EIA-767 collects annual data from electric power facilities:

- **Plant identification**
  - company name, plant name, plant status, plant type
- **Plant configuration**
  - boiler, associated generators, stacks, flue information
- **Plant information**
  - fly ash, bottom ash, thermal output quantity and fuel use
- **Boiler information**
  - boiler I.D., boiler standards, design parameters, emission controls
- **Generator information**
  - maximum capacity, monthly generation
- **Stack and flue information**
  - rate, temperature, and velocity at different loads
- **Flue gas particulate collector information**
  - status, type, removal efficiency
- **Cooling system information**
  - annual operations, design parameters
- **FGD unit information**
  - hours in service, percent removal, type of sorbent
EIA-767

• EIA-767 provides EIA with boiler-specific steam-electric plant data that is critical to the formation of multiple EPA analytical tools and programs, such as:
  
  – Integrated Planning Model (IPM)
  – (eGRID) Emissions & Generation Resource Integrated Database
  – CAIR NO$_x$ Allowance Allocations

• The above tools are used to develop environmental policies that have billions of dollars in public health and economic benefits
What Is the Integrated Planning Model (IPM)?

- IPM is a long-term capacity expansion and production costing model for analyzing the U.S. electric power sector.
- EPA uses IPM to analyze emissions policies affecting the power sector.
- IPM outputs are used in EPA’s air quality models.
- IPM was used on:
  - Clean Air Interstate Rule (CAIR)
  - Clean Air Mercury Rule (CAMR)
  - Clean Air Visibility Rule (CAVR)
  - Clear Skies Initiative
  - NOx Budget Trading Program (NBP)

Model Regions in Recent Update of IPM
EIA-767 Is Critical to IPM

- Form EIA-767 contains 163 data fields:
  - IPM relies on data from all 163 fields
  - IPM considers 49 of the 163 fields to be critical data

EIA-767 Data Relevance to IPM

IPM relevant (70%)

IPM relevant and critical (30%)
EPA Is One of Many Users of IPM

EPA has used IPM to:

• Support rules
  – CAIR — Title IV SO₂
  – CAMR — NOx SIP Call
  – CAVR — Revised NAAQS
  – Cooling Water Standards

• Evaluate effects of 1990 Clean Air Act Amendments

• Analyze environmental impacts of restructuring

• Provide key inputs to EPA’s air quality models

Other IPM users include:

• Government agencies
  – FERC
  – WRAP
  – RGGI
  – OTC
  – OTAG

• Industry groups
  – EPRI
  – EEI
  – SoCal
  – PacifCorp
  – TVA
  – AEP
  – Florida Power
  – Cinergy
  – National Coal Association

• Other organizations
  – Center for Clean Air Policy
  – Clean Air Task Force
  – Clean Energy Group
What Is eGRID?

- eGRID is EPA’s nationally recognized, comprehensive tool that uniquely links emissions, generation, and fuel use at all electric power plants in the U.S. on an annual basis
  - Generation (MWh)
  - Emissions (NO\textsubscript{x} SO\textsubscript{2} CO\textsubscript{2} Hg)
  - Fuel Use (MMBtu)
  - Boiler data, generator data, integrated plant level data
  - Plant data aggregated to different levels:
    - state, electric generating company, parent company, power control area, eGRID subregion, NERC Region, U.S.
- eGRID has a broad user base
  - eGRID EPA’s most popular clean energy webpage
  - Supports decisions of users and tools they produce
    - Labeling/environmental disclosure
    - RPS & RECS attributes
    - EPA’s Power Profiler tool
    - Policy and research use: analysis (e.g. RGGI) & direct input to other tools (e.g. RMI tool, NREL’s HOMER)
eGRID Uses and Clients

- **eGRID used for other EPA tools/programs**
  - Power Profiler – CPPD website for general public relating electricity use and emissions
  - Climate Leaders – CO₂ emission factors for electricity use
  - Portfolio manager (pending) – Relates CO₂ emissions to building energy use
  - Personal GHG Calculator (pending) – Relates CO₂ emissions with electricity use

- **Used by Federal Government**
  - NETL, ORNL, ANL, NREL
    - ORNL - CHP Calculator
    - NETL - NATCARB website
    - NREL – HOMER

- **Used by RECS Tracking Systems**
  - Emission and fuel use attributes for RECs Tracking Systems:
    - PJM’s Generation Attribute Tracking System (GATS)
    - ISO-NE’s Generation Information System (GIS)
eGRID Uses and Clients

• **Heavily used by states**
  – Many electricity labeling (environmental disclosure programs) rely on eGRID
  – Many states rely on data for policy decisions/impacts (e.g. output based standards)
  – Many states publish state-specific eGRID data on the web
  – Greenhouse Gas Inventory & Registry efforts (e.g. California Climate Action Registry)

• **Used by Non Governmental Organizations in tools and for analyses**

• **Used by universities**
  – Cited in many academic papers and theses
CAIR NO$_x$ Allowance Allocations

- EIA-767 data along with EIA-860 data is used to identify potential CAIR units and to determine a unit’s share of the state-budgeted NO$_x$ allowances
  
  - 1,445,000 annual NO$_x$ allowances are based on EIA data for phase I
  
  - $1.8$ billion/yr of NO$_x$ allowances are based on EIA data for phase I
  
  - 850 of 2,665 potential CAIR units were identified with EIA data
Other Groups/Organizations Using EIA-767 Data

• States use the data for a host of reasons including:
  – Emission Inventories (which are critical to air quality modeling efforts and efforts to understand what sources contribute to air quality problems)
  – Rule development (including trading rules, renewable portfolio standards and high energy demand day strategies)

• Many organizations use the data for power sector modeling including:
  – CRA International
  – Massachusetts Institute of Technology (MIT)
  – Resources for the Future (RFF)
  – Other members of the Stanford Modeling Forum
Conclusion

- EIA-767 collects vital data for federal and state environmental and energy regulatory agencies to use in their efforts to protect human health and the environment.

- EPA requests EIA to continue collection of this data on behalf of the public that we serve.