Technical Support Document
for the
Final Notice of Data Availability for EGU NO_x Annual and NO_x Ozone Season Allocations for the Clean Air Interstate Rule Federal Implementation Plan Trading Programs.

Data Field Description for the CAIR FIP NO_x Annual and NO_x Ozone Season Allocation Tables (2009 through 2014 allowance allocations)

EPA Docket number: OAR-2004-0076
November 2007

U.S. Environmental Protection Agency
Office of Air and Radiation

Data Fields in the CAIR FIP NO_x Annual and NO_x Ozone Season Allocation Tables

The electric generating unit (EGU) NO_x allocation file "Final Data for EGU NO_x Annual and NO_x Ozone Season Allocations for the Clean Air Interstate Rule Federal Implementation Plan Trading Programs" is available on the Clean Air Markets Division (CAMD) website and in the CAIR FIP docket. Section 8 of the final Notice of Data Availability (NODA) describes how to locate this file. This technical support document (TSD) describes data fields in the tables of that allocation file.

The EGU NO_x allocations file contains nine worksheets, one table per worksheet, labeled T1 through T9. Worksheets T1 and T2 provide, respectively, the unit annual and ozone season NO_x allocations. Worksheets T3 through T9 provide the Energy Information Administration (EIA), CAMD, and August 4, 2006 NODA objector heat input data used to determine the unit allocations in T1 and T2.

Each table in this TSD corresponds to one of the nine tables in the EGU NO_x allocations file and describes the field names and data given in each allocation table. Table 1 of the TSD describes the data fields in worksheet T1, Table 2 describes the data fields in worksheet T2, Table 3 describes the data fields in worksheet T3, and so on. Some units use heat input data available from both EIA and CAMD to compile the baseline year heat input. This approach applies for those units that were not subject to the Acid Rain Program (ARP), Ozone Transport Commission (OTC) trading program, or the NO_x Budget Trading Program (NBP) throughout the baseline period. For allocations under the CAIR FIP NO_x annual trading program, EIA data (Table 3) were used until the first full year of ARP data (Table 4) or non-ARP unit 12-month reported OTC/NBP data (Table 5) were available. Ozone season heat input data in the CAIR FIP NO_x ozone season allocation (Table 2) are always from the data reported under the ARP, OTC, or NBP, if available.

Objector data (Tables 6 and 9) replace all other data. The objector data in Tables 6 and 9 represent the subset of heat input objections that EPA has accepted. For a full discussion of EPA's response to objectives submitted in response to the August 2006 NODA, please refer to the "NODA Response to Objections" document which is also available on EPA's website and in the CAIR FIP docket.

Table 1
Annual Unit NO_x Allocation

Field Name	Description
State	Only states affected by the CAIR annual NO_x control program.
Facility Name	Facility name from EIA or CAMD database.
CAMD ORIS Code	Facility ORIS code in CAMD database. Blank if the unit is not subject to the ARP or NBP.
CAMD UNITID	Unit ID in CAMD database. Blank if the unit is not subject to ARP or NBP.
EIA ORIS Code	Facility code in EIA database. Blank if ARP data are used for all baseline years.
EIA Unit ID	Boiler code from EIA 767 or generator code from EIA 860. Blank if ARP data are used for all baseline years.
2000 Data Source	EIA, ARP, OTC, NBP, OBJ - Source for the annual adjusted heat input used in the data year. EIA data (Table 3) used if heat input data for the year are available in both EIA and ARP (Table 4) tables. (EIA data are present only if full annual ARP data not available.) 12-month reported OTC/NBP data are used in place of EIA data. EPA-accepted objector data (OBJ) are used over any other data source.
2001 Data Source	
2002 Data Source	
2003 Data Source	
2004 Data Source	
Retirement Year	Data entered only if unit retired during or after 2000.
2000 Adjusted Heat Input	CAIR fuel-adjusted annual heat input (mmBtu) from data table based on data source (EIA, ARP, OTC, NBP, OBJ).
2001 Adjusted Heat Input	
2002 Adjusted Heat Input	
2003 Adjusted Heat Input	
2004 Adjusted Heat Input	
Average HI over 3 Highest Years (Baseline Heat Input)	Calculated by averaging highest three annual heat inputs from 2000-2004. If less than three years of data available, all years with heat input were averaged.
State Total HI	Calculated by summing "Average HI over 3 Highest Years for all units" in the state.
Unit Fraction of State Total HI	Calculation: (Average HI over 3 Highest Years)/(State Total HI).
State NO_x Budget	95% of the State's 2009 Annual Allocation Budget.
Unit NO_x Allocation	Calculation: Unit NO_x Allocation in Tons = (Unit Fraction of State Total HI) x (State NO_x Budget).

Table 2
Ozone Season Unit NO_x Allocation

Field Name	Description
State	Only states affected by CAIR ozone season NO_x control program.
Facility Name	Facility name from EIA or CAMD database.
CAMD ORIS Code	Facility ORIS code in CAMD database. Blank if the unit is not subject to the ARP or NBP.
CAMD UNITID	Unit ID in CAMD database. Blank if the unit is not subject to ARP or NBP.
EIA ORIS Code	Facility code in EIA database. Blank if ARP data are used for all baseline years.
EIA Unit ID	Boiler code from EIA 767 or generator code from EIA 860. Blank if ARP data are used for all baseline years.
2000 Data Source	EIA, ARP, OTC, NBP, OBJ - Source for the ozone season adjusted heat input used in the data year. CAMD data (ARP, OTC, NBP) used if heat input for the year are available in both EIA and CAMD. EPA-accepted objector data (OBJ) are used over all other data.
2001 Data Source	
2002 Data Source	
2003 Data Source	
2004 Data Source	
Retirement Year	Data entered only if unit retired during or after 2000.
2000 Adjusted Heat Input	CAIR fuel-adjusted ozone season heat input (mmBtu) from data table based on data source (EIA, CAMD, ARP, OTC, NBP, or OBJ).
2001 Adjusted Heat Input	
2002 Adjusted Heat Input	
2003 Adjusted Heat Input	
2004 Adjusted Heat Input	
Average HI over 3 Highest Years	Calculated by averaging highest three annual heat inputs from 2000 - 2004. If less than three years of data available, all years with heat input were averaged.
State Total HI	Calculated by summing "Average HI over 3 Highest Years for all units" in the state.
Unit Fraction of State Total HI	Calculation: (Average HI over 3 Highest Years)/(State Total HI).
State NO_x Budget	95% of the State's 2009 Ozone Season Allocation Budget.
Unit NO_x Allocation	Calculation: Unit NO_x Allocation in Tons = (Unit Fraction of State Total HI) x (State NO_x Budget).

Table 3
EIA Annual Heat Input

Field Name	Description
State	State.
Facility Name	Facility name from EIA form 860.
EIA ORIS Code	Facility ORIS code in EIA form 860.
EIA UNIT ID	Boiler code in EIA form 767 or generator code in EIA form 860.
CAMD ORIS Code	Facility ORIS code in CAMD database. Blank if the facility is not in the CAMD database.
CAMD UNITID	Unit ID in CAMD database. Blank if the unit is not in the CAMD database.
Unit Type	Steam Turbine (ST), Combustion Turbine (CT), or Gas Turbine (GT).
CAIR INSV Status	Denotes whether CAIR unit is "New" or "Existing." New units have in-service date of January 1, 2001, or later. Date reflects commercial on-line date in EIA form 860. Remaining units are Existing.
Retirement Year	Entry appears only if unit is retired during or after baseline period, otherwise blank.
Data Year	Heat input data year.
Annual Heat Input	Annual heat input (mmBtu). Total of annual heat input from coal, gas, oil, and other fuel types.
Annual Heat Input Note	Annual heat input = plant total CT and GT heat input.
CAIR Fuel	CAIR fuel type: Coal, Oil, Gas, or Other.
Annual CAIR Heat Input	Annual fuel-adjusted heat input. Calculation: Annual Heat Input x CAIR Fuel Factor (Coal = 1.0, Oil = 0.6, Gas or Other = 0.4).

Table 4
CAMD ARP Annual Heat Input

Field Name	Description
State	State.
ORIS Code	Facility ORIS code in CAMD database.
Facility Name	Facility name in CAMD database.
UNITID	Unique CAMD database unit ID.
Unit_ID	Unit ID in CAMD database.
Commenced Operation Date	Date unit commenced operation.
Commercial Operation Date	Date unit commenced commercial operation.
Retirement Year	Unit retirement year.
Data Year	Heat input data year.
Program	ARP for all units.
Primary Fuel	Monitoring plan primary fuel.
Annual Heat Input	Annual heat input (mmBtu).
Annual NO_x Mass	Annual NO_x mass emissions (tons).
Annual SO_2 Mass	Annual SO_2 mass emissions (tons).
CAIR Fuel Category	Coal, Oil, Gas, or Other based on primary fuel type.
CAIR Fuel Adjusted Annual Heat Input	Calculation: Annual Heat Input x CAIR Fuel Factor (Coal = 1.0, Oil = 0.6, Gas or Other = 0.4).

Table 5
CAMD NBP/OTC Annual Heat Input (12-Month Reporters)

Field Name	Description
State	State.
ORIS Code	Facility ORIS code in CAMD database.
Facility Name	Facility name in CAMD database.
UNITID	Unique CAMD database unit ID.
Unit_ID	Unit ID in CAMD database.
Data Year	Heat input data year.
Program Code	NBP, OTC.
Number of Months Reported	Months Reported to CAMD (12).
Operating Time	Annual operating time (sum).
Primary Fuel	Monitoring plan primary fuel.
Annual Heat Input	Annual heat input (mmBtu).
CAIR Fuel Category	Coal, Oil, Gas, or Other based on primary fuel type.
CAIR Fuel Adjusted Annual Heat Input	Calculation: Annual Heat Input x CAIR Fuel Factor (Coal = 1.0, Oil = 0.6, Gas or Other = 0.4).

Table 6
Objector (OBJ) Annual Heat Input

Field Name	Description
State	State.
Facility Name	Facility name from EIA form 860.
EIA ORIS Code	Facility ORIS code in EIA form 860.
EIA UNIT ID	Boiler code in EIA form 767 or generator code in EIA form 860.
CAMD ORIS Code	Facility ORIS code in CAMD database. Blank if the facility is not in the CAMD database.
CAMD UNITID	Unit ID in CAMD database. Blank if the unit is not in the CAMD database.
Data Year	Heat input data year.
Objection CAIR Fuel Category	NODA Objection - Coal, Oil, Gas, or Other.
Objection Annual Heat Input	NODA Objection annual heat input (mmBtu).
Objection Fuel Adjusted Annual Heat Input	NODA Objection (mmBtu) - The calculation is: Annual Heat Input x CAIR Fuel Factor (Coal = 1.0, Oil = 0.6, Gas or Other = 0.4).
NODA Data Source	Identifies the data source in T1 of the August 2006 NODA draft allocation heat input.
NODA CAIR Fuel Category	Identifies the CAIR Fuel Category in the August 2006 NODA.
NODA Annual Heat Input	Identifies the annual heat input in the August 2006 NODA.
NODA Annual Fuel Adjusted Heat Input	Identifies the fuel-adjusted annual heat input in the August 2006 NODA.
Objection Docket ID OAR-2004-0076-	Identifies the last four digits of the objection document docket ID number or full docket ID if other than OAR-2004-0076.
Objection Type	Objection type category.
Objector	Identifies Objector.

Table 7
EIA Ozone Season Heat Input

Field Name	Description
State	State.
Facility Name	Facility name from EIA form 860.
EIA ORIS Code	Facility ORIS code in EIA form 860.
EIA UNIT ID	Boiler code in EIA form 767 or generator code in EIA form 860.
CAMD ORIS Code	Facility ORIS code in CAMD database. Blank if the facility is not in the CAMD database.
CAMD UNITID	Unit ID in CAMD database. Blank if the unit is not in the CAMD database.
Unit Type	Steam Turbine (ST), Combustion Turbine (CT), or Gas Turbine (GT).
CAIR INSV Status	Denotes whether CAIR unit is "New" or "Existing." New units have in-service date of January 1, 2001, or later. Date reflects commercial on-line date in EIA form 860. Remaining units are Existing.
Retirement Year	Entry appears only if unit is retired during or after baseline period, otherwise blank.
Data Year	Heat input data year.
Ozone Season Heat Input	Ozone Season heat input (mmBtu). Total of ozone season heat input from coal, gas, oil and other fuel types.
Ozone Season Heat Input Note	Ozone Season heat input = plant total GT and CT heat input.
CAIR Fuel	CAIR fuel type: Coal, Oil, Gas, or Other.
Ozone Season CAIR Heat Input	Ozone Season fuel-adjusted heat input. Calculation: Ozone Season Heat Input x CAIR Fuel Factor (Coal = 1.0, Oil = 0.6, Gas or Other = 0.4).

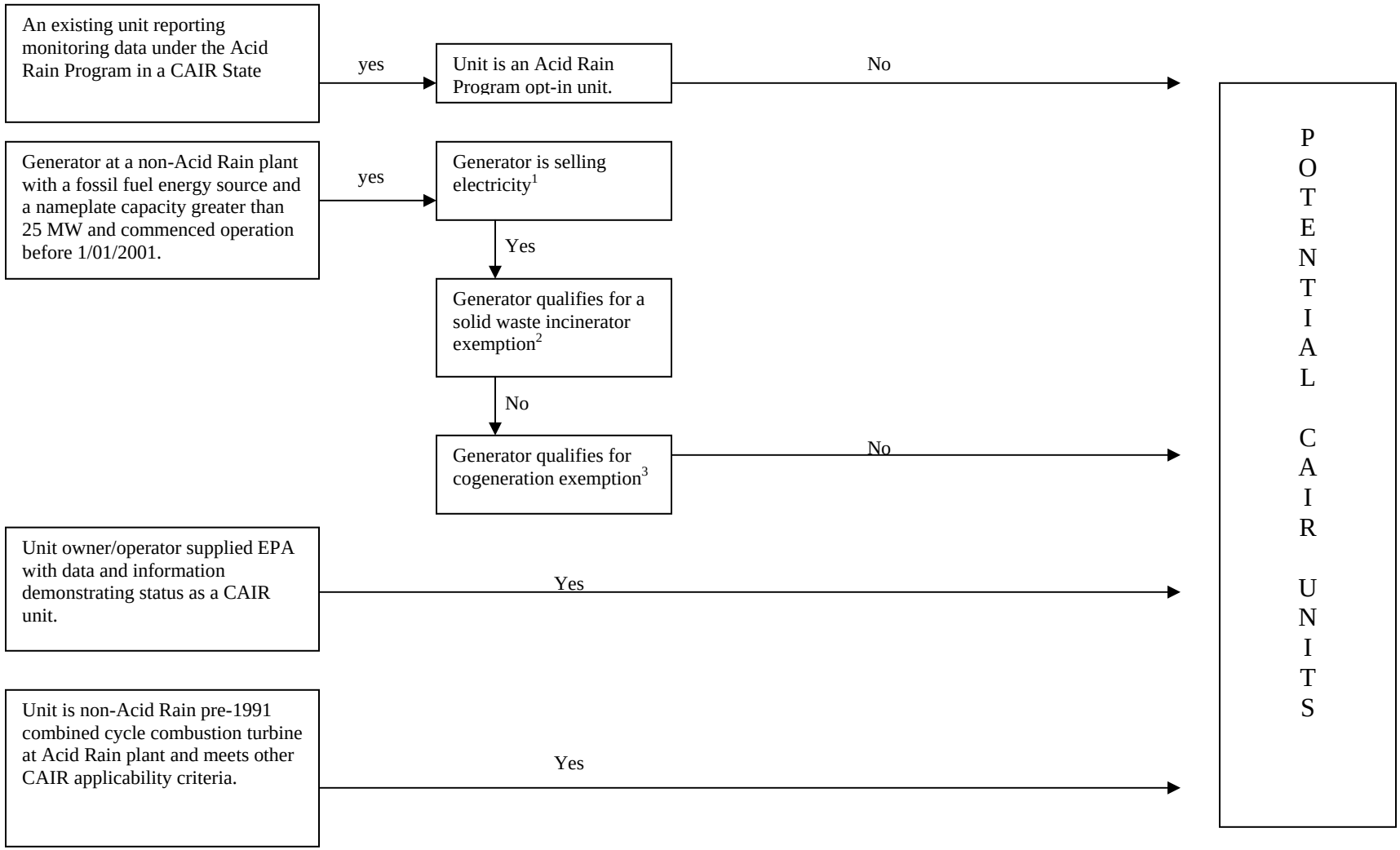
Table 8
CAMD (ARP, NBP, OTC) Ozone Season Heat Input

Field Name	Description
State	State.
ORIS Code	Facility ORIS code in CAMD database.
Facility Name	Facility name in CAMD database.
Unit_ID	Unit ID in CAMD database.
UNITID	Unique CAMD database unit ID.
Commenced Operation Date	Date unit commenced operation.
Commercial Operation Date	Date unit commenced commercial operation.
Retirement Year	Unit retirement year.
Data Year	Heat input data year.
Program	ARP, OTC, or NBP.
Primary Fuel	Monitoring plan primary fuel.
Ozone Season Heat Input	Ozone season heat input (mmBtu).
Ozone Season NO_x Mass	Ozone season NO_x mass emissions (tons).
Ozone Season SO_2 Mass	Ozone season SO_2 mass emissions (tons).
CAIR Fuel Category	Coal, Oil, Gas, or Other based on primary fuel type.
CAIR Fuel Adjusted Ozone Season Heat Input	Calculation: Ozone Season Heat Input x CAIR Fuel Factor (Coal = 1.0, Oil = 0.6, Gas or Other = 0.4).

Table 9
Objector (OBJ) Ozone Season Heat Input

Field Name	Description
State	State.
Facility Name	Facility name from EIA form 860.
EIA ORIS Code	Facility ORIS code in EIA form 860.
EIA UNIT ID	Boiler code in EIA form 767 or generator code in EIA form 860.
CAMD ORIS Code	Facility ORIS code in CAMD database. Blank if the facility is not in the CAMD database.
CAMD UNITID	Unit ID in CAMD database. Blank if the unit is not in the CAMD database.
Data Year	Heat input data year.
Objection CAIR Fuel	NODA Objection - Coal, Oil, Gas, or Other.
Objection Ozone Season Heat Input	NODA Objection ozone season heat input (mmBtu).
Objection Ozone Season Fuel Adjusted Heat Input	NODA Objection fuel-adjusted ozone season heat input (mmBTu). The calculation is: Annual Heat Input x CAIR Fuel Factor (Coal = 1.0, Oil = 0.6, Gas or Other = 0.4).
NODA Data Source	Identifies the data source in T1 of the August 2006 NODA draft allocation heat input.
NODA CAIR Fuel	Identifies the CAIR Fuel Category in the August 2006 NODA.
NODA Ozone Season Heat Input	Identifies the ozone season heat input in the August 2006 NODA.
NODA Ozone Season Fuel Adjusted Heat Input	Identifies the fuel-adjusted ozone season heat input in the August 2006 NODA.
Docket ID OAR-2004-0076-	Identifies the last four digits of the objection document docket ID number or full Docket ID if other than OAR-2004-0076.
Objection Type	Objection type category.
Objector	Identifies Objector.

Diagram 1
Inventory Development of Potential Existing CAIR Units included in CAIR FIP NO_x Allocations NODA



1) EPA excluded generators which did not sell electricity to a utility in 1999 or 2000 based on EIA form 860b. However, under CAIR, a unit serving a generator greater than 25 MWe, and producing electricity for sale on or after 11/15/90 is subject to CAIR. Sales data were only available for 1999 and 2000. However, if a generator was selling electricity at anytime on or after 1990, a unit serving the generator may be affected and were asked to provide data to EPA in the period for objections.

2) The solid waste incinerator exemption was determined by identifying generators located at municipal solid waste combustors according to EIA form 860. There may be several solid waste incinerators which are not located at municipal waste combustors, but would qualify for the exemption. Unit owners and operators were asked to review and comment on this exemption status.

3) EPA excluded generators which were located at FERC qualifying cogeneration facilities that had annual plant wide sales of 1/3 or less of the potential generating capacity, or that had annual sales less than 219,000 MW-hrs, to an electric utility based on EIA form 860b (1999 and 2000). Sales and efficiency data used to determine whether a unit qualifies for a cogeneration exemption under CAIR was insufficient. Unit owner and operators were asked to review their historic sales and efficiency data to determine whether their units qualify for the cogeneration exemption under CAIR.