FVALP(70,30),FVALE(70,30),FVLINN(70,5)              01483
ISN 0014          COMMON FVLOUT(70,5),VALIN(70,5),VALOT(70,5),FVALOT(70,5)             01484
ISN 0015          COMMON UVALOT(70,5),UVALF(70,30),UVALS(70,30),UDEPL(70,30)           01485
ISN 0016          COMMON FDPEL(70,30),UVALC(70,30),FVALC(70,30),PUOUT(70)              01486
ISN 0017          COMMON CLOSS,ULOSS,PLOSS,PWINT,CYTIME,KMONTH,RMONTH                  01487
ISN 0018          COMMON KAZOO,ICORE,NFCOP,NOPT,NRCYCL,LRCYCL,KRUN                     01488
ISN 0019          COMMON PCHIN(70),FCHOT(70),XWVF(30),FABREN(30)                       01489
ISN 0020          COMMON JN(70),BATIN(70,5),BATOT(70,5),NASSM(70)                      01490
ISN 0021          COMMON RPCHG(30),TPCHG(30),PCRDT(30),PALOC(30),TALOC(30)             01491
ISN 0022          COMMON PALOC(30),CFAVE(70),CRTIM(70),RPRCH,IRPRC                     01492
ISN 0023          COMMON SPSDP,SPFDP,SPUCG,SPFCG,SPSCG,SPSAL,SPRCG,SPRAL,SPTCG,SPTAL01493
ISN 0024          COMMON SPPCT,SPPAL,WIHSP,SPBTU,SPKWH,NEWK,IDISC,LAZOO,INT,LAST       01494
ISN 0025          DO 10 J = 1,70                                                       01495
ISN 0026          DO 10 K=1,30                                                         01496
ISN 0027          PLCDT(J,K)=0.0                                                       01497
ISN 0028          PWCDT(K)=0.0                                                         01498
ISN 0029          ALCDT(K) = PALOC(K)                                                  01499
ISN 0030       10 CONTINUE                                                             01500
ISN 0031          IF (NOPT .EQ. 2)GO TO 80                                             01501
ISN 0033          DLTIM = CLTIM + RPTIM                                                01502
ISN 0034          DO 40 J=1,JMAX                                                       01503
ISN 0035          IF(INT .EQ. 2 .AND. J .GT. LAST)GO TO 40                             01504
ISN 0037          JNN=JN(J)                                                            01505
ISN 0038       61 KP = BATOT(J,JNN) + 1.0 + DLTIM                                      01506
ISN 0039          IF(BATOT(J,JNN)+1.0+DLTIM-FLOAT(KP))20,20,30                         01507
ISN 0040       20 KP=KP-1                                                              01508
ISN 0041       30 CONTINUE                                                             01509
ISN 0042          KI = 30                                                              01510
ISN 0043          IF(KP .LT. 30)KI = KP                                                01511
ISN 0045          PLCDT(J,KI)=(1.0-PLOSS/100.)*PVALU(KI)*PUOUT(J)*10.0*UNTIN(J)*       01512
                 1UFOUT(J)                                                             01513
ISN 0046          PWCDT(J)=PLCDT(J,KI)/(1.0+PWINT)**(BATOT(J,JNN)+DLTIM-BATIN(J,1)) 01514
ISN 0047          PCRDT(KI)=PCRDT(KI)+PLCDT(J,KI)                                      01515
ISN 0048       40 CONTINUE                                                             01516
ISN 0049          CALL LLAC(PWCDT,ALCDT)                                               01517
ISN 0050          DO 50 K=1,IY                                                         01518
ISN 0051          IF(INT .EQ. 2 .AND. K .GT. LRCYCL)GO TO 90                           01519
ISN 0053          PALOC(K) = ALCDT(K)                                                  01520
ISN 0054       50 CONTINUE                                                             01521
ISN 0055       90 CONTINUE                                                             01522
```

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ISN 0056        80 CONTINUE                                    01523
ISN 0057           RETURN                                      01524
ISN 0058           END                                         01525
```

NAME	TAG	TYPE	ADD.	NAME	TAG	TYPE	ADD.	NAME	TAG	TYPE	ADD.	NAME	TAG	TYPE	ADD.
J	SF	I*4	0000BC	K	SF	I*4	0000C0	CC	C	R*4	N.R.	CD	C	R*4	N.R.
FC	C	R*4	N.R.	IY	F C	I*4	000004	JI	F C	I*4	015278	KI	SF	I*4	0000C4
KP	SFA	I*4	0000C8	MY	C	I*4	N.R.	IMI	C	I*4	017508	JK	SF	I*4	0000CC
MOI	C	I*4	N.R.	MOD	C	I*4	N.R.	RTRN	C	R*4	N.R.	IDCU	C	I*4	N.R.
IYRI	C	I*4	N.R.	IYRO	C	I*4	N.R.	JMAX	F C	I*4	000000	KSUM	C	I*4	N.R.
LAST	C	I*4	017510	LLAC	SF XF	I*4	000000	MSMK	C	I*4	N.R.	NOPT	C	I*4	015F5C
PCDT		R*4	0000D0	UNTR	C	R*4	N.R.	UTRN	C	R*4	N.R.	XWHF	C	R*4	N.R.
ALCDT	SFA	R*4	0000D8	BATIN	F C	R*4	015384	BATOT	F C	R*4	01692C	BGNTR	C	R*4	N.R.
BGTIM	C	R*4	N.R.	CCCST	C	R*4	N.R.	CDCST	C	R*4	N.R.	CSAVE	C	R*4	N.R.
CLOSS	C	R*4	N.R.	CLTIM	F C	R*4	000014	CNCST	C	R*4	N.R.	CONTM	C	R*4	N.R.
CPFCT	C	R*4	N.R.	CPTIM	C	R*4	N.R.	CSLPE	C	R*4	N.R.	CSTIN	C	R*4	N.R.
CSTOT	C	R*4	N.R.	DTTOT	C	R*4	N.R.	DLTIM	SF	R*4	000004	ENRTM	C	R*4	N.R.
FBCST	C	R*4	N.R.	FBDEP	C	R*4	N.R.	FBINT	C	R*4	N.R.	FCCST	C	R*4	N.R.
FCCST	C	R*4	N.R.	FDPEL	C	R*4	N.R.	FITOT	C	R*4	N.R.	FSLPE	C	R*4	N.R.
FVALS	C	R*4	N.R.	FVALC	C	R*4	N.R.	FVALE	C	R*4	N.R.	IDOSE	C	I*4	N.R.
IDAYI	C	I*4	N.R.	IDAYO	C	I*4	N.R.	IGISC	C	I*4	N.R.	IRPEC	C	I*4	N.R.
IYEAR	C	I*4	N.R.	JMAXB	C	I*4	N.R.	KEZOO	C	I*4	N.R.	KYEAR	C	I*4	N.R.
LAZCO	C	I*4	N.R.	NASSM	C	I*4	N.R.	NECOP	C	I*4	N.R.	PALOC	SF C	R*4	017214
PCRDT	SF C	R*4	0170AC	PLCDT	SF	R*4	000150	PLOSS	F C	R*4	015F4C	PUCUT	F C	R*4	015E2C
PVALU	F C	R*4	001EF4	PWCDT	SFA	R*4	002224	PWINT	F C	R*4	015F50	RALOC	C	R*4	N.R.
RCHIN	C	R*4	N.R.	RCHOT	C	R*4	N.R.	RECHG	C	R*4	N.R.	RECST	C	R*4	N.R.
RPECH	C	R*4	N.R.	RPTIM	F C	R*4	000018	SALOC	C	R*4	N.R.	SECHG	C	R*4	N.R.
SHCST	C	R*4	N.R.	SPETO	C	R*4	N.R.	SPFCG	C	R*4	N.R.	SPFDP	C	R*4	N.R.
SPKWH	C	R*4	N.R.	SPPAL	C	R*4	N.R.	SPPCT	C	R*4	N.R.	SPREL	C	R*4	N.R.
SPRCG	C	R*4	N.R.	SPSAL	C	R*4	N.R.	SPSCG	C	R*4	N.R.	SPSDP	C	R*4	N.R.
SPTAL	C	R*4	N.R.	SPTCG	C	R*4	N.R.	SPUCG	C	R*4	N.R.	SUMDP	C	R*4	N.R.
TALOC	C	R*4	N.R.	TRCHG	C	R*4	N.R.	TRCST	C	R*4	N.R.	UDEPL	C	R*4	N.R.
UECUT	F C	R*4	001A1C	UFTIM	C	R*4	N.R.	ULOSS	C	R*4	N.R.	USINT	C	R*4	N.R.
UVALR	C	R*4	N.R.	UVALC	C	R*4	N.R.	UVALE	C	R*4	N.R.	UWTIN	F C	R*4	001534
VALIN	C	R*4	N.R.	VALOT	C	R*4	N.R.	WTHSP	C	R*4	N.R.	ERXPRM	XF	R*4	000000
CYTIME	C	R*4	N.R.	FABPEN	C	R*4	N.R.	FCONLD	C	R*4	N.R.	FVALOT	C	R*4	N.R.
FVLINN	C	R*4	N.R.	FVLOUT	C	R*4	N.R.	IICORE	C	I*4	N.R.	KMONTH	C	I*4	N.R.
LRCYCL	C	I*4	015F74	NRCYCL	C	I*4	N.R.	RMONTH	C	R*4	N.R.	SCRAPL	C	R*4	N.R.
UCONLD	C	R*4	N.R.	UTOCTM	C	R*4	N.R.	UVALDT	C	R*4	N.R.				

***** COMMON INFORMATION *****

NAME OF COMMON BLOCK * * SIZE OF BLOCK 017514 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.
JMAX	I*4	000000	IY	I*4	000004	IYEAR	I*4	N.R.	KYEAR	I*4	N.R.
MY	I*4	N.R.	CLTIM	R*4	000014	RPTIM	R*4	000018	UCONLD	R*4	N.R.
UTRN	R*4	N.R.	RTRN	R*4	N.R.	IDCU	I*4	N.R.	IICORE	I*4	N.R.
UNTR	R*4	N.R.	BGNTR	R*4	N.R.	FBINT	R*4	N.R.	USINT	R*4	N.R.
JMAXB	I*4	N.R.	FCONLD	R*4	N.R.	BGTIM	R*4	N.R.	UFTIM	R*4	N.R.
FCCST	R*4	N.R.	FCOST	R*4	N.R.	CCCST	R*4	N.R.	FC	R*4	N.R.
CC	R*4	N.R.	CD	R*4	N.R.	RPCST	R*4	N.R.	UTOCTM	R*4	N.R.
CONTM	R*4	N.R.	ENRTM	R*4	N.R.	TRCST	R*4	N.R.	SHCST	R*4	N.R.
MOI	I*4	N.R.	IDAYI	I*4	N.R.	IYRI	I*4	N.R.	CDCST	R*4	N.R.
UECUT	R*4	001A1C	UWTIN	R*4	001534	CSTOT	R*4	N.R.	CSTIN	R*4	N.R.
FBCST	R*4	N.R.	PVALU	R*4	001EF4	CPFCT	R*4	N.R.	SCRAPL	R*4	N.R.
CNCST	R*4	N.R.	MOD	I*4	N.R.	IDAYO	I*4	N.R.	IYRO	I*4	N.R.
CSLPE	R*4	N.R.	FSLPE	R*4	N.R.	SUMDP	R*4	N.R.	FBDEP	R*4	N.R.

FIIOT	R*4	N.R.	UIIOT	R*4	N.R.	SFCHG	R*4	N.R.	SALOC	R*4	N.R.
FVALB	R*4	N.R.	FVALE	R*4	N.R.	FVLFAM	R*4	N.R.	FVLOUT	R*4	N.R.
VALIN	R*4	N.R.	VALOT	R*4	N.R.	FVLEIT	R*4	N.R.	UVALOT	R*4	N.R.
UVALE	R*4	N.R.	UVALB	R*4	N.R.	UAPPL	R*4	N.R.	FOPEI	R*4	N.R.
UVALC	R*4	N.R.	FVALC	R*4	N.R.	PPPOT	R*4	015E2C	CLOSS	R*4	N.R.
ULOSS	R*4	N.R.	FLOSS	R*4	015E4C	PXINT	R*4	015E5D	CYTIME	R*4	N.R.
KMONTH	I*4	N.R.	RMONTH	R*4	N.R.	KAZOO	I*4	N.R.	ICORE	I*4	N.R.
NFCOP	I*4	N.R.	NOPT	I*4	015E6C	NRCYCL	I*4	N.R.	LRCYCL	I*4	015E74
KRUN	I*4	N.R.	RCHIN	R*4	N.R.	RCHOT	R*4	N.R.	XWWF	R*4	N.R.
FARREN	R*4	N.R.	JN	I*4	01629C	RAIIN	R*4	015384	BATOT	R*4	01692C
NASSM	I*4	N.R.	RPCHG	R*4	N.R.	IRCHG	R*4	N.R.	PCPOT	R*4	0170AC
RALOC	R*4	N.R.	TALOC	R*4	N.R.	PALOC	R*4	017214	CFAVE	R*4	N.R.
CRTIM	R*4	N.R.	RPRCH	R*4	N.R.	IRPRC	I*4	N.R.	SPSDP	R*4	N.R.
SPFDP	R*4	N.R.	SPUCG	R*4	N.R.	SPFCG	R*4	N.R.	SPSCG	R*4	N.R.
SPSAL	R*4	N.R.	SPRCG	R*4	N.R.	SPRAL	R*4	N.R.	SPICG	R*4	N.R.
SPTAL	R*4	N.R.	SPPCT	R*4	N.R.	SPPAL	R*4	N.R.	WTHSP	R*4	N.R.
SPATU	R*4	N.R.	SPKWH	R*4	N.R.	NEWK	I*4	N.R.	IDISC	I*4	N.R.
LAZOO	I*4	N.R.	INT	I*4	01750C	LAST	I*4	017510			

JGG

LABEL	ADDR	LABEL	ADDR	LABEL	ADDR	LABEL	ADDR
10	00245A	51	0024E8 NP	20	002544	30	002580
40	002749	50	0027C0	90	0027DA	80	0027DA

OPTIONS IN EFFECT NAME= MAIN,OPT=00,LINECNT=58,SIZE=0000K,

OPTIONS IN EFFECT SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF

STATISTICS SOURCE STATEMENTS = 57 ,PROGRAM SIZE = 10244

STATISTICS NO DIAGNOSTICS GENERATED

****** END OF COMPILATION ******

125K BYTES OF CORE NOT USED

JG7

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          COMPILER OPTIONS - NAME=  MAIN,OPT=00,LINECNT=58,SIZE=COOOK,
                             SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF
                  C       *******       **********        ***********        *******
                  C       *******       **********        ***********        *******
                  C       LEVELIZED ANNUAL COST
ISN 0002                  SUBROUTINE LLAC(PW,ANCST)
ISN 0003                  DIMENSION ANCST(30),ACST(70,30),PW(70)
ISN 0004                  COMMON JMAX,IY,IYEAR,KYEAR,MY,CLTIM,RPTIM,UCONLD,HIRN,FIRN
ISN 0005                  COMMON IDCU,ICORE,UNIP,RGHTR,FBINT,USINT,JMAXB,FCOVLD
ISN 0006                  COMMON PGTIM(70),UFTIM(70),FCOST(70),ECOST(70),CCCST(70)
ISN 0007                  COMMON FC(30),CC(30),CD(30),RPCST(30),UTOCTM,CONTM,ENRTM
ISN 0008                  COMMON TRCST(30),SHCST(30),MOI(70,5),IDAYI(70,5),IYRI(70,5)
ISN 0009                  COMMON COCST(70),UFOUT(70),UWTIN(70),CSTOI(70),CSTIN(70)
ISN 0010                  COMMON FBCST(70),PVALU(30),CPFCT(30),SCRAPL(70),CNCST(30)
ISN 0011                  COMMON MOO(70,5),IDAYO(70,5),IYRO(70,5),CSLPE(70),ESLPE(70)
ISN 0012                  COMMON SUMOP(30),FEDSP(30),FITOT(30),DITOT(30),SFCHG(30)
ISN 0013                  COMMON SALUC(30),FVALR(70,30),FVALS(70,30),FVLINN(70,5)
ISN 0014                  COMMON FVLOUT(70,5),VALIN(70,5),VALOT(70,5),FVALDI(70,5)
ISN 0015                  COMMON UVALOT(70,5),UVALE(70,30),UVALB(70,30),UDEPL(70,30)
ISN 0016                  COMMON FDPSL(70,30),UVALC(70,30),FVALC(70,30),PUOUT(70)
ISN 0017                  COMMON CLOSS,ULOSS,PLOSS,PWINT,CYTIME,KMONTH,RMONTH
ISN 0018                  COMMON KAZCO,ICORE,NFCOP,NOPT,NRCYCL,LRCYCL,KRUN
ISN 0019                  COMMON RCHIN(70),RCHOT(70),XNNF(30),FABPEN(30)
ISN 0020                  COMMON JN(70),BATIN(70,5),BATOT(70,5),NASSM(70)
ISN 0021                  COMMON RPCHG(30),TECHG(30),PCRDT(30),RALOC(30),FALOC(30)
ISN 0022                  COMMON PALOC(30),CFAVE(70),CRTIM(70),RPRCH,IRPRC
ISN 0023                  COMMON SPSOP,SPFOP,SPUCG,SPFCG,SPSCG,SPSAL,SPBCG,SPRAL,SPTCG,SPTAL
ISN 0024                  COMMON SPPCT,SPPAL,WTHSP,SPBTU,SPKWH,NEWK,IDISC,LAZOO,INT,LAST
ISN 0025                  DO 50 K=1,30
ISN 0026                  DO 50 J = 1,70
ISN 0027                  ACST(J,K)=0.0
ISN 0028               50 CONTINUE
ISN 0029                  DO 30 J=1,JMAX
ISN 0030                  IF(INT .EQ. 2 .AND. J .GT. LAST)GO TO 30
ISN 0032                  SPWTH = 0.0
ISN 0033                  JNN=JN(J)
ISN 0034                  DO 10 N=1,JNN
ISN 0035                  KB=BATIN(J,N)+1.0
ISN 0036                  KE=BATOT(J,N)+1.0
ISN 0037                  IF(BATOT(J,N)+1.0-FLOAT(KE))1,1,2
ISN 0038                1 KE=KE-1
ISN 0039                2 KE=KE-1
ISN 0040                  IF(KE-KB)3,3,4
ISN 0041                3 SPWTH=SPWTH+((BATOT(J,N)-BATIN(J,N))/(1.0+PWINT)**(BATOT(J,N)-
                         1BATIN(J,1)))
ISN 0042                  GO TO 10
ISN 0043                4 SPWTH=SPWTH+((FLOAT(KB)-BATIN(J,N))/(1.0+PWINT)**(FLOAT(KB)-
                         1BATIN(J,1)))
ISN 0044                  SPWTH=SPWTH+((BATOT(J,N)-FLOAT(KE))/(1.0+PWINT)**(BATOT(J,N)-
                         1BATIN(J,1)))
ISN 0045                  IF(KE-KB)10,10,5
ISN 0046                5 KUD=KB+1
ISN 0047                  DO 9 K=KUD,KE
ISN 0048                9 SPWTH=SPWTH+(1.0/(1.0+PWINT)**(FLOAT(K)-BATIN(J,1)))
ISN 0049               10 CONTINUE
ISN 0050                  RATE=PW(J)/SPWTH
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ISN 0051          DO 20 N=1,JNN
ISN 0052          KB=BATIN(J,N)+1.0
ISN 0053          KE=BATOT(J,N)+1.0
ISN 0054          IF(BATOT(J,N)+1.0-FLOAT(KE))11,11,12
ISN 0055       11 KE=KE-1
ISN 0056       12 KE=KE-1
ISN 0057          IF(KE-KB)13,13,14
ISN 0058       13 ACST(J,KB)=(BATOT(J,N)-BATIN(J,N))*RATE
ISN 0059          GO TO 20
ISN 0060       14 ACST(J,KB)=(FLOAT(KB)-BATIN(J,N))*RATE
ISN 0061          ACST(J,KE)=(BATOT(J,N)-FLOAT(KE))*RATE
ISN 0062          IF(KE-KB)20,20,15
ISN 0063       15 KUP=KB+1
ISN 0064          DO 19 K=KUP,KE
ISN 0065       19 ACST(J,K)=RATE
ISN 0066       20 CONTINUE
ISN 0067       30 CONTINUE
ISN 0068          DO 40 K=1,IY
ISN 0069          IF(INT .EQ. 2 .AND. K .GT. LRCYCL)GO TO 90
ISN 0071          DO 60 J = 1,JMAX
ISN 0072          ANCST(K) = ANCST(K) + ACST(J,K)
ISN 0073       60 CONTINUE
ISN 0074       40 CONTINUE
ISN 0075       90 CONTINUE
ISN 0076          RETURN
ISN 0077          END
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01588
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NAME	TAG	TYPE	ADD.
J	SF	I*4	000004
CD	C	R*4	N.R.
KB	SFA	I*4	000000
PW	F XR	R*4	000000
MDI	C	I*4	N.R.
IDCU	C	I*4	N.R.
KPIN	C	I*4	N.R.
NDET	C	I*4	N.R.
YWWF	C	R*4	N.R.
BGNTR	C	R*4	N.R.
CEAVE	C	R*4	N.R.
CONTM	C	R*4	N.R.
CSTIN	C	R*4	N.R.
FPCST	C	R*4	N.R.
FCCST	C	R*4	N.R.
FVALB	C	R*4	N.R.
IDAYI	C	I*4	N.R.
IYEAR	C	I*4	N.R.
LAZOO	C	I*4	N.R.
PCRDT	C	R*4	N.R.
PWINT	F C	R*4	015F50
RPCHG	C	R*4	N.R.
SALCC	C	R*4	N.R.
SPECG	C	R*4	N.R.
SPPCT	C	R*4	N.R.
SPSCG	C	R*4	N.R.
SPUCG	C	R*4	N.R.
TRCHG	C	R*4	N.R.
UFTIM	C	R*4	N.R.
UVALC	C	R*4	N.R.
VALDT	C	R*4	N.R.
FABPEN	C	R*4	N.R.
FVLOUT	C	R*4	N.R.
NRCYCL	C	I*4	N.R.
UTOCTM	C	R*4	N.R.

NAME	TAG	TYPE	ADD.
K	SFA	I*4	000008
FC	C	R*4	N.R.
KE	SFA	I*4	000004
INT	C	I*4	017530
MDD	C	I*4	N.R.
IYRI	C	I*4	N.R.
LAST	C	I*4	017510
RATE	SF	R*4	0000E8
ANCST	SF XR	R*4	000000
BGTIM	C	R*4	N.R.
CLOSS	C	R*4	N.R.
CPFCT	C	R*4	N.R.
CSTOT	C	R*4	N.R.
FDPEP	C	R*4	N.R.
FDPEL	C	R*4	N.R.
FVALC	C	R*4	N.R.
IDAYD	C	I*4	N.R.
JMAX3	C	I*4	N.R.
NASSM	C	I*4	N.R.
PLOSS	C	R*4	N.R.
RALCC	C	R*4	N.R.
RPCST	C	R*4	N.R.
SECHG	C	R*4	N.R.
SPEDP	C	R*4	N.R.
SPPAL	C	R*4	N.R.
SPSDP	C	R*4	N.R.
SPWTH	SF	R*4	000050
TRCST	C	R*4	N.R.
ULOSS	C	R*4	N.R.
UVALE	C	R*4	N.R.
WTHSP	C	R*4	N.R.
FCONLD	C	R*4	N.R.
IICORE	C	I*4	N.R.
RMONTH	C	R*4	N.R.
UVALDT	C	R*4	N.R.

NAME	TAG	TYPE	ADD.
A	SF	I*4	000000
IY	F C	I*4	000004
KF	SFA	I*4	000008
JNN	SF	I*4	000000
ACST	SF	R*4	000050
IYRO	C	I*4	N.R.
LLAC	I*4	0000E4	
UNTR	C	R*4	N.R.
BATIN	F C	R*4	01E384
CCCST	C	R*4	N.R.
CLTIM	C	R*4	N.R.
CRTIM	C	R*4	N.R.
DIGIT	C	R*4	N.R.
FBINT	C	R*4	N.R.
FITOT	C	R*4	N.R.
FVALB	C	R*4	N.R.
IOISC	C	I*4	N.R.
KAZOO	C	I*4	N.R.
NRCOP	C	I*4	N.R.
PUPUT	C	R*4	N.R.
RCHIN	C	R*4	N.R.
RPPCH	C	R*4	N.R.
SHCST	C	R*4	N.R.
SPRCH	C	R*4	N.R.
SPTCG	C	R*4	N.R.
SPTAL	C	R*4	N.R.
SUMDP	C	R*4	N.R.
UDEPL	C	R*4	N.R.
USINT	C	R*4	N.R.
UWTIN	C	R*4	N.R.
ERXPRE	XF	R*4	000000
KMONTH	C	I*4	N.R.
SCRAPL	C	R*4	N.R.

NAME	TAG	TYPE	ADD.
LC	C	R*4	N.R.
JN	F C	I*4	016290
KY	C	I*4	N.R.
KUD	SF	I*4	000050
FIRN	C	R*4	N.R.
JMAX	F C	I*4	000030
NESK	C	I*4	N.R.
UTRN	C	R*4	N.R.
BATCT	F C	R*4	01E92C
CDCST	C	R*4	N.R.
CNCST	C	R*4	N.R.
CSEPE	C	R*4	N.R.
ENRIM	C	R*4	N.R.
FCCST	C	R*4	N.R.
FSLPE	C	R*4	N.R.
ICORE	C	I*4	N.R.
IRPRC	C	I*4	N.R.
KYEAR	C	I*4	N.R.
PALDC	C	R*4	N.R.
PVALU	C	R*4	N.R.
RCHGT	C	R*4	N.R.
RPTIM	C	R*4	N.R.
SPRTU	C	R*4	N.R.
SPPAL	C	R*4	N.R.
SPSAL	C	R*4	N.R.
SPTCG	C	R*4	N.R.
TALDC	C	R*4	N.R.
UFOUT	C	R*4	N.R.
UVALB	C	R*4	N.R.
VALIN	C	R*4	N.R.
CYTIME	C	R*4	N.R.
FVLINN	C	R*4	N.R.
LRCYCL	C	I*4	015F74
UCONLD	C	R*4	N.R.

***** COMMON INFORMATION *****

NAME OF COMMON BLOCK * * SIZE OF BLOCK 017514 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.
JMAX	I*4	000000
MY	I*4	N.R.
UTRN	R*4	N.R.
UNTR	R*4	N.R.
JMAX3	I*4	N.R.
FCCST	R*4	N.R.
CC	R*4	N.R.
CONTM	R*4	N.R.
MDI	I*4	N.R.
UFOUT	R*4	N.R.
FPCST	R*4	N.R.
CNCST	R*4	N.R.

VAR. NAME	TYPE	REL. ADDR.
IY	I*4	000004
CLTIM	R*4	N.R.
FIRN	R*4	N.R.
BGNTR	R*4	N.R.
FCONLD	R*4	N.R.
FCOST	R*4	N.R.
CD	R*4	N.R.
ENRIM	R*4	N.R.
IDAYI	I*4	N.R.
UWTIN	R*4	N.R.
PVALU	R*4	N.R.
MDD	I*4	N.R.

VAR. NAME	TYPE	REL. ADDR.
IYEAR	I*4	N.R.
SPTIM	R*4	N.R.
IDCU	I*4	N.R.
FBINT	R*4	N.R.
FCTIM	R*4	N.R.
CDCST	R*4	N.R.
RPCST	R*4	N.R.
TRCST	R*4	N.R.
CSTOT	R*4	N.R.
CPFCT	R*4	N.R.
IDAYD	I*4	N.R.

VAR. NAME	TYPE	REL. ADDR.
KSEAR	I*4	N.R.
UCONLD	R*4	N.R.
IICORE	I*4	N.R.
USINT	R*4	N.R.
UFTIM	R*4	N.R.
FC	R*4	N.R.
UTOCTM	R*4	N.R.
SHCST	R*4	N.R.
CDCST	R*4	N.R.
CSTIN	R*4	N.R.
SCRAPL	R*4	N.R.
IYRO	I*4	N.R.

DSLPE	R*4	N.R.	FSLPE	R*4	N.R.	SUMDP	R*4	N.R.	FRDEP	R*4	N.R.
FITOT	R*4	N.R.	DITOT	R*4	N.R.	SEC	R*4	N.R.	SALPC	R*4	N.R.
FVALR	R*4	N.R.	IVALE	R*4	N.R.	FVLTIN	R*4	N.R.	FVLOUT	R*4	N.R.
VALIN	R*4	N.R.	VALOT	R*4	N.R.	FVALOT	R*4	N.R.	UVALOT	R*4	N.R.
UVALE	R*4	N.R.	UVALR	R*4	N.R.	USPL	R*4	N.R.	FSPEL	R*4	N.R.
UVALC	R*4	N.R.	FVALC	R*4	N.R.	PIPPIT	R*4	N.R.	CLOSS	R*4	N.R.
ULOSS	R*4	N.R.	PLOSS	R*4	N.R.	PWINT	R*4	015F56	CYTIME	R*4	N.R.
KMONTH	I*4	N.R.	RMONTH	R*4	N.R.	KAZOO	I*4	N.R.	ICORE	I*4	N.R.
NFCOP	I*4	N.R.	NOPT	I*4	N.R.	NRCYCL	I*4	N.R.	LRCYCL	I*4	015F74
KRUN	I*4	N.R.	RCHIN	R*4	N.R.	RCHOT	R*4	N.R.	XWUF	R*4	N.R.
FARREN	R*4	N.R.	JN	I*4	01627C	BCTIN	R*4	016394	BATOT	R*4	01692C
NASSM	I*4	N.R.	RPCHG	R*4	N.R.	IRCHG	R*4	N.R.	PCROT	R*4	N.R.
RALOC	R*4	N.R.	IALOC	R*4	N.R.	PALOC	R*4	N.R.	CFAVE	R*4	N.R.
CPTIM	R*4	N.R.	FPRCH	R*4	N.R.	IRPRC	I*4	N.R.	SPSOP	R*4	N.R.
SPFOP	R*4	N.R.	SPUCG	R*4	N.R.	SPECG	R*4	N.R.	SPSCG	R*4	N.R.
SPSAL	R*4	N.R.	SPRCG	R*4	N.R.	SPRAL	R*4	N.R.	SPTCG	R*4	N.R.
SPTAL	R*4	N.R.	SPPCT	R*4	N.R.	SPPAL	R*4	N.R.	WTHSP	R*4	N.R.
SPBTU	R*4	N.R.	SPKWH	R*4	N.R.	NEWK	I*4	N.R.	IDISC	I*4	N.R.
LAZOO	I*4	N.R.	INT	I*4	01750C	LAST	I*4	017510			

LABEL	ADDR	LABEL	ADDR	LABEL	ADDR	LABEL	ADDR
50	0022EE	1	002452	2	002455	3	002478
4	002525	5	0026EE	9	0026C5	10	002758
11	002876	12	002932	13	002990	14	002916
15	002A26	17	002A36	20	002A72	30	002A98
60	002B29	40	002B42	99	002B6C		

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*OPTIONS IN EFFECT*      NAME=  MAIN,OPT=00,LINECNT=58,SIZE=0000K,
*OPTIONS IN EFFECT*      SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF
*STATISTICS*     SOURCE STATEMENTS =      76 ,PROGRAM SIZE =    11196
*STATISTICS*  NO  DIAGNOSTICS GENERATED
****** END OF COMPILATION ******                          117K BYTES OF CORE NOT USED
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COMPILER OPTIONS - NAME= MAIN,OPT=00,LINECNT=58,SIZE=0000K,
                   SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF
                C     *******        **********        **********        *******                01636
                C     *******        **********        **********        *******                01637
                C      /WATU, MILLS/4WM, PRESENT WORTH, PRINT OUTPUT                           01638
ISN 0002              SUBROUTINE PRNT(TMAT,HRATE)                                             01639
ISN 0003              DIMENSION TOTAL(30),                                                    01640
                     1PWSDP(30),PWEDP(30),PWUCG(30),PWFCG(30),PWSCG(30),PWSAL(30),           01641
                     2PWRCG(30),PWRAL(30),PWICG(30),PWIAL(30),PWPCT(30),PWPAL(30),           01642
                     3PWTTL(30)                                                              01643
ISN 0004              DIMENSION IMWT(30),HRATE(30),                                           01644
                     1PWRSDP(30),PWREDP(30),PWRNCG(30),PWRSCG(30),PWRSCC(30),PWRSAL(30),     01645
                     2PWRRCG(30),PWRRAL(30),PWRICG(30),PWRTAL(30),PWRPCT(30),PWRPAL(30),     01646
                     3PWKSDP(30),PWKUCG(30),PWKFCG(30),PWKEDP(30),PWKSCG(30),PWKSAL(30),     01647
                     4PWKRCG(30),PWKRAL(30),PWKICG(30),PWKTAL(30),PWKPCT(30),PWKPAL(30)      01648
ISN 0005              DIMENSION RSUMDP(30),REBDEP(30),REITOT(30),RDITOT(30),RSFCHG(30),       01649
                     1RSALDC(30),RRPCHG(30),RIRCHG(30),RPCRDT(30),RRALDC(30),RTALDC(30),     01650
                     2RRALDC(30),WSUMDP(30),WEBDEP(30),WEITOT(30),WDITOT(30),WSFCHG(30),     01651
                     3WSALDC(30),WRPCHG(30),WIRCHG(30),WPCRDT(30),WRALDC(30),WTALDC(30),     01652
                     4WRALDC(30)                                                             01653
ISN 0006              COMMON JMAX,IY,IYEAR,KYEAR,MY,CLTIM,RPTIM,UCONLD,UTEN,ETRN              01654
ISN 0007              COMMON IDCU,IICORE,UNIR,BGNTR,PRINT,USINT,JMAXS,FCFILD                  01655
ISN 0008              COMMON BGTIM(70),UETIM(70),FCCST(70),FCOST(70),CCCST(70)                 01656
ISN 0009              COMMON FC(30),CC(30),CO(30),RPCST(30),UTOCTM,CONTN,SMRTM                 01657
ISN 0010              COMMON TRCST(30),SHCS(30),MOI(70,5),IDAY1(70,5),IYR1(70,5)               01658
ISN 0011              COMMON CDCST(70),UFOUT(70),UWTIN(70),CSIPU(70),CSUIN(70)                 01659
ISN 0012              COMMON FBCST(30),PVALU(30),CPFCT(30),SCRAPL(70),CNCST(30)                01660
ISN 0013              COMMON MOO(70,5),IDAYO(70,5),IYRO(70,5),CSLPE(70),FSLPE(70)              01661
ISN 0014              COMMON SUMDP(30),FBDEP(30),FITOT(30),DITOT(30),SFCHG(30)                 01662
ISN 0015              COMMON SALDC(30),FVALB(70,30),FVALE(70,30),FVLIN(70,5)                   01663
ISN 0016              COMMON FVLOUT(70,5),VALIN(70,5),VALOT(70,5),FVALO(70,5)                  01664
ISN 0017              COMMON UVALOT(70,5),UVALE(70,30),UVALB(70,30),UDEPL(70,30)               01665
ISN 0018              COMMON FDPEL(70,30),UVALC(70,30),FVALC(70,30),PUBUT(70)                  01666
ISN 0019              COMMON CLOSS,ULOSS,PLOSS,PWINT,CYTIME,KMONTH,PMONTH                      01667
ISN 0020              COMMON KAZOO,ICORE,NFCOR,NOPT,NSCYCL,LRCYCL,KSUN                         01668
ISN 0021              COMMON RCHIN(70),RSHOT(70),XWAF(30),FASPEN(30)                           01669
ISN 0022              COMMON JN(70),PATIN(70,5),FAIOT(70,5),NASSM(70)                          01670
ISN 0023              COMMON RPCHG(30),TFCHG(30),PCRDT(30),RALDC(30),TALDC(30)                 01671
ISN 0024              COMMON PALDC(30),CFAVE(70),CRTIM(70),FPRCH,IRPRC                         01672
ISN 0025              COMMON SPSOP,SFEOP,SPUCG,SPFCG,SPSCG,SPSAL,SPSCG,SPRAL,SPICG,SPTAL       01673
ISN 0026              COMMON SPRCT,SPRAL,WTHSP,SPRTU,SPKWH,NEWK,IDISC,KAZOO,INT,LAST           01674
ISN 0027          546 FORMAT(5X,I2,5(3X,F12.6))                                               01675
ISN 0028          544 FORMAT(5X,I2,3(3X,F12.6))                                               01676
ISN 0029              LL=3                                                                    01677
ISN 0030          500 FORMAT(1H1,9HO          THIS TABLE PRESENTS COST ESTIMATES ON A CUMUL   01678
                     1ATIVE LEVEL ANNUAL COST BASIS FOR EACH YEAR OF OPERATION.       )      01679
ISN 0031          501 FORMAT (1H1,25X,67HNUCLEAR  FUEL  CYCLE  COST  ESTIMATES,  COSTS       01680
                     1IN  YEAR  INCURRED  )                                                  01681
ISN 0032          502 FORMAT(1H+,4H-YEAR        FUEL      FABRICATION   FUEL      SPENT FUEL 01682
                     1   FUEL          TRANSPORTATION  PLUTONIUM     TOTAL      TOTAL/1H   01683
                     2         DEPLETION  DEPLETION     CARRYING   CARRYING     REPROCESSING01684
                     3  CHARGE            CREDIT         FOR       EXCLUDING/1H           CHA01685
                     4RGE      CHARGE        CHARGE     CHARGE       CHARGE                 01686
                     5                     YEAR     CRY. CHG.//)                           01687
ISN 0033          503 FORMAT(2X,I4,4X,F9.0,2X,F9.0,3X,F9.0,4X,F9.0,3X,F9.0,7X,F9.0,4X,     01688
                     1F9.0,2X,F10.0,2X,F10.0)                                                01689
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ISN 0034        504 FORMAT (1H1,10X, 12HNUCLEAR FUEL CYCLE COST ESTIMATES, COSTS01560
                   1 ALLOCATED TO THE PERIOD FUEL WAS PRODUCING ENERGY )        01661
ISN 0035        506 FORMAT(2X,I4,4X,F5.4,2X,F9.4,2X,F9.4,4X,F9.4,3X,F5.4,7X,F9.4,4X,  01562
                   1F9.4,2X,F10.4,2X,F10.4)                                     01663
ISN 0036        505 FORMAT ( 119H1  NUCLEAR FUEL CYCLE COST ESTIMATES, COSTS ALL01664
                   1OCATED TO THE PERIOD FUEL WAS PRODUCING ENERGY, MILLS/KWHR01555
                   2  )                                                        01656
ISN 0037        507 FORMAT (1H1,26X,80HNUCLEAR FUEL CYCLE COST ESTIMATES, COSTS  01557
                   1IN  YEAR  INCURRED,  MILLS/KWHR  )                          01658
ISN 0038        540 FORMAT(1H1,21X,76HTHIS TABLE PRESENTS LEVELIZING FACTORS TO BE ENT01669
                   1ERED INTO SUCCEEDING PROGRAM//)                             01670
ISN 0039        542 FORMAT(1H0,34X,50HTHIS TABLE PRESENTS ADDITIONAL LEVELIZING FACTOR01671
                   1S.//)                                                       01672
ISN 0040        545 FORMAT(1H0,42X,34HFINAL TABLE OF LEVELIZING FACTORS.//)     01673
ISN 0041         60 FORMAT(10X,54HNET ELECTRIC POWER GENERATED DURING THIS YEAR WAS ZE01674
                   1RO)                                                         01675
ISN 0042           WRITE(LL,501)                                              01676
ISN 0043           WRITE(LL,502)                                              01677
ISN 0044           DO 91 K = 1,IY                                             01678
ISN 0045           TOTAL(K) = SUMOP(K)+FBDEP(K)+FITOT(K)+SFCHG(K)+RPCHG(K)+TRCHG(K)- 01679
                   1PCRDT(K)                                                    01680
ISN 0046           M = KYEAR + K -1                                           01681
ISN 0047           PWTTL(K) = TOTAL(K)-FITOT(K)-SFCHG(K)                      01682
ISN 0048           WRITE(LL,503)M,SUMOP(K),FBDEP(K),FITOT(K),SFCHG(K),RPCHG(K),  01683
                   1TRCHG(K),PCRDT(K),TOTAL(K),PWTTL(K)                         01684
ISN 0049         91 CONTINUE                                                  01685
ISN 0050           IF(INT .EQ. 2)GO TO 571                                    01686
ISN 0052           WRITE(LL,501)                                              01687
ISN 0053           WRITE(LL,560)                                              01688
ISN 0054           WRITE(LL,502)                                              01689
ISN 0055        571 CONTINUE                                                  01690
ISN 0056           IF(INT .EQ. 3)GO TO 568                                    01691
ISN 0058           SPSOP=0.0                                                  01692
ISN 0059           SPFDP=0.0                                                  01693
ISN 0060           SPFCG=0.0                                                  01694
ISN 0061           SPSCG=0.0                                                  01695
ISN 0062           SPSAL=0.0                                                  01696
ISN 0063           SPRCG=0.0                                                  01697
ISN 0064           SPRAL=0.0                                                  01698
ISN 0065           SPICG=0.0                                                  01699
ISN 0066           SPIAL=0.0                                                  01700
ISN 0067           SPRCI=0.0                                                  01701
ISN 0068           SPRAL=0.0                                                  01702
ISN 0069           SPWTH=0.0                                                  01703
ISN 0070           SPWTU = 0.0                                                01704
ISN 0071           SPWM = 0.0                                                 01705
ISN 0072        569 CONTINUE                                                  01706
ISN 0073           SPWTH = 0.0                                                01707
ISN 0074           IF(INT .NE. 3)GO TO 600                                    01708
ISN 0076           N = NEWK - 1                                               01709
ISN 0077           DO 601 I = 1,N                                             01710
ISN 0078           SPWTH=SPWTH+(1.0/((1.0+PWINT)**I))                         01711
ISN 0079        601 CONTINUE                                                  01712
ISN 0080        600 CONTINUE                                                  01713
ISN 0081           DO 6500 K=1,IY                                             01714
ISN 0082           N = NEWK + K - 1                                           01715
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ISN 0083          IF(INT .NE. 3)N = K
ISN 0085          PWSDP(K)=SPSDP(K)/((1.0+PWINT)**N
ISN 0086          PWFDP(K)=SPFDP(K)/((1.0+PWINT)**N
ISN 0087          PWFCG(K)=FITOT(K)/((1.0+PWINT)**N
ISN 0088          PWSCG(K)=SPCHG(K)/((1.0+PWINT)**N
ISN 0089          PWSAL(K)=SALOC(K)/((1.0+PWINT)**N
ISN 0090          PWRCG(K)=RPCHG(K)/((1.0+PWINT)**N
ISN 0091          PWRAL(K)=RALOC(K)/((1.0+PWINT)**N
ISN 0092          PWTCG(K)=TPCHG(K)/((1.0+PWINT)**N
ISN 0093          PWTAL(K)=TALOC(K)/((1.0+PWINT)**N
ISN 0094          PWPCT(K)=PCRDT(K)/((1.0+PWINT)**N
ISN 0095          PWPAL(K)=PALOC(K)/((1.0+PWINT)**N
ISN 0096          SPSDP    =SPSDP    +PWSDP(K)
ISN 0097          SPFDP    =SPFDP    +PWFDP(K)
ISN 0098          SPFCG    =SPFCG    +PWFCG(K)
ISN 0099          SPSCG    =SPSCG    +PWSCG(K)
ISN 0100          SPSAL=SPSAL+PWSAL(K)
ISN 0101          SPRCG    =SPRCG    +PWRCG(K)
ISN 0102          SPRAL    =SPRAL    +PWRAL(K)
ISN 0103          SPTCG    =SPTCG    +PWTCG(K)
ISN 0104          SPTAL    =SPTAL    +PWTAL(K)
ISN 0105          SPPCT    =SPPCT    +PWPCT(K)
ISN 0106          SPPAL    =SPPAL    +PWPAL(K)
ISN 0107          SPWTH=SPWTH+(1.0/((1.0+PWINT)**N))
ISN 0108          NEWK = NEWK - 1
ISN 0109          IF(INT .NE. 2 .OR. K .NE. NEWK)GO TO 560
ISN 0111          WTHSP = SPWTH
ISN 0112          WRITE(LL,540)
ISN 0113          WRITE(LL,546)K,SPSUP,SPFDP,SPFCG,SPSCG
ISN 0114          WRITE(LL,546)K,SPSAL,SPRCG,SPRAL,SPTCG,SPTAL
ISN 0115          WRITE(LL,542)
ISN 0116          WRITE(LL,546)K,SPPCT,SPPAL,WTHSP
ISN 0117          GO TO 581
ISN 0118        560 CONTINUE
ISN 0119          PWSDP(K)=SPSDP/SPWTH
ISN 0120          PWFDP(K)=SPFDP/SPWTH
ISN 0121          PWFCG(K)=SPFCG/SPWTH
ISN 0122          PWSCG(K)=SPSCG/SPWTH
ISN 0123          PWSAL(K)=SPSAL/SPWTH
ISN 0124          PWRCG(K)=SPRCG/SPWTH
ISN 0125          PWRAL(K)=SPRAL/SPWTH
ISN 0126          PWTCG(K)=SPTCG/SPWTH
ISN 0127          PWTAL(K)=SPTAL/SPWTH
ISN 0128          PWPCT(K)=SPPCT/SPWTH
ISN 0129          PWPAL(K)=SPPAL/SPWTH
ISN 0130          IF(INT .EQ. 2)GO TO 6500
ISN 0132          TOTAL(K)=PWSDP(K)+PWFDP(K)+PWFCG(K)+PWSCG(K)+PWRCG(K)+PWTCG(K)-
                 1PWPCT(K)
ISN 0133          M = KYEAR + K -1
ISN 0134          PWTTL(K) = TOTAL(K) - PWFCG(K)-PWSCG(K)
ISN 0135          WRITE(LL,503)M,PWSDP(K),PWFDP(K),PWFCG(K),PWSCG(K),PWRCG(K),
                 1PWTCG(K),PWPCT(K),TOTAL(K),PWTTL(K)
ISN 0136        6500 CONTINUE
ISN 0137         581 CONTINUE
ISN 0138          WRITE(LL,504)
ISN 0139          WRITE(LL,502)
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01716 01717 01718 01719 01720 01721 01722 01723 01724 01725 01726 01727 01728 01729 01730 01731 01732 01733 01734 01735 01736 01737 01738 01739 01740 01741 01742 01743 01744 01745 01746 01747 01748 01749 01750 01751 01752 01753 01754 01755 01756 01757 01758 01759 01760 01761 01762 01763 01764 01765 01766 01767 01768 01769 01770 01771

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ISN 0140            DO 92 K = 1, IY                                                 01772
ISN 0141            TOTALL(K)=SUMOP(K)+FBDEP(K)+FITOT(K)+SALOC(K)+RALOC(K)+TALOC(K)-  01773
                   1PALOC(K)                                                        01774
ISN 0142            M = XYEAR + K -1                                                01775
ISN 0143            PWTTL(K)= TOTAL(K) - FITOT(K) - SALOC(K)                        01776
ISN 0144            WRITE(LL,503)M,SUMOP(K),FBDEP(K),FITOT(K),SALOC(K),RALOC(K),    01777
                   1TALOC(K),PALOC(K),TOTAL(K),PWTTL(K)                             01778
ISN 0145         92 CONTINUE                                                        01779
ISN 0146            IF(INT .EQ. 2)GO TO 561                                         01780
ISN 0148            WRITE(LL,504)                                                   01781
ISN 0149            WRITE(LL,500)                                                   01782
ISN 0150            WRITE(LL,502)                                                   01783
ISN 0151            DO 6510 K=1,IY                                                  01784
ISN 0152            TOTAL(K)=PWSOP(K)+PWFDP(K)+PWFCG(K)+PWSAL(K)+PWRAL(K)+PWTAL(K)-  01785
                   1PWPAL(K)                                                        01786
ISN 0153            M = XYEAR + K -1                                                01787
ISN 0154            PWTTL(K)= TOTAL(K)-PWFCG(K)-PWSAL(K)                            01788
ISN 0155            WRITE(LL,503)M,PWSOP(K),PWFDP(K),PWFCG(K),PWSAL(K),PWRAL(K),    01789
                   1PWTAL(K),PWPAL(K),TOTAL(K),PWTTL(K)                             01790
ISN 0156      6510 CONTINUE                                                         01791
ISN 0157       561 CONTINUE                                                         01792
ISN 0158            SPWTH = 0.0                                                     01793
ISN 0159            IF(INT .NE. 3)GO TO 602                                         01794
ISN 0161            N = NEWK - 1                                                    01795
ISN 0162            DO 603 I = 1,N                                                  01796
ISN 0163            SPWTH=SPWTH*(1.0/((1.0+PWINT)**I))                              01797
ISN 0164       603 CONTINUE                                                         01798
ISN 0165       602 CONTINUE                                                         01799
ISN 0166            DO 93 K = 1, IY                                                 01800
ISN 0167            IF(CPECT(K) - 1.0E-4)93,93,60                                   01801
ISN 0168        60 CONTINUE                                                         01802
ISN 0169            XMBTU=TMWT(K)*CPECT(K)/100.*365.*24.*3.4138                     01803
ISN 0170            IF (K .NE. 1)GO TO 21                                           01804*91
ISN 0172            BGIN = (1.0 - RATIN(1,1))*365.                                  01805*92
ISN 0173            XMBTU = TMWT(K)*CPECT(K)/100.*BGIN*24.*3.4138                   01806*91
ISN 0174        21 CONTINUE                                                         01807*91
ISN 0175            XKWHR=(XMBTU/HRATE(K))*1.00E6                                   01808
ISN 0176            N = NEWK + K - 1                                                01809
ISN 0177            IF(INT .NE. 3)N = K                                             01810
ISN 0179            SPBTU=SPBTU+(XMBTU/((1.0+PWINT)**N)                             01811
ISN 0180            SPKWH=SPKWH+(XKWHR/((1.0+PWINT)**N)                             01812
ISN 0181            SPWTH=SPWTH*(1.0/((1.0+PWINT)**N)                               01813
ISN 0182            NEWK = NEWK - 1                                                 01814
ISN 0183            IF(INT .NE. 2 .OR. K .NE. NEWK)GO TO 562                        01815
ISN 0185            WTHSP = SPWTH                                                   01816
ISN 0186            WRITE(LL,545)                                                   01817
ISN 0187            WRITE(LL,544)K,WTHSP,SPBTU,SPKWH                                01818
ISN 0189            GO TO 564                                                       01819
ISN 0189       562 CONTINUE                                                         01820
ISN 0190            PWBTU=SPBTU/SPWTH                                               01821
ISN 0191            PWKWH=SPKWH/SPWTH                                               01822
ISN 0192            PW3SOP(K)=(PWSOP(K)*1.00E2)/PWBTU                               01823
ISN 0193            PW3FDP(K)=(PWFDP(K)*1.00E2)/PWBTU                               01824
ISN 0194            PW3FCG(K)=(PWFCG(K)*1.00E2)/PWBTU                               01825
ISN 0195            PW3SCG(K)=(PWSCG(K)*1.00E2)/PWBTU                               01826
ISN 0196            PW3SAL(K)=(PWSAL(K)*1.00E2)/PWBTU                               01827
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ISN 0197          PWBBCG(K)=(PWBCG(K)*1.00E2)/PWBTU                                01828
ISN 0198          PWBBAL(K)=(PWBAL(K)*1.00E2)/PWBTU                                01829
ISN 0199          PWBTCG(K)=(PWTCG(K)*1.00E2)/PWBTU                                01830
ISN 0200          PWBTAL(K)=(PWTAL(K)*1.00E2)/PWBTU                                01831
ISN 0201          PWBPCT(K)=(PWPCT(K)*1.00E2)/PWBTU                                01832
ISN 0202          PWBPAL(K)=(PWPAL(K)*1.00E2)/PWBTU                                01833
ISN 0203          PWKSDP(K)=(PWSDP(K)*1.00E3)/PWKWH                                01834
ISN 0204          PWKBCG(K)=(PWBCG(K)*1.00E3)/PWKWH                                01835
ISN 0205          PWKBDP(K)=(PWBDP(K)*1.00E3)/PWKWH                                01836
ISN 0206          PWKSCG(K)=(PWSCG(K)*1.00E3)/PWKWH                                01837
ISN 0207          PWKSAL(K)=(PWSAL(K)*1.00E3)/PWKWH                                01838
ISN 0208          PWKRCG(K)=(PWRCG(K)*1.00E3)/PWKWH                                01839
ISN 0209          PWKRAL(K)=(PWRAL(K)*1.00E3)/PWKWH                                01840
ISN 0210          PWKTCG(K)=(PWTCG(K)*1.00E3)/PWKWH                                01841
ISN 0211          PWKTAL(K)=(PWTAL(K)*1.00E3)/PWKWH                                01842
ISN 0212          PWKPCT(K)=(PWPCT(K)*1.00E3)/PWKWH                                01843
ISN 0213          PWKPAL(K)=(PWPAL(K)*1.00E3)/PWKWH                                01844
ISN 0214          BSUMDP(K)=(SUMDP(K)*1.00E2)/XMBTU                                01845
ISN 0215          BFBDEP(K)=(FBDEP(K)*1.00E2)/XMBTU                                01846
ISN 0216          BFITOT(K)=(FITOT(K)*1.00E2)/XMBTU                                01847
ISN 0217          BSECHG(K)=(SECHG(K)*1.00E2)/XMBTU                                01848
ISN 0218          BSALOC(K)=(SALOC(K)*1.00E2)/XMBTU                                01849
ISN 0219          BSPCHG(K)=(SPCHG(K)*1.00E2)/XMBTU                                01850
ISN 0220          BTRCHG(K)=(TRCHG(K)*1.00E2)/XMBTU                                01851
ISN 0221          BPCRDT(K)=(PCRDT(K)*1.00E2)/XMBTU                                01852
ISN 0222          BRALOC(K)=(RALOC(K)*1.00E2)/XMBTU                                01853
ISN 0223          BTALOC(K)=(TALOC(K)*1.00E2)/XMBTU                                01854
ISN 0224          BPALOC(K)=(PALOC(K)*1.00E2)/XMBTU                                01855
ISN 0225          WSUMDP(K)=(SUMDP(K)*1.00E3)/XKWHR                                01856
ISN 0226          WFBDEP(K)=(FBDEP(K)*1.00E3)/XKWHR                                01857
ISN 0227          WFITOT(K)=(FITOT(K)*1.00E3)/XKWHR                                01858
ISN 0228          WSECHG(K)=(SECHG(K)*1.00E3)/XKWHR                                01859
ISN 0229          WSALOC(K)=(SALOC(K)*1.00E3)/XKWHR                                01860
ISN 0230          WSPCHG(K)=(SPCHG(K)*1.00E3)/XKWHR                                01861
ISN 0231          WTRCHG(K)=(TRCHG(K)*1.00E3)/XKWHR                                01862
ISN 0232          WPCRDT(K)=(PCRDT(K)*1.00E3)/XKWHR                                01863
ISN 0233          WRALOC(K)=(RALOC(K)*1.00E3)/XKWHR                                01864
ISN 0234          WTALOC(K)=(TALOC(K)*1.00E3)/XKWHR                                01865
ISN 0235          WPALOC(K)=(PALOC(K)*1.00E3)/XKWHR                                01866
ISN 0236       93 CONTINUE                                                         01867
ISN 0237          WRITE(LL,505)                                                    01868
ISN 0238          WRITE(LL,502)                                                    01869
ISN 0239          DO 94 K = 1, IY                                                  01870
ISN 0240          IF(QPCT(K) - 1.0E-4)62,62,64                                     01871
ISN 0241       62 WRITE(LL,85)                                                     01872
ISN 0242          GO TO 94                                                         01873
ISN 0243       64 CONTINUE                                                         01874
ISN 0244          TOTAL(K)=WSUMDP(K)+WFBDEP(K)+WFITOT(K)+WSALOC(K)+WRALOC(K)+      01875
                 1WTALOC(K)-WPALOC(K)                                              01876
ISN 0245          M = KYEAR + K -1                                                 01877
ISN 0246          PWTTL(K)= TOTAL(K)-WFITOT(K)-WSALOC(K)                           01878
ISN 0247          WRITE(LL,506)M,WSUMDP(K),WFBDEP(K),WFITOT(K),WSALOC(K),WRALOC(K),01879
                 1WTALOC(K),WPALOC(K),TOTAL(K),PWTTL(K)                           01880
ISN 0248       94 CONTINUE                                                         01881
ISN 0249          WRITE(LL,505)                                                    01882
ISN 0250          WRITE(LL,500)                                                    01883
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ISN 0251          WRITE(LL,502)                                                 01934
ISN 0252          DO 6520 K=1,IY                                                01935
ISN 0253          IF(CPECT(K) - 1.0E-4)81,81,82                                 01936
ISN 0254           81 WRITE(LL,89)                                              01937
ISN 0255          GO TO 6520                                                    01938
ISN 0256           82 CONTINUE                                                  01939
ISN 0257          TOTAL(K)=PWKSOP(K)+PWKFOP(K)+PWKFCG(K)+PWKSAL(K)+PWKRAL(K)+   01940
                 1PWKTAL(K)-PWKPAL(K)                                           01941
ISN 0258          M = KYEAR + K -1                                              01942
ISN 0259          PWTTL(K) =  TOTAL(K) - PWKFCG(K) - PWKSAL(K)                  01943
ISN 0260          WRITE(LL,506)M,PWKSOP(K),PWKFOP(K),PWKFCG(K),PWKSAL(K),PWKRAL(K),01944
                 1PWKTAL(K),PWKPAL(K),TOTAL(K),PWTTL(K)                         01945
ISN 0261         6520 CONTINUE                                                  01946
ISN 0262          WRITE(LL,507)                                                 01947
ISN 0263          WRITE(LL,502)                                                 01948
ISN 0264          DO 95 K=1,IY                                                  01949
ISN 0265          IF(CPECT(K) - 1.0E-4)83,83,84                                 01950
ISN 0266           83 WRITE(LL,88)                                              01951
ISN 0267          GO TO 95                                                      01952
ISN 0268           84 CONTINUE                                                  01953
ISN 0269          TOTAL(K)=WSUMOP(K)+WFBOEP(K)+WFITOT(K)+WSFCHG(K)+WRPCHG(K)+   01954
                 1WTRCHG(K)-WPCRDT(K)                                           01955
ISN 0270          M = KYEAR + K -1                                              01956
ISN 0271          PWTTL(K) = TOTAL(K) - WFITOT(K) - WSFCHG(K)                   01957
ISN 0272          WRITE(LL,505)M,WSUMOP(K),WFBOEP(K),WFITOT(K),WSFCHG(K),WRPCHG(K),01958
                 1WTRCHG(K),WPCRDT(K),TOTAL(K),PWTTL(K)                         01959
ISN 0273           95 CONTINUE                                                  01960
ISN 0274          WRITE(LL,507)                                                 01961
ISN 0275          WRITE(LL,500)                                                 01962
ISN 0276          WRITE(LL,502)                                                 01963
ISN 0277          DO 6530 K=1,IY                                                01964
ISN 0278          IF(CPECT(K) - 1.0E-4)85,85,86                                 01965
ISN 0279           85 WRITE(LL,90).                                             01966
ISN 0280          GO TO 6530                                                    01967
ISN 0281           86 CONTINUE                                                  01968
ISN 0282          TOTAL(K)=PWKSOP(K)+PWKFOP(K)+PWKFCG(K)+PWKSCG(K)+PWKRCG(K)+   01969
                 1PWKTCG(K)-PWKPCT(K)                                           01970
ISN 0283          M = KYEAR + K -1                                              01971
ISN 0284          PWTTL(K) = TOTAL(K) - PWKFCG(K) - PWKSCG(K)                   01972
ISN 0285          WRITE(LL,506)M,PWKSOP(K),PWKFOP(K),PWKFCG(K),PWKSCG(K),PWKRCG(K),01973
                 1PWKTCG(K),PWKPCT(K),TOTAL(K),PWTTL(K)                         01974
ISN 0286         6530 CONTINUE                                                  01975
ISN 0287          500 FORMAT (1H1 119H1  NUCLEAR  FUEL  CYCLE  COST  ESTIMATES,  COSTS  ALL01976
                 1OCATED  TO  THE  PERIOD  FUEL  WAS  PRODUCING  ENERGY,  CENTS/MBTU01977
                 2  )                                                           01978
ISN 0288          509 FORMAT (1H1,26X,80HNUCLEAR  FUEL  CYCLE  COST  ESTIMATES,  COSTS 01979
                 1IN  YEAR  INCURRED,  CENTS/MBTU  )                            01980
ISN 0289          WRITE(LL,509)                                                 01981
ISN 0290          WRITE(LL,502)                                                 01982
ISN 0291          DO 96 K=1,IY                                                  01983
ISN 0292          IF(CPECT(K) - 1.0E-4)87,87,88                                 01984
ISN 0293           87 WRITE(LL,89)                                              01985
ISN 0294          GO TO 96                                                      01986
ISN 0295           89 CONTINUE                                                  01987
ISN 0296          TOTAL(K)=BSUMOP(K)+BFBOEP(K)+BFITOT(K)+BSALOC(K)+BRALOC(K)+   01988
                 1BTALOC(K)-BPALOC(K)                                           01989
```

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ISN 0297            M = KYEAR + K -1                                                    01940
ISN 0298            PWTTL(K) = TOTAL(K) - BFITOT(K) - BSALOC(K)                         01941
ISN 0299            WRITE(LL,503)M,BSUMDP(K),BFBDEP(K),BFITOT(K),BSALOC(K),BRALOC(K),  01942
                   1TOTAL(K),BPALOC(K),TOTAL(K),PWTTL(K)                                01943
ISN 0300          96 CONTINUE                                                           01944
ISN 0301            WRITE(LL,508)                                                       01945
ISN 0302            WRITE(LL,509)                                                       01946
ISN 0303            WRITE(LL,502)                                                       01947
ISN 0304            DO 97 K=1,IY                                                        01948
ISN 0305            IF(CPCT(K) - 1.0E-4)71,71,72                                        01949
ISN 0306          71 WRITE(LL,80)                                                       01950
ISN 0307            GO TO 97                                                            01951
ISN 0308          72 CONTINUE                                                           01952
ISN 0309            TOTAL(K)=PWBSDP(K)+PWBFDP(K)+PWBFCG(K)+PWBSAL(K)+PWBRAL(K)+       01953
                   1PWBTAL(K)-PWBPAL(K)                                                 01954
ISN 0310            M = KYEAR + K -1                                                    01955
ISN 0311            PWTTL(K)= TOTAL(K) - PWBFCG(K) - PWBSAL(K)                          01956
ISN 0312            WRITE(LL,505)M,PWBSDP(K),PWBFDP(K),PWBFCG(K),PWBSAL(K),PWBRAL(K),  01957
                   1PWBTAL(K),PWBPAL(K),TOTAL(K),PWTTL(K)                               01958
ISN 0313          97 CONTINUE                                                           01959
ISN 0314            WRITE(LL,509)                                                       01960
ISN 0315            WRITE(LL,502)                                                       01961
ISN 0316            DO 98 K=1,IY                                                        01962
ISN 0317            IF(CPCT(K) - 1.0E-4)73,73,74                                        01963
ISN 0318          73 WRITE(LL,80)                                                       01964
ISN 0319            GO TO 98                                                            01965
ISN 0320          74 CONTINUE                                                           01966
ISN 0321            TOTAL(K) =BSUMDP(K)+BFBDEP(K)+BFITOT(K)+BSFCHG(K)+BRPCHG(K)+       01967
                   1BPCHG(K)-BPCRDT(K)                                                  01968
ISN 0322            M = KYEAR + K -1                                                    01969
ISN 0323            PWTTL(K) = TOTAL(K) - BFITOT(K) - BSFCHG(K)                         01970
ISN 0324            WRITE(LL,505)M,BSUMDP(K),BFBDEP(K),BFITOT(K),BSFCHG(K),BRPCHG(K),  01971
                   1BPCHG(K),BPCRDT(K),TOTAL(K),PWTTL(K)                                01972
ISN 0325          98 CONTINUE                                                           01973
ISN 0326            WRITE(LL,509)                                                       01974
ISN 0327            WRITE(LL,500)                                                       01975
ISN 0328            WRITE(LL,502)                                                       01976
ISN 0329            DO 99 K=1,IY                                                        01977
ISN 0330            IF(CPCT(K) - 1.0E-4)75,75,76                                        01978
ISN 0331          75 WRITE(LL,80)                                                       01979
ISN 0332            GO TO 99                                                            01980
ISN 0333          76 CONTINUE                                                           01981
ISN 0334            TOTAL(K) =PWBSDP(K)+PWBFDP(K)+PWBFCG(K)+PWBSCG(K)+PWBRCG(K)+       01982
                   1PWBTCG(K)-PWBPCT(K)                                                 01983
ISN 0335            M = KYEAR + K -1                                                    01984
ISN 0336            PWTTL(K)= TOTAL(K) - PWBFCG(K) - PWBSCG(K)                          01985
ISN 0337            WRITE(LL,506)M,PWBSDP(K),PWBFDP(K),PWBFCG(K),PWBSCG(K),PWBRCG(K),  01986
                   1PWBTCG(K),PWBPCT(K),TOTAL(K),PWTTL(K)                               01987
ISN 0338          99 CONTINUE                                                           01988
ISN 0339         564 CONTINUE                                                           01989
ISN 0340            RETURN                                                              01990
ISN 0341            END                                                                 01991
```

NAME	TAG	TYPE	ADD.	NAME	TAG	TYPE	ADD.	NAME	TAG	TYPE	ADD.	NAME	TAG	TYPE	ADD.
I	SF	I*4	005FEC	K	SF	I*4	000700	M	SF	I*4	000704	N	SF	I*4	000708
CC	C	R*4	N.R.	CD	C	R*4	N.R.	FC	C	R*4	N.R.	IY	F C	I*4	000004
JM	C	I*4	N.R.	LL	SF	I*4	000700	MY	C	I*4	N.R.	INT	C	I*4	017500
MMI	C	I*4	N.R.	MM	C	I*4	N.R.	MSIM	SF	R*4	000719	FIRI	C	R*4	N.R.
IDCU	C	I*4	N.R.	IYRI	C	I*4	N.R.	IYRU	C	I*4	N.R.	JMAX	C	I*4	N.R.
KRUN	C	I*4	N.R.	LAST	C	I*4	N.R.	MSWK	S	I*4	000714	NEWK	F C	I*4	017503
NOPT	C	I*4	N.R.	PRNT		R*4	000718	TWT	F XF	R*4	000000	UNTR	C	R*4	N.R.
UTEN	C	R*4	N.R.	XWWF	C	R*4	N.R.	BATIN	F C	R*4	016384	BATOT	C	R*4	N.R.
EGNTP	C	R*4	N.R.	BGTIM	C	R*4	N.R.	CDCST	C	R*4	N.R.	CDCST	C	R*4	N.R.
CFAVE	C	R*4	N.R.	CLOSS	C	R*4	N.R.	CLTIM	C	R*4	N.R.	CNCST	C	R*4	N.R.
CONTM	C	R*4	N.R.	CPECT F	C	R*4	001F6C	CRTIM	C	R*4	N.R.	CSLPE	C	R*4	N.R.
CSTIN	C	R*4	N.R.	CSTOT	C	R*4	N.R.	DTIOT	C	R*4	N.R.	ENRTM	C	R*4	N.R.
FPCST	C	R*4	N.R.	FRGFP F	C	R*4	003494	FRINT	C	R*4	N.R.	FCCST	C	R*4	N.R.
FCCST	C	R*4	N.R.	FDPEL	C	R*4	N.R.	FITOT F	C	R*4	0034FC	FSLPE	C	R*4	N.R.
FVALR	C	R*4	N.R.	FVALC	C	R*4	N.R.	FVALF	C	R*4	N.R.	HRATE F	XR	R*4	000000
ICORE	C	I*4	N.R.	IDAYI	C	I*4	N.R.	IDAYO	C	I*4	N.R.	IDISC	C	I*4	N.R.
IRPEC	C	I*4	N.R.	IYEAR	C	I*4	N.R.	JMAXB	C	I*4	N.R.	KAZCO	C	I*4	N.R.
KYEAR F	C	I*4	000000	LAZCO	C	I*4	N.R.	NASSM	C	I*4	N.R.	NFCOP	C	I*4	N.R.
PALOC F	C	R*4	017714	PCRDT F	C	R*4	01704C	PLOSS	C	R*4	N.R.	PUORT	C	R*4	N.R.
PVALU	C	R*4	N.R.	PWRTU SF		R*4	000710	PWRCG SF		R*4	003730	PWTDP SF		R*4	003743
PWINT F	C	R*4	015550	PWKWH SF		R*4	003720	PWPAL SF		R*4	003820	PWPCT SF		R*4	003833
PWRAL SF		R*4	000910	PWRCG SF		R*4	000988	PWSAL SF		R*4	0039A0	PWSCG SF		R*4	0039A3
PWSDP SF		R*4	0004F0	PWTAL SF		R*4	003968	PWTCG SF		R*4	003980	PWTTL SF		R*4	0006C8
PWUCG		R*4	N.R.	RALOC F	C	R*4	017124	RCHIN	C	R*4	N.R.	RCHRT	C	R*4	N.R.
RPCHG F	C	R*4	016FDC	RPCST	C	R*4	N.R.	RPRCH	C	R*4	N.R.	RPTIM	C	R*4	N.R.
SALOC F	C	R*4	003564	SECHG F	C	R*4	0035EC	SLCST	C	R*4	N.R.	SPRTU SF	C	R*4	017473
SPECG SF	C	R*4	017400	SPFDP SF	C	R*4	017408	SPKWH SF	C	R*4	0174FC	SPPAL SF	C	R*4	017503
SPPCT SF	C	R*4	0174EC	SPRAL SF	C	P*4	017450	SPRCG SF	C	R*4	0174DC	SPSAL SF	C	R*4	017403
SPSCG SF	C	R*4	017404	SPSDP SF	C	R*4	017404	SPTAL SF	C	R*4	017458	SPTCG SF	C	R*4	0174E4
SPUCG	C	R*4	N.R.	SPWTH SF		R*4	00[illegible]24	SPWDP F	C	R*4	00340C	TALOC F	C	R*4	01714C
TOTAL SF		R*4	000CD0	TRCHG F	C	R*4	017034	TPCST	C	R*4	N.R.	UDEPL	C	R*4	N.R.
UFOUT	C	R*4	N.R.	UPTIM	C	R*4	N.R.	ULOSS	C	R*4	N.R.	USINT	C	R*4	N.R.
UVALR	C	R*4	N.R.	UVALC	C	R*4	N.R.	UVALF	C	R*4	N.R.	UWTIM	C	R*4	N.R.
VALIN	C	R*4	N.R.	VFLOT	C	R*4	N.R.	WINSP SF	C	R*4	0174F4	XXWP SF		R*4	003728
XWRTU SF		R*4	000720	ERXPIA	XF	R*4	000000	BOITOT		R*4	N.R.	bFEDEP SF		R*4	003048
BFITOT SF		R*4	0000C0	BPALOC SF		R*4	001539	BPCRDT SF		R*4	002580	BSALOC SF		R*4	003F28
BRPCHG SF		R*4	000F80	BSALOC SF		R*4	001018	BSECHG SF		R*4	001090	BSUMDP SF		R*4	001108
BTALOC SF		R*4	001180	BTRCHG SF		R*4	0011F8	CYTIME	C	R*4	N.R.	EANFEN	C	R*4	N.R.
FCONLD	C	R*4	N.R.	FVALOT	C	R*4	N.R.	FVLINM	C	R*4	N.R.	FVLOUT	C	R*4	N.R.
IECONR F	XF	I*4	000000	IICRRS	C	I*4	N.R.	KMINM	C	I*4	N.R.	LPCYCL	C	I*4	N.R.
NRCYCL	C	I*4	N.R.	PWRTCG SF		R*4	001270	PWSDP SF		R*4	0012E8	PWSPAL SF		R*4	001360
PWRPCT SF		R*4	0013DP	PWRPAL SF		R*4	001450	PWRSCG SF		R*4	0014C8	PWSSAL SF		R*4	001540
PWSSCG SF		R*4	0015B8	PWSSDP SF		R*4	001634	PWTTAL SF		R*4	0016AC	PWUTCG SF		R*4	001724
PWRUCG		R*4	N.R.	PWKFCG SF		R*4	001790	PWSFDP SF		R*4	001814	PWSPAL SF		R*4	001858
PWKPCT SF		R*4	001904	PWSRAL SF		R*4	001970	PWKRCG SF		R*4	0019E4	PWKSAL SF		R*4	001A5C
PWKSCG SF		R*4	001A54	PWKSDP SF		R*4	001B5C	PWKTAL SF		R*4	001BD4	PWKTCG SF		R*4	001C4C
PWRUCG		R*4	N.R.	RMONTH	C	R*4	N.R.	SLSAPL	C	R*4	N.R.	UCONLD	C	R*4	N.R.
UTCCTM	C	R*4	N.R.	UVALOT	C	R*4	N.R.	WDITOT		R*4	N.R.	WF2DIP SF		R*4	001CC4
WFITOT SF		R*4	001D3C	WPALOC SF		R*4	001D84	WPCRDT SF		R*4	001E2C	WRALOC SF		R*4	001EA4
WRPCHG SF		R*4	001F1C	WSALOC SF		R*4	001F94	WSECHG SF		R*4	00200C	WSUMDP SF		R*4	002084
WTALOC SF		R*4	0020FC	WTRCHG SF		R*4	002174								

***** COMMON INFORMATION *****

JBo

NAME OF COMMON BLOCK * * SIZE OF BLOCK 017514 HEXADECIMAL BYTES

VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.	VAR. NAME	TYPE	REL. ADDR.
JMAX	I*4	N.R.	IY	I*4	000004	[illegible]	I*4	N.R.	[illegible]	I*4	000000
MY	I*4	N.R.	CLTIM	R*4	N.R.	[illegible]	R*4	N.R.	UCONLD	R*4	N.R.
UTRN	R*4	N.R.	FIRN	R*4	N.R.	[illegible]	I*4	N.R.	IICORE	I*4	N.R.
UNIR	R*4	N.R.	EGNIR	R*4	N.R.	[illegible]	R*4	N.R.	USINT	R*4	N.R.
JMAXB	I*4	N.R.	FCONLD	R*4	N.R.	[illegible]	R*4	N.R.	UFTIM	R*4	N.R.
FCCST	R*4	N.R.	FCCST	R*4	N.R.	[illegible]	R*4	N.R.	FC	R*4	N.R.
CC	R*4	N.R.	CD	R*4	N.R.	[illegible]	R*4	N.R.	UTOCTM	R*4	N.R.
CONTM	R*4	N.R.	ENDTM	R*4	N.R.	[illegible]	R*4	N.R.	SHCST	R*4	N.R.
NDI	I*4	N.R.	IDAYI	I*4	N.R.	[illegible]	I*4	N.R.	CDCST	R*4	N.R.
UFOUT	R*4	N.R.	IWTIN	R*4	N.R.	[illegible]	R*4	N.R.	CSTIM	R*4	N.R.
FBCST	R*4	N.R.	FVALU	R*4	N.R.	[illegible]	R*4	001F6C	SCRAPL	R*4	N.R.
CNCST	R*4	N.R.	NDO	I*4	N.R.	[illegible]	I*4	N.R.	IYRO	I*4	N.R.
CSLPE	R*4	N.R.	FSLPE	R*4	N.R.	[illegible]	R*4	00340C	FBOFP	R*4	003494
FITOT	R*4	0034EC	DITOT	R*4	N.R.	[illegible]	R*4	0035EC	SALOC	R*4	003a64
FVALB	R*4	N.R.	FVALE	R*4	N.R.	[illegible]	R*4	N.R.	FVLOUT	R*4	N.R.
VALIN	R*4	N.R.	VALOT	R*4	N.R.	[illegible]	R*4	N.R.	UVALOT	R*4	N.R.
UVALE	R*4	N.R.	UVALB	R*4	N.R.	[illegible]	R*4	N.R.	FDFEL	R*4	N.R.
UVALC	R*4	N.R.	FVALC	R*4	N.R.	[illegible]	R*4	N.R.	CLOSS	R*4	N.R.
ULOSS	R*4	N.R.	PLOSS	R*4	N.R.	[illegible]	R*4	015F50	CYTIME	R*4	N.R.
KMONTH	I*4	N.R.	RMONTH	R*4	N.R.	[illegible]	I*4	N.R.	ICORE	I*4	N.R.
NFCOP	I*4	N.R.	NOPI	I*4	N.R.	[illegible]	I*4	N.R.	LRCYCL	I*4	N.R.
KRUN	I*4	N.R.	FCHEM	R*4	N.R.	[illegible]	R*4	N.R.	XWWF	R*4	N.R.
FAMPEN	R*4	N.R.	JN	I*4	N.R.	[illegible]	R*4	015384	BATOT	R*4	N.R.
NASSM	I*4	N.R.	PPCHG	R*4	016FAC	[illegible]	R*4	017034	PCRDT	R*4	0170AC
PALOC	R*4	017124	TALOC	R*4	01719C	[illegible]	R*4	017214	CFAVE	R*4	N.R.
CPTIM	R*4	N.R.	RPPCH	R*4	N.R.	[illegible]	I*4	N.R.	SPSDP	R*4	0174C4
SPFGP	R*4	0174C8	SPUCG	R*4	N.R.	[illegible]	R*4	017400	SPSCG	R*4	017404
SPSAL	R*4	017408	SPRCG	R*4	01740C	[illegible]	R*4	0174E0	SPTCG	R*4	0174E4
SPTAL	R*4	0174E9	SPPCT	R*4	0174EC	[illegible]	R*4	0174F0	WTHSP	R*4	0174F4
SPATU	R*4	0174F8	SPKWH	R*4	0174FC	[illegible]	I*4	017500	IDISC	I*4	N.R.
LAZOO	I*4	N.R.	INT	I*4	01750C	LAST	I*4	N.R.			

LABEL	ADDR	LABEL	ADDR	LABEL	ADDR	LABEL	ADDR
91	002594	571	0026 1E	558	002548	601	002502
600	002559	560	0025CE	6500	0035F4	591	0025CE
92	0031C0	6510	003350	561	0035F4	603	00344E
602	003464	60	003586	21	003500	562	003534
93	003D56	63	003F5A	64	003F76	94	004C20
81	C0409A	82	004086	6520	004260	83	0042C6
84	004352	95	00449C	85	004506	86	004522
6530	0046CC	87	004732	88	00474E	96	0048F0
71	00496A	72	004986	97	004B30	73	004896
74	004882	99	004D54	75	004DCE	76	004DEA
99	004F94	564	004FAE				

OPTIONS IN EFFECT NAME= MAIN,OPT=00,LINECNT=58,SIZE=0000K,

OPTIONS IN EFFECT SOURCE,EBCDIC,NOLIST,NODECK,LOAD,MAP,NOEDIT,ID,NOXREF

STATISTICS SOURCE STATEMENTS = 340 ,PROGRAM SIZE = 20484

STATISTICS NO DIAGNOSTICS GENERATED

****** END OF COMPILATION ******

496K BYTES OF CORE NOT USED

STATISTICS NO DIAGNOSTICS THIS STEP

F64-LEVEL LINKAGE EDITOR OPTIONS SPECIFIED MAP,LET,LIST
DEFAULT OPTION(S) USED - SIZE=(120832,24576)

MODULE MAP

CONTROL SECTION NAME	ORIGIN	LENGTH
MAIN	00	6194
READ	6198	2AA5
COST	8C48	1572
UOPL	A1C0	1526
FOPL	B6E8	162C
CCHG	CD18	5298
SREL	11F60	3606
RCHG	15598	2876
TCHG	17E30	48C0
PCDT	1C9F0	2804
LLAC	1F1F8	2932
PRNT	21090	5004
IHNSLOG *	26088	104
IHNERXPI*	26F90	179
IHNERXPR*	27110	183
IHNECOM*	27298	F90
IHNCOM#2*	28228	761
IHNFCVTH*	29990	86F
IHNEFNTH*	29500	549
IHNSEXP *	29A48	180
IHNEFIOS*	29BF8	FF8
IHNFIOS2*	2ABF0	588
IHNERRM *	2B1A8	5FC
IHNUCPT *	2B7A8	318
IHNFCONI*	2BAC0	2E5
IHNFCOND*	2BDA8	4A2
IHNETRCH*	2C250	2A6
IHNUATBL*	2C4F8	638 *
IHNFTEN *	2CB30	198

ENTRY NAME	LOCATION	NAME	LOCATION	NAME	LOCATION	NAME	LOCATION
ALOG10	26DB8	ALOG	26DDC				
FRXPI#	26F90						
FRXPR#	27110						
IBCOM#	27264	FDIOCSA	27350	INTSWTCH	291FE		
SEQDASD	286A2						
ADCON#	29990	FCVADUTP	29A3A	FCVLOUTP	29ACA	FCVZOUTP	29B2C
FCVIOUTP	29FCE	FCVFOUTP	29DC0	FCVCOUTP	29204	INT6SWCH	29480
ARITH#	29500	ADJSWTCH	29B9C				
EXP	29A48						
FIOCS#	29BF8	FIOCSBEP	29BFE				
ERRMON	2B1A8	IHNERRE	2B1C0				
FOCONI#	2BAC0						
FOCONO#	2BDA8						
IHNTRCH	2C250	ERRTRA	2C25B				
FTEN#	2CB30						

J83

```
   NAME     ORIGIN  LENGTH
 ONE         2CCC8      50
$BLANKCOM    2CD18   17514
 CON         44230     150

ENTRY ADDRESS       00

TOTAL LENGTH     44380
****P491187   NOW REPLACED IN DATA SET
AUTHORIZATION CODE IS        0.

NAME   LOCATION     NAME   LOCATION     NAME   LOCATION     NAME   LOCATION
```