U.S. Department of Er Energy Information Ad Form EIA-411 (2008)		COORDINATED BULK POWE SUPPLY PROGRAM REPOR	OMB	Approved No. 1905-0129 oval Expires: 12/31/2010
PURPOSE	Form EIA-411 collects information about regional electricity supply and demand projections for a five-year advance period and information on the transmission system and supporting facilities. The data collected on this form appear in the Energy Information Administration (EIA) publication, <i>Electric Power Annual</i> . They are also used by the U.S. Department of Energy to monitor the current status and trends of the electric power industry and to evaluate the future of the industry.			
REQUIRED RESPONDENTS	voluntary. All Regional Council compile Council and pro	-411 has both mandatory and voother Schedules are mandatory. cils of the North American Electric les the responses from data furnish ovided to NERC. NERC then comergy Information Administration.	The form is t Reliability Corp ned by utilities	o be completed by each of the coration (NERC). Each Regional and other members within their
RESPONSE DUE DATE	end of the cale	e due to the North American Electric ndar year. After review, NERC sho following the end of the calendar year	ould submit the	
METHODS OF FILING RESPONSE	The North American Reliability Corporation (NERC) will oversee the methods of filing response of the data by the Regional Councils. NERC then submits the compiled report to EIA.			
		data via a secure file transf eia.doe.gov for instructions.	er process.	Contact John Makens at
		er flow cases can be transmitted electoristics containing the data can also be ma		
	Energy Info 1000 Indep	ns, Survey Manager rmation Administration, Mail Stop E endence Avenue, S.W. n, DC. 20585-0690	I-53	
	Please retain a	completed copy of this form for you	r files.	
CONTACTS	Data Question: Manager:	s: For questions about the data req	uested on Forr	m EIA-411, contact the Survey
		John Ma Telephone Number: FAX Number: (2 E-mail: <u>John.Make</u> ı	(202) 586-40 (02) 287-1934	

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GENERAL INSTRUCTIONS

For the purposes of this form, "actual-year data" should be submitted based on the same principles as the planning-based projected data. In order to avoid having the actual-year data change to operating data that is not comparable to planning data, please use the following:

Do not include:

- forced outages
- short-term transactions (purchases and sales)

Do include:

Changes to capacity due to return-to-service or new-to-service delays

All numbers should be entered as MW in whole, positive values – no decimals or negatives. (All subtractions will be shown on the respective line found in the form).

The term, peak and distributive generator, are defined as follows:

- **Summer Peak Hour Demand:** The maximum load in megawatts during the period June through September. The summer peak period begins on June 1 and extends through September 30.
- Winter Peak Hour Demand: The maximum load in megawatts during the period December through February. The winter peak period begins on December 1 and extends through the end-of-February.
- Peak Hour Demand: The maximum load in megawatts during the specified reporting period.

ITEM-BY-ITEM INSTRUCTIONS

SCHEDULE 1. IDENTIFICATION

- Survey Contact: Verify contact name, title, telephone number, Fax number, and e-mail address.
- 2. **Supervisor of Contact Person for Survey:** Verify the contact's supervisor's name, title, telephone number, Fax number and e-mail address.
- 3. Report For: Verify the NERC council and reporting party.

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

SCHEDULE 2. HISTORICAL AND PROJECTED PEAK DEMAND AND ENERGY

- 1. Enter annual and seasonal peak demands and net energy for load for designated years.
- 2. SCHEDULE 2 is to be reported in total by each Regional Council for all utilities, groups of utilities, such as Council subregions, Independent System Operators, or Regional Transmission Operators, within that Council. The reported capacity should comprise the sum of all non-coincident peak loads for the various operating entities within a NERC Region during the specified period. (Do not file coincident peak load.)

SCHEDULE 3. HISTORICAL AND PROJECTED DEMAND AND CAPACITY

- 1. SCHEDULE 3 is to be reported in total by each Regional Council for all utilities, groups of utilities, such as Council subregions, Independent System Operators, or Regional Transmission Operators, within that Council.
- Enter demand and capacity for the summer (PART A) and winter (PART B) peak periods of the designated years for the NERC region. Peak demands reported should agree with the corresponding entries in SCHEDULE 2, Part B.
- 3. For hydroelectric capacity, explain in SCHEDULE 9, COMMENTS whether the projected years data are for an adverse water year, an average water year, or other.
- 4. The information in SCHEDULE 3 is to be entered in megawatts (MW) for each peak period on the same basis as reported in SCHEDULE 2, Part B.
- 5. For line 1, **Internal Demand**, the following instructions apply:
 Internal Demand is the sum of the metered (net) outputs of all generators within the system and the metered line flows into the system, less the metered line flows out of the system. The

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demands for station service or auxiliary needs (such as fan motors, pump motors, and other equipment essential to the operation of the generating units) are not included. (Note: please use integrated hourly demand values.)

Internal Demand includes adjustments for utility indirect demand-side management programs such as conservation programs, improvements in efficiency of electric energy use, rate incentives, and rebates. Internal Demand should not include Stand-by Demand (line 2) and should not be reduced by Direct Control Load Management or Interruptible Demand, which are reported on Lines 4 and 5, respectively.

- 6. For line 2, **Standby Demand**, enter the demand specified by contractual arrangement with a customer to provide power and energy to that customer as a secondary source or backup for an outage of the customer's primary source. Standby Demand is intended to be used infrequently by any one customer. If there are no arrangements for Standby Demand, report "0" on line 2.
- 7. For line 3, **Total Internal Demand**, enter sum of lines 1 and 2. Data should be the same as reported in SCHEDULE 2, Part B, Peak Hour Demand.
- 8. For line 4, **Direct Control Load Management**, enter the magnitude of customer demand that can be interrupted at the time of the Regional Council seasonal peak by direct control of the System Operator by interrupting power supply to individual appliances or equipment on customer premises. This type of control usually reduces the demand of residential customers. Direct Control Load Management as reported here does not include Interruptible Demand (line 5).
- 9. For line 5, Interruptible Demand, enter the magnitude of customer demand that, in accordance with contractual arrangements, can be interrupted at the time of the Regional Council's seasonal peak by direct control of the System Operator or by action of the customer at the direct request of the System Operator. In some instances, the demand reduction may be effected by direct action of the System Operator (remote tripping) after notice to the customer in accordance with contractual provisions. For example, demands that can be interrupted to fulfill planning or operating reserve requirements normally should be reported as Interruptible Demand. Interruptible Demand as reported here does not include Direct Control Load Management (line 4).
- 10. For line 6, **Net Internal Demand**, enter line 3, less line 4, less line 5 (Internal Demand, less Direct Control Load Management and Interruptible Demand).
- 11. For line 7, **Total Internal Capacity**, enter the internal capacity for the reporting area. (Defined as seasonal rated capability at full load where full availability of primary fuel, wind, and water is assumed.) The reported value should include capacity of all generators physically located and interconnected in the reporting area or planned to be physically located and interconnected in the reporting area, including the full capacity of those generators wholly or partially owned by (or with entitlement rights held by) entities outside of the reporting area. The following conditions also apply:
 - This number should NOT be reduced for the following conditions: transmission constraints, inoperable capacity, wind capacity variations, hydro limitations, and other fuel/energy source limitations (these conditions will be addressed in lines 8 and 10-13).
 - This number should NOT include "behind-the-meter" capacity if the load served by this
 capacity is NOT included in the load forecast for the area.
 - The status of generators (either existing, under construction, or not under construction) should be as of the assessment data reporting due date or a specific date no more than 90 days prior to the assessment data reporting due date. Therefore a unit is defined as existing (line 7a) if it is existing as of the data due date.
 - For the seasonal assessments, planned (under construction) units that are expected to
 enter service prior to the beginning of the Reporting Period should be included in line
 7c as planned (under construction) capacity. For example, for a unit expected to come
 into service on July 1, the unit value should be zero MW for June and the full MW value
 in line 7c planned (under construction) for July, August, and September.
 - For lines 7a and 7b, **Uncommitted Resources**, uncommitted resources are recorded if one or more of the following conditions apply:
 - Have **not** been contracted **nor** have legal or regulatory obligation to deliver at time of

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peak

- Do not have or do not plan to have firm transmission service reserved (or its equivalent) or capacity injection rights to deliver the expected output to load within the region
- Have not had a transmission study conducted to determine the level of deliverability
 For lines 7a2 and 7b, Energy Only Resources, generating resources that are designated as energy-only resources or have elected to be classified as energy-only resources may include generating capacity that can be delivered within the area but may be recallable to another area.
- 12. For line 7a, **Existing Capacity,** included in this category are (1) all in service commercial operating plants/generators within a defined regional boundary that are producing some electrical output (real/reactive), (2) those that are available for service, but not normally used, and (3) any out-of-service units that could not be used for the reporting year, but are expected to be returned to service in the future. In addition, any generators that are scheduled to start operation after modification or reactivation and those plants/generators that are operational until their scheduled retirement or deactivation are also included. (Covers Form EIA-860 codes OP, SB, OS, FC, RP and RA.)
- 13. For line 7b, Less Retirements and Negative Rerating, a generator is included in this category, for the appropriate seasonal periods and years, when a scheduled change from a working operational status is known or identified in a projected effective date. This includes generators scheduled or placed into a deactivated shutdown status or scheduled for retirement. Those generators scheduled to start operations after modification or reactivation with a negative rerating on capability will also be included for the appropriate seasonal periods and years identified by the effective dates. (Covers Form EIA-860 codes RT, A, D, and M)
- 14. For line 8, **Inoperable Capacity**, this value should only include capacity that has been mothballed or is otherwise expected to be unavailable, such as extended outages, during the entire Reporting Period (as opposed to anticipated outages of shorter duration, which are reported under Scheduled Maintenance in Line 11).
- 15. For line 9, Operable Total Internal Capacity, total Internal Capacity less Inoperable (line 8).
- 16. For line 10, Derates

For line 10a, **Conditional Derates**, enter the amount of conditional derates that decrease the seasonal rated capacity. These include fuel unavailability, other fuel/energy source limitations, and other non-machine-related conditions such as environmental or regulatory limitations.

For line 10b, **Hydro Derates**, enter the amount of hydro derates that decrease the seasonal rated capacity.

For line 10c, **Wind Capacity Variations**, enter the amount of wind capacity variations that decrease the seasonal rated capacity.

- 17. For line 11, **Scheduled Maintenance**, enter the amount of capacity expected to be out for scheduled maintenance during the expected time of the peak during the Reporting Period. Include only scheduled maintenance with a duration less than the entire Reporting Period (as opposed to extended periods of inoperability which are reported as Inoperable Capacity in line 8). The following clarification also applies for this capacity reduction classification: The main difference between inoperable capacity (line 8) and scheduled maintenance (line 11) is that inoperable capacity cannot be brought back online or delayed at a given time period.
- 18. For line 12, **Derated Operable Total Internal Capacity**, line 9 less lines 10 through 11 (lines 10a, 10b, 10c, and 11).
- 19. For line 13, **Energy Only Resources/ Uncommitted Capacity**, includes generating capacity resources that are built, planned, or in operation, but are not counted towards capacity margin and reserve margin calculations. Capacity from individual units not counted towards capacity margin and reserve margin calculations should be included unless its physical delivery limitation was the result of a transmission study, in which case the amount of capacity from such units(s) is not counted towards capacity margin and reserve margin calculations should be included in line 15.
- 20. For line 14, **Derated Operable Internal Capacity, l**ine 12 less line 13. This value represents the internal capacity (prior to transmission limitations) that a region considers towards the

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calculation of capacity and reserve margins. Margin calculations also take into account capacity that either enters or leaves the region via purchases, sales, ownership, or entitlements.

- 21. For line 15, Adjustments for Studied Transmission Limitations, enter the amount of transmission-constrained generation resources that have known physical deliverability limitations to load within the region. The following conditions also apply: If capacity is limited by both studied transmission limitations and generator derates (line 10), the generator derates take precedence. For example, a 100 MW wind farm with a wind capacity variation reduction of 50 MW and a transmission limitation of 60 MW would take the 50 MW wind variation reduction first and list 10 MW in the transmission limitation.
- 22. For line 16, **Deliverable Internal Capacity**, line 14 less line 15. For purposes of this form, this value represents capacity that is counted towards capacity margin and reserve margin calculations. Margin calculations also take into account capacity that either enters or leaves the region via purchases, sales, ownership, or entitlements.
- 23. For line 17, Purchases and Incoming Adjustments (Additions)

For line 17a, **Purchases** - Enter the amount of purchased capacity that will move from an outside Region or subregion to the reporting Region or subregion. Transmission must be available.

For line 17b, **Owned Capacity/Entitlement Located Externally** (see examples shown below after Item 26 in the instructions) - Enter the amount of externally owned capacity or capacity entitlements that will move from an outside Region or subregion to the reporting Region or subregion.

26. For line 18, Sales and Outgoing Adjustments (Subtractions)

For line 18a, **Sales**, enter the amount of sold capacity that will move from the reporting Region or subregion to an outside Region or subregion. Transmission must be available.

For line 18b, **Capacity Owned by/Entitlement Held by External Entity,** enter the amount of externally owned capacity or capacity entitlements that will move from the reporting Region or subregion to an outside Region or subregion.

The following examples are provided to show how transaction are handled between two reporting areas for Purchases and Sales Incoming/Outgoing Adjustments:

1. Unit physically located in SERC that is fully owned by a FRCC company and not connected to the SERC network but instead has a direct and adequate transmission connection to FRCC.

Solution: Since the unit is electrically connected to only FRCC, account for the unit completely in FRCC with no transfers.

Unit physically located in and electrically connected to SERC but is partially or fully owned by an FRCC company.

Solution:

- SERC lists entire capacity on line 7
- SERC derates capacity on lines 10a 10c (if applicable)
- SERC shows outgoing ownership adjustment on line 18b
- FRCC does not reflect this capacity in line 7
- FRCC shows corresponding incoming ownership adjustment 17b
- FRCC must be able to demonstrate adequate interregional transfer capability, otherwise remaining capacity is accounted for in SERC
 - FRCC must have or plan to have firm transmission service (or its equivalent) across the interface, or
 - FRCC must have conducted a transmission study to determine the level of deliverability
- 27. For line 19, **Net Capacity Resources**, line 16 plus lines 17a through 17b less lines 18a through 18b.
- 28. For line 20, Total Potential Resources, lines 19 plus lines 21 through 23.
- 29. For line 21, Distributed Generation less than 1 MW, show estimated value.

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- 30. For line 22, Other Capacity less than 1 MW, show estimated value.
- 31. For line 23, **Distributed Generator Capacity greater than or equal to 1 MW**, show estimated value of amount connected to a power grid.
- 32. For line 24, **Capacity Total from EIA-860**, final national and regional Net Summer and Winter Capacity values are used.
- 33. For line 25, **Existing Capacity Difference**, line 24 minus **Total Internal Capacity** (Line 7). Describes not counted 'behind-the-meter capacity' and unaccounted for capacity that could be available for use or incorporated into the planning review.

SCHEDULE 4. HISTORICAL AND PROJECTED CAPACITY PURCHASES, SALES, AND TRANSFERS

Enter all projected capacity purchases and sales (in megawatts) that involve entities outside of the Council or Reporting Region. The totals should agree with the totals in SCHEDULE 3 Line 10, **Total Capacity Purchases** and Line 11, **Total Capacity Sales**.

- 1. Some data may be non-coincident due to differences in the month of the seasonal peaks for the purchaser and seller. An example would be a transfer that changes magnitude from July to August. The transfer would be reported in July by the selling party whose peak occurs in July and reported in August by the purchasing party whose peak occurs in August.
- 2. For column (a), Other Party, EIA Code, enter the five character numeric code for that party. A list of the EIA company codes, by reporting party name, is available at the EIA website, http://www.eia.doe.gov/cneaf/electricity/page/gen_companies/codesp1.html. If the name of the reporting party is not on this list, please enter the name of the party on the form and a code will be assigned by EIA.
- 3. For the Plant ID and Unit ID columns, enter the EIA code for those unit specific purchases, sales, and transfers, if known.

SCHEDULE 5. BULK ELECTRIC TRANSMISSION SYSTEM MAPS

- 1. Each Council is to submit a map(s), in electronic format, showing the existing bulk electric transmission system 230 kV and above, including ties to all other Councils, and the bulk electric transmission system additions projected for a five-year period beginning with the year following the reporting year.
- 2. Only major geographic features and State boundaries, bulk electric facilities, and the names of major metropolitan areas need be shown. The map scale to be used is left to the discretion of the Region or Reporting Party, but should be such as to allow convenient use of the map. Show the voltage level of all bulk electric transmission lines. The year of installation of all projected system additions may be shown at the option of the Council or Reporting Party.
- 3. The map requirement may be satisfied by either:
 - (a) A single map in electronic format showing the existing bulk electric transmission system as of January 1 of the reporting year and system additions for a five-year period beginning with the reporting year; or
 - (b) Separate maps for a set of subregions that comprise the whole region.
- 4. For Line 1, enter the number of maps provided.
- 5. For Line 2, enter the requested map information in columns (a) through (d).

SCHEDULE 6. PROJECTED TRANSMISSION LINE ADDITIONS

- This SCHEDULE must be completed by each Regional Council for all transmission line additions at 230 kV and above projected for the five-year period beginning with the year following the reporting year.
- 2. For line 1, **Terminal Location (From)**, enter the name of the beginning terminal point of the line.
- 3. For line 2, **Terminal Location (To)**, enter the name of the ending terminal point of the line.
- 4. For line 3, **Company Name**, enter the company name.

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- 5. For line 4, **EIA Company Code**, identify each organization by the six-character code assigned by EIA.
- 6. For line 5, **Type of Organization**, identify the type of organization that best represents the line owner including the following types of utilities Investor-owned (I), Municipality (M), Cooperative (C), State-owned (S), Federally-owned (F), or other (O).
- 7. For line 6, **Percent Ownership**, if the transmission line will be jointly-owned, enter the percentages owned by each individual respondent.
- 8. For line 7, **Line Length**, enter the number of miles between the beginning and ending terminal points of the line, regardless of the number of conductors or circuits carried.
- 9. For line 8, **Line Type**, select physical location of the line conductor overhead (OH), underground (UG), or submarine (SM).
- 10. For line 9, Voltage Type, select voltage as alternating current (AC) or direct current (DC).
- 11. For line 10, **Voltage Operating**, enter the voltage at which the line is normally operated in kilovolts (kV).
- 12. For line 11, **Voltage Design**, enter the voltage at which the line was designed to operate in kilovolts (kV).
- 13. For line 12, **Conductor Size**, enter the size of the line conductor in thousands of circular mils (MCM).
- 14. For line 13, **Conductor Material Type**, enter the line conductor material type aluminum, ACCR, ACSR, copper, or other.
- 15. For line 14, **Bundling Arrangement**, enter the bundling arrangement/configuration of the line conductors single, double, triple, quadruple, or other.
- 16. For line 15, **Circuits per Structure Present**, enter the current number of three-phase circuits on the structures of the line.
- 17. For line 16, **Circuits per Structure Ultimate**, enter the ultimate number of three-phase circuits that the structures of the line are designed to accommodate.
- 18. For line 17, **Pole/Tower Type**, identify the predominant pole/tower material for the line wood, concrete, steel, combination, composite material, or other. Also include the type of structure single pole, H-frame structure, tower, underground, or other.
- 19. For line 18, **Capacity Rating**, enter the normal load-carrying capacity of the line in millions of volt-amperes (MVA).
- 20. For line 19, **Projected In-Service Date**, enter the projected date the line will be energized under the control of the system operator. Please provide a month and year (e.g., **12-2004**).

SCHEDULE 7. ANNUAL DATA ON TRANSMISSION LINE OUTAGES FOR EHV LINES, GENERAL INSTRUCTIONS FOR PART A AND PART B

In general terms, an Outage is defined as the removal from service availability of a generation unit, transmission line, or other facility for either scheduled (planned) or unscheduled (unplanned) reasons. For this reporting purpose, individual outage duration should be reported following similar company standards and/or regional reliability guidelines. The outage durations reported on the Form EIA-411 represent the annual summation (in hours) of all these events for the reporting NERC region.

The duration of an outage is the amount of time that the transmission line was completely deenergized. For preferred reporting practices, do not start recording duration until the line is completely de-energized and stop recording duration when the entire line is reenergized. If practices differ, please SCHEDULE 9, COMMENTS.

Outages that occur on intertie lines between regions are to be reported only once by one or the other of the reporting regions.

Scheduled Outages

Information collected on scheduled outages is for the events where the duration was 1 hour or more in length. This includes line upgrades and the normal maintenance that is usually performed during non-peak load periods. Each time a line is removed from service, this is recorded as one scheduled outage (this includes accounting for periods where lines are returned to service on a

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periodic basis during a previously scheduled work period).

Unscheduled Outages

The information requested on unscheduled outages covers all events in which a line is automatically removed from service by system protection or must be removed from service due to unforeseen circumstances. The unscheduled outage of any circuit continues until that circuit is restored to service. If company practices are different from this, please note in SCHEDULE 9 COMMENTS.

- For any set of outages that have more than one cause, please report the initial cause (i.e., the cause that occurred first).
- For an outage of a circuit to be considered, the line(s) must be deenergized. If the line
 recloses and trips again within a minute of the initial outage, it is only considered one
 outage. The line would need to remain in service for longer than one minute between the
 breaker operations to be considered as two outages.
- 'Failed tests' are not considered additional outages. If the operator or dispatcher tries to
 energize a circuit that has a fault on it, and it immediately re-opens, this is considered a
 'failed test' and is not an additional outage. However, if the test 'passed' and the line
 remained in service for longer than one minute, any additional outages will be recorded as
 a new outage.
- Removal of any transmission line (including radials) from service is considered as an outage. However, transmission lines that are removed for system stability (such as 'voltage control') should not be reported as an outage. These may be reported separately as a footnote.
- When a tap off a transmission line is removed from service (scheduled or unscheduled outage) and the transmission line itself remains energized only the tap is considered out-ofservice.

SCHEDULE 7. PART A. ANNUAL DATA ON TRANSMISSION LINE OUTAGES FOR EHV LINES, A.C. LINES, SPECIFIC INSTRUCTIONS

- 1. All transmission line outages involving Extra High Voltage (EHV) A.C. lines of 230 kV and above are to be aggregated by each Regional Council and reported on this schedule.
- 2. For line 1, if you are reporting an outage(s) of a voltage class that is not listed, identify the voltage class in column e.
- 3. For line 2, **Number of Scheduled Outages**, report the total number of scheduled outages that occurred in the reporting period for each voltage class.
- 4. For line 3, Number of Circuits Involved, report the total number of "circuit outages", that occurred during the reporting period, for all scheduled outages. For example, if there was one outage and five circuits are involved, the respondent should report five circuit outages. Alternatively, if there was one outage with two circuits involved and subsequently there is another outage with four circuits involved, the respondent should report six circuit outages, for each voltage class.
- 5. For line 4, Scheduled Circuit-Hours Out of Service, report the total scheduled circuit-hours out of service for all of the scheduled outages for each voltage class during the year. This is the sum across all circuits of the number of hours each circuit was out of service for scheduled reasons during the reporting period.
- 6. For line 5, **Number of Non-Momentary Unscheduled Outages**, report the number of non-momentary (lasting 60 seconds or longer) unscheduled outages that occurred during the reporting period for each voltage class.
- 7. For line 6, **Number of Circuits Involved**, report the total number of "circuit outages", that occurred during the reporting period, for all unscheduled outages, both momentary and non-momentary. For example, if there is one outage and five circuits are involved, the respondent should report five circuit outages. Alternatively, if there was one outage with two circuits involved and subsequently there was another outage with four circuits involved, the respondent should report six circuit outages, for each voltage class.
- 8. For line 7, **Unscheduled Circuit-Hours Out of Service**, report the unscheduled circuit-hours out of service for all of the unscheduled outages for each voltage class during the year. This is

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the sum across all circuits of the number of hours each circuit was out of service for unscheduled reasons during the reporting period.

- 9. For line 8, **Weather**, includes all unscheduled outages caused by severe weather conditions (tornado, hurricane, lightning strikes, ice, high winds, etc.) that are the primary cause of the outage.
- 10. For line 9, Animals, Fire and Smoke, Human Accidents, includes the events caused by actions where animal movement or nesting impacts electrical operations of equipment or facilities. Actions by humans (accidents or intention) that not employed or under contract by the utility in the responsible area that impact operations will be reported. Fire and conditions linked to this from whatever event that started the fire/smoke conditions need to be accounted for in this category.
- 11. For line 10, **Vegetation**, includes outages initiated by vegetation in the proximity of transmission facilities. Reporting definition will be consistent with the NERC template and vegetation management criteria.
- 12. For line 11, **Operator Action**, includes any action traceable to employees and/or contactors for companies operating, maintaining, and/or providing assistance for actions that impacted any part of the operations of the Nation's power grids will be identified and reported in this category. Also, any failure or interpretation of standard industry practices and guidelines that cause an outage event will be reported in this category.
- 13. For line 12, Equipment Failure, includes failure of any line or terminal equipment.
- 14. Line 13, **Unknown**, any unknown sources should be reported in this category.
- 15. Line 14, **Other**, includes all other causes (computed automatically to be the difference between 100 percent and the sum of lines 8 through 13).

SCHEDULE 7. PART B. ANNUAL DATA ON TRANSMISSION LINE OUTAGES FOR EHV LINES, D.C. LINES, SPECIFIC INSTRUCTIONS

- 1. All transmission line outages involving Extra High Voltage (EHV) D.C. lines of ±100 kV and above are to be aggregated by each Regional Council and reported on this schedule.
- 2. For line 2, **Number of Scheduled Outages**, report the total number of scheduled outages that occurred in the year for each voltage class.
- 3. For line 3, Number of Circuits Involved, report the total number of "circuit outages", that occurred during the year, for all scheduled outages. For example, if there is one outage and five circuits are involved, the respondent should report five circuit outages. Alternatively, if there was one outage with two circuits involved and subsequently there was another outage with four circuits involved, the respondent should report six circuit outages, for each voltage class.
- 4. For line 4, Scheduled Circuit-Hours Out of Service, report the total scheduled circuit-hours out of service for all of the scheduled outages for each voltage class during the year. This is the sum across all circuits of the number of hours each circuit was out of service for scheduled reasons during the year.
- For line 5, Number of Non-Momentary Unscheduled Outages, report the number of nonmomentary (lasting 60 seconds or longer) unscheduled outages that occurred during the year for each voltage class.
- 6. For line 6, Number of Circuits Involved, report the total number of "circuit outages", that occurred during the year, for all unscheduled outages, both momentary and non-momentary. For example, if there is one outage and five circuits are involved, the respondent should report five circuit outages. Alternatively, if there was one outage with two circuits involved and subsequently there was another outage with four circuits involved, the respondent should report six circuit outages, for each voltage class.
- 7. For line 7, Unscheduled Circuit-Hours Out of Service, report the unscheduled circuit-hours out of service for all of the unscheduled outages for each voltage class during the year. This is the sum across all circuits of the number of hours each circuit was out of service for unscheduled reasons during the year.
- 8. For Line 8, **Weather**, includes all unscheduled outages caused by severe weather conditions (tornado, hurricane, lightning strikes, ice, high winds, etc.) that are the primary cause of the outage.
- 9. For Line 9, **Animals, Fire and Smoke, Human Accidents,** includes the events caused by actions where animal movement or nesting impacts electrical operations of equipment or

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facilities. Actions by humans (accidents or intention) that not employed or under contract by the utility in the responsible area that impact operations will be reported. Fire and conditions linked to this from whatever event that started the fire/smoke conditions need to be accounted for in this category.

- 10. For Line 10, **Vegetation**, includes outages initiated by vegetation in the proximity of transmission facilities. Reporting definition will be consistent with the NERC template and vegetation management criteria.
- 11. For Line 11, **Operator Action**, includes any action traceable to employees and/or contactors for companies operating, maintaining, and/or providing assistance for actions that impacted any part of the operations of the Nation's power grids will be identified and reported in this category. Also, any failure or interpretation of standard industry practices and guidelines that cause an outage event will be reported in this category.
- 12. For line 12, Equipment Failure, includes failure of any line or terminal equipment.
- 13. For line 13, **Unknown**, any unknown sources should be reported in this category.
- 14. For line 14, **Other**, includes all other causes (computed automatically to be the difference between 100 percent and the sum of lines 8 through 13).

SCHEDULE 8. BULK TRANSMISSION FACILITY POWER FLOW CASES

- Each Regional Council is to coordinate the collection of data on basic electrical data and power flow information on prospective new bulk transmission facilities of 230 kV and above (including lines, transformers, HVDC terminal facilities, phase shifters, and static VAR compensators) that have been approved for construction and are scheduled to be energized over the next two years.
- 2. If the prospective bulk transmission facilities are represented in the respondent's current FERC Form 715 submission, please provide a copy of an annual peak load power flow case submitted which represents a period of at least two years into the future and complete (see Instructions 6 through 13).
- 3. If the facilities are not represented in the respondent's current FERC Form 715 submission, please submit a power flow case(s) representing the prospective facilities. The respondent may submit a single annual peak load power flow case that includes all prospective facilities to be energized in the next two years. Alternatively, the respondent may provide a copy of any annual peak load power flow case that includes the new facility for the year it is to be energized. If more than one facility is to be energized in a given year, it is acceptable to provide a single annual peak load power flow case that includes all the new facilities added in that year. The power flow shall be in the same format as used for the respondent's FERC Form 715 filing.
- 4. For each power flow case that is provided in response to Items 2 and 3 above, please identify on SCHEDULE 8 all prospective facilities that are not currently in service and the projected inservice date of those facilities. Complete one page for each new power flow case. In each case, identify only the new facility by type and list bus numbers and names that the new facility is connected with electrically.
- 5. The EIA expects that in nearly all cases the power flow format will be one of the following:
 - The Raw Data File format of the PTI (Power Technologies, Inc.) PSS/E power flow program;
 - The Card Deck Image format of the Philadelphia Electric power flow program;
 - The Card Deck format of the WSCC power flow program;
 - The Raw Data File format of the General Electric (formerly Electric Power Consultant, Inc. or EPC), or the PSLF power flow program; or
 - The IEEE Common Format for Exchange of Solved Power Flows.

Respondents submitting their own cases must supply the input data to the solved base cases and associated ACSII output data on compact disk in the format associated with the power flow program used by the respondents in the course of their transmission studies, as described above.

- 6. For Line 1, enter the case name.
- 7. For Line 2, enter the year studied in this power flow case.
- 8. For Line 3, enter the case number assigned by respondent.

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	9. For Line 4,	column a, enter the name of a prospective	facility included on the power flow case.	
	10. For Line 4, column b, enter the type of facility, e.g., line, transformer, etc.			
	 For Line 4, column c, enter the projected in-service date of the proposed facility. P provide month and year (e.g., 12-2004). 		ce date of the proposed facility. Please	
	12. For Line 4, column d and e, enter the number and name respectively of each bus to w facility is connected. Use one line for each bus.		me respectively of each bus to which the	
	13. Repeat Inst	ructions 9 through 12 for each prospective	e facility.	
	SCHEDULE 9. COMMENTS			
		omment by the appropriate schedule, part additional sheets, as required. (Any commonstive.)		
GLOSSARY		r this form is available online at the following the soldowing the soldo	ng URL:	
SANCTIONS	13(b) of the Federal Failure to response a fine of not more action to prohibit preliminary or permandatory injuncting 18 U.S.C. 1001 any Agency or 100.	ission of Form EIA-411 by those required eral Energy Administration Act of 1974 (FE and may result in a penalty of not more than the than \$5,000 per day for each criminal vious reporting violations, which may result in a termanent injunction without bond. In such actions commanding any person to comply makes it a criminal offense for any person to the United States any fall r within its jurisdiction.	EAA) (Public Law 93-275), as amended. a \$2,750 per day for each civil violation, or plation. The government may bring a civil at temporary restraining order or a civil action, the court may also issue with these reporting requirements. Title con knowingly and willingly to make to	
REPORTING BURDEN	hours per counci sources, gatherin of information. T for the members aspect of this col Energy Informati Avenue S.W., Fo and Regulatory A	burden for this collection of information is a life response, including the time of reviewing and maintaining the data needed, and of the burden includes not only the hours new within each council. Send comments regulection of information, including suggestion Administration, Statistics and Methods prestal Building, Washington, D.C. 20585-Affairs, Office of Management and Budget, espond to the collection of information unless.	g instructions, searching existing data completing and reviewing the collection eded by the Councils and NERC, but also arding this burden estimate or any other ns for reducing this burden, to the Group, El-70, 1000 Independence -0670; and to the Office of Information, Washington, D.C. 20503. A person is	
PROVISIONS REGARDING THE		reported on Form EIA-411 will be treate ifiable form, except as noted below.	ed as non-sensitive and may be publicly	
CONFIDENITALITY OF INFORMATION	The information contained on SCHEDULE 5, Bulk Electric Transmission System Maps, and SCHEDULE 8, Bulk Transmission Facility Power Flow Cases, 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 DOE regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.			
	Federal agencies be made availab Committee of 0 authorized by la information in re	ergy Administration Act requires the EIA to so when requested for official use. The intelle, upon request, to another component of Congress, the Government Accountable with the receive such information. A court of sponse to an order. The information may trative, regulatory, law enforcement, or adj	formation reported on this form may also f the Department of Energy (DOE) to any lity Office, or other Federal agencies of competent jurisdiction may obtain this y be used for any nonstatistical purposes	
	SCHEDULES 5	ation procedures are applied to the so and 8, EIA-411 survey information to mation is very small.	ensitive statistical data published from ensure that the risk of disclosure of	

U.S. Department of Energy Energy Information Administration Form EIA-411 (2008)

COORDINATED BULK POWER SUPPLY PROGRAM REPORT

Form Approved
OMB No. 1905-0129

Approval Expires: 12/31/2010

NOTICE: This report is **mandatory** under the Federal Energy Administration Act of 1974 (Public Law 93-275) for all parts but Schedule 7, which is voluntarily reported. Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For further information concerning sanctions and data protections see the provision on sanctions and the provision concerning the confidentiality of information in the instructions. **Title 18 USC 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.**

SCHEDULE 1. IDENTIFICATION		
Survey Contact		
First Name:	Last Name:	
Title:		
Telephone (include extension): Fax:		
E-mail:		
	f Contact Person for Survey	
First Name:	Last Name:	
Title:		
Telephone (include extension): Fax:		
E-mail:		
	Report For	
Council:		
Reporting Party:		
For questions about the data reque	ested on Form EIA-411, contact the Survey Manager:	
John Makens Telephone Number: (202) 586-4059 FAX Number: (202) 287-1934		

E-mail: John.Makens@eia.doe.gov

	. Department of E		COORDINA	ATED BULK PO			Approved				
	rgy Information A m EIA-411 (2008)	Administration	SUPPLY F	ROGRAM REP			No. 1905-0129 val Expires: 12/	124 /2040			
						Appro	vai Expires. 12	31/2010			
	uncil:										
Re	porting Party:										
	SCHEDULE 2	2. PART A. H	IISTORICAL A	AND PROJEC	CTED PE	AK D	EMAND AND	DENERGY -			
				MONTHLY							
					YEAR						
		20	800	2009				2010			
		PEAK HOUR DEMAND	NET ENERGY (THOUSANDS OF MEGA-	PEAK HOUR DEMAND	NET ENE (THOUSAN MEGA	DS OF	PEAK HOUR DEMAND	NET ENERGY (THOUSANDS OF			
INE	MONTH	(MEGAWATTS)	WATTHOURS)	(MEGAWATTS)	WATTHO	URS)	(MEGAWATTS)	MEGA-WATTHOURS)			
NO. 1	lanuary	(a)	(b)	(a)	(b)		(a)	(b)			
2	January February										
3	March										
4	April										
5	May										
6	June										
7	July										
8	August										
9	September										
10	October										
11	November										
12	December										
SCI	HEDULE 2. PA	RT B. HISTO	RICAL AND	PROJECTED	PEAK D	DEMA	ND AND EN	ERGY - ANNUAL			
INE					YEAR						
NO.		2008	2009	2010	2011	l	2012	2013			
1	Summer Peak Hour Demand, June - September										
	(Megawatts)				_		_				
		2008/09	2009/10	2010/11	2011/	12	2012/13	2013/14			
2	Winter Peak Hour Demand, December - March										
	(Megawatts)										
		2008	2009	2010	2011		2012	2013			
3	Net Annual Energy (Thousands of Megawatthours)										
		i	i e		1						

Energy	epartment of Energy / Information Administration EIA-411 (2008)		SUDDI V DDOGDAM DEDODT					Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2010		
-	rting Party:									
	EDULE 3. PART A. HIST	TORICAL A	AND PROJ	ECTED DI		AND	CAPAC	ITY - SUMMER		
LINE			1	1	YEAR					
NO.		2008	2009	2010	2011		2012	2013		
_		DEI	MAND (IN MI	EGAWATTS						
1	Internal Demand									
2	Standby Demand									
3	Total Internal Demand (sum of lines 1 and 2)									
4	Direct Control Load Management									
5	Interruptible Demand									
6	Net Internal Demand (line 3, less line 4, less line 5)									
		CAP	ACITY (IN M	EGAWATTS	5)					
7	Total Internal Capacity									
7a	Existing Capacity									
7a1	Committed									
7a1.1	Operable									
7a1.2	Inoperable									
7a2	Uncommitted									
7a2.1	Operable									
7a2.2	Inoperable									
7a3	Energy Only									
7a3.1	Operable									
7a3.2	Inoperable									
7b	Planned Capacity Additions									
7b1 7b1.1	Under Construction									
7b1.1 7b1.2	Committed Uncommitted									
7b1.2	Energy Only									
7b1.3	Not Under Construction									
7b2.1	Committed									
7b2.1	Uncommitted									
7b2.3	Energy Only									
7c	Capacity Rerating, Retirements and Adjustments									
7c1	Planned Positive Reratings of Existing Capacity									
7c2	Planned Negative Reratings of Existing Capacity							_		
7c3	Planned Retirements of Existing Operable Capacity									

Energy	epartment of Energy Information Administration EIA-411 (2008)		NATED BULK PROGRAM I		Form Appro OMB No. 19 Approval Ex		2010		
Counc	oil:				_				
•	ting Party:				_				
SCF	<u>IEDULE 3. PART A. HISTOR</u>	RICAL AND	PROJECT	ED DEMAI	ID AND CAPACITY - SUMMER				
LINE					AR				
NO.		2008	2009	2010	2011	2012	2013		
		CAPACIT	Y (IN MEGAV	VATTS)	_				
7c4	Planned Retirement of								
	Existing Inoperable Capacity Return to Service of Existing								
7c5	Inoperable Capacity								
	Existing Net Purchases from								
7c6	Non-reporting parties within								
	Region - Subregion Planned Net Purchases from								
7c7	Non-reporting parties within								
	Region - Subregion								
8	Total Inoperable Capacity								
9	Operable Total Internal Capacity								
10	Derates and Decreases in Seasonal Rated Capacity								
10a	Conditional Derates								
10b	Hydro Derates								
10c	Wind Capacity								
11	Planned Outages or Scheduled Maintenance of Existing								
- ''	Capacity								
40	Derated Operable Total Internal								
12	Capacity								
13	Operable Energy-only and								
	Uncommitted Resources Derated Operable Internal								
14	Capacity								
15	Transmission-Limited Resources								
16	Deliverable Internal Capacity								
17	Capacity Purchases and Incoming Adjustments								
17a	Purchases from Entities Outside the Region - Subregion								
17a.1	Full-Responsibility Purchases (portion of total purchases)								
17b	Owned Capacity - Entitlement Located Outside the Region - Subregion					_			
18	Sales and Outgoing Adjustments								

Energy Form E	epartment of Energy Information Administration EIA-411 (2008)		INATED BULF Y PROGRAM	_	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2010		
Cound	oil:						
Repoi	ting Party:				_		
SCH	HEDULE 3. PART A. HISTOF	RICAL AND	PROJECT	ED DEMAN	D AND CAI	PACITY - SI	UMMER
LINE				YE	AR		
NO.		2008	2009	2010	2011	2012	2013
	CA	APACITY - Co	ontinued (IN I	MEGAWATTS)		
18a	Sales to Entities Outside the Region -Subregion						
18a1	Full-Responsibility Sales (portion of total sales)						
18b	Capacity Owned by - Entitlement Held by Entity Outside the Region - Subregion						
19	Net Capacity Resources						
20	Total Potential Resources						
21	Distributed Generator Capacity less than 1 MW						
22	Other Capacity less than 1 MW						
23	Distributed Generator Capacity greater than or equal to 1 MW						
24	EIA-860 Capacity Total						
25	Existing Capacity Difference - Line 24 less Total Internal Capacity						

Energy	partment of Energy Information Administration IA-411 (2008)	COORDINATED BULK POWER SUPPLY PROGRAM REPORT			Form Appro OMB No. 19 Approval E		/2010
Counc	il:						
Report	ting Party:						
SCH	HEDULE 3. PART B. HISTO	ORICAL A	ND PROJE	CTED DE	MAND AND	CAPACIT	Y - WINTER
LINE					YEAR		
NO.		2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
DEMAI	ND (IN MEGAWATTS)						
1	Internal Demand						
2	Standby Demand						
3	Total Internal Demand (sum of lines 1 and 2)						
4	Direct Control Load Management						
5	Interruptible Demand						
6	Net Internal Demand (line 3, less line 4, less line 5)						
CAPACITY (IN MEGAWATTS)							
7	Total Internal Capacity	0.000	(I		
7a	Existing Capacity						
7a1	Committed						
7a1.1	Operable						
7a1.2	Inoperable						
7a2	Uncommitted						
7a2.1	Operable						
7a2.2	Inoperable						
7a3	Energy Only						
7a3.1	Operable						
7a3.2	Inoperable						
7b	Planned Capacity Additions						
7b1	Under Construction						
7b1.1	Committed						
7b1.2	Uncommitted						
7b1.3	Energy Only						
7b2	Not Under Construction						
7b2.1	Committed						
7b2.2	Uncommitted						
7b2.3	Energy Only						

Energy	epartment of Energy Information Administration EIA-411 (2008)		NATED BULK PROGRAM		Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2010						
Cound	oil:				_	_					
Repor	ting Party:										
SCH	HEDULE 3. PART B. HISTO	RICAL ANI	RICAL AND PROJECTED DEMAND AND CAPACITY - WINTER								
LINE				YE							
NO.		2008/09	2008/09 2009/10 2010/11 2011/12 2012/13 2013/14 APACITY - Continued (IN MEGAWATTS)								
		APACITY - Co	ontinued (IN	MEGAWATT	3)						
7c	Capacity Rerating, Retirements and Adjustments										
7c1	Planned Positive Reratings of Existing Capacity										
7c2	Planned Negative Reratings of Existing Capacity										
7c3	Planned Retirements of Existing Operable Capacity										
7c4	Planned Retirement of Existing Inoperable Capacity										
7c5	Return to Service of Existing Inoperable Capacity										
7c6	Existing Net Purchases from Non-reporting parties within Region - Subregion										
7c7	Planned Net Purchases from Non-reporting parties within Region - Subregion										
8	Total Inoperable Capacity										
9	Operable Total Internal Capacity										
10	Derates and Decreases in Seasonal Rated Capacity										
10a	Conditional Derates										
10b	Hydro Derates										
10c	Wind Capacity										
11	Planned Outages or Scheduled Maintenance of Existing Capacity										
12	Derated Operable Total Internal Capacity										

Energy I	oartment of Energy Information Administration A-411 (2008)		INATED BULI Y PROGRAM		Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2010		
Counci	:						
Reporti	ng Party:						
	EDULE 3. PART B. HISTO	DICAL AN	D DDO IEC	TED DEMA	ND AND C	ADACITY - V	MINITED
LINE	EDULE 3. FART B. 11131C	INICAL AN	DFROJEC		EAR	AFACIII-	MINITI
NO.		2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
110.	C		ontinued (IN			2012/13	2013/14
40	Operable Energy-only and						
13	Uncommitted Resources						
14	Derated Operable Internal Capacity						
15	Transmission-Limited Resources						
16	Deliverable Internal Capacity						
17	Capacity Purchases and Incoming Adjustments						
17a	Purchases from Entities Outside the Region - Subregion						
17a.1	Full-Responsibility Purchases (portion of total purchases)						
17b	Owned Capacity - Entitlement Located Outside the Region - Subregion						
18	Sales and Outgoing Adjustments						
18a	Sales to Entities Outside the Region -Subregion						
18a1	Full-Responsibility Sales (portion of total sales)						
18b	Capacity Owned by - Entitlement Held by Entity Outside the Region - Subregion						
19	Net Capacity Resources						
20	Total Potential Resources						
	Distributed C						
21	Distributed Generator Capacity less than 1 MW						
22	Other Capacity less than 1 MW						
23	Distributed Generator Capacity greater than or equal to 1 MW						

EIA-860 Capacity Total

Existing Capacity
Difference - Line 24 less
Total Internal Capacity
(Line 7)

24

25

							_							
Energy		on Administra	ation		TED BULK F		Form Approv OMB No. 190	5-0129						
	EIA-411 (20	08)		30FFLTF	NOGNAM KL	FORT	Approval Exp	oires: 12/31/2	2010					
Coun	cil:													
_	rting Party						_							
SC	HEDULE	4. PART A.		RICAL AND				HASES/INC	COMING					
			TRA	NSFERS (MI	EGAWATTS	S) - SUMM	ER							
						Y	EAR							
	OTHER													
LINE	PARTY													
NO.	EIA													
	CODE			2008	2009	2010	2011	2012	2013					
	(a)	PLANT ID	UNIT II	D (b)	(c)	(d)	(e)	(f)	(g)					
1														
2														
3														
5														
6														
7														
8														
9														
10														
11	Total													
SC	HEDULE	4. PART B.	HISTO	RICAL AND	PROJECTE	D CAPAC	ITY PURC	HASES/INC	COMING					
				NSFERS (M										
				,	YEAR									
	OTHER													
	PARTY													
LINE	EIA													
NO.	CODE			2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014					
	(a)	PLANT ID	UNIT I		(c)	(d)	(e)	(f)	(g)					
12	(-)				(-)	(3)	\-\ \-\ \-\ \-\ \-\ \-\ \-\ \-\ \-\ \-\		(3/					
13														
14														
15														
16														
17														
18														
19														
20														
21	_													
22	22 Total													

Energy Form I	epartment of y Information EIA-411 (2008	Administrat	ion		TED BULK F ROGRAM RE	EDODT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2010					
Coun	cil:						_					
Repo	rting Party:_						_					
	SCHEDULE	4. PART (C. HIST	ORICAL AN	D PROJEC	CTED CAI	PACITY SA	LES/OUT	OING			
			TRAN	SFERS (ME	GAWATTS	S) - SUMN	IER					
					YEAR							
LINE NO.	OTHER PARTY EIA CODE (a)	PLANT ID	UNIT II	2008 (b)	2009 (c)	2010 (d)	2011 (e)	2012 (f)	2013 (g)			
1	, ,			, ,	. ,	` ,						
2												
3												
5												
6												
7												
8												
9												
10												
11	Total											
	SCHEDULE	E 4. PART I		ORICAL AN				LES/OUTG	OING			
			TRAN	ISFERS (ME	GAWATT	S) - WINT	ER					
						•	YEAR					
LINE NO.	OTHER PARTY EIA CODE (a)	PLANT ID	UNIT IE	2008/2009 (b)	2009/2010 (c)	2010/2011 (d)	2011/2012 (e)	2012/2013 (f)	2013/2014 (g)			
12												
13												
14												
15												
16 17												
18												
19												
20												
21												
22	Total											

Energy Form E	epartment of Ener Information Adm EIA-411 (2008)	gy ninistration		ATED BULK POWER PROGRAM REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2008
Cound	cil:				_
Repor	ting Party:				
	SCH	EDULE 5. B	ULK ELECT	RIC TRANSMISSION	N SYSTEM MAPS
LINE NO.					
1	Specify the Nur Provided:	_			
2	For each map pr	ovide file name	e, coverage, ar	nd map software:	
	MAP NUMBER	FILE N	NAME	YEARS PROJECTED	MAP SOFTWARE
	(a)	(k))	(c)	(d)
					-
					-
					-
					-
					-

Energy	Information I IA-411 (2008)	Administration	n	COORDINATEI SUPPLY PRO			OMB No. Approval			
Counc	il:						_	•		
Report	ting Party:									
		SCHE	DUL	E 6. PROJECTE	D	TRANSMISSIO	ON LINES			
LINE				RANSMISSION LINE		TRANSMISSI		TRAI	NSMISSIO	N LINE
NO.				(a)		(b)			(c)	
TRANS	MISSION LIN	E IDENTIFICA	TION			T				
1	Terminal Loc	cation (From)								
2	Terminal Loc	cation (To)								
		E OWNERSHI	Р			T				
3	Company Na									
4	EIA Compar									
5	Type of Org									
6 TDANS	Percent Own									
7						<u> </u>				
8	Line Length (miles) Line Type		[] OH	[] [] UG SM		[] [] OH UG	[] SM	[] OH	[] UG	[] SM
9	Voltage Type		[]	[] DC		[] [] AC DC	SIVI	[] AC	[] DC	SIVI
10	Voltage Operating (Kilovolts)		AC	ЪС		AC DC		AC	DC	
11	Voltage Des (Kilovolts)	ign								
12	Conductor S	Size (MCM)								
	Conductor Material									
13	Type (Selection from legend	below)								
14	Bundling Ar (Select code legend below	es from								
15	Circuits per Present	Structure								
16	Circuits per Ultimate	Structure								
17	Pole/Tower (Select code legend below	es from		ole Material: [] Pole Type: []		Pole Materia Pole Type:			Material: le Type: []
18	Capacity Ra (Megavoltan	ting								
19	Projected In Date (e.g., 1	-Service								
	(LEGI	ENE	Ď				
ine Type		Voltage Type		Conductor Material	Bur	ndling Arrangement		Pole/Pov	wer Type	
OH=Overh	ead	AC=Alternating		Туре	1 =	Single	Pole Material		Pole Type	
JG=Under		Current		AL = Aluminum	2 =	Double			l old Type	
SM=Subm	arine	DC=Direct Curre	nt	ACCR = Aluminum Composite Conductor		Triple	W = Wood		P = Single p H = H-frame	
				Reinforced		Quadruple = Other	C = Concrete S = Steel		H = H-frame T = Tower	
				ACSR = Aluminum Core Steel Reinforced			B = Combinati		U = Undergr	ound
				CU = Copper			P = Composite O = Other	•	O = Other	
				OT = Other			o = Other			

Energy	partment of Energy Information Administration IA-411 (2008)			ULK POWER AM REPORT		OMB N	approved o. 1905-0129 al Expires:	
Counc	il:							
Report	ting Party:							
SCI	HEDULE 7. PART A, ANNU (Report follo		LINES					OR EHV A.C.
LINE NO.								
1	Applicable A.C. Voltage C	ass	230 kV	345 kV	500	kV	765 kV	Other (specify) (e)
			(a)	(b)	(0	:)	(d)	
Scheduled Outages for Specified Voltage Class								
2	Number of Scheduled Outages							
3	Number of Circuits Involved							
4	Scheduled Circuit-Hours Out o Service	f						
	Unsch	eduled Ou	itages for Sp	ecified Volta	age Cla	ass		
5	Number of Non-Momentary Unscheduled Outages							
6	Number of Circuits Involved							
7	Unscheduled Circuit-Hours Ou Service							
	Causal Categories for	Unschedi	uled Outages	of Specified	d Volta	ge Cla	ss (Percent)	
8	Weather							
9	Animals, Fire and Smoke, Human Accidents							
10	Vegetation							
11	Operator Action							
12	Equipment Failure							
13	Unknown							
14	Other							

Energy Information Administration			RDINATED BU PLY PROGRA		OMB No. 1	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2008		
Coun	Council:							
Repo	rting Party:							
SCHEDULE 7. PART B, ANNUAL DATA ON TRANSMISSION LINE OUTAGES FOR EHV D.C. LINES (Report following data for each applicable EHV Voltage Class)								
LINE NO.								
1	Applicable D.C. Voltage Cl	± 100-199 kV (a)	± 200-299 kV (b)	± 300-399 kV (c)	± 400-499 kV (d)	± 500 kV or greater (e)		
2	Number of Scheduled Outages		. ,		. ,	. ,		
3	Number of Circuits Involved							
4	Scheduled Circuit-Hours Out of	Service						
	Unsch	eduled O	utages for Sp	ecified Voltage	e Class			
5	Number of Non-Momentary Unscheduled Outages							
6	Number of Circuits Involved							
7	Unscheduled Circuit-Hours Out Service							
Causal Categories for Unscheduled Outages of Specified Voltage Class (Percent)								
8	Weather							
9	Animals, Fire and Smoke, Human Accidents							
10	Vegetation							
	11 Operator Action							
12	Equipment Failure							
13	Unknown							
14	Other							

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	Reporting Party:							
	SCHEDULE	8. BUL	K TRA	NSMISSION FA	CILITY POV	WER FLC	OW CASES	
LINE NO.								
1	Case Name:							
2	Year of Study:							
3	Case Number:		DOODE	OTIVE EAOU ITIES	AND CONNE	OTIONO		
		<u> </u>	ROSPE	CTIVE FACILITIES PROJECTED	AND CONNE	CHONS		
				IN-SERVICE DATE		CON	NECTIONS	
4	NAME OF FACILITY (a)	TYPE OF FACILITY (b)		(e.g., 12-2004) (c)	BUS NUI	MBER	BUS NAME (e)	
	(a)	(5	,	(0)	(u)	<u>'</u>	(e)	

U.S. Department of Energy						
Energy Information Administration						
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(2000)	
Council:	
Reporting Party:	

SCHEDULE 9. COMMENTS									
LINE NO.	SCHEDULE (a)	PART (b)	LINE NO. (c)	COLUMN (d)	PAGE (e)	COMMENT (f)			
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