

<b>U.S. Department of Energy Energy Information Administration Form EIA-923</b>	<b>POWER PLANT OPERATIONS REPORT INSTRUCTIONS</b>	<b>Form Approval OMB No. 1905-0129 Approval Expires: 12/31/2010</b>																				
<b>PURPOSE</b>	<p>Form EIA-923 collects information from all electric power plants and combined heat and power (CHP) plants in the United States. Data collected on this form include electric power generation, fuel consumption, fossil fuel stocks, and delivered fossil fuel cost and quality. These data are used to monitor the status and trends of the electric power industry and appear in many Energy Information Administration (EIA) publications including: <i>Electric Power Monthly</i>, <i>Electric Power Annual</i>, <i>Monthly Energy Review</i>, <i>Annual Energy Review</i>, <i>Natural Gas Monthly</i>, <i>Natural Gas Annual</i>, <i>Cost and Quality of Fuels</i>, <i>Quarterly Coal Report</i>, and the <i>Renewable Energy Annual</i>. Further information can be found at <a href="http://www.eia.doe.gov/fuelelectric.html">http://www.eia.doe.gov/fuelelectric.html</a>. The "Stocks at End of Reporting Period" information (SCHEDULE 4), Nonutility "Total Delivered Cost" information (SCHEDULE 2), and "Commodity Cost" information (SCHEDULE 2) reported on this form are protected information.</p>																					
<b>REQUIRED RESPONDENTS</b>	<p>The Form EIA-923 is a mandatory report for all electric power plants and CHP plants that meet the following criteria: 1) have a total generator nameplate capacity (sum for generators at a single site) of 1 megawatt (MW) or greater; and 2) where the generator(s), or the facility in which the generator(s) resides, is connected to the local or regional electric power grid and has the ability to draw power from the grid or deliver power to the grid. To lessen the reporting burden, a sample of plants is collected on a monthly basis. Plants that are not selected to respond monthly must respond annually for the calendar year. <b>Facilities that do not generate electricity but serve either as a transfer terminal or store offsite stocks for generating stations may be required to report on the Form EIA-923.</b></p> <p><b>See instructions for each schedule for more specific filing requirements.</b></p>																					
<b>RESPONSE DUE DATE</b>	<p><b>Monthly respondents</b> are required to file SCHEDULE 1 through SCHEDULE 5 and SCHEDULE 9 of this form with EIA by the last day of the month following the reporting period. For example, if reporting for July, survey data are due on August 31. SCHEDULE 6 through SCHEDULE 8 must be filed by March 30 following the end of the reporting year.</p> <p><b>Annual and supplemental respondents</b> are required to file the form with EIA <b>approximately 45 calendar days after the form opens for data entry.</b> (Schedules 3A and 5A should show a monthly breakdown of data for the entire year. All other schedules can be aggregated for the year.)</p> <p><b>See instructions for each schedule for more specific filing requirements.</b></p>																					
<b>METHODS OF FILING RESPONSE</b>	<p>Submit your data electronically using EIA's secure e-file system. This system uses security protocols to protect information against unauthorized access during transmission.</p> <p>If you have not registered with the e-file Single Sign-On (SSO) system, send an e-mail requesting assistance to: <a href="mailto:EIA-923@eia.doe.gov">EIA-923@eia.doe.gov</a>.</p> <p>If you have registered with SSO, log on at: <a href="https://signon.eia.doe.gov/ssoserver/login">https://signon.eia.doe.gov/ssoserver/login</a></p> <p>If you are having a technical problem with logging into or using the e-file system, contact the Help Desk at:</p> <p style="text-align: center;">E-mail: <a href="mailto:CNEAFhelpcenter@eia.doe.gov">CNEAFhelpcenter@eia.doe.gov</a> Phone: 202-586-9595</p> <p>If you need an alternate means of filing your response, contact the Help Desk. If you do not use the e-file system, retain a completed copy of this form for your files.</p>																					
<b>CONTACTS</b>	<p><b>E-file System Questions:</b> For questions related to the e-file system, see the help contact information immediately above.</p> <p><b>Data Questions:</b> For questions about the data requested on the Form EIA-923, contact:</p> <table border="0"> <tr> <td>Schedules 1 &amp; 4:</td> <td>Chris Cassar</td> <td><a href="mailto:christopher.cassar@eia.doe.gov">christopher.cassar@eia.doe.gov</a></td> <td>202-586-5448</td> </tr> <tr> <td>Schedule 2:</td> <td>Becky McNerney</td> <td><a href="mailto:rebecca.mcnerney@eia.doe.gov">rebecca.mcnerney@eia.doe.gov</a></td> <td>202-586-4509</td> </tr> <tr> <td>Schedules 3 &amp; 5:</td> <td>Ron Hankey</td> <td><a href="mailto:ronald.hankey@eia.doe.gov">ronald.hankey@eia.doe.gov</a></td> <td>202-586-2630</td> </tr> <tr> <td>Schedules 6 &amp; 7</td> <td>Marie Rinkoski Spangler</td> <td><a href="mailto:marie.rinkoski-spangler@eia.doe.gov">marie.rinkoski-spangler@eia.doe.gov</a></td> <td>202-586-2446</td> </tr> <tr> <td>Schedule 8:</td> <td>Channele Wirman</td> <td><a href="mailto:channele.wirman@eia.doe.gov">channele.wirman@eia.doe.gov</a></td> <td>202-586-5356</td> </tr> </table> <p>EIA-923 Fax: 202-287-1943 EIA-923 Mailbox: <a href="mailto:EIA-923@eia.doe.gov">EIA-923@eia.doe.gov</a></p>		Schedules 1 & 4:	Chris Cassar	<a href="mailto:christopher.cassar@eia.doe.gov">christopher.cassar@eia.doe.gov</a>	202-586-5448	Schedule 2:	Becky McNerney	<a href="mailto:rebecca.mcnerney@eia.doe.gov">rebecca.mcnerney@eia.doe.gov</a>	202-586-4509	Schedules 3 & 5:	Ron Hankey	<a href="mailto:ronald.hankey@eia.doe.gov">ronald.hankey@eia.doe.gov</a>	202-586-2630	Schedules 6 & 7	Marie Rinkoski Spangler	<a href="mailto:marie.rinkoski-spangler@eia.doe.gov">marie.rinkoski-spangler@eia.doe.gov</a>	202-586-2446	Schedule 8:	Channele Wirman	<a href="mailto:channele.wirman@eia.doe.gov">channele.wirman@eia.doe.gov</a>	202-586-5356
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**GENERAL  
INSTRUCTIONS**

**Revision Policy:** Submit revisions to data previously reported as soon as possible after the error or omission is discovered. Do not wait to revise data until the next reporting month's form is due. Revisions or adjustments to data should be made only to the survey month(s) to which they pertain. (Do not adjust the current month to reflect a revision or adjustment to a prior month submission.)

- Log on to the e-file system, re-key revised data, indicate in SCHEDULE 9 the nature and date of the revision, and resubmit the data.
- Remember to save and RESUBMIT (click on the SUBMIT button).

If you are unable to make a revision through the e-file system because the monthly data file has been closed, please e-mail your changes to EIA-923@eia.doe.gov, and indicate 'Revision' in subject line. Be sure to include your Plant ID, the specific revision, and the month that is being revised.

**Correcting Preprinted Information.** For e-file users, much of the information on the form is preprinted by EIA. If you need to correct or add to the administrative information, e.g., contact name or e-mail address, click on the CHANGE CONTACT Tab on SCHEDULE 1 and enter the changes. Please note that PLANT NAME, PLANT CODE, and COMPANY NAME cannot be changed. Contact the survey manager if these items are incorrect.

**Revising data: If you report via Internet Secure File Transfer, facsimile, or e-mail, you may send a corrected copy of the form, but be sure to indicate in SCHEDULE 9: (1) that it is a revision, (2) the month that is being revised, (3) what has been revised, and (4) the date of the revision. If you report via the e-file system, send an email to the survey manager indicating the 4 items listed above.**

Schedule 9 is provided for respondents to provide comments. Use it to explain anomalies with data or to provide any further details that are pertinent to the data and plant.

**ITEM-BY-ITEM  
INSTRUCTIONS**

**SCHEDULE 1. IDENTIFICATION**

1. **Survey Contact:** Verify contact name, title, address, telephone number, Fax number, and e-mail address.
2. **Supervisor of Contact Person for Survey:** Verify the contact's supervisor's name, title, address telephone number, Fax number and e-mail address.

If any of the above information is incorrect, revise the incorrect entry and provide the correct information. Provide any missing information.

3. **Report For:** Verify all information, including company name, plant name, plant identification number, plant State and county, and month or year for which data are being reported. State codes are two-character U.S. Postal Service abbreviations. These fields cannot be revised online. Contact the EIA-923 survey manager if corrections are needed.
4. **CHP Checkbox:** Verify that the check correctly indicates whether or not this facility is a combined heat and power plant. Contact the EIA-923 survey manager if a correction is needed.
5. **Regulatory Status:** Verify that the check correctly identifies your plant as either regulated or unregulated. Contact the EIA-923 survey manager if a correction is needed.

## SCHEDULE 2. COST AND QUALITY OF FUEL RECEIPTS – PLANT-LEVEL

**REQUIRED RESPONDENTS:** Plants with a total nameplate capacity of 50 MW and above that use fossil fuels (coal, petroleum products, petroleum coke, natural gas, and other gases (including blast furnace gas)) for the generation of electric power must complete the appropriate data on Schedule 2, Cost and Quality of Fuel Receipts.

All fuel receipts should be reported at the plant level where possible. Receipts data should only be reported by a storage facility or terminal if the storage site can report cost, quality, or vendor information that is not available to the plant.

In order to avoid duplicate data, report receipts at **either** the storage site **or** at the plant, but not both. Receipts reported by a storage site and then transferred to the plant should not be reported at the plant level. Instead, designate such transfers in Schedule 4 as a negative adjustment to stocks at the storage site and a positive adjustment to stocks at the plant, including appropriate comments.

**ANNUAL RESPONDENTS:** Report Schedule 2 by aggregating receipts for the entire year in the manner specified in the instructions for Schedule 2, Page 1 below.

**Plant Name, Plant ID, State, Reporting Month and Year:** For e-file users, verify the preprinted information for these items at the top of this (and all) page(s).

If no fuel was received during the reporting period, place a check in the "No Receipts" box, and go to Schedule 3.

If this plant has a tolling agreement and the toller will not divulge the cost of the fuel, you may leave both the commodity and delivered prices blank. Report all other data. Be sure to indicate that there is a tolling agreement currently in place by entering a check in the box at the center of the page. For e-file users, this check will carry over into subsequent months. If the agreement expires, contact the survey manager to have the check removed.

### SCHEDULE 2. PAGE 1. CONTRACT INFORMATION, RECEIPTS, AND COSTS.

1. **Fuel Supplier Name:**

**Coal Receipts:** Report data by supplier and mine source. (Purchased coal which will be converted to synthetic gas should be reported as it is received, i.e. as a coal product. )

**Monthly Respondents:** Coal received from spot-market purchases and from contract purchases should be aggregated separately. Data on coal received under each purchase order or contract with a supplier must be reported separately unless the shipments are identical in purchase type, coal type, mine type, Mine Safety and Health Administration (MSHA) ID, State of origin, county of origin, and supplier. The reported quality and cost data would then be a weighted average of the aggregated deliveries. If coal received under a purchase order or contract originates in more than one mine/county and the MSHA IDs and mine names are known as well as the amount received from each mine, split the amount received accordingly between the number of different mines and report identical quality and prices (unless the actual quality and prices are known).

**Annual Respondents:** Coal received from spot market purchases and from contract purchases should be reported separately. Aggregation for the entire year is allowed by supplier and mine. The cost and quality of the fuel will be a weighted average of the total receipts in that particular aggregation.

**Petroleum Receipts:** Report data by fuel type, supplier or broker, or refinery and, if applicable, port of entry.

**Monthly Respondents:** Oil received from spot-market purchases and from contract purchases should be reported separately. Report individual shipments as separate line items.

**Annual Respondents:** Oil received from spot-market purchases and from contract purchases should be reported separately. Aggregation for the entire year is allowed by fuel type and supplier. The cost and quality of the fuel will be a weighted average of the total receipts in that particular aggregation.

**Gas Receipts (monthly and annual respondents):** Report data by fuel type and supplier, or aggregate by pipeline or distributor. Aggregation of fuel deliveries from various suppliers is allowed only if the purchase type and fuel are identical. The reported cost and quality data would be the weighted average of the aggregated deliveries. If you do aggregate various suppliers, report your pipeline or distributor in the supplier column. Contract or spot-market purchases must be reported as separate line items and should never be aggregated and reported as one delivery. For gas produced by the plant (e.g., BFG), list the supplier as "self-produced," which is one of the choices in the drop-down list of suppliers. Do not report land fill gas (LFG) in the category of Other Gases (OG) on Schedule 2 because LFG is not a fossil fuel.

2. **Contract Type:** Use the following codes for **coal, petroleum** and **natural gas** purchases:

**C – Contract Purchase** – Fuel received under a purchase order or contract with a term of **one year or longer**. **Contracts with a shorter term are considered spot purchases. (See below.)**

**NC – New Contract or Renegotiated Contract Purchase** – Fuel received under a purchase order or contract with duration of one year or longer, under which deliveries were first made during the reporting month.

**S – Spot-Market Purchase** – Fuel received under a purchase order or contract that has a duration of **less than one year**.

3. **Contract Expiration Date:** Enter the month and the year the purchase order or contract expires. For example, report "1108" for a November 2008 expiration date. This column should be left blank if **Contract Type** contains an "S" for spot-market purchase.

#### Receipts

4. **Energy Source:** Identify purchased fossil fuels (including start-up and flame stabilization fuel) using the energy source codes listed in Table 8 for coal and syncoal, petroleum products, and natural gas and other gases.
5. **Quantity Received:** Enter quantities in tons for coal and other solid fuels, barrels for oil and other liquid fuels, and thousands of cubic feet for gas. **The receipts reported should pertain to the fuel that will ultimately be used for electric power generation and thermal energy.** For CHP or cogeneration, include fuel receipts for fuel used for process steam, direct heating, space heating/cooling, or steam delivered to other end users. Other uses should not be included, if possible. For example: if a boiler's output has no connection to a generator, but is solely used for space heating, and it is possible to separate fuel receipts for that boiler, those receipts should not be included on Form 923. Start-up and flame-stabilization fuels should be reported.

#### Cost of Fuel

6. **Total Delivered Cost (all fuels):** Enter the delivered cost of the fuel in **cents** per million Btu to the nearest 0.1 cent. This cost should include all costs incurred in the purchase and delivery of the fuel to the plant. It should not include unloading costs. Do not include adjustments associated with prior months' fuel costs. The delivered price for fuel shipped under contract should include any penalties/premiums paid or expected to be paid on the fuel delivered during the month. These adjustments should be made only by revising the appropriate prior months' submissions. **The current month fuel costs should reflect only costs associated with the current month fuel deliveries.** For natural gas, include the following pipeline charges: fuel losses, transportation reservation charges, balancing costs, and distribution system costs outside of the plant. Because these types of fees can skew the cost of the fuel per MMBtu, please provide an explanation in an error log override comment, e.g. "This price includes a reservation fee of x dollars."

7.

8. **Commodity Cost (Coal and Natural Gas Only):** **The commodity cost is the price of that fuel (in cents per million Btu) at the point of first loading (free on board/FOB) including taxes and any quality-related charges or credits. The commodity cost does not include: loading and unloading charges, dust**

proofing, freeze conditioning, switching charges, diesel fuel surcharges, pipeline charges, or any other charges relating to the movement of the fuel to the point of use. In the case of natural gas this is typically the price of the gas FOB the transmission pipeline.

**SCHEDULE 2. PAGE 2. QUALITY OF FUEL AND TRANSPORTATION INFORMATION**

**Quality of Fuel**

**Fuel Supplier Name, Contract Type, Contract Expiration Date, and Energy Source** will be preprinted for e-file users based on the data entered on page 1 of SCHEDULE 2.

1. **Heat Content:** Enter the average Btu content for each fuel in terms of million Btu (MMBtu) per ton for solid fuel, MMBtu per barrel for liquid fuel, and MMBtu per thousand cubic feet for gas. Show to the nearest 0.001 MMBtu. Refer to Table 8 for approximate ranges.
2. **Sulfur Content:** For all fuels except gas, enter the sulfur content of the fuel in terms of percent sulfur by weight. Show to the nearest 0.01 percent. Refer to Table 1 for approximate ranges.
3. **Ash Content:** For coal only, enter the ash content of the fuel in terms of percent ash by weight. Show to the nearest 0.1 percent. Comment if the reported ash content for coal is an estimate. Refer to Table 1 for approximate ranges.
4. **Mercury Content:** For coal only, enter the mercury content in parts per million (ppm). **Show to the nearest 0.000 parts per million (ppm).** If lab tests of the coal receipts do not include the mercury content, enter the amount specified in the contract with the supplier. Refer to Table 1 for approximate ranges.

**Table 1**

<b>Fuel</b>	<b>% Sulfur</b>	<b>% Ash</b>	<b>Ppm Mercury</b>
<b>BIT</b>	0.4 – 6.0	4.0 – 30.0	<0.500
<b>LIG</b>	0.4 – 3.0	5.0 – 35.0	<0.500
<b>SC</b>	0.4 – 6.0	4.0 – 30.0	<0.500
<b>SUB</b>	0.2 – 1.5	3.0 – 15.0	<0.300
<b>WC</b>	0.3 – 6.0	5.0 – 50.0	<0.700
<b>DFO</b>	0.0 – 1.0		
<b>JF</b>	0.0 – 1.0		
<b>KER</b>	0.0 – 1.0		
<b>PC</b>	1.0 – 7.0		
<b>RFO</b>	0.2 – 4.5		
<b>WO</b>	0.0 – 4.5		

**Fuel Transportation**

5. **Natural Gas:** Use the following codes for natural gas transportation service:
  - F – Firm** – Gas transportation service provided on a firm basis using facilities that were designed, installed, and dedicated to a certified quantity of service. The contract with the gas transportation company anticipates no interruption of gas transportation service. Firm transportation service takes priority over interruptible service.
  - I – Interruptible** – Gas transportation service (usually low-priority service) provided under schedules or contracts which anticipate and permit interruption on short notice, generally in peak-load seasons, by reason of the claim of firm service customers and higher priority users.

(Note: Natural Gas received under firm contracts must be aggregated separately from interruptible contracts.)

6. **Predominant Mode:** The method used to transport the fuel over the longest distance from point of origin to consumer. If the shipment involves only one mode of transportation, that is the Predominant Mode. If the shipment involves more than one mode of transportation, see Secondary Mode below.
7. **Secondary Mode:** If more than one method of transportation is used in a single shipment, the Secondary Mode of transportation is the method used to transport the fuel over the second longest distance from point of origin to consumer. If two methods are used to transport a shipment and both distances are equal, then the Predominant Mode is the method used to transport the fuel from the source and the Secondary Mode is the method used to deliver the fuel to the consumer. If more than two methods are used in a single shipment, only the Predominant and Secondary Modes should be reported.

Do not report "truck" as a transportation mode if trucks are used to transport coal exclusively on private roads between the mine and rail load-out or barge terminal.

Do not report the transportation modes used entirely within a mine, terminal, or power plant (e.g., trucks used to move coal from a mine pit to the mine load-out; conveyors at a power plant used to move coal from the plant storage pile to the plant).

For mine mouth coal plants, report "Conveyor" as the Predominant Mode if the conveyor feeding coal to the plant site originates at the mine. Otherwise report the Predominant Mode (typically truck or rail) used to move the coal to the plant site.

Report Transportation Modes using the following codes:

**RR – Rail:** Shipments of fuel moved to consumers by rail (private or public/commercial). Included is coal hauled to or away from a railroad siding by truck if the truck did not use public roads.

**RV – River:** Shipments of fuel moved to consumers via river by barge. Not included are shipments to Great Lakes coal loading docks, tidewater piers, or coastal ports.

**GL – Great Lakes:** Shipments of coal moved to consumers via the Great Lakes. These shipments are moved via the Great Lakes coal loading docks, which are identified by name and location as follows:

- Conneaut Coal Storage & Transfer, Conneaut, Ohio
- NS Coal Dock (Ashtabula Coal Dock), Ashtabula, Ohio
- Sandusky Coal Pier, Sandusky, Ohio
- Toledo Docks, Toledo, Ohio
- KCBX Terminals Inc., Chicago, Illinois
- Superior Midwest Energy Terminal, Superior, Wisconsin

**TP – Tidewater Piers and Coastal Ports:** Shipments of coal moved to Tidewater Piers and Coastal Ports for further shipments to consumers via coastal water or ocean. The Tidewater Piers and Coastal Ports are identified by name and location as follows:

- Dominion Terminal Associates, Newport News, Virginia
- McDuffie Coal Terminal, Mobile, Alabama
- IC Railmarine Terminal, Convent, Louisiana
- International Marine Terminals, Myrtle Grove, Louisiana
- Cooper/T. Smith Stevedoring Co. Inc., Darrow, Louisiana
- Seward Terminal Inc., Seward, Alaska
- Los Angeles Export Terminal, Inc., Los Angeles, California
- Levin-Richmond Terminal Corp., Richmond, California
- Baltimore Terminal, Baltimore, Maryland
- Norfolk Southern Lamberts Point P-6, Norfolk, Virginia
- Chesapeake Bay Piers, Baltimore, Maryland
- Pier IX Terminal Company, Newport News, Virginia
- Electro-Coal Transport Corp., Davant, Louisiana

**TR – Truck:** Shipments of fuel moved to consumers by truck. Not included is fuel hauled to or away from a railroad siding by truck on non-public roads.

**TC – Tramway/Conveyor:** Shipments of fuel moved to consumers by tramway or conveyor.

**SP – Slurry Pipeline:** Shipments of coal moved to consumers by slurry pipeline.

**PL – Pipeline:** Shipments of fuel moved to consumers by pipeline.

**WT – Water:** Shipments of fuel moved to consumers by other waterways.

#### SCHEDULE 2. PAGE 3. COAL MINE INFORMATION

**Fuel Supplier Name, Contract Type, Contract Expiration Date, and Energy Source** will be preprinted for e-file users based on the data entered on page 1 of SCHEDULE 2.

1. **Mine Safety and Health Administration (MSHA) ID Number:** Enter the MSHA ID number. The MSHA ID should match the ID located at the top of most MSHA forms.
2. **Name of Mine or Tipple:** Insert the name of the mine or tipple.
3. **Mine Type:** Insert "S" for surface-mined or "U" for underground-mined. If the coal received is a blend of surface and underground, use "S/U" or "U/S." This notation will result in a 0.67/0.33 allocation. Do not combine separate deliveries of surface-mined coal and underground-mined coal using the designation of "S/U" or "U/S." These must be reported using the corresponding "S" or "U" mine type.
4. **State or Country of Origin:** Use the two-letter U.S. Postal Service abbreviation to show the State in which the coal was mined. Do not report the location of the preparation plants or transfer facilities, but rather the location of the mine(s). Verify the State of origin with the supplier. **If the origin cannot be determined**, report on SCHEDULE 9 the State of origin based on the most likely probability. While the reporting of the mine origin is mandatory, there will be instances where the specific mine cannot be determined, i.e. purchases from a barge where coal is mixed, purchases from a broker, etc. Report the level of detail available, such as State and/or County of origin. For items left blank, provide a detailed explanation on SCHEDULE 9.

For imported coal, insert the two-letter country code shown here, in combination with IMP in the county code field.

AS – Australia; CN – Canada; CL – Colombia; ID – Indonesia; PL – Poland;

RS– Russia; VZ – Venezuela; OT – Other.

5. **County:** Insert the three-digit Federal Information Processing Standards (FIPS) County Code, <http://www.itl.nist.gov/fipspubs/co-codes/states.htm>, to show the county in which the coal was mined. (For e-file users, a dropdown list is provided for your convenience. Double click on the county code box to access the dropdown list.) Do not report the location of the transfer facilities, shipping facilities, preparation plants, or mining company headquarters. Use only the mine location to determine the county of origin. If the coal from the supplier originates from more than one county, use separate lines to show county of origin and appropriate quantity, quality, and cost data. For imported coal, IMP should be entered. **While the reporting of the mine origin is mandatory, there will be instances where the specific mine cannot be determined, i.e. purchases from a barge where coal is mixed, purchases from a broker, etc. Report the level of detail available, such as State and/or County of origin. For items left blank, provide a detailed explanation on SCHEDULE 9.**

**SCHEDULE 3. PART A. BOILER INFORMATION  
FOR STEAM-ELECTRIC ORGANIC-FUELED PLANTS – FUEL CONSUMPTION**

**Required Respondents:** Complete this schedule for fuels consumed in the boilers at plants with steam turbines that have a total nameplate capacity of **10 MW and above** and burn organic fuels. This does not include steam turbines where the energy source is nuclear, geothermal, or solar, or plants that have less than 10 MW total steam turbine nameplate capacity. Also report on this schedule, fuels consumed at combined-cycle plants for supplementary firing of heat recovery steam generator (HRSG) units that have a total steam turbine nameplate capacity of 10 MW and above. For fuels consumed by gas turbines, including the gas turbines at combined-cycle plants, IC engines, or pumped-storage hydroelectric plants, report fuel consumption on SCHEDULE 3. PART B.

Prime movers are devices that convert one energy form (such as heat from fuels or the motion of water or wind) into mechanical energy. Examples include steam turbines, combustion turbines, reciprocating engines, and water turbines. For a complete list of prime mover codes, please refer to Table 7.

If steam was produced for purposes other than electric power generation during this reporting period, please place a check in the box on the form.

**Prime Mover Code:** Prime mover codes are shown in Table 7. Only CA and ST can be used in Schedule 3. Part A. For e-file users, the code will be preprinted. If the preprinted code is incorrect, delete the code and choose the correct prime mover code from the drop-down list.

**Boiler ID:** The boiler ID will be preprinted. For an ID not preprinted, choose the ID from the drop down list of planned equipment IDs. If the equipment ID is not on the list, choose "OTHER" and enter the required data. The Form EIA-860 staff will determine the ID and provide it to the Form EIA-923 staff who will then overwrite the OTHER code with the actual ID. For non-e-file users, if the ID is unknown, enter "OTHER" along with the required data. EIA staff will determine the ID. Do not use blanks in the code.

If any of the boilers produced steam for purposes other than electric power generation during this reporting period please place a check in the box on the form.

**Boiler Status:** Enter one of the codes listed below:

**Table 2**

Code	Boiler Status
OP	Operating (in commercial service or out of service less than 365 days)
OS	Out of service (365 days or longer)
RE	Retired (no longer in service and not expected to be returned to service)
SB	Standby (or inactive reserve); i.e., not normally used, but available for service
SC	Cold Standby (Reserve); deactivated (usually requires 3 to 6 months to reactivate)

**Energy Source:** Use the fuel codes in Table 8. **For bituminous and subbituminous coal that is blended, report the fuel that is predominant in quantity.**

**Quantity Consumed:** For each month, report the amount of fuel consumed for electric power generation and thermal energy associated with the production of electricity. Include all fuel used in a cogeneration system, such as fuel used for process steam, direct heating, space heating, or thermal output delivered to other end users. Combined-cycle units should report only the auxiliary firing fuel associated with the HRSG. Do not report the fuel associated with the combustion turbine portion of the combined-cycle unit.



**Type of Physical Units:** Fuel consumption must be reported in the following units:

Solids – Tons

Liquids – Barrels (one barrel equals 42 U.S. gallons)

Gases – Thousands of cubic feet (Mcf)

**Average Heat Content:** For each month, report the heat content of the fuels burned in million Btu (MMBtu) per physical unit. The heat content of the fuel should be reported as the gross or “higher heating value” (rather than the net or lower heating value). The higher heating value exceeds the lower heating value by the latent heat of vaporization of the water. The heating value of fuels generally used and reported in a fuel analysis, unless otherwise specified, is the higher heating value. If the fuel heat content cannot be reported “as burned,” data may be obtained from the fuel supplier on an “as received” basis.

If this is the case, indicate on SCHEDULE 9 that the fuel heat content data are “as received.” Report the value in the following units: solids in million Btu (MMBtu) per ton; liquids in MMBtu per barrel; and gases in MMBtu per thousand cubic feet (Mcf). Refer to Table 8 for approximate ranges of heat content of specific energy sources.

**Sulfur Content (petroleum, petroleum coke, and coal):** For each month, enter sulfur content to nearest 0.01 percent. Sulfur content should be reported for the following fuel codes: BIT, LIG, SUB, WC, PC, SC, RFO, and WO. Refer to Table 1 for approximate ranges.

**Ash Content (coal only):** For each month, enter ash content to the nearest 0.1 percent. Ash content should be reported for the following fuel codes: BIT, LIG, SUB, WC, and SC. Refer to Table 1 for approximate ranges.

**Report actual values.** If necessary, report estimated values and state that the value is an estimate on SCHEDULE 9.

**ENTER ZERO** when an energy source was not consumed for the reporting period. Do not leave blank.

### **SCHEDULE 3. PART B. FUEL CONSUMPTION – PRIME MOVER-LEVEL**

**Required Respondents:** Report fuel consumed in all combustion turbines, internal combustion engines, steam-electric plants under 10 megawatts, and pumped-storage hydroelectric plants. Excluded from this schedule are conventional hydroelectric plants and all other plants that do not consume a combustible energy source (e.g., wind, solar, geothermal, and nuclear). Do not report for each individual unit. For example, report natural gas consumed in all combustion turbines at the plant as one value and report distillate fuel oil consumed by all IC engines as one value. Combined-cycle plants should report the fuel consumed by the combustion turbines on this schedule. Report supplementary fuel consumed by the HRSG on this schedule only if the steam turbine is less than 10 MW. Supplementary-fired HRSGs 10 MW and above must report on Schedule 3A.

Prime movers are devices that convert one energy form (such as heat from fuels or the motion of water or wind) into mechanical energy. Examples include steam turbines, combustion turbines, reciprocating engines, and water turbines.

If steam was produced for purposes other than electric power generation during this reporting period, please place a check in the box on the form.

**Prime Mover Code:** Prime mover codes are shown in Table 7. Only CA, CS, CT, GT, IC, PS, ST, and OT can be used in Schedule 3. Part B. For e-file users, the code will be preprinted. If the preprinted code is incorrect, delete the code and choose the correct prime mover code from the drop-down list.

**Report actual values.** If necessary, report estimated values and state that the value is an estimate on SCHEDULE 9.

**Energy Source:** Use the fuel codes in Table 8. For bituminous and subbituminous coal that is blended, report the fuel that is predominant in quantity.

**Quantity Consumed:** For each month, report the amount of fuel consumed for electric power generation and thermal energy associated with the production of electricity. Include all fuel used in a cogeneration system, such as fuel used for process steam, direct heating, space heating, or thermal output delivered to other end users. If you cannot report your fuel using the specified units of measure (below), specify the units you are using on SCHEDULE 9. Include start-up and flame-stabilization fuels.

**Type of Physical Units:** Fuel consumption must be reported in the following units:

Solids – Tons

Liquids – Barrels (one barrel equals 42 U.S. gallons)

Gases – Thousands of cubic feet (Mcf)

**Average Heat Content:** For each month, report the heat content of the fuels burned in million Btu (MMBtu) per physical unit. The heat content of the fuel should be reported as the gross or “higher heating value” (rather than the net or lower heating value). The higher heating value exceeds the lower heating value by the latent heat of vaporization of the water. The heating value of fuels generally used and reported in a fuel analysis, unless otherwise specified, is the higher heating value. If the fuel heat content cannot be reported “as burned,” data may be obtained from the fuel supplier on an “as received” basis. If this is the case, indicate on SCHEDULE 9 that the fuel heat content data are “as received.” Report the value in the following units: solids in MMBtu per ton; liquids in MMBtu per barrel; and gases in MMBtu per thousand cubic feet (Mcf). Refer to Table 8 for approximate ranges of heat content for specific fuels.

#### **SCHEDULE 4. FOSSIL FUEL STOCKS AT THE END OF THE REPORTING PERIOD AND DATA BALANCE**

**Required Respondents:** Schedule 4 regarding stocks must be completed by all plants that burn fossil fuels: COAL, DISTILLATE FUEL OILS (NO. 2, 4), RESIDUAL FUEL OIL (NO. 6), JET FUEL, KEROSENE, PETROLEUM COKE, AND NATURAL GAS. Although there are no stocks for natural gas, the energy balance (between receipts and consumed fuel) and comments should be completed for natural gas plants that have a total nameplate capacity of 50 MW and more (and have completed Schedule 2).

Report fuel stocks ONLY for the following fuels:

- Coal: Report all stocks of coal for use by this power plant. This includes both stocks held on site and stocks held off site whether owned by your plant or by an affiliated company. If the stocks are held for the plant by an affiliated company and the amount is unknown, please provide EIA the name of the company. EIA will contact them to obtain the stocks number. Do not report waste coal stocks.
- Residual oil (No. 5 and No. 6 fuel oils)
- Distillate-type oils (including diesel oil, No. 2 oil, jet fuel, and kerosene)
- Petroleum coke

Include back-up fuels and start-up and flame-stabilization fuels. Do not report stocks for waste coal, natural gas, or wood waste. All fuel stocks should be reported at the plant level where possible. Stocks data should only be reported at a storage facility if inventory cannot be attributed to individual plants.

Receipts reported by a storage site and then transferred to the plant should not be reported at the plant level. Instead, designate such transfers in Schedule 4 as a negative adjustment to stocks at the storage site and a positive adjustment to stocks at the plant, including appropriate comments. Schedule 4 data for storage facilities will not have a balance because there are no consumption data and possibly no receipts data (for example, if receipts are reported at the plant level or if the storage facility exclusively holds stocks).

**ENTER ZERO** in the Ending Stocks column if a plant has no stocks.

**Energy Source:** Add the energy source code from Table 8. For e-file users the code will be preprinted. If the code is incorrect, delete it and choose the correct code from the drop-down list.

**Type of Physical Units:** Report coal and petroleum coke in tons and distillate and residual oils in barrels.

1. **Previous Month's Ending Stocks:** This is automatically loaded into the schedule.
2. **Current Month's Receipts:** These data have been reported (above in SCHEDULE 2) and will also automatically appear.
3. **Current Month's Consumption:** These data also have been reported (in SCHEDULE 3) and will automatically appear. For plants with steam-electric turbines of 10 MW or greater, these are the data reported in SCHEDULE 3. PART A. Otherwise, these are the data reported in SCHEDULE 3. PART B.
4. **Ending Stocks:** Report this month's ending stocks, including on-site stocks that do not belong to your plant.
5. **Adjustment to Stocks:** Report adjustments to end-of-month stocks. Adjustments may include stocks transferred or sold offsite and revisions to account for adjustments to previous months' stocks. Adjustments can be positive or negative. Enter the reason for the adjustment in a comment in SCHEDULE 9.

**Balance:** The data balance verifies the quality of the data. The balance is the difference between Reported Ending Stocks (4) and an expected value for ending stocks calculated by the following equation: Previous Month's Ending Stocks plus Current Month's Receipts minus Current Month's Consumption plus (or minus) Adjustment to Stocks [(4) = (1) + (2) - (3) + (5)]. If the balance is a non-zero value, please review the data entered for stocks, receipts, consumption, and adjustments. Enter a comment to explain any discrepancy. Fuel receipts that are not used for the production of electricity but for purposes related to the production (e.g. as a feed material to produce chemical byproducts such as fertilizers, etc.) will most likely cause an imbalance in the equation. Likewise, fuel that is sold off during the month will cause an imbalance. Enter a comment to explain these or any situations that result in an imbalance.

**SCHEDULE 5. PART A. GENERATOR INFORMATION FOR STEAM-ELECTRIC  
ORGANIC-FUELED PLANTS**

**Required Respondents:** This schedule will be completed ONLY for generators at steam-electric organic-fueled plants with a total steam turbine capacity of 10 megawatts and above. Report generation for all other types of prime movers (combustion turbines, IC engines, wind, or hydro-electric turbines), and steam turbine plants with less than 10 megawatts total capacity or fueled by nuclear, solar, geothermal, or other energy sources on SCHEDULE 5. PARTS B or C. Generation reported on Schedule 5. Part A. corresponds to the fuel consumption reported on Schedule 3. Part A.

**Prime Mover Code:** Prime mover codes are shown in Table 7. Only CA and ST can be used in Schedule 5. Part A. For e-file users, the code will be preprinted. If the preprinted code is incorrect, delete the code and choose the correct prime mover code from the drop-down list.

**Generator ID:** The generator ID will be preprinted. For an ID not preprinted, choose the ID from the drop down list of planned equipment IDs. If the equipment ID is not on the list, choose "OTHER" and enter the required data. The Form EIA-860 staff will determine the ID and provide it to the Form EIA-923 staff who will then overwrite the OTHER code with the actual ID. For non-e-file users, if the ID is unknown, enter "OTHER" along with the required data. EIA staff will determine the ID. Do not use blanks in the code.

Data must be reported in megawatthours (MWh), rounded to whole numbers, no decimals.

If no generation occurred, report **ZERO**. Please do not leave fields blank.

**Generator Status:** Enter one of the codes listed in Table 3 for generator status.

**Table 3**

<b>Status Code</b>	<b>Status Code Description</b>
OP	Operating - in service (commercial operation) and producing some electricity. Includes peaking units that are run on an as needed (intermittent or seasonal) basis.
SB	Standby/Backup - available for service but not normally used (has little or no generation during the year) for this reporting period
OA	Out of service – was not used for some or all of the reporting period but was either returned to service on December 31 or will be returned to service in the next calendar year.
OS	Out of service – was not used for some or all of the reporting period and is NOT expected to be returned to service in the next calendar year.
RE	Retired - no longer in service and not expected to be returned to service

**Gross Generation:** Enter the total amount of electric energy produced by generating units and measured at the generating terminal. For each month, enter that amount in MWh.

**Net Generation:** Enter the gross generation minus the electric energy consumed at the generating station for pumps, fans, and auxiliary equipment. If the monthly station service load exceeded the monthly gross electrical generation, report negative electrical net generation with a minus sign. Do not use parentheses. For each month, enter that amount in MWh.

**SCHEDULE 5. PART B. PRIME MOVER LEVEL GENERATION**

**Required Respondents:** This schedule will be completed by: 1) steam-electric organic-fueled plants with a total steam turbine capacity less than 10 megawatts, 2) combined-cycle plants whose steam portion of the operation is under 10 MW, and 3) **ALL** IC engines, combustion turbines, and pumped-storage hydroelectric turbines. Generation reported on this schedule corresponds to the fuel consumption reported on Schedule 3. Part B.

**Prime Mover Code:** Prime mover codes are shown in Table 7. Only CA, CS, CT, GT, IC, PS, ST, and OT can be used in Schedule 5. Part B. For e-file users, the code will be preprinted. If the preprinted code is incorrect, delete the code and choose the correct prime mover code from the drop-down list.

If no generation occurred, report zero. Do not leave fields blank.

Data must be reported in MWh, rounded to whole numbers, with no decimals.

**Gross Generation:** Enter the total amount of electric energy produced by generating units and measured at the generating terminal. For each month, enter in the MWh generated.

**Net Generation:** Enter the gross generation minus the electric energy consumed at the generating station for pumps, fans, and auxiliary equipment. If the monthly station service load exceeded the monthly gross electrical generation, report negative net electrical generation with a minus sign. Do not use parentheses. For each month, enter the net generation in MWh.

**SCHEDULE 5. PART C. GENERATION FROM NUCLEAR AND  
OTHER NONCOMBUSTIBLE ENERGY SOURCES**

**Required Respondents:** This schedule will be completed by all nuclear plants and by all wind, solar, geothermal, hydroelectric, or other plants where the energy source is noncombustible, such as purchased steam or waste heat. No fuel consumption is required for these types of plants. Report generation by energy source for nuclear, wind, solar, geothermal, conventional hydroelectric, and miscellaneous sources such as purchased steam or waste heat. **Report nuclear data by generating unit.** Do not report generation at a combined-cycle plant. All combined-cycle generation is reported on SCHEDULE 5. PART B.

**Prime Mover Code:** Prime mover codes are shown in Table 7. Only CE, FC, HY, BT, PV, ST, WT, and OT can be used in Schedule 5. Part C. For e-file users, the code will be preprinted. If the preprinted code is incorrect, delete the code and choose the correct prime mover code from the drop-down list.

**Energy Source:** Enter one of the fuel codes listed in Table 8.

**Unit Code:** For nuclear units only, enter the nuclear unit code.

**Gross Generation:** Enter the total amount of electric energy produced by generating units and measured at the generating terminal. For each month, enter that amount in MWh.

**Net Generation:** Enter the gross generation minus the electric energy consumed at the generating station for pumps, fans, and auxiliary equipment. If the monthly station service load exceeded the monthly gross electrical generation, report negative electrical net generation with a minus sign. Do not use parentheses. For each month, enter that amount in MWh.

**SCHEDULE 6. NONUTILITY ANNUAL SOURCE AND DISPOSITION OF ELECTRICITY**

**Required Respondents:** Nonutility plants report annual (no monthly detail) source and disposition of electricity. Annual data on SCHEDULE 6 are due by March 30 following the reporting year.

- *If you file the EIA-923 monthly, you should complete this schedule between January and the March 30 due date following the reporting year.*
- *If you file the EIA-923 annually, fill out this schedule when you submit your other data due by March 30 of the year following the reporting year.*

Report all generation in MWh rounded to a whole number.

**Source of Electricity**

1. **Gross Generation (Annual):** Report the total gross generation from all prime movers at the plant.
2. **Other Incoming Electricity:** Report all incoming electricity to the facility, whether from purchases, tolling agreements, transfers, exchanges, or other arrangements.
3. **Total Sources:** Enter the sum of the total **gross electricity generated** plus the total **incoming electricity**. This entry must equal **Total Disposition** (see below).

**Disposition of Electricity**

4. **Station Use:** Station Use is electricity that is used to operate an electric generating plant, including electricity used in the operation, maintenance, or repair of the facility (e.g., for heating, lighting, and office facilities), regardless of whether the electricity is produced at the plant or comes from another source. Station use does not include any electricity converted and stored at an energy storage plant (such as electricity used for pumping at a hydroelectric pumped-storage plant), nor direct use (see below) of electricity by an industrial or commercial CHP plant.
5. **Direct Use (CHP Plants):** Report the amount of electricity generated by the plant and consumed onsite for processes such as manufacturing, district heating/cooling, and uses other than power plant station use. **(CHP plants that cannot separate Station Use and Direct Use may enter zero in Station Use and the sum of Station Use and Direct Use in the Direct Use field. Provide a comment on SCHEDULE 9.)**
6. **Total Facility Use:** Report the total sum of station use and direct use.
7. **Retail Sales to Ultimate Customers:** Report the amount of electricity sold, or otherwise provided, to retail (end-use) customers. Include unbilled electricity provided to affiliated and non-affiliated entities, excluding power provided as part of a tolling agreement. By entering a value in this cell, you will be required to also file Form EIA-861 "Annual Electric Power Industry Report."
8. **Sales for Resale:** Report the amount of electricity sold for resale (wholesale sales in MWh). If data are entered for this item, you must complete SCHEDULE 7.
9. **Other Outgoing Electricity:** Report all other outgoing electricity from the facility, such as tolling agreements, transfers, and exchanges.

**Total Disposition:** Report the sum of station use, direct use, retail sales, sales for resale, and other outgoing electricity. This entry must equal **Total Sources** (see above).

### SCHEDULE 7. ANNUAL REVENUES FROM SALES FOR RESALE

**Required Respondents:** To be completed by respondents who report a positive value on SCHEDULE 6, Disposition of Electricity, Item 8, Sales for Resale.

“Sales for Resale” is energy supplied to other electric utilities, cooperatives, municipalities, Federal and State electric agencies, or other entities for resale to end-use consumers.

Report all revenue from Sales for Resale in thousand dollars to the nearest whole number.

### SCHEDULE 8. ANNUAL ENVIRONMENTAL INFORMATION

**Required Respondents:** SCHEDULE 8. PARTS A through F are filed annually and must be reported by steam-electric organic-fueled power plants with a total steam turbine capacity of 100 megawatts and above (only plants that reported boiler-level consumption on SCHEDULE 3. Part A.). All steam-electric organic-fueled power plants with a total steam turbine capacity of 10 megawatts and above are responsible for filing Schedule 8, Parts C, E, and F. Annual data are due by March 30 following the reporting year.

#### SCHEDULE 8. PART A. ANNUAL BYPRODUCT DISPOSITION

1. If no byproduct was produced, place a check in the checkbox labeled NO BYPRODUCTS.
2. If a byproduct is disposed of at no cost, enter the quantity of the byproduct under the appropriate column and make a footnote entry on SCHEDULE 9 stating that no money was exchanged for the quantity indicated. If there was a cost for disposal, make sure there is a corresponding entry on SCHEDULE 8, PART B, for collection and/or disposal costs. Costs for gypsum disposal should be reported on SCHEDULE 8, PART B, column 5, under “Disposal,” with a footnote entry on SCHEDULE 9. Entries on SCHEDULE 8, PART A, in the **Sold** column, must be compatible with entries on SCHEDULE 8, PART B, columns 11 through 16, **Byproduct Sales Revenue**. If the byproduct was distributed in several different ways (for example, the byproduct was placed in a landfill and then later sold), report the end disposition of the byproduct and provide a comment on SCHEDULE 9 explaining all previous dispositions.
3. Do not include byproducts sold under “Used On-Site.”
4. **Fly ash from standard boiler/primary particulate collection device (PCD) units** includes those with no flue gas desulfurization (FGD) system or with FGD systems located downstream of the PCD.
5. **Fly ash from units with dry FGD** includes spray dryer or duct injection systems where Fly Ash and FGD byproducts are collected in the same PCD. It does not include Fluidized Bed Combustion (FBC) units.
6. **Fly ash from FBC units** includes fly ash from fluidized bed combustion (FBC) units.
7. **Bottom ash from standard boiler units** includes boiler slag from slagging combustors. It does not include Bottom (Bed) Ash from FBC units or slag from coal gasification units.
8. **Bottom (bed) ash from FBC units** includes bottom (bed) ash from fluidized bed combustion (FBC) units.
9. **FGD Gypsum** is defined as byproducts that are greater than 75 percent  $\text{CaSO}_4 \bullet 2\text{H}_2\text{O}$  by weight.
10. **Other FGD byproducts** includes all FGD byproducts not reported in **Fly ash from units with dry FGD units; Fly ash from FBC units; Bottom ash from standard boiler units; Bottom (bed) ash from FBC units;** and **FGD gypsum** along with additives used to stabilize the FGD byproducts.
11. **Ash from coal gasification (IGCC) units** includes slag or solids extracted from the bottom of the gasifier as well as fly ash removed downstream of the gasifier.
12. **Other:** Enter amount of other by-products. Specify the by-product on Schedule 9, Comments.

13. **Steam sales** should be reported in million Btu (MMBtu)

**SCHEDULE 8. PART B. FINANCIAL INFORMATION**

1. All entries should be reported in thousand dollars to the nearest whole number.
2. For all **Operation and Maintenance (O&M) Expenditures During Year**, costs should be provided for both collection and disposal of the indicated byproducts. If the collection and disposal costs cannot be separated, place the total cost under **Collection**, and provide a comment on SCHEDULE 9 indicating that the costs cannot be separated. All operation and maintenance expenditures should exclude depreciation expense, cost of electricity consumed, and fuel differential expense (i.e., extra costs of cleaner, thus more expensive fuel). Include all contract and self-service pollution abatement operation and maintenance expenditures for each line item.
3. For column 1, **Fly Ash**, and column 2, **Bottom Ash**, expenditures cover all material and labor costs including equipment operation and maintenance costs (such as particulate collectors, conveyors, hoppers, etc.) associated with the collection and disposal of the byproducts.
4. For column 3, **Flue Gas Desulfurization**, expenditures cover all material and labor costs including equipment operation and maintenance costs associated with the collection and disposal of the sulfur byproduct.
5. For column 4, **Water Pollution Abatement**, expenditures cover all operation and maintenance costs for material and/or supplies and labor costs including equipment operation and maintenance (pumps, pipes, settling ponds, monitoring equipment, etc.), chemicals, and contracted disposal costs. Collection costs include any expenditure incurred once the water that is used at the plant is drawn from its source. Begin calculating expenditures at the point of the water intake. Disposal costs include any expenditure incurred once the water that is used at the plant is discharged. Begin calculating disposal expenditures at the water outlet (i.e., cooling costs).
6. For column 5, **Other Pollution Abatement**, operation and maintenance expenditures are those not allocated to one particular expenditure (e.g., expenditures to operate an environmental protection office or lab). Include expenses for conducting environmental studies for expansion or reduction of operation. Exclude all expenses for health, safety, employee comfort (OSHA), environmental aesthetics, research and development, taxes, fines, permits, legal fees, Superfund taxes, and contributions. Define other pollution abatement(s) in a comment on SCHEDULE 9.
7. For **Capital Expenditures for New Structures and Equipment during Year, Excluding Land and Interest Expense**, report all pollution abatement capital expenditures for new structures and/or equipment made during the reporting year regardless of the date they may become operational. Columns 7, 8, 9, and 10 should not be left blank. **ENTER ZERO** if the item is not applicable or an estimate is not available, and enter a comment in SCHEDULE 9. Specify the nature of the expenditures for these items in a comment on SCHEDULE 9.
8. For column 7, **Air Pollution Abatement**, report new structures and/or equipment purchased to reduce, monitor, or eliminate airborne pollutants, including particulate matter (dust, smoke, fly ash, dirt, etc.), sulfur dioxides, nitrogen oxides, carbon monoxide, hydrocarbons, odors, and other pollutants. Examples of air pollution abatement structures/equipment include flue gas particulate collectors, FGD units, continuous emissions monitoring equipment (CEMs), and nitrogen oxide control devices. Specify new structures/equipment in a comment on SCHEDULE 9.
9. For column 8, **Water Pollution Abatement**, report new structures and/or equipment purchased to reduce, monitor, or eliminate waterborne pollutants, including chlorine, phosphates, acids, bases, hydrocarbons, sewage, and other pollutants. Examples include structures/equipment used to treat thermal pollution; cooling, boiler, and cooling tower blowdown water; coal pile runoff; and fly ash waste water. Water pollution abatement excludes expenditures for treatment of water prior to use at the plant. Specify new structures/equipment in a comment on SCHEDULE 9.



10. For column 9, **Solid/Contained Waste**, report new structures/equipment purchased to collect and dispose of objectionable solids or contained liquids. Examples include purchases of storage facilities, trucks, etc., to collect, store, and dispose of solid/contained waste. Include equipment used for handling solid/contained waste generated as a result of air and water pollution abatement. Specify new structures/equipment in a comment on SCHEDULE 9.
11. For column 10, **Other Pollution Abatement**, report amortizable expenses and purchases of new structures and or equipment when such purchases are not allocated to a particular unit or item. Examples include charges for the purchases of facilities to control hazardous waste, radiation, and noise pollution. Exclude all equipment purchased for aesthetics purposes. Specify new structures/equipment in a comment on SCHEDULE 9.
12. If **Byproduct Sales Revenue During Year** items are not applicable, **ENTER ZERO** in Total, column 16, only. Report the revenue, if any, for each listed byproduct. Specify "other" revenue in a comment on SCHEDULE 9. Entries must be compatible with the entries on SCHEDULE 8, PART A, "Sold" column. If the revenue for a byproduct is less than \$500, but more than zero dollars, enter a zero and enter a comment on SCHEDULE 9 with the actual dollar amount. Revenue for gypsum should be reported on SCHEDULE 8, PART B, column 14, with a comment on SCHEDULE 9. Report the total revenue for the sale of byproducts in column 16. If the revenue reported was for the sale of stockpiled byproducts from previous years, make a comment on SCHEDULE 9.

**SCHEDULE 8. PART C. BOILER INFORMATION  
NITROGEN OXIDE EMISSION CONTROLS**

1. **No NOx Controls:** Place a check in this box if the plant has no NOx control equipment.
2. **Boiler ID:** The boiler ID should match the boiler ID reported on the EIA-860. It will be preprinted for e-file users.
3. **NOx Control In-Service (hours):** Enter the total hours the nitrogen oxide control was in service during the reporting period (to the nearest hour).
4. **For Entire Year,** enter the controlled nitrogen oxide emission rate, in pounds per million Btu of the fuel, based on data from the continuous emission monitoring system (CEMS) where possible. Where CEMS data are not available, report the controlled nitrogen oxide emission rate based on the method used to report emissions data to environmental authorities.
5. For **May through September Only**, enter the controlled nitrogen oxide emission rate, in pounds per million Btu of the fuel, based on data from CEMS where possible. Where CEMS data are not available, report controlled nitrogen oxide rates based on the method used to report emissions data to environmental authorities. The summer emission rate may be assumed to be equivalent to the annual emission rate where identical nitrogen oxide controls are used year round.

**SCHEDULE 8. PART D. COOLING SYSTEM INFORMATION  
ANNUAL OPERATIONS**

1. **If actual data are not available, provide an estimated value.**
2. **If the source of cooling water is a well or municipal water system, do not complete the Maximum Cooling Water Temperature sections.**
3. **Cooling System ID:** The cooling system ID should match what was last reported in 2005 on the Form EIA-767. It will be preprinted for e-file users. For an ID not preprinted, choose the ID from the drop-down list of planned equipment IDs. If the equipment ID is not on the list, choose "OTHER" and enter the required data. The Form EIA-860 staff will determine the ID and provide it to the Form EIA-923 staff who will then overwrite the OTHER code with the actual ID. For non-e-file users, if the ID is unknown, enter "OTHER" along with the required data. EIA staff will determine the ID.

4. **Cooling System Status:** Select from the equipment status codes on Table 4.

**Table 4**

<b>Code</b>	<b>System Status</b>
OP	Operating (in commercial service or out of service less than 365 days)
OS	Out of service (365 days or longer)
RE	Retired (no longer in service and not expected to be returned to service)
SB	Standby (or inactive reserve); i.e., not normally used, but available for service)
SC	Cold Standby (Reserve); deactivated (usually requires 3 to 6 months to reactivate)

5. **Annual Amount of Chlorine Added to Cooling Water** pertains solely to elemental chlorine. If a compound is used, determine the amount of chlorine in the compound. If the amount of chlorine added to the cooling water is known for the entire plant but not for each cooling system, enter the information under the first cooling system ID in column (a), and **ENTER ZERO** in the rest of the columns as necessary, and indicate in a comment on SCHEDULE 9 that the information is for the entire plant. Report amount of chlorine to the nearest whole number in thousand pounds.
6. **For Annual Rate of Cooling Water Discharge, if the system is a closed, zero-discharge system, report "0," complete consumption and intake temperatures, but skip discharge temperatures.**
7. **If the Average Annual Flow Rate of Cooling Water is known for the entire plant but not for each cooling system, enter the information in Consumption** under the first cooling system ID, column (a), **ENTER ZERO** in the rest of the columns as necessary, and indicate in a comment on SCHEDULE 9 that the information is for the entire plant.
8. **For the Maximum Cooling Water Temperature** sections, the "Peak Load Month" refers to the month of greatest plant electrical generation during the winter heating season (October-March) and summer cooling season (April-September), respectively. Report temperature in degrees Fahrenheit to the nearest whole number.

**SCHEDULE 8. PART E. FLUE GAS PARTICULATE COLLECTOR INFORMATION**

1. **Flue Gas Particulate Collector ID:** The flue gas particulate collector ID should match what was reported in 2005 on the Form EIA-767. It will be preprinted for e-file users. For an ID not preprinted, choose the ID from the drop down list of planned equipment IDs. If the equipment ID is not on the list, choose "OTHER" and enter the required data. The Form EIA-860 staff will determine the ID and provide it to the Form EIA-923 staff who will then overwrite the OTHER code with the actual ID. For non-e-file users, if the ID is unknown, enter "OTHER" along with the required data. EIA staff will determine the ID.
2. **FGP Collector Status:** Select from the equipment status codes in Table 5.

**Table 5**

<b>Code</b>	<b>Status</b>
CN	Cancelled (previously reported as "planned")
CO	New unit under construction
OP	Operating (in commercial service or out of service within 365 days)
OS	Out of service (365 days or longer)
PL	Planned (on order or expected to go into commercial service within 5 years)
RE	Retired (no longer in service and not expected to be returned to service)

3. **Hours in Service:** Enter the hours each collector was in service for the reporting period.
4. For **Typical Particulate Emissions Rate**, enter the particulate emission rate based on the annual operating factor (to nearest 0.01 pound per million Btu).
5. For **Removal Efficiency of Particulate Matter at Annual Operating Factor** and **At 100-Percent Load or Tested Efficiency**, if the collector has a combination of components (i.e., a baghouse and an electrostatic precipitator) enter both components as one unit in one column. If the particulate collector also removes sulfur dioxide, enter the particulate scrubbing process in this section and the desulfurization process on SCHEDULE 8, PART F, **FLUE GAS DESULFURIZATION UNIT INFORMATION ANNUAL OPERATIONS**.
6. For **Removal Efficiency of Particulate Matter at Annual Operating Factor**, enter removal efficiency based on the annual operating factor. Annual operating factor is defined as annual fuel consumption divided by the product of design firing rate and hours of operation per year. If actual data are unavailable, provide estimates based on equipment design performance specifications.
7. For **At 100-Percent Load or Tested Efficiency**, if the test was conducted, but not at 100-percent load, enter the efficiency and provide the load at which the test was conducted in a comment on SCHEDULE 9. If no test has been conducted, **ENTER ZERO** in the column and in the test date column. Test results should not be noted if there was no test date.
8. For **Date of Most Recent Efficiency Test**, enter test date. If an efficiency test has never been performed, enter "NA" and enter a comment on SCHEDULE 9.

**SCHEDULE 8. PART F. FLUE GAS DESULFURIZATION UNIT INFORMATION  
ANNUAL OPERATIONS**

1. **Flue Gas Desulfurization Unit ID:** The flue gas desulfurization unit ID should match what was reported in 2005 on the Form EIA-767. It will be preprinted for e-file users. For an ID not preprinted, choose the ID from the drop down list of planned equipment IDs. If the equipment ID is not on the list, choose "OTHER" and enter the required data. The Form EIA-860 staff will determine the ID and provide it to the Form EIA-923 staff that will then overwrite the OTHER code with the actual ID. For non-e-file users, if the ID is unknown, enter "OTHER" along with the required data. EIA staff will determine the ID.

2. **The Flue Gas Desulfurization Unit Status**, as of January 1 following the end of the reporting year. Select from the equipment status codes listed in Table 6.

**Table 6**

Code	Status
CN	Cancelled (previously reported as "planned")
CO	New unit under construction
OP	Operating (in commercial service or out of service less than 365 days)
OS	Out of service (365 days or longer)
PL	Planned (on order and expected to go into commercial service within 5 years)
RE	Retired (no longer in service and not expected to be returned to service)

3. For **Hours In Service**, enter the total number of hours one or more trains (or modules) were in operation; do not report for individual trains.
4. **Quantity of FGD Sorbent Used**: Enter the quantity of FGD sorbent used during the reporting period (to the nearest 0.1 thousand tons).
5. **Electrical Energy Consumption**: Enter the Electrical Energy Consumed by this Unit during the reporting period (in megawatthours).
6. For **Estimated Removal Efficiency for Sulfur Dioxide at Annual Operating Factor** and At 100 Percent Load or Tested Efficiency, if the FGD unit also removes particulate matter, enter the desulfurization process in this section and the particulate scrubbing process on SCHEDULE 8. PART E, FLUE GAS PARTICULATE COLLECTOR INFORMATION.
7. For **Estimated Removal Efficiency for Sulfur Dioxide at Annual Operating Factor**, enter removal efficiency based on the annual operating factor. Annual operating factor is defined as annual fuel consumption divided by the product of design firing rate and hours of operation per year. If actual data are unavailable, provide estimates based on equipment design performance specifications.
8. For **Estimated Removal Efficiency for Sulfur Dioxide at 100-Percent Load or Tested Efficiency**, if the test was conducted, but not at 100-percent load, enter the efficiency, and provide the load at which the test was conducted in a comment on SCHEDULE 9. If no test was conducted, input "NA" in the final two lines. Test results should not be given without a test date.
9. Report the **Operation and Maintenance Expenditures during the Year**, excluding electricity, in thousand dollars.

**SCHEDULE 9. COMMENTS**

**PRIME MOVER  
CODES AND  
DESCRIPTION**

This schedule provides additional space for comments. Please identify schedule, item, and identifying information (e.g., plant code, boiler ID, generator ID, prime mover) for each comment. If plant is sold, provide purchaser's name, a telephone number (if available), and date of sale.

**Table 7**

<b>Prime Mover Code</b>	<b>Prime Mover Description</b>
CA	Combined-Cycle – Steam Part
CE	Compressed Air Energy Storage
CS	Combined-Cycle Single Shaft – Combustion turbine and steam turbine share a single generator
CT	Combined-Cycle Combustion – Turbine Part
FC	Fuel Cell
GT	Combustion (Gas) Turbine (including jet engine design)
HY	Hydraulic Turbine (including turbines associated with delivery of water by pipeline)
IC	Internal Combustion (diesel, piston) Engine
PS	Hydraulic Turbine – Reversible (pumped storage)
BT	Turbines Used in a Binary Cycle (such as used for geothermal applications)
PV	Photovoltaic
ST	Steam Turbine (including nuclear, geothermal and solar steam, excluding combined-cycle)
WT	Wind Turbine
OT	Other – Specify on SCHEDULE 9.

**ENERGY SOURCE  
CODES AND HEAT  
CONTENT**

**Table 8**

	Energy Source Code	Unit Label	"Higher Heating Value" Range		Energy Source Description
			MMBtu Lower	MMBtu Upper	
<b>Fossil Fuels</b>					
<b>Coal and Syncoal</b>	BIT	tons	20	29	Anthracite Coal and Bituminous Coal
	LIG	tons	10	14.5	Lignite Coal
	SC	tons	10	35	Coal-based Synfuel (including briquettes, pellets, or extrusions, which are formed by binding materials or processes that recycle materials)
	SUB	tons	15	20	Subbituminous Coal
	WC	tons	6.5	16	Waste/Other Coal (including anthracite culm, bituminous gob, fine coal, lignite waste, waste coal)
<b>Petroleum Products</b>	DFO	barrels	5.5	6.2	Distillate Fuel Oil (including diesel, No. 1, No. 2, and No. 4 fuel oils.
	JF	barrels	5	6	Jet Fuel
	KER	barrels	5.6	6.1	Kerosene
	PC	tons	24	30	Petroleum Coke
	RFO	barrels	5.8	6.8	Residual Fuel Oil (including No. 5 and No. 6 fuel oils, and bunker C fuel oil.
	WO	barrels	3.0	5.8	Waste/Other Oil (including crude oil, liquid butane, liquid propane, oil waste, re-refined motor oil, sludge oil, tar oil, or other petroleum-based liquid wastes)
<b>Natural Gas and Other Gases</b>	BFG	Mcf	0.07	0.12	Blast Furnace Gas
	NG	Mcf	0.8	1.1	Natural Gas
	OG	Mcf	0.32	3.3	Other Gas (specify in Comment Section of SCHEDULE 9)
	PG	Mcf	2.5	2.75	Gaseous Propane
	SG	Mcf	0.2	1.1	Synthetic Gas
	SGC	Mcf	0.2	0.3	Coal-Derived Synthetic Gas
<b>Renewable Fuels</b>					
<b>Solid Renewable Fuels</b>	AB	tons	9	18	Agricultural Crop Byproducts/Straw/Energy Crops
	MSW	tons	9	12	Municipal Solid Waste
	OBS	tons	8	25	Other Biomass Solids (specify in Comment Section of SCHEDULE 9)
	WDS	tons	7	18	Wood/Wood Waste Solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids)

Table 8 Continued

	Energy Source Code	Unit Label	"Higher Heating Value" Range		Energy Source Description
			MMBtu Lower	MMBtu Upper	
<b>Renewable Fuels (cont.)</b>					
<b>Liquid Renewable (Biomass) Fuels</b>	OBL	barrels	3.5	4	Other Biomass Liquids (specify in Comment Section of SCHEDULE 9)
	SLW	tons	10	16	Sludge Waste
	BLQ	tons	10	14	Black Liquor
	WDL	barrels	8	14	Wood Waste Liquids excluding Black Liquor (includes red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids)
<b>Gaseous Renewable (Biomass) Fuels</b>	LFG	Mcf	0.3	0.6	Landfill Gas
	OBG	Mcf	0.36	1.6	Other Biomass Gas (includes digester gas, methane, and other biomass gasses) (specify in Comment Section of SCHEDULE 9)
<b>All Other Renewable Fuels</b>	SUN	N/A	0	0	Solar
	WND	N/A	0	0	Wind
	GEO	N/A	0	0	Geothermal
	WAT	N/A	0	0	Water at a Conventional Hydroelectric Turbine
<b>All Other Fuels</b>					
<b>All Other Fuels</b>	WAT	Mwh	0	0	Pumping Energy for Reversible (Pumped Storage) Hydroelectric Turbine
	NUC	N/A	0	0	Nuclear Uranium, Plutonium, Thorium
	PUR	N/A	0	0	Purchased Steam
	WH	N/A	0	0	Waste heat not directly attributed to a fuel source (WH should only be reported where the fuel source for the waste heat is undetermined, and for combined cycle steam turbines that do not have supplemental firing)
	TDF	tons	16	32	Tire-derived Fuels
	OTH	N/A	0	0	Specify in Comment Section of SCHEDULE 9.

<b>U.S. Department of Energy Energy Information Administration Form EIA-923</b>	<b>POWER PLANT OPERATIONS REPORT INSTRUCTIONS</b>	<b>Form Approval OMB No. 1905-0129 Approval Expires: 12/31/2010</b>
<b>GLOSSARY</b>	<p>The glossary for this form is available online at the following URL:  <a href="http://www.eia.doe.gov/glossary/index.html">http://www.eia.doe.gov/glossary/index.html</a></p>	
<b>SANCTIONS</b>	<p>The timely submission of Form EIA-923 by those required to report is mandatory under Section 13(b) of the Federal Energy Administration Act of 1974 (FEAA) (Public Law 93-275), as amended. Failure to respond may result in a penalty of not more than \$2,750 per day for each civil violation, or a fine of not more than \$5,000 per day for each criminal violation. The government may bring a civil action to prohibit reporting violations, which may result in a temporary restraining order or a preliminary or permanent injunction without bond. In such civil action, the court may also issue mandatory injunctions commanding any person to comply with these reporting requirements. Title 18 U.S.C. 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.</p>	
<b>REPORTING BURDEN</b>	<p>Public reporting burden for this collection of information is estimated to average 2.7 hours per response for monthly respondents, 3.2 hours per response for annual respondents, and 3.4 hours per response for annual respondents with boiler level data, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the EIA, Statistics and Methods Group, EI-70, 1000 Independence Avenue S.W., Forrestal Building, Washington, D.C. 20585-0670; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. A person is not required to respond to the collection of information unless the form displays a valid OMB number.</p>	
<b>PROVISIONS REGARDING CONFIDENTIALITY OF INFORMATION</b>	<p>Information reported on Form EIA-923 will be treated as non-sensitive and may be publicly released in identifiable form except as noted below.</p> <p>The "Total Delivered Cost" of coal, natural gas, and petroleum received at nonutility power plants and "Commodity Cost" information for all plants in SCHEDULE 2 and "Previous Month's Ending Stocks" and "Stocks at End of Reporting Period" information reported on SCHEDULE 4 will be treated as sensitive and protected to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the Department of Energy (DOE) regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.</p> <p>The Federal Energy Administration Act requires the EIA to provide company-specific data to other Federal agencies when requested for official use. The information reported on this form may also be made available, upon request, to another component of the Department of Energy (DOE), to any Committee of Congress, the Government Accountability Office, or other Federal agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order. The information may be used for any non-statistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.</p> <p>Disclosure limitation procedures are applied to the sensitive statistical data published from SCHEDULES 2 and 4 on Form EIA-923 to ensure that the risk of disclosure of identifiable information is very small.</p>	