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INFORMAL REPORT

USER ACCESS TO THE MAP3S SOURCE EMISSIONS INVENTORY

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INTRODUCTION

An emissions inventory based on data obtained from NEDS[1], FPC[2], Environment Canada and other agencies has been compiled by the MAP3S Central Data Coordination at Brookhaven National Laboratory. Pertinent data was brought together, collated, and loaded into computerized data bases using SYSTEM 2000[3] as the data base management system. These data bases are available to interested users for interactive scanning or batch retrieval.

The emissions inventory consists of two distinct sections: a point source inventory and an area source inventory. The point source inventory covers the continental U.S. and Canada; information is kept at the individual source level. The area source inventory covers the continental U.S.; information is kept on a county basis. Work is in progress to obtain a Canadian area source inventory based on census divisions.

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(1) NEDS = National Emissions Data System, U.S. Environmental Protection Agency.

(2) FPC = Federal Power Commission, currently merged into the Department of Energy.

(3) SYSTEM 2000 is a registered trademark of INTEL Commercial Systems Division, Austin, Texas.

I. Point Source Emissions Inventory

The point source emissions inventory consists of two logically distinct data base designs. Within each logical set physically distinct data bases are used to partition the data because of computer mass storage limitations.

The central portion of the inventory data is contained in the POINTXX79 data bases. These data bases are partitioned geographically; XX refers to the geographic section addressed by each data base. U.S. data in the POINTXX79 data bases was obtained mainly from NEDS and includes all sectors generating point source emissions--electric power generation, industrial, commercial, etc. Canadian data in the POINTCA79 data base was obtained from Environment Canada and also includes all sectors generating point source emissions. However, the current Canadian data set is more limited in scope than the data set obtained from NEDS - it only includes plant location, stack parameters and emissions data.

An auxiliary set of data is contained in the FPCYY data bases. These data bases are partitioned by year; YY refers to the year addressed by each data base. FPCYY data was compiled from the air quality control section of the FPC FORM 67: "Steam-Electric Plant Air and Water Quality Control Data." These data are only available for electric power generating plants in the U.S.

In order to facilitate the use of these emissions data bases, the corresponding FPC and NEDS plant codes for all U.S. power plants have been included in both sets of data bases. Also, a plant level summary of the FPC emissions and fuel data has been included in the U.S. POINTXX79 data bases.

A. POINTXX79 Data Bases

Figure 1 presents the logical data base definition for the POINTXX79 data bases. The plant information level (RG 30) contains general characteristics

of a plant or facility. The point source information level (RG 100) contains data specific to each point source within the plant or facility.

U.S. Data

Data for the POINTXX data bases covering the continental U.S. were derived mainly from NEDS. As outlined in the Federal Register, November 25, 1971, 51.1(K), NEDS defines a point source as:

> (a) any stationary source causing emissions in excess of 100 tons (90.7 metric tons) per year of any pollutant for which there is a national standard in a region containing an area whose 1970 "urban place" population, as defined by the U.S. Bureau of Census, was equal to or greater than 1 million, or (b) any stationary source causing emissions in excess of 25 tons (22.7 metric tons) per year of any pollutant for which there is a national standard in a region containing an area whose 1970 "urban place" population, as defined by the U.S. Bureau of Census, was less than 1 million; or (c) without regard to amount of emissions, stationary sources listed below.

Chemical Process Industries

- Adipic acid
- Ammonia
- Ammonium nitrate
- Carbon black
- Charcoal
- Chlorine
- Detergent and soap
- Explosives (TNT and nitrocellulose)
- Hydrofluoric acid
- Nitric acid
- Paint and varnish manufacturing
- Phosphoric acid
- Phthalic anyhydride
- Plastics manufacturing
- Printing ink manufacturing
- Sodium carbonate
- Sulfuric acid
- Synthetic fibers
- Synthetic rubber
- Terephthalic acid

Food and Agricultural Industries

- Alfalfa dehydrating
- Ammonium nitrate
- Coffee roasting
- Cotton ginning
- Feed and grain
- Fermentation processes
- Fertilizers
- Fish meal processing
- Meat smoke houses
- Starch manufacturing

Metallurgical Industries

Primary metal industries

- Aluminum ore reduction
- Copper smelters
- Ferroalloy production
- Iron and steel mills
- Lead smelters
- Metallurgical coke manufacturing
- Zinc

Secondary metals industries

- Aluminum operations
- Brass and bronze smelting
- Ferroalloys
- Gray iron foundries
- Lead smelting
- Magnesium smelting
- Steel foundries
- Zinc processes

Mineral Products Industries

- Asphalt roofing
- Asphaltic concrete batching
- Bricks and related clay refractories
- Calcium carbide
- Castable refractories
- Cement
- Ceramic and clay processes
- Clay and fly ash sintering
- Coal cleaning
- Concrete batching
- Fiberglass manufacturing
- Frit manufacturing
- Glass manufacturing
- Gypsum manufacturing
- Lime manufacturing
- Mineral wool manufacturing
- Paperboard manufacturing
- Perlite manufacturing
- Phosphate rock preparation
- Rock, gravel, and sand quarrying and processing

All Petroleum Refining and Petrochemical Operations

All Wood Processing Operations

Petroleum Storage (storage tanks and bulk terminals)

Miscellaneous

- Fossil fuel steam electric power plants
- Municipal or equivalent incinerators
- Open burning dumps

Hazardous Pollutant Sources

In keeping with the above definition every boiler is a separate and individual point source (RG 100). For example, if two or more boilers at a facility discharge gases into one stack, then two (or more) point sources (RG100) are included for the facility. However, there are instances when boilers may have been combined as a single point source:

a. Where two or more similar small boilers (burning the same type fuel, having the same operating hours, and having similar capacities) are discharged through a common stack, they may have been combined as a single source if the total emission of any one pollutant is less than 100 tons per year.

b. Where a number of very small similar boilers exist at a facility, each emitting five tons per year or less of any pollutant and each discharging through separate similar stacks, they may have been combined as a single source.

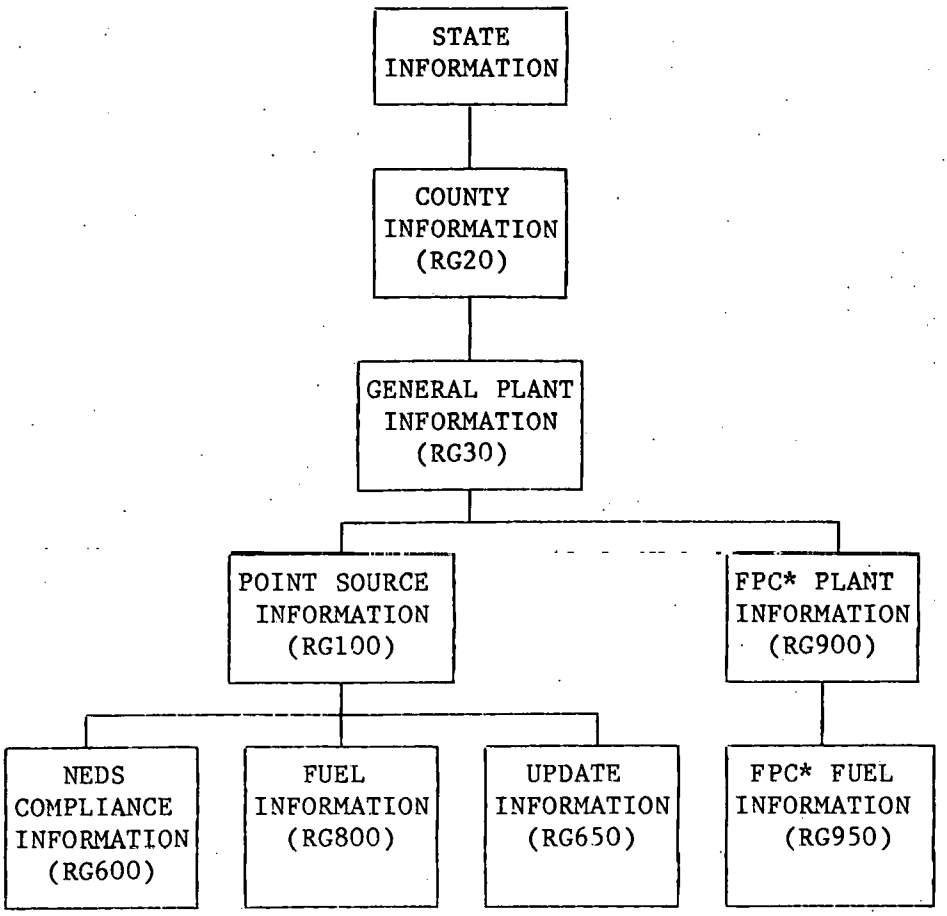
When boilers are combined as in (a) or (b), the boiler capacity is the sum of capacities of the combined boilers. The fuel use data are totals of each fuel used in the combined boilers. Boilers having emissions controls have not been combined with boilers not having controls.

When several similar boilers emit through several stacks with the number of stacks not equal to the number of boilers, the actual stack data is retained and the boilers are apportioned so total capacity and emissions are proportionally distributed among stacks.

Boiler, process and solid waste data for a facility are entered as different point sources. Combustion data other than boiler is combined with process data as the same point source only when the combustion is an integral part of the process and exhaust gases are commingled in the process.

Solvent, hydrocarbon, fuel, and other organic vapor losses from storage and handling operations in a facility are emissions and are appropriately reported as point sources.

Canadian Data Environment Canada has defined each stack within a plant to be a point source (RG100). All stacks within a plant have been given the same latitude and longitude.



* Applies to U.S. power plants only.

POINTXX79 Logical Data Base Design

Figure 1

POINTXX79

DATA BASE DEFINITION

```
SYSTEM RELEASE NUMBER       2.60F
DATA BASE NAME IS POINTXX79
DEFINITION NUMBER      1
DATA BASE CYCLE    18724
   1*  STATENEDS (INTEGER NUMBER 99)
  40*  STATEFIPS (NON-KEY INTEGER NUMBER 99)
  41*  STNAME (NON-KEY NAME X(6))
  20*  COUNTY (RG)
     2*  CTNEDS (INTEGER NUMBER 9999 IN 20)
    22*  CTFIPS (NON-KEY INTEGER NUMBER 999 IN 20)
    21*  CTNAME (NON-KEY NAME X(13) IN 20)
    30*  PLANT (RG IN 20)
       3*  AQCR (INTEGER NUMBER 999 IN 30)
       4*  NEDSID (NAME X(10) IN 30)
       5*  CITY (NON-KEY INTEGER NUMBER 9999 IN 30)
       6*  PLSICODE (INTEGER NUMBER 9999 IN 30)
       7*  NEDSYR (NON-KEY INTEGER NUMBER 99 IN 30)
       8*  NAME (NON-KEY NAME X(11) IN 30)
      10*  CONTACT (NON-KEY NAME X(10) IN 30)
      11*  OWNER (NON-KEY NAME X IN 30)
      12*  ACTION (NON-KEY NAME X IN 30)
      13*  CAPACITY (NON-KEY DECIMAL NUMBER 9999.99 IN 30)
      14*  MODDATE (DATE IN 30)
      15*  FPCCODE (NAME X(12) IN 30)
      16*  CAPYR (NON-KEY INTEGER NUMBER 99 IN 30)
     100*  POINT (RG IN 30)
       101*  POINTID (NAME XX IN 100)
       102*  SICCODE (INTEGER NUMBER 9999 IN 100)
       103*  IPPCODE (INTEGER NUMBER 99 IN 100)
       104*  PNTLON (NON-KEY DECIMAL NUMBER 9999.99 IN 100)
       105*  PNTLAT (NON-KEY DECIMAL NUMBER 999.99 IN 100)
       108*  COMSTACK (NON-KEY NAME X(5) IN 100)
       109*  COM1 (NON-KEY NAME X(5) IN 100)
       110*  NEDSYRPT (NON-KEY INTEGER NUMBER 99 IN 100)
       111*  EMISYRUP (NON-KEY INTEGER NUMBER 99 IN 100)
       112*  PRODYRUP (NON-KEY INTEGER NUMBER 99 IN 100)
       201*  STACKHEIGHT (NON-KEY DECIMAL NUMBER 9999.999 IN 100)
       202*  STACKDIAM (NON-KEY DECIMAL NUMBER 99.999 IN 100)
       203*  STACKTEMP (NON-KEY DECIMAL NUMBER 9999.999 IN 100)
       204*  STACKFLOW (NON-KEY DECIMAL NUMBER 9(6).999 IN 100)
       205*  STACKVELO (NON-KEY DECIMAL NUMBER 9(6).999 IN 100)
       206*  STACKNORMRISE (NON-KEY DECIMAL NUMBER 9(6).999 IN 100)
       301*  PLHGT (NON-KEY DECIMAL NUMBER 9999.999 IN 100)
       401*  PARTEMSSLOG (INTEGER NUMBER 99 IN 100)
       402*  PARTPRIMCONTR (NON-KEY INTEGER NUMBER 999 IN 100)
       403*  PARTSECONCONTR (NON-KEY INTEGER NUMBER 999 IN 100)
       404*  PARTEFFIC (NON-KEY DECIMAL NUMBER 99.9 IN 100)
       405*  PARTEMISS (NON-KEY DECIMAL NUMBER 9(10).999 IN 100)
       407*  PARTEMISOK (NON-KEY DECIMAL NUMBER 9(10).999 IN 100)
       411*  SO2EMSSLOG (INTEGER NUMBER 99 IN 100)
       412*  SO2PRIMCONTR (NON-KEY INTEGER NUMBER 999 IN 100)
       413*  SO2SECONCONTR (NON-KEY INTEGER NUMBER 999 IN 100)
       414*  SO2EFFIC (NON-KEY DECIMAL NUMBER 99.9 IN 100)
       415*  SO2EMISS (NON-KEY DECIMAL NUMBER 9(10).999 IN 100)
       417*  SO2EMISOK (NON-KEY DECIMAL NUMBER 9(10).999 IN 100)
       421*  NOXEMSSLOG (INTEGER NUMBER 99 IN 100)
       422*  NOXPRIMCONTR (NON-KEY INTEGER NUMBER 999 IN 100)
       423*  NOXSECONCONTR (NON-KEY INTEGER NUMBER 999 IN 100)
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424*  NOXEFFIC (NON-KEY DECIMAL NUMBER 99.9 IN 100)
425*  NOXEMISS (NON-KEY DECIMAL NUMBER 9(10).999 IN 100)
427*  NOXEMISOK (NON-KEY DECIMAL NUMBER 9(10).999 IN 100)
431*  HCEMSSLOG (INTEGER NUMBER 99 IN 100)
432*  HCPRIMCONTR (NON-KEY INTEGER NUMBER 999 IN 100)
433*  HCSECONCONTR (NON-KEY INTEGER NUMBER 999 IN 100)
434*  HCEFFIC (NON-KEY DECIMAL NUMBER 99.9 IN 100)
435*  HCEMISS (NON-KEY DECIMAL NUMBER 9(10).999 IN 100)
437*  HCEMISOK (NON-KEY DECIMAL NUMBER 9(10).999 IN 100)
441*  COEMSSLOG (INTEGER NUMBER 99 IN 100)
442*  COPRIMCONTR (NON-KEY INTEGER NUMBER 999 IN 100)
443*  COSECONCONTR (NON-KEY INTEGER NUMBER 999 IN 100)
444*  COEFFIC (NON-KEY DECIMAL NUMBER 99.9 IN 100)
445*  COEMISS (NON-KEY DECIMAL NUMBER 9(10).999 IN 100)
447*  COEMISOK (NON-KEY DECIMAL NUMBER 9(10).999 IN 100)
501*  DECFEB (NON-KEY INTEGER NUMBER 99 IN 100)
502*  MARMAY (NON-KEY INTEGER NUMBER 99 IN 100)
503*  JUNEAUG (NON-KEY INTEGER NUMBER 99 IN 100)
504*  SEPTNOV (NON-KEY INTEGER NUMBER 99 IN 100)
505*  HOUR (NON-KEY INTEGER NUMBER 99 IN 100)
506*  DAY (NON-KEY INTEGER NUMBER 99 IN 100)
507*  WEEK (NON-KEY INTEGER NUMBER 99 IN 100)
701*  BOILER (NON-KEY DECIMAL NUMBER 9(10).999 IN 100)
702*  SPACE (NON-KEY DECIMAL NUMBER 99.9 IN 100)
600*  COMPLY (RG IN 100)
  606*  STATUS (NON-KEY INTEGER NUMBER 99 IN 600)
  607*  COMPYR (NON-KEY INTEGER NUMBER 99 IN 600)
  608*  COMPMO (NON-KEY INTEGER NUMBER 99 IN 600)
  609*  UPYR (NON-KEY INTEGER NUMBER 99 IN 600)
  610*  UPMO (NON-KEY INTEGER NUMBER 99 IN 600)
  611*  UPDY (NON-KEY INTEGER NUMBER 99 IN 600)
  612*  YRREG (NON-KEY INTEGER NUMBER 99 IN 600)
  613*  CNTRLREG (NON-KEY NAME X(5) IN 600)
  614*  EMERSTCD (NON-KEY NAME X IN 600)
650*  UPDATE RG (RG IN 100)
  651*  UPDATE (DATE IN 650)
  653*  COMPONENTS (NAME X(5) IN 650)
  652*  DESCRIP (NON-KEY NAME X(19) IN 650)
  656*  UPFLAG (NON-KEY NAME X IN 650)
800*  CARD6 (RG IN 100)
  806*  FUEL (NON-KEY NAME X(5) IN 800)
  801*  SCC (INTEGER NUMBER 9(8) IN 800)
  804*  SULPHUR (NON-KEY DECIMAL NUMBER 9.99 IN 800)
  805*  ASH (NON-KEY DECIMAL NUMBER 99.9 IN 800)
  807*  HEAT (NON-KEY DECIMAL NUMBER 9(10).999 IN 800)
  808*  SOURCE (NON-KEY NAME X IN 800)
  809*  CONF (NON-KEY NAME X IN 800)
  810*  COMMENT (NON-KEY NAME X(6) IN 800)
900*  FPCDATA (RG IN 30)
  901*  FPCDATAYR (NON-KEY INTEGER NUMBER 99 IN 900)
  902*  FPCCAP (NON-KEY DECIMAL NUMBER 9(5).99 IN 900)
  903*  FPCEMISSO2 (NON-KEY DECIMAL NUMBER 9(10).999 IN 900)
  904*  FPCEMISPART (NON-KEY DECIMAL NUMBER 9(10).999 IN 900)
  905*  FPCEMISNOX (NON-KEY DECIMAL NUMBER 9(10).999 IN 900)
  906*  FPCNOSTCK (NON-KEY INTEGER NUMBER 99 IN 900)
  907*  FPCLWSTCK (NON-KEY DECIMAL NUMBER 9999.999 IN 900)
  908*  FPCHGSTCK (NON-KEY DECIMAL NUMBER 9999.999 IN 900)
  950*  FPCFUEL (RG IN 900)
    951*  FPCFUEL NAME (NON-KEY NAME X(5) IN 950)
    952*  FPCFUEL CONS (NON-KEY DECIMAL NUMBER 9(10).999 IN 950)
    953*  FPCFUEL HEAT (NON-KEY DECIMAL NUMBER 9(10).999 IN 950)
    954*  FPCFUELS (NON-KEY DECIMAL NUMBER 99.9 IN 950)
    955*  FPCFUELASH (NON-KEY DECIMAL NUMBER 99.9 IN 950)
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      956*  FPCFUELH2O (NON-KEY DECIMAL NUMBER 99.9 IN 950)
17*   PLLON (DECIMAL FUNCTION ((AVG C104 BY C30)))
18*   PLLAT (DECIMAL FUNCTION ((AVG C105 BY C30)))
50*   PLPARTEMISS (DECIMAL FUNCTION ((SUM C405 BY C30)))
51*   PLSO2EMISS (DECIMAL FUNCTION ((SUM C415 BY C30)))
52*   PLNOXEMISS (DECIMAL FUNCTION ((SUM C425 BY C30)))
53*   PLHCEMISS (DECIMAL FUNCTION ((SUM C435 BY C30)))
54*   PLCOEMISS (DECIMAL FUNCTION ((SUM C445 BY C30)))
55*   PLTPARTEMSSLOG (DECIMAL FUNCTION ((MAX C401 BY C30)))
56*   PLTSO2EMSSLOG (DECIMAL FUNCTION ((MAX C411 BY C30)))
57*   PLTNOXEMSSLOG (DECIMAL FUNCTION ((MAX C421 BY C30)))
58*   PLTHCEMSSLOG (DECIMAL FUNCTION ((MAX C431 BY C30)))
59*   PLTCOEMSSLOG (DECIMAL FUNCTION ((MAX C441 BY C30)))
```

LIST OF DATA BASE COMPONENT NUMBERS
(IN ASCENDING ORDER)
COMPONENT NUMBER, COMPONENT NAME, KEY OR NOT, COMPONENT DESCRIPTION

(FOR A DETAILED DESCRIPTION OF THE NEDS DATA PLEASE REFER TO "A GUIDE FOR COMPILING A COMPREHENSIVE EMISSION INVENTORY," EPA PUBLICATION NO. APTD-1135)

C1 STATENEDS KEY
SAROAD state code for state where plant is located (see Table 1) or Environment Canada code for Canadian province (see Table 1A).

C2 CTNEDS KEY
SAROAD county code for U.S. county where plant is located. (Reference: SAROAD Station Coding Manual for Aerometric Sampling Networks, publication No. APTD-0907, EPA). Environment Canada code for census division.(1)

C3 AQCR KEY
Air quality control region where plant is located. (Reference: Federal Air Quality Control Regions, publication number AP-102, EPA(2)).

C4 NEDSID KEY
Ten character unique identifier for plant.

C5 CITY NON-KEY
If plant is located within any of the cities listed in the SAROAD Station Coding Manual for Aerometric Sampling Networks, the code is indicated here.

C6 PLSICODE KEY
Standard Industrial Classification Code assigned to the facility. This corresponds to the SIC code assigned to the majority of the sources within a plant. (Reference: Standard Industrial Classification Manual, Office of Management and Budget, Stock No. 4101-0066).

C7 NEDSYR NON-KEY
Year when plant information was last updated by agency compiling the original data.

C8 NAME NON-KEY
Name and address of facility.

C10 CONTACT NON-KEY
Name of person responsible for pollution control at the facility.

C11 OWNER NON-KEY
Ownership of facility as follows- P=Private, L=Local Government, S=State Government, F=Federal Government, U=Utilities.

(1)Currently not implemented in POINTCA79.
(2)EPA=Environmental Protection Agency.

C12 ACTION NON-KEY
Dummy component.

C13 CAPACITY NON-KEY
If U.S. power plant, plant capacity in megawatts from plant FPC FORM 67.

C14 MODDATE KEY
Date of last BNL update to any data pertaining to the facility.

C15 FPCCODE KEY
Federal Power Commission plant code (applies to U.S. power plants only).

C16 CAPYR NON-KEY
Year corresponding to plant capacity figure (applies to U.S. power plants only).

C20 COUNTY NON-KEY
RG with county or census division information.

C21 COUNTY NAME NON-KEY
Name of county (U.S.) or census division (Canada).(1)

C22 CTFIPS NON-KEY
FIPS code for U.S. county (Reference: Counties and County Equivalents of the States of the United States, NTIS publication number NBS-FIPS-PUB-6-2).

C30 PLANT NON-KEY
RG with individual facility information.

C40 STATEFIPS NON-KEY
FIPS code for U.S. state (see Table 1) or DIA(2) code for Canadian province (see Table 1A). (Reference: Geopolitical Data Elements and Related Features, pub. No. DIAM-65-18).

C41 STNAME NON-KEY
Name of U.S. state or Canadian province.

C100 POINT NON-KEY
RG with information about each individual point source within a facility.

C101 POINTID KEY
Unique identifier for a point source within a facility.

C102 SICCODE KEY
Standard Industrial Classification code for point. (Reference: Standard Industrial Classification Manual; Office of Management and Budget, stock no. 4101-0066).

(1)Currently not implemented in POINTCA79.
(2)DIA=Defense Intelligence Agency.

C103 IPPCODE KEY

IPP process code for point, if any. (Reference: Aeros Manual Series Volume V: Aeros Manual of Codes, EPA-450/2-76-005; OAQ PS No. 1.2-042, section 3, chapter 2).

C104 PLLON NON-KEY

Longitude of point (decimal equivalent of degrees, minutes).

C105 PLLAT NON-KEY

Latitude of point (decimal equivalent of degrees, minutes).

C108 COMSTACK NON-KEY

When multiple point sources are discharged through a single stack all such point sources are numbered sequentially. This component contains the numbers of the first and last point source discharging into the common stack. For example, if a facility has 5 point sources and point sources 3, 4, and 5 discharge into a single stack, then C108 for points 3, 4, and 5 would have identical entries of the form 03-05.

C109 COM1 NON-KEY

Comment field.

C110 NEDSYRPT NON-KEY

Date point information was last updated by NEDS.

C111 EMISYRUP NON-KEY

Date emissions information was last updated by NEDS.

C112 PRODYRUP NON-KEY

Date production information was last updated by NEDS.

C201 STACKHEIGHT NON-KEY

Vertical distance between point of emission and ground level (meters).

C202 STACKDIAM NON-KEY

Inside diameter of a round gas exit at point of emission; for non-round exits it is an equivalent diameter calculated from the cross-sectional area at point of discharge (meters).

C203 STACKTEMP NON-KEY

Temperature of exhaust stream at stack exit under normal operating conditions (^{o}K).

C204 STACKFLOW NON-KEY

Volume of exhaust gas released at the operating temperature of stack. (m^3/min) Gas pressure assumed the same as normal atmospheric pressure.

C205 STACKVELO NON-KEY

Average stack velocity of exhaust gas stream (m/sec).

C206 STACKNORMRISE NON-KEY

Dummy component.

C301 PLHGT NON-KEY

The plume height is a gross estimate and is used only when the source has one of the following characteristics: (a) no clear-cut enclosed point of emission (e.g., gas leaks at an oil refinery), (b) no stack height (e.g., burning dumps), (c) a mobile emission point within the facility (e.g., quarry), (d) pollutants released into the atmosphere at ambient temperatures through diffusion (e.g., gasoline storage tanks); (meters above ground level).

C401 PARTEMSSLOG KEY

Truncated base 10 log of particulate emissions for point source (for key search purposes).

C402 PARTPRIMCONTROL NON-KEY

Primary control device equipment code for particulate emissions (see Table 2).

C403 PARTSECONCONTROL NON-KEY

Secondary control device equipment code for particulate emissions (see Table 2).

C404 PARTEFFIC NON-KEY

Estimated control efficiency for all particulate control equipment (weight %).

C405 PARTEMISS NON-KEY

Annual controlled particulate emissions from point source (tonnes/year(1)).

C407 PARTEMISOK NON-KEY

Maximum legal particulate emissions from point source (tonnes/year).

C411 SO2EMSSLOG KEY

Truncated base 10 log of SO_2 emissions for point source (for key search purposes).

C412 SO2PRIMCONTR NON-KEY

Primary control device equipment code for SO_x emissions (see Table 2).

C413 SO2SECONCONTR NON-KEY

Secondary control device equipment code for SO_x emissions (see Table 2).

C414 SO2EFFIC NON-KEY

Estimated control efficiency for all SO_x equipment (weight %).

C415 SO2EMISS NON-KEY

Annual controlled SO_x emissions from point source (tonnes of SO_2/year).

C417 SO2EMISOK NON-KEY

Maximum legal SO_x emissions from point source (tonnes of SO_2/year).

C421 NOXEMSSLOG KEY

Truncated base 10 log of NO_x emissions for point source (for key search purposes).

(1) tonnes = metric tons (10^3 kgs)

C422 NOXPRIMCONTR NON-KEY
Primary control device equipment code for NO_x emissions (see Table 2).

C423 NOXSECONCONTR NON-KEY
Secondary control device equipment code for NO_x emissions (see Table 2).

C424 NOXEFFIC NON-KEY
Estimated control efficiency for all NO_x control equipment (weight %).

C425 NOXEMISS NON-KEY
Annual controlled NO_x emissions from point source (tonnes of NO_2/year).

C427 NOXEMISOK NON-KEY
Maximum legal NO_x emissions from point source (tonnes of NO_2/year).

C431 HCEMSSLOG KEY
Truncated base 10 log of HC emissions for point source (for key search purposes).

C432 HCPRIMCONTR NON-KEY
Primary control device equipment code for HC emissions (see Table 2).

C433 HCSECONCONTR NON-KEY
Secondary control device equipment code for HC emissions (see Table 2).

C434 HCEFFIC NON-KEY
Estimated control efficiency for all HC control equipment (weight %).

C435 HCEMISS NON-KEY
Annual controlled HC emissions from point source (tonnes of CH_4/year).

C437 HCEMISOK NON-KEY
Maximum legal HC emissions from point source (tonnes of CH_4/year).

C441 COEMSSLOG KEY
Truncated base 10 log of CO emissions for point source (for key search purposes).

C442 COPRIMCONTR NON-KEY
Primary control device equipment code for CO emissions (see Table 2).

C443 COSECONCONTR NON-KEY
Secondary control device equipment code for CO emissions (see Table 2).

C444 COEFFIC NON-KEY
Estimated control efficiency for all CO control equipment (weight %).

C445 COEMISS NON-KEY
Annual controlled CO emissions from point source (tonnes/year).

C447 COEMISOK NON-KEY
Maximum legal CO emissions from point source (tonnes/year).

C501 DECFEB NON-KEY
Weighted portion of production of source occurring from December to February (%).

C502 MARMAY NON-KEY
Weighted portion of production of source occurring from March to May (%).

C503 JUNEAUG NON-KEY
Weighted portion of production of source occurring from June to August (%).

C504 SEPTNOV NON-KEY
Weighted portion of production of source occurring from September to November (%).

C505 HOUR NON-KEY
Hours/day source operates under normal conditions.

C506 DAY NON-KEY
Days/week source operates under normal conditions.

C507 WEEK NON-KEY
Weeks/year source operates under normal conditions.

C600 COMPLY NON-KEY
RG with compliance analysis information.

C606 STATUS NON-KEY
Code for present status of the source under existing legislation as follows- 1=in compliance, 2=not in compliance and no variance, 3=not in compliance but variance obtained, 4=compliance status unknown.

C607 COMPYR NON-KEY
Year source must be in compliance.

C608 COMPMO NON-KEY
Month source must be in compliance.

C609 UPYR NON-KEY
Year of most recent change in compliance status of source.

C610 UPMO NON-KEY
Month of most recent change in compliance status of source.

C611 UPDY NON-KEY
Day of most recent change in compliance status of source.

C612 YRREG NON-KEY
Date regulatory info last updated.

C613 CNTRLREG NON-KEY
Control regulations applying to this source.

C614 EMERSTCD NON-KEY
Emergency control action plan (ECAP) status as follows = 0 = ECAP not required; 1 = required ECAP not submitted; 2 = ECAP submitted.

C701 BOILER NON-KEY
Boiler input design capacity before heat transfer (kilocalories/minute).

C702 SPACE NON-KEY
% of total fuel used for space heating.

C800 CARD6 NON-KEY
RG with operating characteristics of each fuel or process contributing to the point source.

C801 SCC KEY
NEDS Source Classification Code for fuel or process. (References: Compilation of Air Pollutant Emission Factors, EPA publication AP-42. Aeros Manual Series Volume V: Aeros Manual of Codes, EPA-450/2-76-005; OAQPS No. 1.2-042, section 3, chapter 7).

C804 SULPHUR NON-KEY
Sulfur content of fuel being used (%).

C805 ASH NON-KEY
Ash content of fuel being used (%).

C806 FUEL NON-KEY
Name of fuel used.

C807 HEAT NON-KEY
Heat content of fuel being used (kilocalories/fuel unit).

C808 SOURCE NON-KEY
Process category as follows- B=boiler, P=process, C=other combustion, S=solid waste.

C809 CONF NON-KEY
Confidentiality of data as follows- 1=some data should be considered confidential, 2=no data need be considered confidential.

C810 COMMENT NON-KEY
Comments on corresponding SCC (C801).

C900 FPCDATA NON-KEY
Rg with data from FPC FORM 67. Data in this RG applies to power plants only.

C901 FPCDATAYR NON-KEY
Year when FPC data was compiled.

C902 FPCCAP NON-KEY
Capacity of power plant (megawatts) from FPC FORM 67.

C903 FPCEMISSO2 NON-KEY
Annual controlled SO_x emissions for plant (tonnes of SO2/year) from FPC FORM 67.

C904 FPCEMISPART NON-KEY
Annual controlled particulate emissions for plant (tonnes/year) from FPC FORM 67.

C905 FPCEMISNOX NON-KEY
Annual controlled NO_x emissions for plant (tonnes of NO_2/year) from FPC FORM 67.

C906 FPCNOSTCK NON-KEY
Number of stacks in plant.

C907 FPCLWSTCK NON-KEY
Lowest stack height (meters).

C908 FPCHGST CK NON-KEY
Highest stack height (meters).

C950 FPCFUEL NON-KEY
RG with fuel data from FPC FORM 67.

C951 FPCFUEL NAME NON-KEY
Name of fuel (coal, oil or gas).

C952 FPCFUEL CONS NON-KEY
Fuel consumption of plant (tonnes/year for coal; thousands of M^3 for gas and oil).

C953 FPCFUEL HEAT NON-KEY
Average heat content of the fuel (kilo calories/fuel unit).

C954 FPCFUELS NON-KEY
Average sulfur content of the fuel (%).

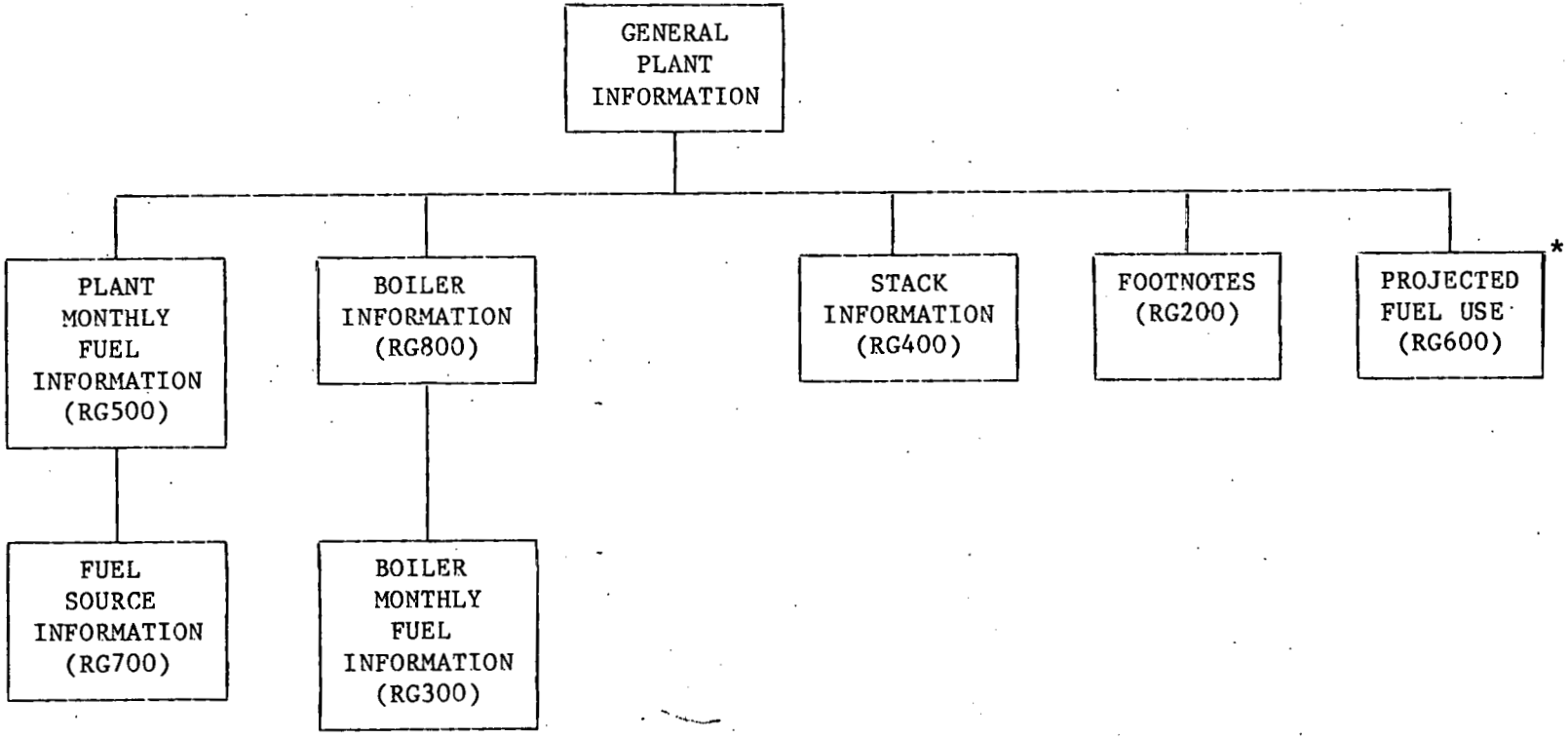
C955 FPCFUELASH NON-KEY
Average ash content of the fuel (%).

C956 FPCFUELH2O NON-KEY
Average moisture content of the fuel (%).

B. FPCYY Data Bases

These data bases include the air quality control section data of the FPC FORM 67 data. These data must be submitted yearly to the Energy Information Administration section of the Department of Energy by an electric utility with a steam-electric generating capacity of 25 megawatts or greater during the year covered.

Figure 2 presents the logical data base definition for the FPCYY data bases. Because additional data was compiled starting in 1974 the projected fuel use repeating group (RG600) was added to the definition for FPC74, FPC75 and FPC76.



FPCYY - Logical Data Base Design

Figure 2

*Only available starting in 1974.

FPCYY

DATA BASE DEFINITION
(FOR DATA BASES FPC69,FPC70,FPC71,FPC72 AND FPC73)

```
SYSTEM RELEASE NUMBER       2.60D
DATA BASE NAME IS FPCYY
DEFINITION NUMBER       1
DATA BASE CYCLE         1
   1?  COMPANY NAME (NON-KEY NAME X(15))
   2?  PLANT NAME (NON-KEY NAME X(15))
   3?  FPC CO-PLANT CODE (NAME X(11))
   4?  NEDS CODE (NAME X(10))
   5?  PLANT CAPACITY (NON-KEY DECIMAL NUMBER 9(5).99)
  12?  ROUNDED PLANT CAPACITY (INTEGER NUMBER 9(5))
   6?  FIPS STATE CODE (NAME XX)
  19?  STATE NAME (NON-KEY NAME X(10))
   7?  FIPS COUNTY CODE (NAME XXX)
  14?  GEOGRAPHIC REGION (NON-KEY NAME XX)
   8?  POST OFFICE ZIP (NON-KEY NAME X(10))
   9?  AQCR CODE (NON-KEY NAME XXX)
  10?  WATER RESOURCES REGION CODE (NON-KEY NAME XX)
  11?  FPC REGIONAL OFFICE CODE (NON-KEY NAME X)
  13?  FILING DATE (NON-KEY DATE)
  15?  FUEL QUALITY REPORTED (NON-KEY NAME X)
  16?  NET ANNUAL GENERATION (NON-KEY DECIMAL NUMBER 9(8).99)
 101?  HEAT RATE (NON-KEY DECIMAL NUMBER 9(6).99)
  40?  TOTAL LIMESTONE USED (NON-KEY DECIMAL NUMBER 9(5).99)
  41?  TOTAL DOLOMITE USED (NON-KEY DECIMAL NUMBER 9(5).99)
  42?  OTHER ADDITIVES USED (NON-KEY DECIMAL NUMBER 9(5).99)
  44?  TOTAL FLYASH COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
  45?  TOTAL FLYASH SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
  46?  TOTAL FLYASH PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
  47?  TOTAL FLYASH LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
  48?  TOTAL FLYASH WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
  49?  TOTAL FLYASH OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
  50?  LONGITUDE (NON-KEY DECIMAL NUMBER 999.99)
  51?  LATITUDE (NON-KEY DECIMAL NUMBER 999.99)
  54?  TOTAL BOTTOM ASH COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
  55?  TOTAL BOTTOM ASH SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
  56?  TOTAL BOTTOM ASH PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
  57?  TOTAL BOTTOM ASH LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
  58?  TOTAL BOTTOM ASH WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
  59?  TOTAL BOTTOM ASH OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
  84?  TOTAL ELEMENTAL S COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
  85?  TOTAL ELEMENTAL S SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
  86?  TOTAL ELEMENTAL S PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
  87?  TOTAL ELEMENTAL S LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
  88?  TOTAL ELEMENTAL S WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
  89?  TOTAL ELEMENTAL S OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
  94?  TOTAL SO4H2 COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
  95?  TOTAL SO4H2 SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
  96?  TOTAL SO4H2 PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
  97?  TOTAL SO4H2 LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
  98?  TOTAL SO4H2 WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
  99?  TOTAL SO4H2 OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
 100?  PURITY OF SO4H2 (NON-KEY DECIMAL NUMBER 99.9)
 104?  TOTAL SO2 COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
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105?  TOTAL SO2 SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
106?  TOTAL SO2 PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
107?  TOTAL SO2 LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
108?  TOTAL SO2 WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
109?  TOTAL SO2 OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
114?  TOTAL OTHER S COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
115?  TOTAL OTHER S SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
116?  TOTAL OTHER S PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
117?  TOTAL OTHER S LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
118?  TOTAL OTHER S WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
119?  TOTAL OTHER S OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
124?  TOTAL OTHER PRODUCTS COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
125?  TOTAL OTHER PRODUCTS SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
126?  TOTAL OTHER PRODUCTS PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
127?  TOTAL OTHER PRODUCTS LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
128?  TOTAL OTHER PRODUCTS WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
129?  TOTAL OTHER PRODUCTS OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
 60?  FLYASH EXPENSES (NON-KEY DECIMAL NUMBER 9(5).99)
 61?  BOTTOM ASH EXPENSES (NON-KEY DECIMAL NUMBER 9(5).99)
 62?  SULFUR EXPENSES (NON-KEY DECIMAL NUMBER 9(5).99)
 63?  OTHER PRODUCTS EXPENSES (NON-KEY DECIMAL NUMBER 9(5).99)
 68?  OTHER AIR QUALITY EXPENSES (NON-KEY DECIMAL NUMBER 9(5).99)
 70?  SALES OF FLYASH (NON-KEY DECIMAL NUMBER 9(5).99)
 72?  SALES OF BOTTOM ASH (NON-KEY DECIMAL NUMBER 9(5).99)
 73?  SALES OF FLY+BOTTOM (NON-KEY DECIMAL NUMBER 9(5).99)
 75?  SALES OF SULFUR (NON-KEY DECIMAL NUMBER 9(5).99)
 77?  OTHER REVENUES (NON-KEY DECIMAL NUMBER 9(5).99)
500?  FUEL INFORMATION (RG)
  501?  FUEL NAME (NAME X(5) IN 500)
  502?  JANTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  592?  JANBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  503?  JANAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  504?  JANAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  505?  JANAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  506?  FEBTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  507?  FEBBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  508?  FEBAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  509?  FEBAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  510?  FEBAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  511?  MARTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  512?  MARBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  513?  MARAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  514?  MARAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  515?  MARAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  516?  APRTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  517?  APRBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  518?  APRAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  519?  APRAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  520?  APRAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  521?  MAYTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  522?  MAYBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  523?  MAYAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  524?  MAYAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  525?  MAYAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  526?  JUNTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  527?  JUNBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  528?  JUNAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  529?  JUNAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  530?  JUNAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  531?  JULTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
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  532?  JULBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  533?  JULAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  534?  JULAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  535?  JULAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  536?  AUGTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  537?  AUGBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  538?  AUGAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  539?  AUGAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  540?  AUGAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  541?  SEPTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  542?  SEPBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  543?  SEPAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  544?  SEPAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  545?  SEPAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  546?  OCTTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  547?  OCTBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  548?  OCTAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  549?  OCTAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  550?  OCTAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  551?  NOVTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  552?  NOVBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  553?  NOVAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  554?  NOVAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  555?  NOVAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  556?  DECTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  557?  DECBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  558?  DECAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  559?  DECAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  560?  DECAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  580?  YEARTOTUSED (NON-KEY DECIMAL NUMBER 9(7).99 IN 500)
  581?  YEARBTUBL (NON-KEY DECIMAL NUMBER 9(7).99 IN 500)
  582?  YEARAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  583?  YEARAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  584?  YEARAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  700?  FUEL SOURCE (RG IN 500)
    701?  SOURCENAME (NON-KEY NAME X(10) IN 700)
    702?  SOURCEPORT (NON-KEY NAME X(5) IN 700)
    703?  SOURCEQUANT (NON-KEY DECIMAL NUMBER 9(5).99 IN 700)
800?  BOILER INFORMATION (RG)
  801?  BOILER NUMBER (NAME X(5) IN 800)
  802?  TOTAL HR OPERATION (NON-KEY DECIMAL NUMBER 9999.99 IN 800)
  803?  CAPACITY FACTOR (NON-KEY DECIMAL NUMBER 999.9 IN 800)
  880?  BOILER PART EMISSIONS COAL (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  881?  BOILER PART EMISSIONS OIL (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  882?  BOILER SO2 EMISSIONS COAL (NON-KEY DECIMAL NUMBER 9(6).99 IN 800)
  883?  BOILER SO2 EMISSIONS OIL (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  884?  BOILER NOX EMISSIONS COAL (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  885?  BOILER NOX EMISSIONS OIL (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  886?  BOILER NOX EMISSIONS GAS (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  804?  WINTER PEAK HIGH (NON-KEY NAME XX IN 800)
  805?  WINTER PEAK LOW (NON-KEY NAME XX IN 800)
  806?  WINTER PEAK HIGH1 (NON-KEY NAME XX IN 800)
  807?  WINTER PEAK LOW1 (NON-KEY NAME XX IN 800)
  809?  SUMMER PEAK HIGH (NON-KEY NAME XX IN 800)
  810?  SUMMER PEAK LOW (NON-KEY NAME XX IN 800)
  811?  SUMMER PEAK HIGH1 (NON-KEY NAME XX IN 800)
  812?  SUMMER PEAK LOW1 (NON-KEY NAME XX IN 800)
  816?  LOWEST WEEK HIGH (NON-KEY NAME XX IN 800)
  817?  LOWEST WEEK LOW (NON-KEY NAME XX IN 800)
  818?  LOWEST WEEK HIGH1 (NON-KEY NAME XX IN 800)
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819?  LOWEST WEEK LOW1 (NON-KEY NAME XX IN 800)
821?  MECH SEP TEST EFF (NON-KEY DECIMAL NUMBER 999.9 IN 800)
822?  MECH SEP TEST DATE (NON-KEY NAME X(8) IN 800)
823?  MECH SEP EST EFF (NON-KEY DECIMAL NUMBER 999.9 IN 800)
824?  ELEC SEP TYPE (NON-KEY NAME X IN 800)
825?  ELEC SEP HOURS IN OP (NON-KEY DECIMAL NUMBER 9(6).9 IN 800)
827?  ELEC SEP TEST DATE (NON-KEY NAME X(8) IN 800)
828?  HOURS PRECIP OUT (NON-KEY DECIMAL NUMBER 9999.9 IN 800)
830?  ESTM EFF PRECIP OUT (NON-KEY DECIMAL NUMBER 999.9 IN 800)
831?  ESTM EFF PRCIP ANNUAL (NON-KEY DECIMAL NUMBER 99.9 IN 800)
841?  DESULF SYS HOURS (NON-KEY DECIMAL NUMBER 9999.9 IN 800)
832?  DESULF SYS TEST EFF (NON-KEY DECIMAL NUMBER 999.9 IN 800)
890?  DESULF SYS TEST DATE (NON-KEY NAME X(8) IN 800)
833?  DESULF SYS EST EFF (NON-KEY DECIMAL NUMBER 99.9 IN 800)
834?  OTHER GAS CLEANER TYPE HOURS (NON-KEY DECIMAL NUMBER 9999.9 IN 800)
835?  SERVICE STACK NUMBER (NON-KEY NAME X(5) IN 800)
836?  GENERATOR NUMBER (NON-KEY NAME X(5) IN 800)
837?  BOILER MANUFACTURER (NON-KEY NAME X(5) IN 800)
838?  YEAR INSTALLED (NON-KEY NAME X(5) IN 800)
839?  GENERATING CAPACITY (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
840?  HIGHEST STEAM CAPACITY (NON-KEY DECIMAL NUMBER 9(7).99 IN 800)
842?  BOILER EFF 100 LOAD (NON-KEY DECIMAL NUMBER 999.9 IN 800)
843?  BOILER EFF 75 LOAD (NON-KEY DECIMAL NUMBER 99.9 IN 800)
844?  BOILER EFF 50 LOAD (NON-KEY DECIMAL NUMBER 99.9 IN 800)
845?  TOTAL AIR FLOW (NON-KEY DECIMAL NUMBER 9(8).99 IN 800)
846?  EXCESS AIR (NON-KEY DECIMAL NUMBER 99.9 IN 800)
847?  WET-DRY BOTTOM (NON-KEY NAME XXX IN 800)
848?  FLYASH REINJECTION (NON-KEY NAME XXX IN 800)
849?  TYPE OF FIRING (NON-KEY NAME X(5) IN 800)
850?  GAS CLEAN TYPE (NON-KEY NAME X(5) IN 800)
851?  GAS CLEAN EFF (NON-KEY DECIMAL NUMBER 99.9 IN 800)
852?  GAS CLEAN MASS RATE (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
853?  GAS CLEAN YEAR (NON-KEY NAME X(5) IN 800)
854?  GAS CLEAN COST (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
855?  GAS CLEAN MANUFACTURER (NON-KEY NAME X(5) IN 800)
856?  ELECT PRECIP TYPE (NON-KEY NAME X IN 800)
857?  ELECT PRECIP EFF (NON-KEY DECIMAL NUMBER 99.9 IN 800)
858?  ELECT PRECIP MASS (NON-KEY DECIMAL NUMBER 9(6).99 IN 800)
859?  ELECT PRECIP YEAR (NON-KEY NAME X(5) IN 800)
860?  ELECT PRECIP COST (NON-KEY DECIMAL NUMBER 9(5).9 IN 800)
861?  ELECT PRECIP MANUFACTURER (NON-KEY NAME X(5) IN 800)
862?  DESIGN COAL CONSUMP (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
863?  DESIGN OIL CONSUMP (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
864?  DESIGN GAS COMSUMP (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
865?  DESULF EQUIP TYPE (NON-KEY NAME X(5) IN 800)
866?  DESULF EQUIP EFF (NON-KEY DECIMAL NUMBER 99.9 IN 800)
867?  DESULF EQUIP MASS (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
868?  DESULF EQUIP YEAR (NON-KEY NAME X(5) IN 800)
869?  DESULF EQIP COST (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
870?  DESULF EQUIP MANUFACTURER (NON-KEY NAME X(5) IN 800)
871?  OTHER EQUIP (NON-KEY NAME X(5) IN 800)
872?  OTHER EQUIP EFF (NON-KEY DECIMAL NUMBER 99.9 IN 800)
873?  OTHER EQUIP MASS (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
874?  OTHER EQUIP YEAR (NON-KEY NAME X(5) IN 800)
875?  OTHER EQUIP COST (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
876?  OTHER EQUIP MANUFACTURER (NON-KEY NAME X(5) IN 800)
300?  BOILER FUEL (RG IN 800)
  314?  BOILER FUEL NAME (NAME X(5) IN 300)
  302?  JAN FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
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    303?  FEB FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    304?  MAR FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    305?  APR FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    306?  MAY FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    307?  JUNE FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    308?  JULY FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    309?  AUG FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    310?  SEPT FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    311?  OCT FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    312?  NOV FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    313?  DEC FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    315?  TOTAL FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
400?  STACK INFORMATION (RG)
  401?  STACK NUMBER (NAME X(5) IN 400)
  402?  INSTALLED COST (NON-KEY DECIMAL NUMBER 9(5).99 IN 400)
  403?  STACK HEIGHT (NON-KEY DECIMAL NUMBER 9999.99 IN 400)
  404?  STACK INSIDE DIAMETER (NON-KEY DECIMAL NUMBER 999.99 IN 400)
  405?  FLUE GAS RATE 100 LOAD (NON-KEY DECIMAL NUMBER 9(7).99 IN 400)
  406?  FLUE GAS RATE 75 LOAD (NON-KEY DECIMAL NUMBER 9(7).99 IN 400)

  407?  FLUE GAS RATE 50 LOAD (NON-KEY DECIMAL NUMBER 9(7).99 IN 400)
  408?  EXIT GAS TEMP 100 LOAD (NON-KEY DECIMAL NUMBER 999.9 IN 400)
  409?  EXIT GAS TEMP 75 LOAD (NON-KEY DECIMAL NUMBER 999.9 IN 400)
  410?  EXIT GAS TEMP 50 LOAD (NON-KEY DECIMAL NUMBER 999.9 IN 400)
  411?  EXIT GAS SPEED 100 LOAD (NON-KEY DECIMAL NUMBER 9999.9 IN 400)
  412?  EXIT GAS SPEED 75 LOAD (NON-KEY DECIMAL NUMBER 999.9 IN 400)
  413?  EXIT GAS SPEED 50 LOAD (NON-KEY DECIMAL NUMBER 999.9 IN 400)
  414?  DISTANCE TO NEXT STACK (NON-KEY DECIMAL NUMBER 9999.9 IN 400)
  415?  ORIENTATION OF STACK (NON-KEY DECIMAL NUMBER 999.9 IN 400)
200?  FOOTNOTES (RG)
  201?  FOOTNOTE KEY (NAME X(7) IN 200)
  202?  TEXXT (NON-KEY NAME X(28) IN 200)
  203?  DUMMY (NON-KEY NAME X(5) IN 200)
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FPCYY

DATA BASE DEFINITION
(FOR DATA BASES FPC74, FPC75, FPC76)

```
SYSTEM RELEASE NUMBER       2.60D
DATA BASE NAME IS FPCYY
DEFINITION NUMBER      1
DATA BASE CYCLE        1
   1?  COMPANY NAME (NON-KEY NAME X(15))
   2?  PLANT NAME (NON-KEY NAME X(15))
   3?  FPC CO-PLANT CODE (NAME X(11))
   4?  NEDS CODE (NAME X(10))
   5?  PLANT CAPACITY (NON-KEY DECIMAL NUMBER 9(5).99)
  12?  ROUNDED PLANT CAPACITY (INTEGER NUMBER 9(5))
   6?  FIPS STATE CODE (NAME XX)
  19?  STATE NAME (NON-KEY NAME X(10))
   7?  FIPS COUNTY CODE (NAME XXX)
  14?  GEOGRAPHIC REGION (NON-KEY NAME XX)
   8?  POST OFFICE ZIP (NON-KEY NAME X(10))
   9?  AQCR CODE (NON-KEY NAME XXX)
  10?  WATER RESOURCES REGION CODE (NON-KEY NAME XX)
  11?  FPC REGIONAL OFFICE CODE (NON-KEY NAME X)
  13?  FILING DATE (NON-KEY DATE)
  15?  FUEL QUALITY REPORTED (NON-KEY NAME X)
  16?  NET ANNUAL GENERATION (NON-KEY DECIMAL NUMBER 9(8).99)
  20?  CURR BOILERS (NON-KEY DECIMAL NUMBER 99.)
  22?  PLUS5 BOILERS (NON-KEY DECIMAL NUMBER 99.)
  23?  PLUS10 BOILERS (NON-KEY DECIMAL NUMBER 99.)
  21?  CURR NAME CAP (NON-KEY DECIMAL NUMBER 9(5).99)
  24?  PLUS5 NAME CAP (NON-KEY DECIMAL NUMBER 9(5).99)
  25?  PLUS10 NAME CAP (NON-KEY DECIMAL NUMBER 9(5).99)
  26?  PLUS5 TOTAL BOILERS (NON-KEY DECIMAL NUMBER 99.)
  27?  PLUS10 TOTAL BOILERS (NON-KEY DECIMAL NUMBER 99.)
  28?  PLUS5 TOTAL CAP (NON-KEY DECIMAL NUMBER 9(5).99)
  29?  PLUS10 TOTAL CAP (NON-KEY DECIMAL NUMBER 9(5).99)
  30?  CURR TOT TSP (NON-KEY DECIMAL NUMBER 9(6).99)
  34?  PLUS5 TOT TSP (NON-KEY DECIMAL NUMBER 9(6).99)
  35?  PLUS10 TOT TSP (NON-KEY DECIMAL NUMBER 9(6).99)
  31?  CURR TOT SOX (NON-KEY DECIMAL NUMBER 9(6).99)
  36?  PLUS5 TOT SOX (NON-KEY DECIMAL NUMBER 9(6).99)
  37?  PLUS10 TOT SOX (NON-KEY DECIMAL NUMBER 9(6).99)
  32?  CURR TOT NOX (NON-KEY DECIMAL NUMBER 9(6).99)
  38?  PLUS5 TOT NOX (NON-KEY DECIMAL NUMBER 9(6).99)
  39?  PLUS10 TOT NOX (NON-KEY DECIMAL NUMBER 9(6).99)
  33?  CURR TOT HEAT (NON-KEY DECIMAL NUMBER 9(6).99)
  17?  PLUS5 TOT HEAT (NON-KEY DECIMAL NUMBER 9(6).99)
  18?  PLUS10 TOT HEAT (NON-KEY DECIMAL NUMBER 9(6).99)
 101?  HEAT RATE (NON-KEY DECIMAL NUMBER 9(6).99)
  40?  TOTAL LIMESTONE USED (NON-KEY DECIMAL NUMBER 9(5).99)
  41?  TOTAL DOLOMITE USED (NON-KEY DECIMAL NUMBER 9(5).99)
  42?  OTHER ADDITIVES USED (NON-KEY DECIMAL NUMBER 9(5).99)
  44?  TOTAL FLYASH COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
  45?  TOTAL FLYASH SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
  46?  TOTAL FLYASH PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
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 47?  TOTAL FLYASH LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
 48?  TOTAL FLYASH WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
 49?  TOTAL FLYASH OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
 50?  LONGITUDE (NON-KEY DECIMAL NUMBER 999.99)
 51?  LATITUDE (NON-KEY DECIMAL NUMBER 999.99)
 54?  TOTAL BOTTOM ASH COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
 55?  TOTAL BOTTOM ASH SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
 56?  TOTAL BOTTOM ASH PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
 57?  TOTAL BOTTOM ASH LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
 58?  TOTAL BOTTOM ASH WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
 59?  TOTAL BOTTOM ASH OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
 84?  TOTAL ELEMENTAL S COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
 85?  TOTAL ELEMENTAL S SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
 86?  TOTAL ELEMENTAL S PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
 87?  TOTAL ELEMENTAL S LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
 88?  TOTAL ELEMENTAL S WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
 89?  TOTAL ELEMENTAL S OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
 94?  TOTAL SO4H2 COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
 95?  TOTAL SO4H2 SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
 96?  TOTAL SO4H2 PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
 97?  TOTAL SO4H2 LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
 98?  TOTAL SO4H2 WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
 99?  TOTAL SO4H2 OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
100?  PURITY OF SO4H2 (NON-KEY DECIMAL NUMBER 99.9)
104?  TOTAL SO2 COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
105?  TOTAL SO2 SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
106?  TOTAL SO2 PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
107?  TOTAL SO2 LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
108?  TOTAL SO2 WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
109?  TOTAL SO2 OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
114?  TOTAL OTHER S COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
115?  TOTAL OTHER S SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
116?  TOTAL OTHER S PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
117?  TOTAL OTHER S LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
118?  TOTAL OTHER S WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
119?  TOTAL OTHER S OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
124?  TOTAL OTHER PRODUCTS COLLECTED (NON-KEY DECIMAL NUMBER 9(5).99)
125?  TOTAL OTHER PRODUCTS SOLD (NON-KEY DECIMAL NUMBER 9(5).99)
126?  TOTAL OTHER PRODUCTS PAID DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
127?  TOTAL OTHER PRODUCTS LAND FILL (NON-KEY DECIMAL NUMBER 9(5).99)
128?  TOTAL OTHER PRODUCTS WATER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
129?  TOTAL OTHER PRODUCTS OTHER DISPOSAL (NON-KEY DECIMAL NUMBER 9(5).99)
 60?  FLYASH EXPENSES (NON-KEY DECIMAL NUMBER 9(5).99)
 61?  BOTTOM ASH EXPENSES (NON-KEY DECIMAL NUMBER 9(5).99)
 62?  SULFUR EXPENSES (NON-KEY DECIMAL NUMBER 9(5).99)
 63?  OTHER PRODUCTS EXPENSES (NON-KEY DECIMAL NUMBER 9(5).99)
 68?  OTHER AIR QUALITY EXPENSES (NON-KEY DECIMAL NUMBER 9(5).99)
 70?  SALES OF FLYASH (NON-KEY DECIMAL NUMBER 9(5).99)
 72?  SALES OF BOTTOM ASH (NON-KEY DECIMAL NUMBER 9(5).99)
 73?  SALES OF FLY+BOTTOM (NON-KEY DECIMAL NUMBER 9(5).99)
 75?  SALES OF SULFUR (NON-KEY DECIMAL NUMBER 9(5).99)
 77?  OTHER REVENUES (NON-KEY DECIMAL NUMBER 9(5).99)
500?  FUEL INFORMATION (RG)
  501?  FUEL NAME (NAME X(5) IN 500)
  502?  JANTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  592?  JANBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
  503?  JANAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
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504?  JANAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
505?  JANAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
506?  FEBTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
507?  FEBBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
508?  FEBAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
509?  FEBAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
510?  FEBAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
511?  MARTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
512?  MARBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
513?  MARAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
514?  MARAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
515?  MARAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
516?  APRTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
517?  APRBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
518?  APRAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
519?  APRAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
520?  APRAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
521?  MAYTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
522?  MAYBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
523?  MAYAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
524?  MAYAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
525?  MAYAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
526?  JUNTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
527?  JUNBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
528?  JUNAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
529?  JUNAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
530?  JUNAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
531?  JULTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
532?  JULBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
533?  JULAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
534?  JULAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
535?  JULAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
536?  AUGTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
537?  AUGBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
538?  AUGAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
539?  AUGAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
540?  AUGAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
541?  SEPTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
542?  SEPBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
543?  SEPAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
544?  SEPAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
545?  SEPAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
546?  OCTTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
547?  OCTBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
548?  OCTAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
549?  OCTAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
550?  OCTAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
551?  NOVTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
552?  NOVBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
553?  NOVAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
554?  NOVAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
555?  NOVAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
556?  DECTOTUSED (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
557?  DECBTULB (NON-KEY DECIMAL NUMBER 9(6).99 IN 500)
558?  DECAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
559?  DECAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
560?  DECAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
580?  YEARTOTUSED (NON-KEY DECIMAL NUMBER 9(7).99 IN 500)
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  581?  YEARBTUBL (NON-KEY DECIMAL NUMBER 9(7).99 IN 500)
  582?  YEARAVGS (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  583?  YEARAVGASH (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  584?  YEARAVGMOIST (NON-KEY DECIMAL NUMBER 99.9 IN 500)
  700?  FUEL SOURCE (RG IN 500)
    701?  SOURCENAME (NON-KEY NAME X(10) IN 700)
    702?  SOURCEPORT (NON-KEY NAME X(5) IN 700)
    703?  SOURCEQUANT (NON-KEY DECIMAL NUMBER 9(5).99 IN 700)
800?  BOILER INFORMATION (RG)
  801?  BOILER NUMBER (NAME X(5) IN 800)
  802?  TOTAL HR OPERATION (NON-KEY DECIMAL NUMBER 9999.99 IN 800)
  803?  CAPACITY FACTOR (NON-KEY DECIMAL NUMBER 999.9 IN 800)
  880?  BOILER PART EMISSIONS COAL (NON-KEY DECIMAL NUMBER 9(6).99 IN 800)
  881?  BOILER PART EMISSIONS OIL (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  882?  BOILER SO2 EMISSIONS COAL (NON-KEY DECIMAL NUMBER 9(6).99 IN 800)
  883?  BOILER SO2 EMISSIONS OIL (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  884?  BOILER NOX EMISSIONS COAL (NON-KEY DECIMAL NUMBER 9(5).99 IN
  885?  BOILER NOX EMISSIONS OIL (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  886?  BOILER NOX EMISSIONS GAS (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  804?  WINTER PEAK HIGH (NON-KEY NAME XX IN 800)
  805?  WINTER PEAK LOW (NON-KEY NAME XX IN 800)
  806?  WINTER PEAK HIGH1 (NON-KEY NAME XX IN 800)
  807?  WINTER PEAK LOW1 (NON-KEY NAME XX IN 800)
  809?  SUMMER PEAK HIGH (NON-KEY NAME XX IN 800)
  810?  SUMMER PEAK LOW (NON-KEY NAME XX IN 800)
  811?  SUMMER PEAK HIGH1 (NON-KEY NAME XX IN 800)
  812?  SUMMER PEAK LOW1 (NON-KEY NAME XX IN 800)
  816?  LOWEST WEEK HIGH (NON-KEY NAME XX IN 800)
  817?  LOWEST WEEK LOW (NON-KEY NAME XX IN 800)
  818?  LOWEST WEEK HIGH1 (NON-KEY NAME XX IN 800)
  819?  LOWEST WEEK LOW1 (NON-KEY NAME XX IN 800)
  821?  MECH SEP TEST EFF (NON-KEY DECIMAL NUMBER 999.9 IN 800)
  822?  MECH SEP TEST DATE (NON-KEY NAME X(8) IN 800)
  823?  MECH SEP EST EFF (NON-KEY DECIMAL NUMBER 999.9 IN 800)
  824?  ELEC SEP TYPE (NON-KEY NAME X IN 800)
  825?  ELEC SEP HOURS IN OP (NON-KEY DECIMAL NUMBER 9(6).9 IN 800)
  826?  ELEC SEP TEST EFF (NON-KEY DECIMAL NUMBER 999.9 IN 800)
  827?  ELEC SEP TEST DATE (NON-KEY NAME X(8) IN 800)
  828?  HOURS PRECIP OUT (NON-KEY DECIMAL NUMBER 9999.9 IN 800)
  830?  ESTM EFF PRECIP OUT (NON-KEY DECIMAL NUMBER 999.9 IN 800)
  831?  ESTM EFF PRCIP ANNUAL (NON-KEY DECIMAL NUMBER 99.9 IN 800)
  841?  DESULF SYS HOURS (NON-KEY DECIMAL NUMBER 9999.9 IN 800)
  832?  DESULF SYS TEST EFF (NON-KEY DECIMAL NUMBER 999.9 IN 800)
  890?  DESULF SYS TEST DATE (NON-KEY NAME X(8) IN 800)
  833?  DESULF SYS EST EFF (NON-KEY DECIMAL NUMBER 99.9 IN 800)
  834?  OTHER GAS CLEANER TYPE HOURS (NON-KEY DECIMAL NUMBER 9999.9 IN 800)
  835?  SERVICE STACK NUMBER (NON-KEY NAME X(5) IN 800)
  836?  GENERATOR NUMBER (NON-KEY NAME X(5) IN 800)
  837?  BOILER MANUFACTURER (NON-KEY NAME X(5) IN 800)
  838?  YEAR INSTALLED (NON-KEY NAME X(5) IN 800)
  839?  GENERATING CAPACITY (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
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  840?  HIGHEST STEAM CAPACITY (NON-KEY DECIMAL NUMBER 9(7).99 IN 800)
  842?  BOILER EFF 100 LOAD (NON-KEY DECIMAL NUMBER 999.9 IN 800)
  843?  BOILER EFF 75 LOAD (NON-KEY DECIMAL NUMBER 99.9 IN 800)
  844?  BOILER EFF 50 LOAD (NON-KEY DECIMAL NUMBER 99.9 IN 800)
  845?  TOTAL AIR FLOW (NON-KEY DECIMAL NUMBER 9(8).99 IN 800)
  846?  EXCESS AIR (NON-KEY DECIMAL NUMBER 999.9 IN 800)
  847?  WET-DRY BOTTOM (NON-KEY NAME XXX IN 800)
  848?  FLYASH REINJECTION (NON-KEY NAME XXX IN 800)
  849?  TYPE OF FIRING (NON-KEY NAME X(5) IN 800)
  850?  GAS CLEAN TYPE (NON-KEY NAME X(5) IN 800)
  851?  GAS CLEAN EFF (NON-KEY DECIMAL NUMBER 99.9 IN 800)
  852?  GAS CLEAN MASS RATE (NON-KEY DECIMAL NUMBER 9(6).9 IN 800)
  853?  GAS CLEAN YEAR (NON-KEY NAME X(5) IN 800)
  854?  GAS CLEAN COST (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  855?  GAS CLEAN MANUFACTURER (NON-KEY NAME X(5) IN 800)
  856?  ELECT PRECIP TYPE (NON-KEY NAME X IN 800)
  857?  ELECT PRECIP EFF (NON-KEY DECIMAL NUMBER 99.9 IN 800)
  858?  ELECT PRECIP MASS (NON-KEY DECIMAL NUMBER 9(6).9 IN 800)
  859?  ELECT PRECIP YEAR (NON-KEY NAME X(5) IN 800)
  860?  ELECT PRECIP COST (NON-KEY DECIMAL NUMBER 9(5).9 IN 800)
  861?  ELECT PRECIP MANUFACTURER (NON-KEY NAME X(5) IN 800)
  862?  DESIGN COAL CONSUMP (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  863?  DESIGN OIL CONSUMP (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  864?  DESIGN GAS COMSUMP (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  865?  DESULF EQUIP TYPE (NON-KEY NAME X(5) IN 800)
  866?  DESULF EQUIP EFF (NON-KEY DECIMAL NUMBER 99.9 IN 800)
  867?  DESULF EQUIP MASS (NON-KEY. DECIMAL NUMBER 9(5).99 IN 800)
  868?  DESULF EQUIP YEAR (NON-KEY NAME X(5) IN 800)
  869?  DESULF EQIP COST (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  870?  DESULF EQUIP MANUFACTURER (NON-KEY NAME X(5) IN 800)
  871?  OTHER EQUIP (NON-KEY NAME X(5) IN 800)
  872?  OTHER EQUIP EFF (NON-KEY DECIMAL NUMBER 99.9 IN 800)
  873?  OTHER EQUIP MASS (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  874?  OTHER EQUIP YEAR (NON-KEY NAME X(5) IN 800)
  875?  OTHER EQUIP COST (NON-KEY DECIMAL NUMBER 9(5).99 IN 800)
  876?  OTHER EQUIP MANUFACTURER (NON-KEY NAME X(5) IN 800)
  300?  BOILER FUEL (RG IN 800)
    314?  BOILER FUEL NAME (NAME X(5) IN 300)
    302?  JAN FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    303?  FEB FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    304?  MAR FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    305?  APR FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    306?  MAY FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    307?  JUNE FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    308?  JULY FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    309?  AUG FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    310?  SEPT FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    311?  OCT FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    312?  NOV FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    313?  DEC FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
    315?  TOTAL FUEL (NON-KEY DECIMAL NUMBER 9(5).99 IN 300)
400?  STACK INFORMATION (RG)
  401?  STACK NUMBER (NAME X(5) IN 400)
  402?  INSTALLED COST (NON-KEY DECIMAL NUMBER 9(5).99 IN 400)
  403?  STACK HEIGHT (NON-KEY DECIMAL NUMBER 9999.99 IN 400)
  404?  STACK INSIDE DIAMETER (NON-KEY DECIMAL NUMBER 999.99 IN 400)
  405?  FLUE GAS RATE 100 LOAD (NON-KEY DECIMAL NUMBER 9(7).99 IN 400)
  406?  FLUE GAS RATE 75 LOAD (NON-KEY DECIMAL NUMBER 9(7).99 IN 400)
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  407?  FLUE GAS RATE 50 LOAD (NON-KEY DECIMAL NUMBER 9(7).99 IN 400)
  408?  EXIT GAS TEMP 100 LOAD (NON-KEY DECIMAL NUMBER 999.9 IN 400)
  409?  EXIT GAS TEMP 75 LOAD (NON-KEY DECIMAL NUMBER 999.9 IN 400)
  410?  EXIT GAS TEMP 50 LOAD (NON-KEY DECIMAL NUMBER 999.9 IN 400)
  411?  EXIT GAS SPEED 100 LOAD (NON-KEY DECIMAL NUMBER 9999.9 IN 400)
  412?  EXIT GAS SPEED 75 LOAD (NON-KEY DECIMAL NUMBER 9(4).9 IN 400)
  413?  EXIT GAS SPEED 50 LOAD (NON-KEY DECIMAL NUMBER 9(4).9 IN 400)
  414?  DISTANCE TO NEXT STACK (NON-KEY DECIMAL NUMBER 9999.9 IN 400)
  415?  ORIENTATION OF STACK (NON-KEY DECIMAL NUMBER 999.9 IN 400)
200?  FOOTNOTES (RG)
  201?  FOOTNOTE KEY (NAME X(7) IN 200)
  202?  TEXXT (NON-KEY NAME X(28) IN 200)
  203?  BOILERNO (NON-KEY NAME X(5) IN 200)
600?  PROJECTED FUEL (RG)
  601?  PROJ FUEL NAME (NAME X(5) IN 600)
  602?  PROJ FUEL QUANT (NON-KEY DECIMAL NUMBER 9(7).99 IN 600)
  603?  PROJ HEAT VALUE (NON-KEY DECIMAL NUMBER 9(7).99 IN 600)
  604?  PROJ S CONTENT (NON-KEY DECIMAL NUMBER 99.9 IN 600)
  605?  PROJ ORIGIN (NON-KEY NAME X(5) IN 600)
  606?  PROJ DOMESTIC (NON-KEY DECIMAL NUMBER 9(6).99 IN 600)
  607?  PROJ IMPORTED (NON-KEY DECIMAL NUMBER 9(6).99 IN 600)
  608?  PROJ ORG2 (NON-KEY NAME X(5) IN 600)
  609?  PROJ ORG3 (NON-KEY NAME X(5) IN 600)
  610?  TIME INTERVAL (NAME X(5) IN 600)
  611?  PROJ ORG4 (NON-KEY NAME X(5) IN 600)
  612?  PROJ ORG OTHER (NON-KEY NAME X(5) IN 600)
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LIST OF DATA BASE COMPONENTS
(IN ASCENDING ORDER)
COMPONENT NUMBER, COMPONENT NAME, KEY OR NOT, FORM 67 PAGE-SHEET-LINE-COLUMN, COMPONENT DESCRIPTION

(FOR A DETAILED DESCRIPTION OF THE FPC DATA PLEASE REFER TO THE FPC FORM 67, "STEAM-ELECTRIC PLANT AIR AND WATER QUALITY CONTROL DATA FOR THE YEAR ENDED DECEMBER 31, 19YY")

C1 COMPANY NAME — NON-KEY
02-01-00-1 utility name.

C2 PLANT NAME — NON-KEY
02-01-00-2 plant name.

C3 FPC CO-PLANT CODE — KEY
FPC company - plant code.

C4 NEDS CODE — KEY
NEDS plant code.

C5 PLANT CAPACITY — NON-KEY
02-01-00-B plant capacity (megawatts).

C6 FIPS STATE CODE — KEY
FIPS state code.

C7 FIPS COUNTY CODE — KEY
FIPS county code.

C8 POST OFFICE ZIP — NON-KEY
02-01-00-E post office zip code.

C9 AQCR CODE — NON-KEY
Air Quality Control Region (AQCR) where plant is located (Reference: Federal Air Quality Control Regions, publication No. AP-102, EPA(1)).

C10 WATER RESOURCES REGION CODE — NON-KEY
Water Resources Region (WRR) Code.

C11 FPC REGIONAL OFFICE CODE — NON-KEY
FPC Regional Office Code.

C12 ROUNDED PLANT CAPACITY — KEY
Rounded figure for plant capacity (megawatts) (for key search purposes).

C13 FILING DATE — NON-KEY
Date report was filed.

(1) EPA = Environmental Protection Agency.

C14 GEOGRAPHIC REGION NON-KEY
geographic region code.

C15 FUEL QUALITY REPORTED NON-KEY
02-01-00-F fuel quality reported (B=as burned, R=as received).

C16 NET ANNUAL GENERATION NON-KEY
14-01-00-F net annual generation (excludes plant use) (megawatts).

C17 PLUS5 TOT HEAT NON-KEY
23-01-04-C 5 yr projection total heat rejected to air (10^9 BTU/yr).

C18 PLUS10 TOT HEAT NON-KEY
23-01-04-D 10 yr projection to air (10^9 BTU/yr).

C20 CURR BOILERS NON-KEY
21-01-02-B current number of existing boiler-generator units in operation.

C21 CURR NAME CAP NON-KEY
21-01-03-B current nameplate capacity of existing generators at maximum hydrogen pressure (megawatts).

C22 PLUS5 BOILERS NON-KEY
21-01-02-C 5 yr projection of number of existing boiler-generator units in operation.

C23 PLUS10 BOILERS NON-KEY
21-02-02-P 10 yr projection of number of existing boiler-generator units in operation.

C24 PLUS5 NAME CAP NON-KEY
21-01-03-C 5 yr projection of nameplate capacity of existing generators at maximum hydrogen pressure (megawatts).

C25 PLUS10 NAME CAP NON-KEY
21-01-03-D 10 yr projection of nameplate capacity of existing generators at maximum hydrogen pressure (megawatts).

C26 PLUS5 TOTAL BOILERS NON-KEY
21-01-16-C 5 yr projection of total number of units (old and new) in operation.

C27 PLUS10 TOTAL BOILERS NON-KEY
21-01-16-D 10 yr projection of total number of units (old and new) in operation.

C28 PLUS5 TOTAL CAP NON-KEY
21-01-17-C 5 yr projection of total nameplate capacity at maximum hydrogen pressure (megawatts).

C29 PLUS10 TOTAL CAP NON-KEY
21-01-17-D 10 yr projection of total nameplate capacity at maximum hydrogen pressure (megawatts).

C30 CURR TOT TSP NON-KEY
23-01-01-B current plant particulate emissions calculated by utility using formula in FORM 67 (1000 tons/year).

C31 CURR TOT SOX NON-KEY
23-01-02-B current plant SO_x emissions calculated by utility using formula in FORM 67 (1000 tons SO_2/yr).

C32 CURR TOT NOX NON-KEY
23-01-03-B current plant NO_x emissions calculated by utility using formula in FORM 67 (1000 tons NO_2/yr).

C33 CURR TOT HEAT NON-KEY
23-01-04-B current total heat rejected to air (10^9 BTU/yr).

C34 PLUS5 TOT TSP NON-KEY
23-01-01-C 5 yr projection of plant particulate emissions calculated by utility using formula in FORM 67 (1000 tons/yr).

C35 PLUS10 TOT TSP NON-KEY
23-01-01-D 10 yr projection of plant particulate emissions calculated by utility using formula in FORM 67 (1000 tons/yr).

C36 PLUS5 TOT SOX NON-KEY
23-01-02-C 5 yr projection of plant SO_x emissions calculated by utility using formula in FORM 67 (1000 tons SO_2/yr).

C37 PLUS10 TOT SOX NON-KEY
23-01-02-D 10 yr projection of plant SO_x emissions calculated by utility using formula in FORM 67 (1000 tons SO_2/yr).

C38 PLUS5 TOT NOX NON-KEY
23-01-03-C 5 yr projection of plant NO_x emissions calculated by utility using formula in FORM 67 (1000 tons NO_2/yr).

C39 PLUS10 TOT NOX NON-KEY
23-01-03-D 10 yr projection of plant NO_x emissions calculated by utility using formula in FORM 67 (1000 tons NO_2/yr).

C40 TOTAL LIMESTONE USED NON-KEY
07-01-01-B amount of limestone used as additive (1000 tons).

C41 TOTAL DOLAMITE USED NON-KEY
07-01-01-C amount of dolamite used as additive (1000 tons).

C42 OTHER ADDITIVES USED NON-KEY
07-01-01-D amount of other additives used (1000 tons).

C44 TOTAL FLYASH COLLECTED NON-KEY
07-01-02-B total flyash collected (1000 tons).

C45 TOTAL FLYASH SOLD NON-KEY
07-01-02-C total flyash sold (1000 tons).

'46 TOTAL FLYASH PAID DISPOSAL NON-KEY
07-01-02-D total flyash paid disposal (1000 tons).

C47 TOTAL FLYASH LAND FILL NON-KEY
07-01-02-E total flyash used for land fill (1000 tons).

C48 TOTAL FLYASH WATER DISPOSAL NON-KEY
07-01-02-F total flyash used for water disposal (1000 tons).

C49 TOTAL FLYASH OTHER DISPOSAL NON-KEY
07-01-02-G total flyash disposed by other means (1000 tons).

C50 LONGITUDE NON-KEY
Longitude of plant (degrees to 0.01).

C51 LATITUDE NON-KEY
Latitude of plant (degrees to 0.01).

C54 TOTAL BOTTOM ASH COLLECTED NON-KEY
07-01-03-B total bottom ash collected (1000 tons).

C55 TOTAL BOTTOM ASH SOLD NON-KEY
07-01-03-C bottom ash sold (1000 tons).

C56 TOTAL BOTTOM ASH PAID DISPOSAL NON-KEY
07-01-03-D bottom ash paid disposal (1000 tons).

C57 TOTAL BOTTOM ASH LAND FILL NON-KEY
07-01-03-E bottom ash used for land fill (1000 tons).

C58 TOTAL BOTTOM ASH WATER DISPOSAL NON-KEY
07-01-03-F bottom ash used for water disposal (1000 tons).

C59 TOTAL BOTTOM ASH OTHER DISPOSAL NON-KEY
07-01-03-G bottom ash disposed by other means (1000 tons).

C60 FLYASH EXPENSES NON-KEY
07-01-09-B expenses in flyash collection and disposal ($1000)

C61 BOTTOM ASH EXPENSES NON-KEY
07-01-10-B expenses in bottom ash collection and disposal ($1000).

C62 SULFUR EXPENSES NON-KEY
07-01-11-B expenses in sulfur and sulfur product collection and disposal ($1000).

C63 OTHER PRODUCTS EXPENSES NON-KEY
07-01-12-B expenses in collection and disposal of other products from flue gases ($1000).

C68 OTHER AIR QUALITY EXPENSES NON-KEY
07-01-13-B other air quality control expenses ($1000).

C70 SALES OF FLYASH NON-KEY
07-01-15-B revenues from sales of flyash ($1000).

C72 SALES OF BOTTOM ASH NON-KEY
07-01-16-B revenues from sales of bottom ash ($1000).

C73 SALES OF FLY + BOTTOM NON-KEY
07-01-17-B revenues from sales of intermingled flyash and bottom ash ($1000).

C75 SALES OF SULFUR NON-KEY
07-01-18-B revenues from sales of sulfur and sulfur products ($1000).

C77 OTHER REVENUES NON-KEY
07-01-19-B other revenues from air quality control operations ($1000).

C84 TOTAL ELEMENTAL S COLLECTED NON-KEY
07-01-04-B total elemental sulfur collected (1000 tons).

C85 TOTAL ELEMENTAL S SOLD NON-KEY
07-01-04-C total elemental sulfur sold (1000 tons).

C86 TOTAL ELEMENTAL S PAID NON-KEY
07-01-04-D elemental sulfur paid disposal (1000 tons).

C87 TOTAL ELEMENTAL S LAND FILL NON-KEY
07-01-04-E elemental sulfur used in land fill (1000 tons).

C88 TOTAL ELEMENTAL S WATER DISPOSAL NON-KEY
07-01-04-F elemental sulfur used in water disposal (1000 tons).

C89 TOTAL ELEMENTAL S OTHER DISPOSAL NON-KEY
07-01-04-G elemental sulfur disposed by other means (1000 tons).

C94 TOTAL SULFURIC ACID COLLECTED NON-KEY
07-01-05-B total sulfuric acid collected (1000 tons).

C95 TOTAL SULFURIC ACID SOLD NON-KEY
07-01-05-C sulfuric acid sold (1000 tons).

C96 TOTAL SULFURIC ACID PAID DISPOSAL NON-KEY
07-01-05-D sulfuric acid paid disposal (1000 tons).

C97 TOTAL SULFURIC ACID LAND FILL NON-KEY
07-01-05-E sulfuric acid used in land fill (1000 tons).

C98 TOTAL SULFURIC ACID WATER DISPOSAL NON-KEY
07-01-05-F sulfuric acid used in water disposal (1000 tons).

C99 TOTAL SULFURIC ACID OTHER DISPOSAL NON-KEY
07-01-05-G sulfuric acid disposed by other means (1000 tons).

C100 PURITY OF SULFURIC ACID NON-KEY
07-01-05-I purity of sulfuric acid (%).

C101 HEAT RATE NON-KEY
14-01-00-G heat rate (BTU/kilowatt-hr).

C104 TOTAL SO2 COLLECTED NON-KEY
07-01-06-B total SO_2 collected (1000 tons).

C105 TOTAL SO2 SOLD NON-KEY
07-01-06-C SO_2 sold (1000 tons).

C106 TOTAL SO2 PAID DISPOSAL NON-KEY
07-01-06-D SO_2 paid disposal (1000 tons).

C107 TOTAL SO2 LAND FILL NON-KEY
07-01-06-E SO_2 used in land fill (1000 tons).

C108 TOTAL SO2 WATER DISPOSAL NON-KEY
07-01-06-F SO_2 used in water disposal (1000 tons).

C109 TOTAL SO2 OTHER DISPOSAL NON-KEY
07-01-06-G SO_2 disposed by other means (1000 tons).

C114 TOTAL OTHER S COLLECTED NON-KEY
07-01-07-B other sulfur products-total collected (1000 tons).

C115 TOTAL OTHER S SOLD NON-KEY
07-01-07-C other sulfur products sold (1000 tons).

C116 TOTAL OTHER S PAID DISPOSAL NON-KEY
07-01-07-D other sulfur products paid disposal (1000 tons).

C117 TOTAL OTHER S LAND FILL NON-KEY
07-01-07-E other sulfur products used in land fill (1000 tons).

C118 TOTAL OTHER S WATER DISPOSAL NON-KEY
07-01-07-F other sulfur products used in water disposal (1000 tons).

C119 TOTAL OTHER S OTHER DISPOSAL NON-KEY
07-01-07-G other sulfur products disposed by other means (1000 tons).

C124 TOTAL OTHER PRODUCTS COLLECTED NON-KEY
07-01-08-B other products of combustion total collected (1000 tons).

C125 TOTAL OTHER PRODUCTS SOLD NON-KEY
07-01-08-C other products of combustion sold (1000 tons).

C126 TOTAL OTHER PRODUCTS PAID DISPOSAL NON-KEY
07-01-08-D other products of combustion paid disposal (1000 tons).

C127 TOTAL OTHER PRODUCTS LAND FILL NON-KEY
07-01-08-E other products of combustion used in land fill (1000 tons).

C128 TOTAL OTHER PRODUCTS WATER DISPOSAL NON-KEY
07-01-08-F other products of combustion used in water disposal (1000 tons).

C129 TOTAL OTHER PRODUCTS OTHER DISPOSAL NON-KEY
07-01-08-G other products of combustion disposed by other means (1000 tons).

C200 FOOTNOTES
Footnotes repeating group.

C201 FOOTNOTE KEY KEY
Page/sheet/line/col to which footnote applies.

C202 TEXXT NON-KEY
Footnote text.

C203 BOILERNO NON-KEY
Boiler number to which footnote applies.

C300 BOILER FUEL
Boiler fuel information repeating group.

C302 JAN FUEL NON-KEY
05-01-02-B/C/D fuel consumption at boiler for January (1000 tons or 1000 barrels or 1000 Mcf(1)).

C303 FEB FUEL NON-KEY
05-01-03-B/C/D fuel consumption at boiler for February (1000 tons or 1000 barrels or 1000 Mcf).

C304 MAR FUEL NON-KEY
05-01-04-B/C/D fuel consumption at boiler for March (1000 tons or 1000 barrels or 1000 Mcf).

C305 APR FUEL NON-KEY
05-01-05-B/C/D fuel consumption at boiler for April (1000 tons or 1000 barrels or 1000 Mcf).

C306 MAY FUEL NON-KEY
05-01-06-B/C/D fuel consumption at boiler for May (1000 tons or 1000 barrels or 1000 Mcf).

C307 JUNE FUEL NON-KEY
05-01-07-B/C/D fuel consumption at boiler for June (1000 tons or 1000 barrels or 1000 Mcf).

(1) Mcf = 10^3 ft.^{3}

C308 JULY FUEL NON-KEY
05-01-08-B/C/D fuel consumption at boiler for July (1000 tons or 1000 barrels or 1000 Mcf).

C309 AUG FUEL NON-KEY
05-01-09-B/C/D fuel consumption at boiler for August (1000 tons or 1000 barrels or 1000 Mcf).

C310 SEPT FUEL NON-KEY
05-01-10-B/C/D fuel consumption at boiler for September (1000 tons or 1000 barrels or 1000 Mcf).

C311 OCT FUEL NON-KEY
05-01-11-B/C/D fuel consumption at boiler for October (1000 tons or 1000 barrels or 1000 Mcf).

C312 NOV FUEL NON-KEY
05-01-12-B/C/D fuel consumption at boiler for November (1000 tons or 1000 barrels or 1000 Mcf).

C303 DEC FUEL NON-KEY
05-01-13-B/C/D fuel consumption at boiler for December (1000 tons or 1000 barrels or 1000 Mcf).

C314 BOILER FUEL NAME KEY
Fuel name.

C315 TOTAL FUEL NON-KEY
05-01-14-B/C/D total yearly fuel consumption by boiler (1000 tons or 1000 barrels or 1000 Mcf).

C400 STACK INFORMATION
Stack information repeating group.

C401 STACK NUMBER KEY
11-43-B/C/D/E stack number.

C402 INSTALLED COST NON-KEY
11-44-B/C/D/E installed cost of stack ($1000).

C403 STACK HEIGHT NON-KEY
11-45-B/C/D/E stack height above ground (feet).

C404 STACK INSIDE DIAMETER NON-KEY
11-46-B/C/D/E inside diameter of flue at top (inches).

C405 FLUE GAS RATE 100 LOAD NON-KEY
11-47-B/C/D/E flue gas rate at 100% load (cubic feet/min).

C406 FLUE GAS RATE 75 LOAD NON-KEY
11-48-B/C/D/E flue gas rate at 75% load (cubic feet/min).

C407 FLUE GAS RATE 50 LOAD NON-KEY
11-49-B/C/D/E flue gas rate at 50% load (cubic feet/min).

C408 EXIT GAS TEMP 100 LOAD NON-KEY
11-50-B/C/D/E exit gas temperature at 100% load (^{o}F).

C409 EXIT GAS TEMP 75 LOAD NON-KEY
11-51-B/C/D/E exit gas temperature at 75% load (^{o}F).

C410 EXIT GAS TEMP 50 LOAD NON-KEY
11-52-B/C/D/E exit gas temperature at 50% load (^{o}F).

C411 EXIT GAS SPEED 100 LOAD NON-KEY
11-53-B/C/D/E exit gas velocity at 100% load (ft/sec).

C412 EXIT GAS SPEED 75 LOAD NON-KEY
11-54-B/C/D/E exit gas velocity at 75% load (ft/sec).

C413 EXIT GAS SPEED 50 LOAD NON-KEY
11-55-B/C/D/E exit gas velocity at 50% load (ft/sec).

C414 DISTANCE TO NEXT STACK NON-KEY
11-56-B/C/D/E distance to next stack, center to center (ft).

C415 ORIENTATION OF STACK NON-KEY
11-57 orientation of line of stack (degrees clockwise from true north).

C500 FUEL INFORMATION
Fuel information repeating group.

C501 FUEL NAME KEY
Fuel name.

C502 JANTOTUSED NON-KEY
02-01-01-B/G/J January fuel consumption (1000 tons or 1000 barrels or 1000 Mcf).

C503 JANAVGS NON-KEY
02-01-01-D/I average % sulfur of fuel used in January.

C504 JANAVGASH NON-KEY
02-01-01-E average % ash of coal used in January.

C505 JANAVGMOIST NON-KEY
02-01-01-F average % moisture of coal used in January.

C506 FEBTOTUSED NON-KEY
02-01-02-B/G/J February fuel consumption (1000 tons or 1000 barrels or 1000 Mcf).

C507 FEBBTULB NON-KEY
02-01-02-C/H/K heat content of fuel used in February (BTU/lb BTU/gal or BTU/ft^3).

C508 FEBAVGS NON-KEY
02-01-02-D/I average % sulfur of fuel used in February.

C509 FEBAVGASH NON-KEY
02-01-02-E average % ash of coal used in February.

C510 FEBAVGMOIST NON-KEY
02-01-02-F average % moisture of coal used in February.

C511 MARTOTUSED NON-KEY
02-01-03-B/G/J March fuel consumption (1000 tons or 1000 barrels or 1000 Mcf).

C512 MARBTULB NON-KEY
02-01-03-C/H/K heat content of fuel used in March (BTU/lb or BTU/gal or BTU/ft^3).

C513 MARAVGS NON-KEY
02-01-03-D/I average % sulfur of fuel used in March.

C514 MARAVGASH NON-KEY
02-01-03-E average % ash of coal used in March.

C515 MARAVGMOIST NON-KEY
02-01-03-F average % moisture of coal used in March.

C516 APRTOTUSED NON-KEY
02-01-04-B/G/J April fuel consumption (1000 tons or 1000 barrels or 1000 Mcf).

C517 APRBTULB NON-KEY
02-01-04-C/H/K heat content of fuel used in April (BTU/lb or BTU/gal or BTU/ft^3).

C518 APRAVGS NON-KEY
02-01-04-D/I average % sulfur of fuel used in April.

C519 APRAVGASH NON-KEY
02-01-04-E average % ash of coal used in April.

C520 APRAVGMOIST NON-KEY
02-01-04-F average % moisture of coal used in April.

C521 MAYTOTUSED NON-KEY
02-01-05-B/G/J May fuel consumption (1000 tons or 1000 barrels or 1000 Mcf).

C522 MAYBTULB NON-KEY
02-01-05-C/H/K heat content of fuel used in May (BTU/lb or BTU/gal or BTU/ft^3).

C523 MAYAVGS NON-KEY
02-01-05-D/I average % sulfur of fuel used in May.

C524 MAYAVGASH NON-KEY
02-01-05-E average % ash of coal used in May.

C525 MAYAVGMOIST NON-KEY
02-01-05-F average % moisture of coal used in May.

C526 JUNTOTUSED NON-KEY
02-01-06-B/G/J June fuel consumption (1000 tons or 1000 barrels or 1000 Mcf).

C527 JUNBTULB NON-KEY
02-01-06-C/H/K heat content of fuel used in June (BTU/lb or BTU/gal or BTU/ft^3).

C528 JUNAVGS NON-KEY
02-01-06-D/I average % sulfur of fuel used in June.

C529 JUNAVGASH NON-KEY
02-01-06-E average % ash of coal used in June.

C530 JUNAVGMOIST NON-KEY
02-01-06-F average % moisture of coal used in June.

C531 JULTOTUSED NON-KEY
02-01-07-B/G/J July fuel consumption (1000 tons or 1000 barrels or 1000 Mcf).

C532 JULBTULB NON-KEY
02-01-07-C/H/K heat content of fuel used in July (BTU/lb or BTU/gal or BTU/ft^3).

C533 JULAVGS NON-KEY
02-01-07-D/I average % sulfur of fuel used in July.

C534 JULAVGASH NON-KEY
02-01-07-E average % ash of coal used in July.

C535 JULAVGMOIST NON-KEY
02-01-07-F average % moisture of coal used in July.

C536 AUGTOTUSED NON-KEY
02-01-08-B/G/J August fuel consumption (1000 tons or 1000 barrels or 1000 Mcf).

C537 AUGBTULB NON-KEY
02-01-08-C/H/K heat content of fuel used in August (BTU/lb or BTU/gal or BTU/ft^3).

C538 AUGAVGS NON-KEY
02-01-08-D/I average % sulfur of fuel used in August.

C539 AUGAVGASH NON-KEY
02-01-08-E average % ash of coal used in August.

C540 AUGAVGMOIST NON-KEY
02-01-08-F average % moisture of coal used in August.

C541 SEPTOTUSED NON-KEY
02-01-09-B/G/J September fuel consumption (1000 tons or 1000 barrels or 1000 Mcf.)

C542 SEPBTULB NON-KEY
02-01-09-C/H/K heat content of fuel used in September (BTU/lb or BTU/gal or BTU/ft^3).

C543 SEPAVGS NON-KEY
02-01-09-D/I average % sulfur of fuel used in September.

C544 SEPAVGASH NON-KEY
02-01-09-E average % ash of coal used in September.

C545 SEPAVGMOIST NON-KEY
02-01-09-F average % moisture of coal used in September.

C546 OCTTOTUSED NON-KEY
02-01-10-B/G/J October fuel consumption (1000 tons or 1000 barrels or 1000 Mcf).

C547 OCTBTULB NON-KEY
02-01-10-C/H/K heat content of fuel used in October (BTU/lb or BTU/gal or BTU/ft^3).

C548 OCTAVGS NON-KEY
02-01-10-D/I average % sulfur of fuel used in October.

C549 OCTAVGASH NON-KEY
02-01-10-E average % ash of coal used in October.

C550 OCTAVGMOIST NON-KEY
02-01-10-F average % moisture of coal used in October.

C551 NOVTOTUSED NON-KEY
02-01-11-B/G/J November fuel consumption (1000 tons or 1000 barrels or 1000 Mcf).

C552 NOVBTULB NON-KEY
02-01-11-C/H/K heat content of fuel used in November (BTU/lb or BTU/gal or BTU/ft^3).

C553 NOVAVGS NON-KEY
02-01-11-D/I average % sulfur of fuel used in November.

C554 NOVAVGASH NON-KEY
02-01-11-E average % ash of coal used in November.

C555 NOVAVGMOIST NON-KEY
02-01-11-F average % moisture of coal used in November.

C556 DECTOTUSED NON-KEY
02-01-12-B/G/J December fuel consumption (1000 tons or 1000 barrel or 1000 Mcf.)

C557 DECBTULB NON-KEY
02-01-12-C/H/K heat content of fuel used in December (BTU/lb or BTU/gal or BTU/ft^3).

C558 DECAVGS NON-KEY
02-01-12-D/I average % sulfur of fuel used in December.

C559 DECAVGASH NON-KEY
02-01-12-E average % ash of coal used in December.

C560 DECAVGMOIST NON-KEY
02-01-12-F average % moisture of coal used in December.

C580 YEARTOTUSED NON-KEY
02-01-13-B/G/J total fuel consumption for year (1000 tons or 1000 barrels or 1000 Mcf.)

C581 YEARBTULB NON-KEY
02-01-13-C/H/K average heat content of fuel used for year (BTU/lb or BTU/gal or BTU/ft^3).

C582 YEARAVGS NON-KEY
01-01-13-D/I average % sulfur of fuel used for year.

C583 YEARAVGASH NON-KEY
02-01-13-E average % ash of coal used for year.

C584 YEARAVGMOIST NON-KEY
02-01-13-F average % moisture of coal used for year.

C592 JANBTULB NON-KEY
02-01-01-C/H/K heat content of fuel used in January (BTU/lb or BTU/gal or BTU/ft^3).

C600 PROJECTED FUEL
Projected fuel information repeating group (available after 1974).

C601 PROJ FUEL NAME KEY
Projected fuel name.

C602 PROJ FUEL QUANT NON-KEY
22-01-01/05/10/13/19-B/C/D proj fuel quant (1000 tons or 1000 barrels or 1000 Mcf).

C603 PROJ HEAT VALUE NON-KEY
22-01-02/06/10/13/20-B/C/D proj fuel avg htg val (BTU/lb or BTU/gal or BTU/ft^3).

C604 PROJ S CONTENT NON-KEY
22-01-03/07/14-B/C/D average % sulfur of projected fuel.

C605 PROJ ORIGIN NON-KEY
22-01-04-B/C/D projected fuel consumption from source No. 1 as Bureau of Mines region No./quantity in 1000 tons.

C606 PROJ DOMESTIC NON-KEY
22-01-12, 15, 19-B/C/D if oil, percent domestic source. If gas, 1000 Mcf firm.

C607 PROJ IMPORTED NON-KEY
22-01-13, 16, 20-B/C/D if oil, percent imported source. If gas, 1000 Mcf interruptable.

C608 PROJ ORG2 NON-KEY
22-01-05-B/C/D projected fuel consumption from source No. 2 as Bureau of Mines region No./quantity in 1000 tons.

C609 PROJ ORG3 NON-KEY
22-01-06-B/C/D projected fuel consumption from source No. 3 as Bureau of Mines region No./quantity in 1000 tons.

C610 TIME INTERVAL KEY
Time interval of projection (Curr/FUT5/FUT10).

C611 PROJ ORG4 NON-KEY
22-01-07-B/C/D projected fuel consumption from source No. 4 as Bureau of Mines region No./quantity in 1000 tons.

C612 PROJ ORG NON-KEY
22-01-08-B/C/D projected fuel consumption from all other sources as Bureau of Mines region no./quantity in 1000 tons.

C700 FUEL SOURCE
Fuel source repeating group.

C701 SOURCENAME NON-KEY
03-01-14-22-B/D source or supplier of fuel.

C702 SOURCEPORT NON-KEY
03-01-14-22-E refinery or port of entry (for oil only).

C703 SOURCEQUANT NON-KEY
03-01-14-22-F/C quantity of fuel from source (1000 tons or 1000 barrels).

C800 BOILER INFORMATION
Boiler information repeating group.

C801 BOILER NUMBER KEY
05-01-01-B boiler number.

C802 TOTAL HR OPERATION NON-KEY
05-01-19-B total hours of boiler operation during year.

C803 CAPACITY FACTOR NON-KEY
05-01-20-B boiler capacity factor, average for year (%).

C804 WINTER PEAK HIGH NON-KEY
05-01-16-B code for winter peak week, average for consecutive 4 hrs of highest output, weekdays (see Table 7).

C805 WINTER PEAK LOW NON-KEY
05-01-16-C boiler operation code for winter peak week, average for consecutive 4 hrs of lowest output, weekdays (see Table 7).

C806 WINTER PEAK HIGH1 NON-KEY
05-01-16-D boiler operation code for winter peak week, average for consecutive 4 hrs of highest output, weekends (see Table 7).

C807 WINTER PEAK LOW1 NON-KEY
05-01-16-E boiler operation code for winter peak week, average for consecutive 4 hrs of lowest output, weekends (see Table 7).

C809 SUMMER PEAK HIGH NON-KEY
05-01-17-B boiler operation code for summer peak week, average for consecutive 4 hrs of highest output, weekdays (see Table 7).

C810 SUMMER PEAK LOW NON-KEY
05-01-17-C boiler operation code for summer peak week, average for consecutive 4 hrs of lowest output, weekdays (see Table 7).

C811 SUMMER PEAK HIGH1 NON-KEY
05-01-17-D boiler operation code for summer peak week, average for consecutive 4 hrs of highest output, weekends (see Table 7).

C812 SUMMER PEAK LOW1 NON-KEY
05-01-17-E boiler operation code for summer peak week, average for consecutive 4 hrs of lowest output, weekends (see Table 7).

C816 LOWEST WEEK HIGH NON-KEY
05-01-18-B boiler operation code for lowest power period week, average for consecutive 4 hrs of highest output, weekdays (see Table 7).

C817 LOWEST WEEK LOW NON-KEY
05-01-18-C boiler operation code for lowest power period week, average for consecutive 4 hrs of lowest output, weekdays (see Table 7).

C818 LOWEST WEEK HIGH1 NON-KEY
05-01-18-D boiler operation code for lowest power period week, average for consecutive 4 hrs of highest output, weekends (see Table 7).

C819 LOWEST WEEK LOW1 NON-KEY
05-01-18-E boiler operation code for lowest power period week, average for consecutive 4 hrs of lowest output, weekends (see Table 7).

C821 MECH SEP TEST EFF NON-KEY
06-01-22-B/C/D/E mechanical separators-test efficiency.

C822 MECH SEP TEST DATE NON-KEY
06-01-23-B/C/D/E/ mechanical separators-date of test (year/month/day).

C823 MECH SEP EST EFF NON-KEY
06-01-24-B/C/D/E estimated efficiency at annual operating factor (if no test during year).

C824 ELEC SEP TYPE NON-KEY
06-01-25-B/C/D/E electrostatic or combination precipitators type (E=electrostatic, C=combination).

C825 ELEC SEP HOURS IN OP NON-KEY
06-01-26-B/C/D/E total hours for year during which all electrical bus sections are energized and boiler is operating.

C826 ELEC SEP TEST EFF NON-KEY
06-01-27-B/C/D/E tested efficiency of electrostatic or combination precipitators.

C827 ELEC SEP TEST DATE NON-KEY
06-01-28-B/C/D/E date of test of electrostatic or combination precipitators (year/month/day).

C828 HOURS PRECIP OUT NON-KEY
06-01-29-B/C/D/E number of hours for year when electrostatic or combination precipitator is not fully operational and boiler is operating.

C830 ESTM EFF PRECIP OUT NON-KEY
06-01-30-B/C/D/E estimated efficiency of electrostatic or combination precipitator when boiler is operational but precipitator is not fully operational.

C831 ESTM EFF PRECIP ANNUAL NON-KEY
06-01-31-B/C/D/E estimated efficiency of electrostatic or combination precipitator factor (if no test performed during year).

C832 DESULF SYS TEST EFF NON-KEY
06-01-33-B/C/D/E desulfurization system tested efficiency.

C833 DESULF SYS EST EFF NON-KEY
06-01-35-B/C/D/E desulfurization system estimated efficiency at annual operating factor (if not tested during year).

C834 OTHER GAS CLEANER TYPE HOURS NON-KEY
06-01-36-B/C/D/E hours in service for year of other flue gas cleaning system.

C835 SERVICE STACK NUMBER NON-KEY
09-01-02-B/C/D/E stack ID of stack that serves boiler.

C836 GENERATOR NUMBER NON-KEY
09-01-03-B/C/D/E related generator number/s.

C837 BOILER MANUFACTURER NON-KEY
Boiler manufacturer code (see Table 3).

C838 YEAR INSTALLED NON-KEY
09-01-05-B/C/D/E year boiler placed in service.

C839 GENERATING CAPACITY NON-KEY
09-01-06-B/C/D/E associated turbo-generating capacity (megawatts).

C840 HIGHEST STEAM CAPACITY NON-KEY
09-01-07-B/C/D/E maximum continuous steam capacity (1000 lbs/hr).

C841 DESULF SYS HOURS NON-KEY
06-01-32-B/C/D/E hours of service for year of desulfurization system.

C842 BOILER EFF 100 LOAD NON-KEY
09-01-11-B/C/D/E % boiler efficiency at 100% load.

C843 BOILER EFF 75 LOAD NON-KEY
09-01-12-B/C/D/E % boiler efficiency at 75% load.

C844 BOILER EFF 50 LOAD NON-KEY
09-01-13-B/C/D/E % boiler efficiency at 50% load.

C845 TOTAL AIR FLOW NON-KEY
09-01-14-B/C/D/E total air flow at 100% load including excess air (std cubic ft/min)

C846 EXCESS AIR NON-KEY
09-01-15-B/C/D/E % excess air used at 100% load.

C847 WET-DRY BOTTOM NON-KEY
09-01-16-B/C/D/E code for wet or dry bottom (for coal only) (WET, DRY).

C848 FLYASH REINJECTION NON-KEY
09-01-17-B/C/D/E flyash reinjection code (YES or NO).

C849 TYPE OF FIRING NON-KEY
09-01-18-B/C/D/E type of firing code (see Table 4).

C850 GAS CLEAN TYPE NON-KEY
10-01-19-B/C/D/E flue gas mechanical collector type code (see Table 5).

C851 GAS CLEAN EFF NON-KEY
10-01-20-B/C/D/E flue gas mechanical collector design efficiency (%).

C852 GAS CLEAN MASS RATE NON-KEY
10-01-21-B/C/D/E flue gas mechanical collector mass emission rate (lbs/hour).

C853 GAS CLEAN YEAR NON-KEY
10-01-22-B/C/D/E flue gas mechanical collector year placed in service.

C854 GAS CLEAN COST NON-KEY
10-01-23-B/C/D/E installed cost of flue gas mechanical collector ($1000).

C855 GAS CLEAN MANUFACTURER NON-KEY
10-01-24-B/C/D/E flue gas mechanical collector manufacturer code (see Table 6).

C856 ELECT PRECIP TYPE NON-KEY
10-01-25-B/C/D/E electrostatic and combination precipitators type code (E=electrostatic, C=combination).

C857 ELECT PRECIP EFF NON-KEY
10-01-26-B/C/D/E electrostatic and combination precipitators design efficiency (%).

C858 ELECT PRECIP MASS NON-KEY
10-01-27-B/C/D/E electrostatic and combination precipitators mass emission rate (lbs/hr).

C859 ELECT PRECIP YEAR NON-KEY
10-01-28-B/C/D/E electrostatic and combination precipitators year placed in service.

C860 ELECT PRECIP COST NON-KEY
10-01-29-B/C/D/E installed cost of electrostatic and combination precipitators ($1000).

C861 ELECT PRECIP MANUFACTURER NON-KEY
10-01-30-B/C/D/E electrostatic and combination precipitators manufacturer code (see Table 6).

C862 DESIGN COAL CONSUMP NON-KEY
09-01-08-B/C/D/E design fuel consumption 100% rating-coal (tons/hour).

C863 DESIGN OIL CONSUMP NON-KEY
09-01-09-B/C/D/E design fuel consumption 100% rating-residual oil (barrels/hour).

C864 DESIGN GAS CONSUMP NON-KEY
09-01-10-B/C/D/E design fuel consumption 100% rating gas (1000 cubic feet/hr).

C865 DESULF EQUIP TYPE NON-KEY
10-01-31-B/C/D/E desulfurization system type (specified in footnote).

C866 DESULF EQUIP EFF NON-KEY
10-01-32-B/C/D/E desulfurization system design efficiency (%).

C867 DESULF EQUIP MASS NON-KEY
10-01-33-B/C/D/E desulfurization system mass emission rate (lbs/hr).

C868 DESULF EQUIP YEAR NON-KEY
10-01-34-B/C/D/E desulfurization system year placed in service.

C869 DESULF EQUIP COST NON-KEY
10-01-35-B/C/D/E desulfurization system installed cost ($1000).

C870 DESULF EQUIP MANUFACTURER NON-KEY
10-01-36-B/C/D/E desulfurization system manufacturer (specified in footnote).

C871 OTHER EQUIP NON-KEY
10-01-37-B/C/D/E other flue gas cleaning equipment type (specified in footnote).

C872 OTHER EQUIP EFF NON-KEY
10-01-38-B/C/D/E other flue gas cleaning equipment efficiency (%).

C873 OTHER EQUIP MASS NON-KEY
10-01-39-B/C/D/E other flue gas cleaning equipment mass emissions rate (lbs/year).

C874 OTHER EQUIP YEAR NON-KEY
10-01-40-B/C/D/E other flue gas cleaning equipment year placed in service.

C875 OTHER EQUIP COST NON-KEY
10-01-41-B/C/D/E other flue gas cleaning equipment installed cost ($1000).

C876 OTHER EQUIP MANUFACTURER NON-KEY
10-01-42-B/C/D/E other flue gas cleaning equipment manufacurer (specified in footnote).

C880 BOILER PART EMISSIONS COAL NON-KEY
05-01-21-B boiler particulate emissions from coal calculated by FPC (tons/yr).

C881 BOILER PART EMISSIONS OIL NON-KEY
05-01-21-C boiler particulate emissions from oil calculated by FPC (tons/yr).

C882 BOILER SO2 EMISSIONS COAL NON-KEY
05-01-22-B boiler SO_x emissions from coal calculated by FPC (tons SO_2/yr).

C883 BOILER SO2 EMISSIONS OIL NON-KEY
05-01-22-C boiler SO_x emissions from oil calculated by FPC (tons SO_2/yr).

C884 BOILER NOX EMISSIONS COAL NON-KEY
05-01-23-B boiler NO_x emissions from coal calculated by FPC (tons NO_2/yr.)

C885 BOILER NOX EMISSIONS OIL NON-KEY
05-01-23-C boiler NO_x emissions from oil calculated by FPC (tons NO_2/yr.)

C886 BOILER NOX EMISSIONS GAS NON-KEY
05-01-23-D boiler NO_x emissions from gas calculated by FPC (tons NO_2/yr.)

C890 DESULF SYS TEST DATE NON-KEY
06-01-34-B/C/D/E desulfurization system date of test (year/month/day).

II. Area Source Emissions Inventory

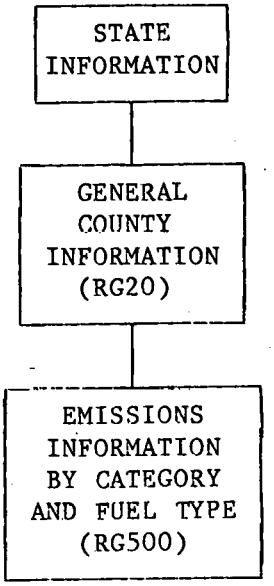
The current area source emissions inventory data consists of data obtained from NEDS. No corrections have been applied to it; no additional data from other agencies have been included.

The area source data are developed mainly by EPA, but may be supplemented by data voluntarily submitted by state agencies. EPA derives area source activity levels primarily from related information published by other Federal agencies, supplemented by special data compiled for the purpose of developing NEDS area source inventories. Published data such as fuel use by state, motor vehicle miles of travel by state and county and forest fire acres burned by state are used with related data such as employment, population, and miscellaneous geographic or economic data available on a county-by-county basis to derive annual estimates of the activity levels for each of the NEDS area source categories. The activity levels derived are adjusted to account for point source activity (such as fuel use by point sources) so that the area source data reflect only the activity levels (and resulting calculated emissions) that are not accounted for by point sources.

The area source emission estimates are calculated for each source category by the use of emission factors developed by EPA. For many categories the same emission factors are used for all counties. However, for some source categories, state- or county- specific emission factors have been developed which consider local variables that affect calculation of emissions. These more specific emission factors are used in NEDS calculations for all highway motor vehicle and fugitive dust categories and for selected other categories in a few counties where data are available to develop more applicable emission factors than the national emission factors. Hand-calculated emissions that

may be more accurate than any simple emission factor calculation may have been entered for some source categories in some specific counties.

The area source emissions inventory consists of one logical data base design. Figure 3 presents the logical data base definition for the AREAXX79 data bases. The data has been loaded into two physically distinct data bases where XX refers to the geographic area of the U.S. included in each data base.



AREAXX79 - Logical Data Base Design

Figure 3

AREAXX79

DATA BASE DEFINITION

```
SYSTEM RELEASE NUMBER       2.60F
DATA BASE NAME IS AREAXX79
DEFINITION NUMBER      1
DATA BASE CYCLE       67
   1*  STATENEDS (INTEGER NUMBER 99)
  40*  STATEFIPS (NON-KEY INTEGER NUMBER 99)
  41*  STATENAME (NON-KEY NAME X(6))
  20*  COUNTY (RG)
     2*  CTNEDS (INTEGER NUMBER 9999 IN 20)
     5*  LATCNTRD (NON-KEY DECIMAL NUMBER 999.99 IN 20)
     6*  LONCNTRD (NON-KEY DECIMAL NUMBER 999.99 IN 20)
    21*  CTNAME (NON-KEY NAME X(8) IN 20)
    22*  CTFIPS (NON-KEY INTEGER NUMBER 999 IN 20)
    23*  CTPOP (NON-KEY INTEGER NUMBER 9999 IN 20)
    24*  DENSCD (NON-KEY NAME X IN 20)
    25*  CTAREA (NON-KEY INTEGER NUMBER 9(6) IN 20)
    31*  AQCRCODE (INTEGER NUMBER 999 IN 20)
    32*  YEAR (NON-KEY INTEGER NUMBER 99 IN 20)
    43*  PARTEMISEST (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    44*  SO2EMISEST (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    45*  NOXEMISEST (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    46*  HCEMISEST (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    47*  COEMISEST (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    51*  ANTHRSULCONT (NON-KEY DECIMAL NUMBER 9.9 IN 20)
    52*  BITUMSULCONT (NON-KEY DECIMAL NUMBER 9.9 IN 20)
    53*  DISOISULCONT (NON-KEY DECIMAL NUMBER 9.9 IN 20)
    54*  RESOISULCONT (NON-KEY DECIMAL NUMBER 9.9 IN 20)
    61*  ANTHRASHCONT (NON-KEY DECIMAL NUMBER 99.9 IN 20)
    62*  BITUMASHCONT (NON-KEY DECIMAL NUMBER 99.9 IN 20)
    71*  ANTHRRESFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    72*  BITUMRESFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    73*  DISTLRESFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    74*  RESDNRESFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    75*  NATGSRESFUEL (NON-KEY DECIMAL NUMBER 9(5).999 IN 20)
    76*  WOODRESFUEL (NON-KEY DECIMAL NUMBER 9(10).9999 IN 20)
    81*  ANTHRCIFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    82*  BITUMCIFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    83*  DISOICIFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    84*  RESOICIFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    85*  NATGSCIFUEL (NON-KEY DECIMAL NUMBER 9(5).999 IN 20)
    86*  WOODCIFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    91*  ANTHRINDFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    92*  BITUMINDFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    93*  COKEINDFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    94*  DISOIINDFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    95*  RESOIINDFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    96*  NATGSINDFUEL (NON-KEY DECIMAL NUMBER 9(5).999 IN 20)
    97*  WOODINDFUEL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
    98*  PROGSINDFUEL (NON-KEY DECIMAL NUMBER 9(5).999 IN 20)
   101*  RESONSTINC (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
   102*  INDONSTINC (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
   103*  CIONSTINC (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
   111*  RESOPENBRN (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
   112*  INDOPENBRN (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
   113*  CIOPENBRN (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
   121*  GASFLLTVEH (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
   122*  GASFLHVVEH (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
   123*  GASFLOFFHW (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
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131*  DIESFLHVVE (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
132*  DIESFLOFFH (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
133*  DIESFLRAIL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
141*  MILAIRCRFT (NON-KEY INTEGER NUMBER 9(8) IN 20)
142*  CIVAIRCRFT (NON-KEY INTEGER NUMBER 9(8) IN 20)
143*  CMLAIRCRFT (NON-KEY INTEGER NUMBER 9(8) IN 20)
151*  ANTHRVESFL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
152*  DIEOIVESFL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
153*  RESOIVESFL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
154*  GASLNVESFL (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
161*  EVAPSOLPURCH (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
171*  GASMRKTD (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
181*  LIMACCMILES (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
182*  RURLRDMILES (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
183*  SUBRDMILES (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
184*  URBNRDMILES (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
191*  DIRTRDTRAV (NON-KEY DECIMAL NUMBER 9(10).999 IN 20)
192*  DIRTAIRLTO (NON-KEY INTEGER NUMBER 9(5) IN 20)
201*  CONSTRUCAREA (NON-KEY DECIMAL NUMBER 9(5).999 IN 20)
202*  WINDEROSAREA (NON-KEY DECIMAL NUMBER 9(5).999 IN 20)
203*  LANDTILLAREA (NON-KEY DECIMAL NUMBER 9(5).999 IN 20)
204*  FORFIREAREA (NON-KEY DECIMAL NUMBER 9(5).999 IN 20)
205*  FORFIREQUAN (NON-KEY DECIMAL NUMBER 9999.999 IN 20)
206*  MANGBRNAREA (NON-KEY DECIMAL NUMBER 9(5).999 IN 20)
207*  MANGBRNQUAN (NON-KEY DECIMAL NUMBER 9999.999 IN 20)
208*  AGRIBRNAREA (NON-KEY DECIMAL NUMBER 9(5).999 IN 20)
209*  AGRIBRNQUAN (NON-KEY DECIMAL NUMBER 9999.999 IN 20)
210*  FROSTCONTHTRS (NON-KEY INTEGER NUMBER 9999 IN 20)
211*  FROSTCONTDAYS (NON-KEY INTEGER NUMBER 999 IN 20)
212*  STRUCTFIRES (NON-KEY INTEGER NUMBER 9(5) IN 20)
213*  NUMAUTOS (NON-KEY INTEGER NUMBER 9(5) IN 20)
214*  NUMTRKLT (NON-KEY INTEGER NUMBER 9(5) IN 20)
215*  NUMTRKHVY (NON-KEY INTEGER NUMBER 9(5) IN 20)
301*  COMMENT (NON-KEY NAME X(10) IN 20)
500*  CATEGORY (RG IN 20)
  501*  CATFUELNAME (NAME X(10) IN 500)
  502*  CATEGORYNAME (NAME X(10) IN 500)
  503*  CATTAP (NON-KEY DECIMAL NUMBER 9(10).999 IN 500)
  504*  CATSO2 (NON-KEY DECIMAL NUMBER 9(10).999 IN 500)
  505*  CATNOX (NON-KEY DECIMAL NUMBER 9(10).999 IN 500)
  506*  CATHC (NON-KEY DECIMAL NUMBER 9(10).999 IN 500)
  507*  CATCO (NON-KEY DECIMAL NUMBER 9(10).999 IN 500)
  508*  CATTSPFLG (NON-KEY INTEGER NUMBER 9 IN 500)
  509*  CATSO2FLG (NON-KEY INTEGER NUMBER 9 IN 500)
  510*  CATNOXFLG (NON-KEY INTEGER NUMBER 9 IN 500)
  511*  CATHCFLG (NON-KEY INTEGER NUMBER 9 IN 500)
  512*  CATCOFLG (NON-KEY INTEGER NUMBER 9 IN 500)
  513*  CATYR (NON-KEY INTEGER NUMBER 99 IN 500)
  514*  CATCOMMENT (NON-KEY NAME X(10) IN 500)
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AREAXX79

LIST OF DATA BASE COMPONENT NUMBERS (IN ASCENDING ORDER)
COMPONENT NAMES, DESCRIPTIONS, KEY OR NOT

(FOR A DETAILED DESCRIPTION OF THE NEDS DATA PLEASE REFER TO "AEROS Manual Series Volumes I-V," EPA Publications)

C1 STATENEDS KEY
SAROAD state code. (see Table 1).

C2 CTNEDS KEY
SAROAD county code. (Reference: SAROAD Station Coding Manual for Aerometric Sampling Networks, publication number APTD-0907, EPA).

C5 LATCNTRD NON-KEY
Latitude of the county centroid. (decimal equivalent of degrees, minutes).

C6 LONCNTRD NON-KEY
Longitude of the county centroid. (decimal equivalent of degrees, minutes).

C20 COUNTY KEY
RG containing particular area source information.

C21 CTNAME NON-KEY
County name.

C22 CTFIPS NON-KEY
FIPS county code. (Reference: Counties μ County Equivalents of the States of the United States, NTIS publication number NBS-FIPS-PUB-6-2).

C23 CTPOP NON-KEY
County population (1000 persons).

C24 DENSCD NON-KEY
Population distribution code. (see Table 8).

C25 CTAREA NON-KEY
Area of county (square kilometers.)

C31 AQCRCODE KEY
Air quality control region (AQCR) where county is located. (Reference: Federal Air Quality Control Regions, publication number AP-102, EPA[1]).

C32 YEAR NON-KEY
Year of data.

[1]EPA = Environmental Protection Agency.

C40 STATEFIPS NON-KEY
FIPS state code. (see Table 1).

C41 STATENAME NON-KEY
State name.

C43 LATPOPCNTRD NON-KEY
Latitude of population centroid of county (decimal equivalent of degrees, minutes) (1).

C44 LONPOPCNTRD NON-KEY
Longitude of population centroid of county (decimal equivalent of degrees, minutes)(1).

C45 NOXEMISEST NON-KEY
Dummy component.

C46 HCEMISEST NON-KEY
Dummy component.

C47 COEMISEST NON-KEY
Dummy component.

C51 ANTHRSULCONT NON-KEY
% sulfur content in anthracite coal.

C52 BITUMSULCONT NON-KEY
% sulfur content in bituminous coal.

C53 DISOISULCONT NON-KEY
% sulfur content in diesel oil.

C54 RESOISULCONT NON-KEY
% sulfur content in residual oil.

C61 ANTHRASHCONT NON-KEY
% ash content of anthracite coal.

C62 BITUMASHCONT NON-KEY
% ash content of bituminous coal.

C71 ANTHRRESFUEL NON-KEY
Anthracite coal used for residential fuel (tonnes*/year).

C72 BITUMRESFUEL NON-KEY
Bituminous coal used for residential fuel (tonnes/year).

C73 DISTLRESFUEL NON-KEY
Distillate oil used for residential fuel (10000 liters/year).

C74 RESDNRESFUEL NON-KEY
Residual oil used for residential fuel (10000 liters/year).

*tonnes=metric tons (10^3 kgs).
(1) = currently not implemented in AREAXX79.

C75 NATGSRESFUEL NON-KEY
Natural gas used for residential fuel (10^6 cu. meters/year).

C76 WOODRESFUEL NON-KEY
Wood used for residential fuel (tonnes/year).

C81 ANTHRCIFUEL NON-KEY
Anthracite coal used for commercial/institution fuel (tonnes/year).

C82 BITUMCIFUEL NON-KEY
Bituminous coal used for commercial/institution fuel (tonnes/year).

C83 DISOICIFUEL NON-KEY
Distillate oil used for commercial/institution fuel (10000 liters/year).

C84 RESOICIFUEL NON-KEY
Residual oil used for commercial/institution fuel (10000 liters/year).

C85 NATGSCIFUEL NON-KEY
Natural gas used for commercial/institution fuel (10^7 cu. meters/year).

C86 WOODCIFUEL NON-KEY
Wood used for commercial/institution fuel (tonnes/year).

C91 ANTHRINDFUEL NON-KEY
Anthracite coal used for industrial fuel (tonnes/year).

C92 BITUMINDFUEL NON-KEY
Bituminous coal used for industrial fuel (tonnes/year).

C93 COKEINDFUEL NON-KEY
Coke used for industrial fuel (tonnes/year).

C94 DISOIINFUEL NON-KEY
Distillate oil used for industrial fuel (10000 liters/year).

C95 RESOIINDFUEL NON-KEY
Residual oil used for industrial fuel (10000 liters/year).

C96 NATGSINDFUEL NON-KEY
Natural gas used for industrial fuel (10^6 cu. meters/year).

C97 WOODINDFUEL NON-KEY
Wood used for industrial fuel (1000 kg/year).

C98 PROGSINDFUEL NON-KEY
Process gas used for industrial fuel (10^6 cu. meters/year).

C101 RESONSTINC NON-KEY
Residential on site incineration (tonnes/year).

C102 INDONSTINC NON-KEY
Industrial on site incineration (tonnes/year).

C103 CIONSTINC NON-KEY
Commercial/institution on site incineration (tonnes/year).

C111 RESOPENBRN NON-KEY
Residential open burning (tonnes/year).

C112 INDOPENBRN NON-KEY
Industrial open burning (tonnes/year).

C113 CIOPENBRN NON-KEY
Commercial/institution open burning (tonnes/year).

C121 GASFLLTVEH NON-KEY
Gasoline used for light vehicles (10000 liters/year).

C122 GASFLHVVEH NON-KEY
Gasoline used for heavy vehicles (10000 liters/year).

C123 GASFLOFFHW NON-KEY
Gasoline for off highway use (10000 liters/year).

C131 DIESFLHVVE NON-KEY
Diesel fuel used for heavy vehicles (10000 liters/year).

C132 DIESFLOFFH NON-KEY
Diesel fuel for off highway use (10000 liters/year).

C133 DIESFLRAIL NON-KEY
Diesel fuel used for railway locomotives (10000 liters/year).

C141 MILAIRCRFT NON-KEY
Landing-takeoff cycles of military aircraft (per year).

C142 CIVAIRCRFT NON-KEY
Landing-takeoff cycles of civilian aircraft (per year).

C143 CMLAIRCRFT NON-KEY
Landing-takeoff cycles of commercial aircraft (per year).

C151 ANTHRVESFL NON-KEY
Anthracite coal fuel used by water vessels (tonnes/year).

C152 DIEOIVESFL NON-KEY
Diesel fuel used by water vessels (10000 liters/year).

C153 RESOIVESFL NON-KEY
Residual oil used by water vessels (10000 liters/year).

C154 GASLNVESFUEL NON-KEY
Gasoline used by water vessels (10000 liters/year).

C161 EVAPSOLPURCH NON-KEY
Solvent purchased evaporated fuel (1000 kg/year).

C171 GASMRKTD NON-KEY
Gasoline marketed (10000 liters/year).

C181 LIMACCMILES NON-KEY
Measured vehicle kilometers on limited access roads (10000 km/year).

C182 RURLRDMILES NON-KEY
Measured vehicle kilometers on rural roads (10000 km/year).

C183 SUBRDMILES NON-KEY
Measured vehicle kilometers on surburban roads (10000 km/year).

C184 URBNDMILES NON-KEY
Measured vehicle kilometers on urban roads (10000 km/year).

C191 DIRTRDTRAV NON-KEY
Dirt road travel (10000 km/year).

C192 DIRTAIRLTO NON-KEY
Dirt airfield landing-takeoff cycles (per year).

C201 CONSTRUCAREA NON-KEY
Construction (1000 acres/year under construction).

C202 WINDEROSAREA NON-KEY
Miscellaneous wind erosion (1000 acres/year).

C203 LANDTILLAREA NON-KEY
Landtilling (1000 acreas/yr).

C204 FORFIREAREA NON-KEY
Forest fires area (1000 acres burned/year).

C205 FORFIREQUAN NON-KEY
Materials burned by forest fires (1000 kg material/acre).

C206 MANGBRNAREA NON-KEY
Managed burning area (1000 acres burned/year).

C207 MANGBRNQUAN NON-KEY
Material burned by managed burning (tonnes material/acre).

C208 AGRIBRNAREA NON-KEY
Agricultural burning area (1000 acres/year).

C209 AGRIBRNQUAN NON-KEY
Material burned by agricultural burning (tonnes/year).

C210 FROSTCONTHTRS NON-KEY
Number of operating frost control orchard heaters.

C211 FROSTCONTDAYS NON-KEY
Frost control days (days/year heaters were fired).

C212 STRUCTFIRES NON-KEY
Structural fires (number/year).

C213 NUMAUTOS NON-KEY
Automobiles (number/year).

C214 NUMTRKLT NON-KEY
Light trucks - <6000 lbs (number/year).

C215 NUMTRKHVY NON-KEY
Heavy trucks - 6000-10000 lbs (number/year).

C301 COMMENT NON-KEY
Area sources comment.

C500 CATEGORY NON-KEY
RG with emissions information for each activity and fuel.

C501 CATFUELNAME KEY
Name of fuel.

C502 CATEGORYNAME KEY
Name of activity.

C503 CATTSP NON-KEY
Total emissions of particulates for given activity and fuel (tonnes/year).

C504 CATSO2 NON-KEY
Total emissions of sulfur oxides for given activity and fuel (tonnes of SO_2/year).

C505 CATNOX NON-KEY
Total emissions of nitrogen oxides for given activity and fuel (tonnes of NO_2/year).

C506 CATHC NON-KEY
Total emissions of hydrocarbons for given activity and fuel (tonnes of CH_4/year).

C507 CATCO NON-KEY
Total emissions of carbon monoxide for given activity and fuel (tonnes/year).

C508 CATTSPFLG NON-KEY
Total emissions of particulates flag; 1= hand calculated; 2= computer calculated.

C509 CATSO2FLG NON-KEY
Total emissions of sulfur oxides flag; 1= hand calculated, 2= computer calculated.

C510 CATNOXFLG NON-KEY

Total emissions of nitrogen oxides flag; 1= hand calculated, 2= computer calculated.

C511 CATHCFLG NON-KEY

Total emissions of hydrocarbons flag; 1= hand calculated, 2= computer calculated.

C512 CATCOFLG NON-KEY

Total emissions of carbon monoxide flag; 1= hand calculated, 2= computer calculated.

C513 CATYR NON-KEY

Year of record.

C514 CATCOMMENT NON-KEY

Comments pertaining to activity and fuel.

AVAILABLE DATA BASES

Currently available data bases are as follows:

1. POINTNE79

   Point source emissions data base covering the following states:

Connecticut	New York
Delaware	Pennsylvania
Maine	Rhode Island
Maryland	Vermont
Massachusetts	Virginia
New Hampshire	Washington, D.C.
New Jersey	

2. POINTMW79

   Point source emissions data base covering the following states:

Illinois	Ohio
Indiana	Tennessee
Kentucky	West Virginia
Michigan	Wisconsin

3. POINTSE79

   Point source emissions data base covering the following states:

Alabama	North Carolina
Florida	Puerto Rico
Georgia	South Carolina
Mississippi	

4. POINTPS79

   Point source emissions data base covering the following states:

Arkansas	Nebraska
Iowa	North Dakota
Kansas	Oklahoma
Louisiana	South Dakota
Minnesota	Texas
Missouri	

5. POINTWS79

Point source emissions data bases covering the following states:

Arizona	New Mexico
California	Oregon
Colorado	Utah
Idaho	Washington
Montana	Wyoming
Nevada	

6. POINTCA79

Point source emissions data base covering all the Canadian provinces.

Basic data for the POINTXX79 data bases were obtained from NEDS and from Environment Canada in 1979-1980. For the U.S. data bases, locally developed corrections were applied, as well as corrections developed by GCA Corporation for the SURE emissions inventory project.(1)

7. FPC69, FPC70, FPC71, FPC72, FPC73, FPC74, FPC75, FPC76

FPC FORM67 air quality control data for years 1969 to 1976. Data obtained from FPC and its successor the Federal Energy Regulatory Commission of the Department of Energy.

8. AREAES79

Area source emissions data base covering the following states:

Alabama	Maryland	Pennsylvania
Connecticut	Massachusetts	Rhode Island
Delaware	Michigan	South Carolina
Florida	Mississippi	Tennessee
Georgia	New Hampshire	Vermont
Illinois	New Jersey	Virginia
Indiana	New York	Washington, D.C.
Kentucky	North Carolina	West Virginia
Maine	Ohio	Wisconsin

(1) GCA/Technology Division, Bedford, Mass. - contractor for the Sulfate Regional Experiment (SURE) emissions inventory project of the Electric Power Research Institute (EPRI).

9. AREAWS79

Area source emissions data base covering the following states:

Arizona	Louisiana	North Dakota
Arkansas	Minnesota	Oklahoma
California	Missouri	Oregon
Colorado	Montana	South Dakota
Idaho	Nebraska	Texas
Iowa	Nevada	Utah
Kansas	New Mexico	Washington
		Wyoming

Data for the AREAXX79 data bases was obtained from NEDS in 1980. No corrections have been applied.

Use of Computerized Source Emissions Inventory

For a detailed description of SYSTEM 2000 (S2K) capabilities the user is directed to the SYSTEM 2000 Reference Manual. The following sections assume user knowledge of the Natural Language and Report Writer features of this DBMS.

For interactive access to emissions inventory data bases a procedure file has been established at BNL's CDC 6600. To activate the interactive procedure:

1. Establish contact with the CDC 6600 computer at Brookhaven National Laboratory, LOGIN and enter user name, password, and problem number.

2. Enter: ETL,400.

3. Enter: ATTACH,MP,MAP3SDATABANK,ID=CMB.

4. Enter: BEGIN,MAP3S,MP.

The user will be prompted for user name and data base name. If the data base is on line the user will be taken directly into S2K and given access to the data base. If the data base is not on line the user is so notified and a batch job is created to place the data base on line. User should wait about 1 hour for batch job to execute before trying to access the data base again.

The following examples demonstrate the use of this procedure (User entries are underlined).

A) Data base not on line

COMMAND-BEGIN,MAP3S,MP.

WELCOME TO THE MAP3S DATA BANK

PLEASE INPUT YOUR LAST NAME (10 CHARACTERS OR LESS). BENKOVITZ

THANK YOU.

PLEASE INPUT NAME OF DATA BASE YOU WISH TO SCAN.

TERMINATE LIST BY TYPING END. FPC76

DATA BASE FPC76 IS BEING LOADED. PLEASE TRY ACCESS LATER.

THANK YOU.

PLEASE INPUT NAME OF DATA BASE YOU WISH TO SCAN.

TERMINATE LIST BY TYPING END. END

COMMAND- (User is back to INTERCOM)

B) Data base is on line

COMMAND-BEGIN,MAP3S,MP.

WELCOME TO THE MAP3S DATA BANK

PLEASE INPUT YOUR LAST NAME (10 CHARACTERS OR LESS). BENKOVITZ

THANK YOU.

PLEASE INPUT NAME OF DATA BASE YOU WISH TO SCAN. POINTMW79

EXIT

.029 CP SECONDS EXECUTION TIME } ——————→ IGNORE.

PF CYCLE NO.=

-556-ASSIGNED POINTMW79 2 249 12/02/80 09.43.44.

--- -> (User is in S2K ready to use the data base.)

EXIT%

COMMAND- (User is back to INTERCOM)

To activate the batch procedure the following control cards must be included in the batch stream:

ATTACH(MP,MAP3SDATABANK,ID=CMB)

BEGIN(MAP3SB,MP,DBN,LFN)

where: DBN is name of data base desired. (no default)

LFN is logical file name of command file for S2K. (default is INPUT)

The procedure will load the data base from tape if needed. Therefore, an NT1 parameter should be included in the job card.

Table 1

NEDS/FIPS U.S. STATE CODES

NEDS CODE	FIPS CODE	STATE NAME	NEDS CODE	FIPS CODE	STATE NAME
01	01	ALABAMA	28	31	NEBRASKA
03	04	ARIZONA	29	32	NEVADA
04	05	ARKANSAS	30	33	NEW HAMPSHIRE
05	06	CALIFORNIA	31	34	NEW JERSEY
06	08	COLORADO	32	35	NEW MEXICO
07	09	CONNECTICUT	33	36	NEW YORK
08	10	DELAWARE	34	37	NORTH CAROLINA
09	11	WASH DC	35	38	NORTH DAKOTA
10	12	FLORIDA	36	39	OHIO
11	13	GEORGIA	37	40	OKLAHOMA
12	15	HAWAII	38	41	OREGON
13	16	IDAHO	39	42	PENNSYLVANIA
14	17	ILLINOIS	40	43	PUERTO RICO
15	18	INDIANA	41	44	RHODE ISLAND
16	19	IOWA	42	45	SOUTH CAROLINA
17	20	KANSAS	43	46	SOUTH DAKOTA
18	21	KENTUCKY	44	47	TENNESSEE
19	22	LOUISIANA	45	48	TEXAS
20	23	MAINE	46	49	UTAH
21	24	MARYLAND	47	50	VERMONT
22	25	MASSACHUSETTS	48	51	VIRGINIA
23	26	MICHIGAN	49	53	WASHINGTON
24	27	MINNESOTA	50	54	WEST VIRGINIA
25	28	MISSISSIPPI	51	55	WISCONSIN
26	29	MISSOURI	52	56	WYOMING

Table 1A

ENVIRONMENT CANADA (EC)/DEFENSE INTELLIGENCE AGENCY (DIA)
CODES FOR CANADIAN PROVINCES

EC CODE	DIA CODE	PROVINCE NAME	EC CODE	DIA CODE	PROVINCE NAME
10	4	NEWFOUNDLAND	46	3	MANITOBA
11	9	PRINCE EDWARD ISLAND	47	11	SASKATCHEWAN
12	7	NOVA SCOTIA	48	1	ALBERTA
13	5	NEW BRUNSWICK	59	2	BRITISH COLUMBIA
24	10	QUEBEC	60	12	YUKON TERRITORY
35	8	ONTARIO	61	6	NORTHWEST TERRITORIES

Table 2

Control Equipment Codes

Identification Number	Control Device/Method
000	No Equipment
001	Wet Scrubber - High Efficiency
002	Wet Scrubber - Medium Efficiency
003	Wet Scrubber - Low Efficiency
004	Gravity Collector - High Efficiency
005	Gravity Collector - Medium Efficiency
006	Gravity Collector - Low Efficiency
007	Centrifugal Collector - High Efficiency
008	Centrifugal Collector - Medium Efficiency
009	Centrifugal Collector - Low Efficiency
010	Electrostatic Precipitator - High Efficiency
011	Electrostatic Precipitator - Medium Efficiency
012	Electrostatic Precipitator - Low Efficiency
013	Gas Scrubber (general, not clasified)
014	Mist Eliminator - High Velocity, i.e., $v>250$ ft/min
015	Mist Eliminator - Low Velocity, i.e., $v<150$ ft/min
016	Fabric Filter - High Temperature, i.e., $T>250^{o}F$
017	Fabric Filter - Medium Temperature, i.e., $180^{o}F<T<250^{o}F$
018	Fabric Filter - Low Temperature, i.e., $T<180^{o}F$
019	Catalytic Afterburner
020	Catalytic Afterburner with Heat Exchanger
021	Direct Flame Afterburner
022	Direct Flame Afterburner with Heat Exchanger
023	Flaring
039	Catalytic Oxidation - Flue Gas Desulfurization
040	Alkalized Alumina
041	Dry Limestone Injection
042	Wet Limestone Injection

Table 2 (continued)

Identification Number	Control Device/Method
043	Sulfuric Acid Plant - Contact Process
044	Sulfuric Acid Plant - Double Contact Process
045	Sulfur Plant
046	Process Change
047	Vapor Recovery System (including condensers, hooding, and other enclosures)
048	Activated Carbon Adsorption
049	Liquid Filtration System
050	Packed-Gas Absorption Column
051	Tray-Type Gas Absorption Column
052	Spray Tower
053	Venturi Scrubber
054	Process Enclosed
059	Metal Fabric Filter Screen (Cotton Gins)
060	Process Gas Recovery
061	Dust Suppression by Water Sprays
062	Dust Suppression by Chemical Stabilizers or Wetting Agents
063	Gravel Bed Filter
064	Annular Ring Filter
065	Catalytic Reduction
066	Molecular Sieve
071	Fluid Bed Dry Scrubber

For the particulate control devices (wet scrubber, gravity collectors, centrifugal collectors, and electrostatic precipitators, the efficiency ranges correspond to the following percentages:

High: 95 - 99 +
Medium: 80 - 95
Low: <80

Table 3

FPC FORM 67 Boiler Manufacturer Codes

B+W	=	The Babcock + Wilcox Company
CE	=	Combustion Engineering
ERIG	=	Erie City Iron Works
FW	=	Foster Wheeler Corporation
RILY	=	Riley Stoker Corporation
VOGT	=	Henry Vogt Machine Company, Inc.
OTHE	=	Other (Specified in footnote)

Table 4

FPC FORM 67 Boiler Type of Firing Code

PCFR	=	Pulverized Coal: Front Firing
PCOP	=	Pulverized Coal: Opposed Firing
PCTA	=	Pulverized Coal: Tangential Firing
CYCL	=	Cyclone
SPRE	=	Spreader Stoker
OSTO	=	Other Stoker
FLUI	=	Fluidized Bed
RFRO	=	Residual Oil: Front Firing
ROPP	=	Residual Oil: Opposed Firing
RTAN	=	Residual Oil: Tangential Firing
GFRO	=	Gas: Front Firing
GOPP	=	Gas: Opposed Firing
GTAN	=	Gas: Tangential Firing
OTHE	=	Other (Specified in footnote)

Table 5

FPC FORM 67 Mechanical Collectors Type Codes

GRAV	=	Gravitational or baffled chamber
SCTA	=	Single cyclone-Conventional reverse flow, tangential inlet
SCAX	=	Single cyclone-Conventional reverse flow, axial inlet
MCTA	=	Multiple cyclones-Conventional reverse flow, tangential inlet
MCAX	=	Multiple cyclones-Conventional reverse flow, axial inlet
CYCL	=	Straight-through-flow cyclones
IMPE	=	Impeller Collector
VENT	=	Wet Collector: Venturi
WETC	=	Wet Collector: Other (Specified in footnote)
BAGH	=	Baghouse (Fabric Collector)
OTHE	=	Other (Specified in footnote)

Table 6

FPC FORM 67 Flue Gas Cleaning Equipment Manufacturers Codes

AAFC	=	American Air Filter Co., Inc.
AMST	=	American Standard, Inc.
BELC	=	Belco Pollution Control Corp.
BUEL	=	Beull Engineering Co., Inc.
DUCO	=	The Ducon Co., Inc.
FIKL	=	Fischer-Klosterman, Inc.
FULL	=	Fuller Co., Draco Products
KIRK	=	Kirk + Blum Manufacturing Co.
KOPP	=	Koppers Co., Inc.
PPCI	=	Precipitair Pollution Control, Inc.
PAOA	=	Precipitation Associates of America, Inc.
PLVR	=	Pulverizing Machinery Division
COTT	=	Research-Cottrell, Inc.
SVRS	=	Seversky Electronatom Corp.
UOP	=	UOP Air Correction Division
TORI	=	The Torit Corp.
WEST	=	Western Precipitation Division
WHEE	=	Wheelabrator Corp.
ZURN	=	Zurn Industries, Inc.
OTHE	=	Other (Specified in footnote)

Table 7

Boiler Operation Codes

1 = Continuous nominal full load
2 = Less than full but over 75% load
3 = 50-75% load
4 = Under 50% load
5 = No-load hot standby
6 = No-load cold standby
7 = Other

Table 8

Area Source Emissions Inventory

Population Distribution Code	Population Breakdown
0	< 10% urban
1	10 - 20% urban
2	20 - 30% urban
3	30 - 40% urban
4	40 - 50% urban
5	50 - 60% urban
6	60 - 70% urban
7	70 - 80% urban
8	80 - 90% urban
9	> 90% urban