Modifications to the Electric Surveys

● Form EIA-411, "Coordinated Bulk Power Supply Program Report"

The Form EIA-411 is filed annually as a voluntary report. The information reported includes: (1) peak demand and energy for the preceding year and 5 future years; (2) existing and planned supply and demand; (3) scheduled capacity purchases and sales; (4) bulk electric transmission system maps and power flow cases, and (5) proposed transmission lines. The 10 North American Electric Reliability Councils (NERC) report information to the NERC headquarters, using data collected from their members, as well as some non-members. The NERC headquarters then compiles the data and provides consolidated regional council reports to EIA.

Modifications to the 2005 forms:

(a) Deleted Schedule 3, "Generation Information." The schedule was carried on the Form EIA-411 and duplicated on the Form EIA-860. The information is now to be reported exclusively on the Form EIA-860.

(b) Added new Schedule 2, "Capacity for Existing Generator in Reporting Year," which contains mostly preprinted information from the Form EIA-860. This information is linked to the Industry identification numbers of NERC's Generating Availability Data System (GADS) database. The only fill-in requirement is the identification of the regional Inoperable Capacity and subtraction of the value from the Form EIA-860 regional totals. This new Schedule represents a working spreadsheet and was developed to assist in providing a detailed methodology for adjustments to the regional summary of the Form EIA-860 data.

(c) Moved existing Schedule 2, "Historical and Projected Peak Demand and Capacity," to become the new Schedule 3. It provides three regional aggregations for additional detail with respect to Uncommitted Capacity, Reliability Deratings-Unit and Group, and Other Generators. A subtotal is also delineated. Schedule 3 was renumbered to address the change in workflow (i.e., the new Schedule 2 must be completed before Schedule 3 can be developed). Regional aggregates of various de-rating actions or exclusions were identified and are now tracked on individual lines of renumbered Schedule 3. Remote Generator adjustments are now addressed on Schedule 2 and Schedule 4. Therefore, those tracking lines have been deleted.

(d) Modified Schedule 4, "Historic and Projected Capacity Purchases/Incoming Transfers," to include the identification number for each powerplant and unit.

This represents the continuation of tracking changes made to the revised Schedule 3. It addresses the issue of possible double counting the purchase, sales, or transfer transactions.

(e) Added Schedule 7, Part A, "Annual Data on Transmission Line Outages for Extra High Voltage Alternating Current Lines: and Schedule 7, Part B, "Annual Data on Transmission Line Outages for Extra High Voltage Direct Current Lines." Scheduled and unscheduled high voltage transmission outage data are being requested for the first time. This represents an annual collection of important new categories of information necessary for an assessment of transmission reliability, among other analytical purposes. Similarly, "causal" categories are also being collected for unscheduled outages to provide more detailed information. EIA will delay Schedule 7 until January 2006 so that the industry stakeholders have an opportunity to update their reporting systems and process.

● Form EIA-412, "Annual Electric Industry Financial Report" (Data collection suspended for 2004 survey cycle)

The Form EIA-412 is a mandatory survey used annually to collect accounting data, including electric balance sheets, income statements, sales of electricity for resale, electric operations and maintenance expenses, and purchased power and power exchanges. Form EIA-412 collects data from approximately 500 municipally owned, federally-owned, and State-owned regulated entities in the United States with approximately 800 additional non-utility entities filing Schedule 9, "Electric Generating Plant Statistics." For Schedules 1-8 of the form, each municipally owned or State-owned utility must submit the form if their annual sales to ultimate consumers or sales for resale are 150,000 megawatthours or greater for the 2 previous years. All Federal entities must submit Schedules 1-12. Municipally owned and State-owned utilities and non-utilities with a nameplate generating capacity of 10 megawatts or greater must also file Schedule 9. In addition, municipally-owned, federally-owned, and State-owned utilities, and generation and transmission (G&T) cooperatives having a nominal voltage of 132 kilovolts or greater must submit Schedule 10, "Existing Transmission Lines," Schedule 11, "Transmission Lines Added Within Last Year," and Schedule 12, "Transmission System Upgrades."

Modifications:

(a) Amended Schedule 9, "Electric Generating Plant Statistics." This Schedule was separated into three separate schedules to enable the different types of electric generators to report their data more easily. Part A is now to be filed by electric utilities, Part B by Independent Power Producers, and Part C by industrial and commercial companies. All three schedules added Gross Generation and Station Use

for those respondents that are unable to provide Net Generation. However, Parts B and C reduced the level of detail on plant costs that is required of these plants.

(b) Added Schedule 12, "Transmission System Upgrades." This schedule is needed to monitor the physical status and capability of the respondent's transmission system in order to provide data that will assist analysts in making transmission reliability assessments.

• Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants"

The Form EIA-423 is a mandatory EIA electric power survey. The form is submitted by approximately 740 non-utility power plants and is used to collect monthly information that is not collected by the FERC. Each unregulated electric generating plant or combined heat and power facility with a total fossil-fueled nameplate capacity of 50 or more megawatts is required to file this survey. The combined information from the Form EIA-423 and FERC Form 423 is used to present statistics on the costs and qualities of the fossil fuels that are used by the entire electric power industry. The data collected include the fuel type, quantity received, quality (Btu, sulfur, and ash content), purchase type, cost, contract expiration date, tolling agreements, and supplier of fossil fuels delivered for the generation of electric power.[1] In addition, for coal only, data will include type of mine and the State and county where the mine is located.

Modifications:
(a) Added a check box to indicate if a tolling agreement is in place. When checked, the respondent will be asked to provide contact information for the toller in the Notes Section. This is needed because some of the plants have been submitting forms with no fuel cost since the tolling company refused to give them that information. In addition, unless respondents are asked about tolling agreements, EIA will have no way to know if the plant has one or multiple tolling agreements in place. Moreover, since tolling companies can or will change from time to time, EIA currently does not have a way to track them unless the plants provide EIA with that information.

---

[1] A tolling agreement is a contract arrangement under which a raw material or intermediate product stream from one company is delivered to the production facility of another company in exchange for the equivalent volume of finished products and payment of a processing fee. For the purposes of this form, a tolling agreement is an arrangement that allows one company to have marketing control of electricity produced by generating assets owned by another company. The agreement usually requires the marketer to procure the fuel supply necessary to produce the electricity.

● Form EIA-767, "Steam-Electric Plant Operation and Design Report"

The Form EIA-767 is a mandatory form used to collect information annually from all steam-electric generating plants with a total nameplate capacity of at least 10 megawatts that burns combustible fuels (about 1,400 plants). Approximately 770 plants have a nameplate capacity of 100 megawatts or greater, and must complete the entire Form EIA-767. If a plant has nameplate of 10 megawatts but less than 100 megawatts is not required to provide certain information, such as cooling system, stack and flue data. Data collected on the Form EIA-767 include design parameters and annual operations data regarding each plant's boilers, generators, cooling systems, flue gas particulate collectors, flue gas desulfurization units, stacks, and flues.

Modifications:

(a) Eliminated lines 18 through 21 from Schedule 4, Part C: "Boiler Information, Design Parameters." These lines duplicate information on the Form EIA-860.

(b) Added technology choice check boxes to Schedule 4, Part E: "Boiler Information, Mercury Emission Controls." The current form asks for the type of mercury emission controls at the plant. The change provides a list of control systems from which the respondent can select with a check mark. This should reduce the burden on respondents and provide EIA with more consistent data.

(c) Added to Schedule 6, Part B, "Cooling System Information, Design Parameters," and Schedule 9, "Stack and Flue Information – Design Parameters," a request for the coordinate system reference associated with the latitude and longitude. The request for datum is required by OMB Circular A-16, revised August 19, 2002.

(d) Beginning data year 2004, the plants with total nameplate capacity of 10MW to <100MW are required to complete Schedule 5 - Generator Information.

● Form EIA-826, "Monthly Electric Sales and Revenue Report With State Distributions"

The mandatory Form EIA-826 is used to collect monthly data by State from a sample consisting of approximately 450 utility and non-utility entities that have sales to end use customers. Data are collected separately for: utilities with regulated sales; entities with market-based sales (for energy-only service); and entities that provide only energy delivery services, where the energy is supplied by another entity. Data collected on the Form EIA-826 include revenue (associated with the sale of electricity), sales (megawatthours delivered), and number of customers. The sampling methodology is described in Section B, "Collection of Information Employing Statistical

Methods," Item 2, Statistical Methodology. Data are collected from firms with sales within States for use in developing monthly average price estimates by State. Such price data are used in evaluating the progress of retail electricity competition.

Modifications:

(a) Expanded "Identification Section" to include a check box for "entity type." The change provides additional detail for distinct categories of energy providers, which is necessary to monitor the changes in the electric power industry as the year progresses. This same change is on the Form EIA-861 to capture the full universe of respondents.

(b) Added Schedule 2. "Mergers and/or Acquisitions." This change permits the tracking of changes in industry structure and ownership as the year progresses. A similar change appears on the Form EIA-861 to capture the full universe of respondents.

(c) Added Schedule 1.D. "Bundled Service by Retail Energy Providers or Any Power Marketer That Provides "Bundled Service"." This change moves the retail energy providers who are in competition, to provide their data on this confidential Schedule, previously filed on Schedule 1.A. A similar change appears on the Form EIA-861 to capture the full universe of respondents.

- ## Form EIA-860, "Annual Electric Generator Report"

The Form EIA-860,"Annual Electric Generator Report," is a mandatory annual form used to collect data on all existing and proposed (5-year plans) plants that: 1) have a total generator nameplate capacity (sum for generators at a single site) of 1 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. The Form EIA-860 is filed by approximately 2,700 respondents who are the operators (or proposed operators) of approximately 5,700 (both existing and planned) plants containing over 16,000 generators. Detailed data are collected at the generator level. Data collected on the Form EIA-860 include plant location, ownership, generator capacity, fuel capability, operational status, date of initial commercial operation, date of retirement and interconnection costs and characteristics associated with new generators . In addition to existing generators and proposed new generators, the form is used to collect data about proposed (5-year plans) modifications to existing generators.

Major Modifications to the Form EIA-860 as of January 1, 2005:

(a) Removed type of reporting entity (regulated or unregulated) from the company level (Schedule 1: "Identification"): A question related to the regulatory status of the entity

or entities that own the generator now appears at the generator level on Schedule 3. This change was necessary because with the widespread changes in ownership in the electric power industry, some plants are now owned in part by traditional electric utilities and in part by independent power producers. By including a question related to the regulatory status of the generator, EIA can more accurately assess the regulatory makeup of the national generator fleet.

(b) Added questions about each generator's ability to use multiple fuels and switch between fuels, in particular, the ability of generators to co-fire fuel oil with natural gas (Schedule 3, Part B: "Existing Generators, and Part D: Proposed Generators"): Over the past several years, power plant operators have built an enormous amount of new generating capacity. Between 2000 and 2003, about 187,000 megawatts of new capacity were added to the generating fleet, an increase of about 23 percent. Almost all of this new capacity is fired by natural gas. The large increase in natural gas-fired capacity has raised concern about the ability of plant operators to switch to alternative fuels, especially fuel oil, in the event of natural gas price spikes or supply disruptions. The questions added to the Form EIA-860 will allow EIA to more accurately determine the fuel supply options available to plant operators. The questions will also allow EIA to better determine the portion of the generating fleet with other fuel options, such as the ability of industrial facilities, like paper mill wastes, to burn waste and renewable fuels. This is critical information for evaluating the reliability and economics of the Nation's electric generating capacity.

(c) Added a schedule, "Schedule 5. New Generator Interconnection Information:" A significant issue in the restructuring electric power industry is the time and cost required for a power producer to arrange to connect a new power plant to the transmission grid. The issue is significant because the speed and cost of interconnections can have a direct impact on system reliability and the ability of new entrants to compete in the power market. Because the connection of a new generator may require significant upgrades or other modifications across a large part of a transmission grid, interconnection activity is directly related to 1) the level of investment in the transmission system, 2) who bears those costs, and 3) the reliability of the transmission grid. The new Schedule 5 will collect previously unavailable information on the cost and time associated with interconnection activity.

(d) Deleted Schedule 6, "Authorization for Reporting." Schedule 6 allowed respondents to file their Form EIA-860 data through the North American Electric Reliability Council (NERC) and its regional councils. This arrangement was designed to improve data coordination with NERC. However, this arrangement has, in effect, been superseded by technological advances which allow respondents to file their data via the Internet and make it possible for EIA to provide NERC and its regional councils with continuous data updates during the collection cycle. Collection of all respondent data by EIA via the Internet will reduce the workload for NERC and the regional council staffs and will be less cumbersome for EIA than the Schedule 6 agent arrangement.

- **Form EIA-860M, Monthly Update to the Annual Electric Generator Report**

The Form EIA-860M is a new mandatory monthly form that collects data on the status of 1) proposed new generators, within 12 months of the generator beginning commercial operation and 2) existing generators proposed for changes, within 12 months of the proposed change being effective. The form is designed to collect updates to information previously reported to EIA on the annual Form EIA-860. The data elements of interest are: proposed initial date of commercial operation (planned effective date), prime mover, capacity and the two most predominant energy sources.

This updated information is an important input to short-term evaluations of electric system reliability. In the past, EIA updated its information on proposed near-term plans for new generators and existing generators proposed to undergo changes via phone calls to the respondents. The latter is a cumbersome process that is burdensome both for EIA and respondents.

The Form EIA-860M is designed to minimize the burden for respondents and to make EIA's data collection more efficient. The form is intended to be used exclusively for electronic data collection (a paper option will be available to respondents who are unable to use the Internet Data Collection system); it only collects data on changes to the previously reported information; respondents only need to file the data when the generator is within 12 months of beginning commercial operation or within 12 months of the proposed change being completed. If there are no changes to previously reported data, the respondent needs to simply check one box for each generator to complete the filing.

- **Form EIA-861, "Annual Electric Power Industry Report"**

The Form EIA-861 is a mandatory annual census of approximately 3,300 regulated entities and power marketers in the United States involved in the generation, transmission and distribution of electric energy. Data collected on the Form EIA-861 include revenues (associated with the sale of electricity), sales (megawatthours delivered), number of customers, energy sources and disposition, customer service programs, electric operating revenue, demand side management information and distribution system information.

Modifications:

(a) Added Schedule 5, "Mergers and Acquisitions." This new schedule is necessary to capture changes in the Form EIA-861 survey frame due to continuing changes in the ownership and structure of the electric utility industry. Because Form EIA-861 serves as the universe (i.e., the frame) for all industry participants, collection of these

data is essential to updating the frames of other entity-based EIA electric surveys, particularly the Form EIA-826.

(b) Added Schedule 7, "Distributed and Dispersed Generation." This new schedule is necessary to acquire information on the capacity, characteristics, and deployment of generators beyond those already collected on the Form EIA-860. Distributed and dispersed generation information will provide valuable new information on the magnitude of additional generating capabilities that bear on system reliability, utility avoided costs, and alternatives to transmission expansion.

(c) Added Schedule 4.D, "Bundled Service by Retail Energy Providers, or Any Power Marketer that Provides 'Bundled Service'." This change allows retail energy providers who are in competition to provide their data on this Schedule in parallel with data filed on Schedule 4D of the EIA-826.

(d) Deleted Schedule 2B, "Energy Sources and Disposition." The current requirement for non-utility generating facilities to file this information using the Form EIA-861 has been changed to have it collected on either the Form EIA-906 (for independent power producers) or Form EIA-920 (for combined heat and power plants). As a result, approximately 1,500 non-utility facilities will no longer file this form separately.

- **Form EIA-906, "Power Plant Report" and Form EIA-920, "Combined Heat and Power Plant Report"**

The Forms EIA-906 and EIA-920, in combination, collect the fuel consumption, electric generation, and fuel stocks of all power plants in the United States with a generating capacity of one megawatt and greater (i.e., all operating plants included in the survey frame for the Form EIA-860). The Form EIA-920 collects data from combined heat and power plants (these are most frequently industrial cogenerators, such as paper mills and refineries). The Form EIA-906 collects data from all other power plants. The data on these two surveys are collected monthly from a statistically determined sample of relatively large plants. The remaining smaller plants are surveyed annually. (The sampling methodology is described in Section B, "Collection of Information Employing Statistical Methods," Item 2, Statistical Methodology.) The survey frames are currently:

Form EIA-906, "Power Plant Report"
- **Monthly collection: 1,418 plants**
- **Annual collection: 2,973 plants**

Form EIA-920, "Combined Heat and Power Plant Report"
- **Monthly collection: 305 plants**
- **Annual collection: 671 plants**

Modification to EIA-906 “Power Plant Report”:

(a) Added collection of gross generation to Schedule 2, “Generation, Fuel Use and Stocks.” These data are needed to help verify the accuracy of fuel consumption data submitted to EIA during time periods when a power plant is operated sporadically. The data are also needed to improve the collection of data from hydroelectric pumped storage facilities.

Modifications to the Form EIA-906, “Power Plant Report,” and the Form EIA-920, “Combined Heat and Power Plant Report”

(a) Added to both forms a new schedule, “Annual Electricity Sources and Disposition for Non-Utility Power Plants.” This will be Schedule 3 on the Form EIA-906 and Schedule 4 on the Form EIA-920. The new schedule collects data needed to develop State and national level information on the sources and disposition of electric energy. This is among the most commonly requested electric power data from EIA. However, collection of the data has become more difficult over time as the electric power industry has splintered into traditional electric utilities, power marketers, and independent power producers. The information on all three of these sectors is currently collected on Form EIA-861. However, that form is designed to collect data at the corporate level, while data from independent power producers and combined heat and power producers (CHP) must be collected at the plant level. In order to make EIA’s data collection more efficient, the changes will:

1) Limit the electric power sources and disposition data collection on the Form EIA-861 to electric utilities and power marketers, who report at the corporate level.

2) Collect these data at the plant level (moved from the Form EIA-861) on the Form EIA-906 and Form EIA-920. As these plants already provide data on the Form EIA-906 and the Form EIA-920, there will be no expansion in the number of respondents.

The sources and disposition data will be collected from the Form EIA-906 and Form EIA-920 respondents once per year, regardless of whether other data are reported monthly or annually. The Form EIA-906 collection applies only to plants operated by independent power producers. The data will not be collected from plants operated by electric utilities, as these companies will continue to report at the corporate level on Form EIA-861.

(b) Added to both forms a new due date for the monthly submitters to allow them to submit their data on the last day of the month following the end of the reporting month, rather than the 10th day following the end of the reporting month.

DATA ELEMENTS	FORMS AFFECTED	PROPOSED CHANGES
Cost of fuels for non-utility plants	EIA-423 - costs of coal, natural gas and petroleum received at a non-utility power plant.	No Change: Column (1), Delivered Fuel Cost, will continue to be treated as confidential and not disclosed to the public in identifiable form.
Tested heat rates	EIA-860 - tested heat rate under full load.	No Change: Schedule 3, Part B, Tested Heat Rate will continue to be treated as confidential and not disclosed to the public in identifiable form.
Fuel inventory – stocks	EIA-906 - end-of-month coal and petroleum stocks. EIA-920 – end-of-month coal and petroleum stocks.	No Change: Stocks at End of Reporting Period will continue to be treated as confidential and not disclosed to the public in identifiable form.
Plant cost and expenses for non-utility plants	EIA-412 - generator plant cost and expenses for non-utility plants.	Electric Generating Plant Statistics specific to cost of plant and production expenses for non-utility plants (Schedule 9, Part B, lines 11 – 23 and Schedule 9, Part C, lines 11 –22) will be treated as confidential and will now be collected in accordance with the Confidential Information Protection and Statistical Efficiency Act of 2002.
Monthly electricity sales information reported for energy-only service	EIA-826 - monthly electric sales, revenue and number of customers reported for energy-only service or by energy-service-providers and marketers.	No Change: Data reported in Schedule 1, Part B, relating to Revenue, Megawatthours Sold, and Number of Customers will be kept confidential. Additionally, information reported in Schedule 1, Part D, provided by retail energy providers or marketers providing bundled service, or energy sales only will be kept confidential.
Latitude and Longitude	EIA-767 - latitude and longitude EIA-860 - latitude and longitude	No Change: Latitude and Longitude will continue to be treated as confidential and not disclosed to the public.
Power flow cases and bulk electric transmission system maps	EIA-411 - power flow cases and bulk electric transmission system maps	Bulk transmission facility power flow cases and bulk electric transmission system maps will be treated as confidential and not disclosed to the public.