# Appendix C Revised Electric Power Survey Cover Letters, Forms, and Instructions

- Form EIA-411, "Coordinated Bulk Power Supply & Demand Program Report"
- Form EIA-826, "Monthly Electric Sales and Revenue with State Distributions Report"
- Form EIA-860, "Annual Electric Generator Report"
- Form EIA-860M, "Monthly Update to the Annual Electric Generator Report"
- Form EIA-861, "Annual Electric Power Industry Report"
- Form EIA-923, "Power Plant Operations Report"



#### Subject: United States Department of Energy - EIA Annual Data Collection, Form EIA-411

Dear Respondent:

The U.S. Energy Information Administration (EIA) is now ready for the North American Electric Reliability Corporation (NERC) to report the annual electric data for the year 2010. NERC is required to file **Form EIA-411**, "**Coordinated Bulk Power Supply and Demand Program Report**" for all regions and subregions. The data are due no later than June 1, 2011 to the NERC who will submit the regional reports to the EIA by July 15, 2011. The EIA electric surveys are a mandatory collection under the authority of the Federal Energy Administration Act of 1974 (P.L. 93-275). Non-respondents and late filers are subject to financial penalties.

NERC collects Form EIA-411 data as part of its annual Long Term Reliability Assessment (LTRA) data collection, and as part of the Transmission Availability Data System (TADS). A subset of the LTRA and TADS data collections are submitted to EIA to fulfill the Form EIA-411 data requirements. Transmission maps and power flow cases (Schedules 5 and 8 on the Form EIA-411 are submitted directly to EIA via a secure file transfer. Please contact the Form EIA-411 Survey Manager with any questions on the secure submission process.

The timely submission of Form EIA-411 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.

Your cooperation is greatly appreciated.

Sincerely,

XXXXXXXXXX Survey Manager Electric Power Division Office of Coal, Nuclear, Electric and Alternate Fuels Energy Information Administration

U.S. Department of Energy U.S. Energy Information Administration Form EIA-411 (2011)		COORDINATED BULK POWER SUPPLY AND DEMAND PROGRAM REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 17 hours		
PURPOSE	Form EIA-411 collects information about regional electricity supply and demand projections for a ten-year advance period and information on the transmission system and supporting facilities. The data collected on this form appear in the U.S. 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	The Form EIA-411 is mandatory for those entities required to report. With the exception of Schedule 7, the form is to be completed by each of the Regional Entities of NERC. Each Regional Entity compiles the responses from data furnished by utilities and other members within their Region and provided to NERC. Where subregions exist, a subregional submittal is required. NERC then compiles and coordinates these data and provides them to the U.S. Energy Information Administration. Schedule 7 data for each Regional Entity will be provided by NERC from its Transmission Availability Data System database.				
RESPONSE DUE DATE	Annual data, following the end of the calendar year, are due to the North American Electric Reliability Corporation by June 1 <sup>st</sup> . After review, NERC will submit the completed Form EIA-411 to the EIA by July 15.				
METHODS OF FILING RESPONSE	The North American Reliability Corporation (NERC) will oversee the methods of filing response of the data by the Regional Entities. NERC then submits the compiled report to EIA.				
	Maps and power flow cases should be transmitted electronically using a secure file transfer process. Contact Orhan Yildiz at <u>orhan.yildiz@eia.gov</u> for instructions.				
	If necessary, CD-ROM disks containing the data can also be mailed via overnight delivery to EIA at the following address:				
	Orhan Yildiz, Survey Manager U.S. Energy Information Administration, Mail Stop EI-23 1000 Independence Avenue, S.W. Washington, DC. 20585-0690				
	Please retain a com	pleted copy of this form for your files.			
CONTACTS	<b>Data Questions:</b> For questions about the data requested on Form EIA-411, contact the Survey Manager:				
		Orhan Yildiz Telephone Number: (202) FAX Number: (202) 287 Email: <u>orhan.yildiz@e</u>	7-1938		

U.S. Department of Er U.S. Energy Informati Form EIA-411 (2011)		COORDINATED BULK POWER SUPPLY AND DEMAND PROGRAM REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 17 hours
GENERAL INSTRUCTIONS	<ol> <li>For schedules wh reporting year. For "Actual" column s data for the year 2</li> </ol>	or example, for data submitted during should contain data for the year 201 2011. sion data for facilities 100kV and abo	ar outlook. column represents the year prior to the 2011 (or, the 2011 reporting year), the 10; the "Year 1" column should contain ove, with the exception of AC circuit and
ITEM-BY-ITEM INSTRUCTIONS		SCHEDULE 1: IDENTIFIC	CATION
	1. Survey Contact address.	t: Verify contact name, title, telept	none number, fax number, and email
		Contact Person for Survey: Verify er, fax number and email address.	the contact's supervisor's name, title,
	3. <b>Report For:</b> Ve Entity or subregio		eporting party, whether it is a Regional
	SCHEDULE 2	, Part A and B: HISTORICAL AND ENERGY	PROJECTED PEAK DEMAND AND
	GENERAL INSTRUC	TIONS	
	<ul> <li>a. non-coincider entities within subregions th coincident val</li> <li>b. the highest ho a reporting er</li> </ul>	a NERC Region or subregion durin nat provide coincident peak deman lue. purly integrated ("60-minute net integ	ak demands for the various operating ng the specified period. For Regions or ids, submit justification for providing a rated peak") Net Energy For Load within The integrated peak hour demand (MW)
	The term "peak" is de		
	through Septe September 30 • Winter Peak December thr through the er	ember. The summer peak period b ). • <b>Hour Demand:</b> The maximum ough February. The winter peak per nd-of-February.	ad in megawatts during the period June begins on June 1 and extends through load in megawatts during the period riod begins on December 1 and extends egawatts during the specified reporting
	<ul> <li>Net Balancing Authority Are interchange. I</li> </ul>	eas, less energy delivered to othe	energy received from other Balancing er Balancing Authority Areas through losses but excludes energy required for
	whether resource generation for in aggregated. While the number of en demand forecasts	s exceed demand while allowing suff nstance). This test requires that e coincident demand determinations tities reporting and the time available	r of the power system is to determine ficient margin to address events (loss of demand forecasts be provided and are preferable, this is not feasible given to build hourly models. Therefore, peak k. In some cases this can be done on a

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	3. When providing a demand forecast to EIA the fundamental approach is to provide a normalized forecast. This is defined as a forecast which has been adjusted to reflect normal weather, and is expected on a 50% probability basis, (i.e., a peak demand forecast level that has a 50% probably of being under or over achieved by the actual peak). This is also known as the 50/50 forecast. This forecast can then be used to test against more extreme conditions.					
	<b>PART A:</b> Enter monthly peak demand and Net Energy for Load for designated months as defined above.					
	Monthly peak dema Schedule 3A and 3B		reported based	d on Total Inter	rnal Demand (s	ee definition on
	<b>PART B:</b> Enter seasonal peak demand and Net Energy for Load for designated years as defined above. The summer peak demands will be the values entered on SCHEDULE 3, Part A, line 2 for the corresponding year, and the winter peak demands will be the values entered on SCHEDULE 3, Part B, line 2, for the corresponding year. Please Note: as of 2011, all forecasts and projections should represent a <b>ten</b> -year outlook.					Part A, line 2 for on SCHEDULE
	SCHEDULE 3	, PART A and I TRANS	B: HISTORICAI ACTIONS, AND			), CAPACITY,
	GENERAL INSTRU	CTIONS				
	1. PART A should the winter sease		r the summer s	easonal peak.	PART B should	be filled out for
	<ol> <li>Please Note: as of 2011, all forecasts and projections should represent a ten-year outlook.</li> <li>Enter demand and capacity for the summer (PART A) and winter (PART B) peak periods of the designated years for the NERC Region or subregion. Peak demands reported should agree with the corresponding entries in SCHEDULE 2, Part B.</li> </ol>					
	added; in 2013	mple, following "0" was added; e, by 2015 "300"	the table below in 2014 "100" is planned to l	w, in 2011 "0" was added; in 2	was added; in 2015 "100" was	n year projection 2012 "100" was added. For the given would be
	YEAR	Actual (2011)	Year 1 (2012)	Year 2 (2013)	Year 3 (2014)	Year 4 (2015)
	Planned Capacity	0	100	100	200	300
	<ol> <li>For demand and capacity values, all numbers should be entered as MW in positive values – no negatives – up to one decimal place. (All subtractions will be shown on the respective line found in the form).</li> <li>For hydroelectric capacity, explain in SCHEDULE 9, COMMENTS whether the projected year's data are for an adverse water year, an average water year, or other.</li> <li>For line 1, Unrestricted Non-coincident Peak Demand is the gross load of the region/sub-</li> </ol>					
	region, which includes New Conservation (Energy Efficiency) and Estimated Diversity; and excludes Additions for Non-member Loads and Stand-by Load Under Contract, as defined below.					
	• For line 1a, <b>New Conservation (Energy Efficiency)</b> , enter the estimated impact of incremental passive energy efficiency programs. The increment represents the increase above the embedded amount from the base year. These impacts should be associated with programs to increase energy efficiency beyond its natural or normal growth. Report the expected capacity impacts (MW) during time of peak.					
L						

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	region's balancir individu day. Wi but thes service usage, f	ng area, zones, etc.). al loads that may mal thin a customer class, se classes place differe requirements of one e facility usage, and/or de	the sum of the The electric utike the demands upon the individual locent demands upon electrical system emands placed upon		de up of many ont times of the usage patterns, ystem grid. The by time-of-day
	of non-r "data su Demano actual a	members, in accordar ubmittal requirements d once and only once, o nd forecast customer D	nce with the NE shall stipulate th on an aggregate Demand values."		d MOD-16 that Entity count its n developing its
	system as a sec not rep separate	peak required to provid condary source or back ort the total (sum) c	de power and er kup for an outag of all contracted ontract standby	enter the expected den nergy (under a contract v e of the customer's prima d stand-by load. Additi demand if it is already	with a customer ary source). Do ionally, do not
	generators with flows out of the motors, pump n are not inclu- management pi energy use, all Peak Pricing, R dispatchable de controllable der	in the system and the ne system. The deman notors, and other equip ded. Internal Deman rograms such as conse non-dispatchable dem ceal Time Pricing and S emand response (such mand response should s reported in SCHEDU	metered line flow nds for station s pment essential nd includes ac ervation program nand response p System Peak Re h as Demand B I not be incorpor	n of the metered (net) vs into the system, less the service or auxiliary need to the operation of the ge djustments for indirect is, improvements in effici- programs (such as Time- sponse Transmission Ta idding and Buy-Back). A ated in this value. These Seasonal Peak Hour D	he metered line ls (such as fan enerating units) t demand-side iency of electric of-Use, Critical ariffs) and some Adjustments for e values should
	categories. All capac types of dispatchabl	city should be counted le and controllable Dei	once and only o mand Response	onse for different Dema once and categorized as one of the categorized as one of the categorized as one of the categorized as one of the categorized as one of the categorized of the categorized as one of the categorized as one	one for the four
	magnitu peak loa individua reduces Load M	de of customer deman ad by direct control of al appliances or equipn the demand of resid	nd that can be i of a system ope nent on custome dential or small Load Control)	nent (Direct Load Cont interrupted at the time of erator by interrupting po er premises. This type of commercial customers. as reported here doe	of the seasonal ower supply to f control usually Direct Control
	of custo interrupt the syst operator of the s with cor planning Interrupt	omer demand that, in ted at the time of the R em operator or by acti r. In some instances, system operator (remo- ntractual provisions. F g or operating reser	n accordance w Region or subreg ion of the custor the demand red te tripping) after For example, de rve requiremen ctually Interruptik	and (Curtailable), enter ith contractual arranger jon's seasonal peak by o mer at the direct reques luction may be effected l notice to the customer mands that can be inter ts normally should be ole Demand as reported 2a).	ments, can be direct control of t of the system by direct action in accordance rrupted to fulfill e reported as

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	customer interrupte system o triggered	2c, <b>Critical Peak Pricing (CPP)</b> demand that, in accordance we ad at the time of the Regional Entity perator or by action of the custome by system contingencies or high who	<b>with Control</b> , enter the magnitude of ith contractual arrangements, can be 's seasonal peak by direct control of the r by responding to high prices of energy olesale market prices.
	that, in a reduction is typical meet spe response during sy authoritie	ccordance with contractual arrangen is when called upon by a balancing a ly an aggregation of a variety of d ecific requirements aligned with trac e, responsive to AGC). These resour- stem contingencies and may be sub-	enter the magnitude of customer demand nents, is committed to pre-specified load authority. This demand response product emand resources which must qualify to ditional generating units (e.g., frequency rces are not limited to being dispatched ject to economic dispatch from balancing be used to meet resource adequacy e margins.
	(Total Internal D		line 2a, less line 2b, less 2c, less line 2d nagement, Interruptible Demand, Critical acity Resources).
	types of Demand Re entity has 100 MW o	esponse categories. Double countin f Direct Load Control Demand Resp and 50 MW can be used for Spinning	that can be called upon for the following g is permitted here. For example, if an bonse, all 100 MW can be used for Non- g Reserves, enter 100 on line 2a, 100 on
	resources whick synchronized an	h can displace generation deplo	erves - Spinning, Enter demand-side byed as operating reserves that are rgy supply and demand imbalance within
	resources, whic	h can displace generation deploye system but capable of serving dem	es – Non-Spinning, enter demand-side ed as operating reserves that are not and within a specified time. Penalties are
	can be respons margin.	sive to Automatic Generation Contr	ion, enter demand-side resources which rol (AGC) to provide normal regulating
	side resources,	which curtail voluntarily when	<b>Voluntary - Emergency</b> , enter demand- offered the opportunity to do so for ail during system and/or local capacity
	category. Determine each supply category whether the resource criteria, assess the c not, assess the criter	a supply resource's applicability to y in order of certainty (use logical e falls into the Existing-Certain cate criteria of Existing-Other. If not, asso ia of Future-Planned. If not assess the ptual. A resource will qualify within	er to the criteria listed within each supply a category by assessing the criteria in progression). For example, first assess gory. If the resource does not meet that ess the criteria of Existing-Inoperable. If he criteria of Future-Other. If not, assess a supply category if one or more of the
		s on this form, the criteria for each sins to the reported seasonal peak, not	upply category is based on the "period of the full year.

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	<ul> <li>seasonal rated water is assum located and intinterconnected partially owned Additionally, wh This value is the</li> <li>For Line 6 – Exsystem for the partially does not includ</li> </ul>	capability during peak period - where ed.) The reported value should inclu erconnected in the reporting area or in the reporting area, including the ful by (or with entitlement rights held by here load is considered a capacity re e summation of all Existing and Future xisting Capacity is the sum of all exist purpose of supplying electric load during e generation serving customers behin	ing generation connected to the electric ng the seasonal peak. Existing capacity d the meter. This value is automatically
1.	4. For line 6a, <b>Ex</b> available to ope the assessment	rate and deliver power within or into th t. Resources included in this category	(Line 6a + Line 6b + Line 6c). this category are generation resources ne region during the period of analysis in may be reported as a portion of the full gory includes, but is not limited to the
	<ol> <li>Contrac period o</li> <li>Where o</li> <li>a marke</li> <li>Network</li> <li>Commis</li> <li>Energy- the asse</li> <li>Capacity</li> <li>Other res</li> </ol>	of analysis in the assessment. organized markets exist, designated markets exist, designated markets at or has been designated as a firm net at Resource, as that term is used asion (FERC) pro forma or other regular only resources confirmed able to serve assment and are not subject to curtailmand y resources that can not be sold elsewe assources not included in the above can	d in the Federal Energy Regulatory atory approved tariffs. we load during the period of analysis in ment here tegories that have been confirmed able
	assessn Do not derate th outages are to b • For cap • For cap • For cap • For cap • For <b>Pro</b> be a cap	nent his value by unplanned or "forced" our be reported on line 6c1. line 6a1, Wind Expected On-Peal acity that is expected to be available of line 6a2, Solar Expected On-Peal acity that is expected to be available of line 6a3, Hydro Expected On-Peal acity that is expected to be available of line 6a4, Biomass Expected On-Peal acity that is expected to be available of line 6a4, Biomass Expected On-Peal acity that is expected to be available of line 6a5, Demand Response Exp grams), The total amount of Demand available on the seasonal peak. Value acity resource and are held to the burce. Do not double count Demand	<ul> <li>k, enter the amount of existing solar n the seasonal peak.</li> <li>k, enter the amount of existing hydro n the seasonal peak.</li> <li>k, enter the amount of existing biomass</li> </ul>
1	5. For line 6b, <b>Exi</b> may be availab analysis in the This category a Certain. This ca 1. A resou 2. Energy- during th 3. Mothbal	tion/subregion counts Demand Respon- d-reducing resource. <b>sting, Other Capacity</b> , included in this le to operate and deliver power within assessment, but may be curtailed or also includes portions of intermittent g ategory includes, but is not limited to the rce with non-firm or other similar transmonly resources that have been confir the Reporting Period, but may be curtailed led generation (that may be returned to	onse as a supply resource, and not a s category are generation resources that n or into the region during the period of interrupted at any time for any reason. generation not included in 6a, Existing, e following: mission arrangements med able to serve load for any reason

<ul> <li>wind, solar, etc.) that may not be available or de-rated during the period of analysis</li> <li>5. Hydro generation no councels as Existing. Certain or de-rated.</li> <li>6. Generation resources constrained for other reasons.</li> <li>Do not derate this value by unplanned or "forced" outages. For Actual-Year data, unplan outages are to be reported on line 6c2.</li> <li>a. For line 6b1, Wind Derated On-Peak, enter the amount of existing solar cap that is expected to be unavailable on seasonal peak.</li> <li>b. For line 6b3, Hydro Derated On-Peak, enter the amount of existing bin capacity that is expected to be unavailable on seasonal peak.</li> <li>c. For line 6b5, Local as a Capacity Resource Daradel.</li> <li>For line 6b6, Hydro Derated On-Peak, enter the amount of existing bin capacity that is expected to be unavailable on seasonal peak.</li> <li>For line 6b6, Transmission-Limited Resources, enter the amount in capacity that is expected to be unavailable on seasonal peak.</li> <li>For line 6b6, The Carl as a Capacity Resource is expected bo be unavailable on seasonal peak.</li> <li>For line 6b6, Therasmission-Limited Resources, enter the amount transmission-limited generation resources that have known physical delivera limitations to serve to add that they are obligated to serve.</li> <li>For line 6b6, Energy Only, enter the amount of generating resources that devising and easier only resources and may include generating capacity that capacity on associated dars in lines 6b1-6b. Energy only resources or have elected to be classified as an enviry resources and may include generation the sources. Energy Only resources are designated as a right as a network resource. Energy Only resources classified as a network resource. Energy</li></ul>

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reporting entity assessment. As achieved one of	17. For line 7, <b>Future Capacity Additions</b> , included in this category are generation resources the reporting entity has a reasonable expectation of coming online during the period of the assessment. As such, to qualify in either of the Future categories, the resource must have achieved one or more of these milestones:				
2. Regulate being ap 3. Regulate 4. Approve					
to be available analysis in the a	to operate and deliver power within assessment. This category includes, bu	ry are generation resources anticipated or into the region during the period of it is not limited to, the following:			
2. Where of a marke 3. Network approve	t or has been designated as a firm network of the second s	arket resource that is eligible to bid into work resource. FERC's pro forma or other regulatory e load during the Reporting Period and			
5. Where	pe curtailed. applicable, included in an integrate	e load during the Reporting Fende and ed resource plan under a regulatory cy requirements and an obligation to			
For this value, on not include dera	•	/alues of Future-Planned resources. Do			
that For is ex For that For is ex For that For that For that For capa • For	is expected to be available on seasonal line 7a2, <b>Wind Derate On-Peak</b> , enter opected to be unavailable on seasonal line 7a3, <b>Solar Expected On-Peak</b> , enter is expected to be available on seasonal line 7a4, <b>Solar Derate On-Peak</b> , enter opected to be unavailable on seasonal line 7a5, <b>Hydro Expected On-Peak</b> , en is expected to be available on seasonal line 7a6, <b>Hydro Derate On-Peak</b> , en is expected to be unavailable on seasonal line 7a7, <b>Biomass Expected On-Pea</b> acity that is expected to be available on line 7a8, <b>Biomass Derate On-Pea</b>	The amount planned wind capacity that peak. Inter the amount planned solar capacity al peak. The amount planned solar capacity that peak. Inter the amount planned hydro capacity al peak. The amount planned hydro capacity onal peak. <b>ak</b> , enter the amount planned biomass of seasonal peak. <b>c</b> , enter the amount planned biomass			
For     Prog     be a     capa     Dor     2a-2     Dem     For     Prog	grams), The total amount of Demand available on seasonal peak. Values in acity resource and are held to the same not double count Demand Response c acity report Demand Response in and Response as a supply resource. line 7a10, <b>Demand Response D</b> grams), The total amount of Demand	on seasonal peak. ected On-Peak (Load Management Response capacity that is expected to reported on this line are treated as a e criteria as a Future-Planned resource. apacity here if already provided in lines here if your Region/subregion counts erate On-Peak (Load Management Response capacity that is expected to not double count Demand Response			
<ul> <li>capa</li> <li>For</li> <li>limit</li> </ul>	acity here if already provided in lines 2a line 7a11, <b>Transmission-Limited Res</b> ed generation resources that have kno				

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	clas For redu prec capa For in lir For desi only the bion asso they	sified as Future-Planned. line 7a12, <b>Scheduled Outage – Main</b> actions due to a generator outage that i determined duration. This scheduled of acity. line 7a13, <b>All Other Derates</b> , enter a nes above that have known physical lim line 7a14, <b>Energy Only</b> , enter the ar gnated as energy-only resources or h resources and may include generatin area but may be recallable to another hass, or hydro capacity in this catego ociated derate in lines above. Energy o	mount of generating resources that are have elected to be classified as energy- ing capacity that can be delivered within r area. Do not include any wind, solar, pryinstead report this capacity on the only resources are designated as such if resource. Energy Only resources are
	qualify as Futu includes, but is assessment tha 1. Be curta 2. Energy- 3. Variable available	re, Planned and are not included in the s not limited to, generation resources at may: ailed or interrupted at any time for any r only resources that may be able to serv	ve load during the period of analysis ure, Planned category or may not be alysis
	uncertainties confidence adjusts the e • For that • For that • For that • For that • For that • For that • For that • For that • For capa • For capa • For capa	s associated with siting, project d factor for Future, Other resources sh expected on-peak values and not the d line 7b1, Wind Expected On-Peak, et is expected to be available on seasona line 7b2, Wind Derate On-Peak, entri is expected to be unavailable on seasona line 7b3, Solar Expected On-Peak, et is expected to be available on seasona line 7b4, Solar Derate On-Peak, entri is expected to be unavailable on seasona line 7b5, Hydro Expected On-Peak, et is expected to be unavailable on seasona line 7b5, Hydro Expected On-Peak, et is expected to be unavailable on seasona line 7b6, Hydro Derate On-Peak, et is expected to be unavailable on seasona line 7b7, Biomass Expected On-Peak acity that is expected to be unavailable on line 7b8, Biomass Derate On-Peak acity that is expected to be unavailable line 7b9, Energy Only, enter the am gnated as energy-only resources or h resources and may include generatin	enter the amount planned wind capacity al peak. There the amount proposed wind capacity onal peak. There the amount planned solar capacity al peak. There the amount proposed solar capacity onal peak. There the amount planned hydro capacity al peak. There the amount planned hydro capacity onal peak. There the amount planned biomass on seasonal peak. There the amount proposed biomass on seasonal peak. There amount proposed biomass on seasonal peak.
	the a • For redu prec capa • For	area but may be recallable to another a line 7b10, <b>Scheduled Outage – Main</b> actions due to a generator outage that i letermined duration. This scheduled o acity.	area. <b>Intenance,</b> enter the amount of capacity is scheduled well in advance and is of a outage is classified as Future-Planned Il other generation derates not reported

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	desi only the bion asso they	ignated as energy-only resources or resources and may include generation area but may be recallable to another mass, or hydro capacity in this catego ociated derate in lines above. Energy	amount of generating resources that are have elected to be classified as energy- ing capacity that can be delivered within er area. Do not include any wind, solar, goryinstead report this capacity on the only resources are designated as such if resource. Energy Only resources are e FERC interconnection process.
	prior listed cate through one or	gory, but have been identified and/or more of the following sources:	e generation resources that are not in a announced on a resource planning basis
	2. Entered 3. Is in a g	ate announcement I into or is in the early stages of an app generator interconnection (or other) qu older" generation for use in modeling.	
	For this value energy only.		-Peak Value. Do not include derates or
L L	uncertainties as actor for Conce		using a confidence factor to reflect ment or queue position. The confidence n line 16c and only adjusts the expected
	that For that For that For that For that For capa For capa For desi only the a	is expected to be available on season line 8a2, Wind Derate On-Peak, en- is expected to be unavailable on season line 8a3, Solar Expected On-Peak, is expected to be available on season line 8a4, Solar Derate On-Peak, en- is expected to be unavailable on season line 8a5, Hydro Expected On-Peak, en- is expected to be available on season line 8a6, Hydro Derate On-Peak, en- is expected to be unavailable on season line 8a6, Hydro Derate On-Peak, en- is expected to be unavailable on season line 8a7, Biomass Expected On-Pea acity that is expected to be available on line 8a8, Biomass Derate On-Pea acity that is expected to be unavailable line 8a9, Energy-Only, enter the a ignated as energy-only resources or or resources and may include generation area but may be recallable to another micipated Internal Capacity, this v	<ul> <li>atter the amount proposed wind capacity sonal peak.</li> <li>anter the amount planned solar capacity hal peak.</li> <li>atter the amount proposed solar capacity sonal peak.</li> <li>anter the amount planned hydro capacity hal peak.</li> <li>atter the amount proposed hydro capacity sonal peak.</li> <li>atter the amount planned biomass on seasonal peak.</li> <li>atter the amount proposed biomass e on seasonal peak.</li> <li>mount of generating resources that are have elected to be classified as energy ing capacity that can be delivered within</li> </ul>

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	(Import) and Sale (I that is transmitted Sales contracts ref subregion to an out contract is located i located reports the o to the outside region	ity are defined as an agreement betwee Export) of generating capacity. Purch from an outside Region or subregion fer to exported capacity that is transide side Region or subregion. For examp in one region and sold to another reg capacity of the resource and reports the	een two or more parties for the Purchase ase contracts refer to imported capacity in to the reporting Region or subregion. Insmitted from the reporting Region or ole, if a generating resource subject to a tion, the region in which the resource is e sale of such capacity that is being sold h capacity as an import, and <b>does not</b>
	TRANSMISSION C		FOR ALL REPORTED IMPORT AND
	DO NOT INCLUDE EXPORTS TRANSA		S WHEN REPORTING IMPORTS AND
		examples are provided to show how or more reporting Regions or subregior	v unit-specific transactions are handled ns for Imports and Exports:
	conne		owned by a company in Area B and not instead has a direct and adequate
		on: Show the unit completely in Ar Inted for in Region or Province B.	rea B with no transfers. All derating
	2. Unit p	hysically located in Area A that is half	owned by a company in Area B.
	capac as Ar	ity. Area B would show an import of I	A with an export to Area B of half of the half of the capacity from Area A, as long e transmission capacity. Unit derating by half of the derated amount.
	3. Unit p	hysically located in Area A that is fully	owned by a company in Area B.
	Soluti amou as loi derati	on: Show the unit completely in Area nt. Area B would show an import of t ng as Area A & B can demonstrate	A with an export to Area B of the full the full amount of capacity from Area A, adequate transmission capacity. Unit A and the import and export reduced by
		hysically located in Area A that is ful led" through Area B.	ly owned by a company in Area C and
	amou. impor	nt. Area B does not report either im	A with an export to Area C of the full aport or export. Area C would show an rea A, as long as Areas A, B, and C can y.
	22. For line 10. <b>Ca</b> r	<b>pacity Transactions – Imports</b> , the su	um of lines 10a through 10d.
	23. For line 10a, <b>Fi</b>		hases for which a firm contract has been
	whic purc loac tran	ch the seller is contractually obligate chaser with the same degree of reliabil customers. Each purchaser and	ases - Enter the total of all purchases for ed to deliver power and energy to the lity as provided to the seller's own native seller must agree on which of their neading. Values reported on this line

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	entit Reg Firm 24. For line 10b, <b>N</b> o	ion/subregion – Enter the amount o lements that will move from an outsic ion or subregion. Values reported on the	<b>Entitlement Located Outside the</b> f externally owned capacity or capacity de Region or subregion to the reporting his line represent a portion of Line 10a – purchases for which a non-firm contract or the previous year actual data
	25. For line 10c, E	<b>xpected</b> , enter the amount of capacity of the second seco	city for which a contract has not been ese transactions will be associated with
	whic purc load trans repr • For <b>Reg</b> entit Reg Exp	th the seller is contractually obligate customers. Each purchaser and sactions are reported under this h- esent a portion of Line 10c – Expected line 10c2, <b>Owned Capacity/E</b> ion/subregion - Enter the amount of lements that will move from an outsic ion or subregion. Values reported on the ected.	<b>intitlement Located Outside the</b> f externally owned capacity or capacity de Region or subregion to the reporting his line represent a portion of Line 10c –
		r <b>ovisional</b> , enter the amount of capac tiations have not begun.	ity for which the transaction(s) is under
	27. For line 11, Cap	bacity Transactions – Exports, the su	um of lines 11a through 11d.
	-	rm, enter the amount of capacity purch transactions will be associated with Ex	nases for which a firm contract has been isting Certain Capacity.
	whic purc load trans repr • For <b>Reg</b> entit	th the seller is contractually obligate chaser with the same degree of reliabili customers. Each purchaser and sactions are reported under this h esent a portion of Line 11a – Firm. line 11a2, <b>Owned Capacity/E</b> ion/subregion - Enter the amount of lements that will move from the reportion ion or subregion. Values reported on the	<b>s</b> - Enter the total of all purchases for d to deliver power and energy to the ity as provided to the seller's own native seller must agree on which of their eading. Values reported on this line <b>Entitlement Located Outside the</b> f externally owned capacity or capacity rting Region or subregion to an outside his line represent a portion of Line 11a –
		<b>on-firm</b> , enter the amount of capacity d. This value should only be entered fo	purchases for which a non-firm contract or the previous year actual data.
		n negotiation, projected, or other. The	city for which a contract has not been ese transactions will be associated with
	<ul> <li>For whic purc load trans repri-</li> <li>For</li> <li>Reg entit Reg Exponention</li> </ul>	line 11c1, Full Responsibility Sales the seller is contractually obligate thaser with the same degree of reliabili customers. Each purchaser and sactions are reported under this h esent a portion of Line 11c – Expected line 11c2, Owned Capacity/E ion/subregion - Enter the amount of lements that will move from the report ion or subregion. Values reported on the ected.	<b>Entitlement Located Outside the</b> f externally owned capacity or capacity rting Region or subregion to an outside his line represent a portion of Line 11c –
		rovisional, enter the amount of capac tiations have not begun.	ity for which the transaction(s) is under

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		GIN CALCULATIONS:	
	Lines 12-15a are o		ent the amount of capacity (generating gin calculations.
		sting, Certain and Net Firm Transac	ctions is calculated by the summation of ctions
	Internal Capacit		culated by the summation of <b>Anticipated</b> ransactions. For the general public, this the older versions of this form.
	Capacity Resout this calculation, line 16a. This a	rces, Existing, Other Capacity, and the Future, Other resources are adjusted	culated by the summation of Anticipated he adjusted Future, Other Capacity (For I using the confidence factor reported on line 16b). All derates and outages are
	Capacity Resou	urces, Existing, Other Capacity, Future	ulated by the summation of Anticipated e, Other Capacity, Conceptual Capacity, s and outages are subtracted from this
	Prospective Ca Conceptual Res amount is autor	pacity Resources, the adjusted Consources are adjusted using the confid	rces is calculated by the summation of neceptual Capacity (For this calculation, dence factor reported on line 16c. This the net of Provisional Transactions. All ion.
	enter a value b	between 0 and 100 that corresponds	<b>es</b> (line 7b), using reasonable judgment, s to the weight of emphasis placed on ctor only adjusts the expected on peak
	38. For line 16b, <b>N</b> 7b times line 16		onfidence Percentage Is Applied, line
	enter a value b	petween 0 and 100 that corresponds	es (line 8), using reasonable judgment, s to the weight of emphasis placed on hly adjusts the expected on peak values.
	40. For line 16d, <b>N</b> times line 16c.	et Conceptual Resources After Cor	nfidence Percentage Is Applied, line 8
	expected target	margin (%) set by the Region/subreg Il be applied and it is assumed this va	between 0 and 100 that represents the gion. If no value is entered, a reference alue will remain constant throughout the

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	NOTES FOR MARC Capacity margin (C on behalf of the Rec	) and reserve margins (R) calculations	s are computed by NERC and submitted
			ctions, take the difference between line in and divide by line 12 for the capacity
	3. Divide by line	e 3 for the reserve margin and divide b	
	3. Divide by line	e 3 for the reserve margin and divide b	
		for the reserve margin and divide by li	difference between line 15 and line 3. ine 15 for the capacity margin.
		<b>usted Potential Resources</b> , take the for the reserve margin and divide by li	e difference between line 15a and line 3. Ine 15a for the capacity margin.
	NOTES FOR LINES	8 23, 24, AND 25:	
	NERC is not oblig	jated to supply this information. אֹן ses so that the public will be aware c	Form EIA-860 and Form EIA-861), and These categories are placed here for of other capacity, which may need to be nformation from the EIA websites for the
		HEDULE 5. BULK ELECTRIC TRANS	
	<ul> <li>electric transmis and the bulk ele with the year fo Computer-Aided</li> <li>Only major geo of major metro discretion of th convenient use year of installa Regional Entity</li> </ul>	ssion system 100 kV and above, inclu- ectric transmission system additions p llowing the reporting year. The submi d Design and Drafting (CAD/CADD) file graphic features and State boundarie politan areas need be shown. The ne Regional Entity or Reporting Pa of the map. Show the voltage level of	tronic format, showing the existing bulk uding ties to all other Regional Entities, projected for a ten-year period beginning ission of Computer-Aided Design and/or e types is also allowed. s, bulk electric facilities, and the names e map scale to be used is left to the arty, but should be such as to allow f all bulk electric transmission lines. The is may be shown at the option of the
	system period b	as of January 1 of the reporting ye beginning with the reporting year; or	the existing bulk electric transmission ar and system additions for a ten-year
	() I	te maps for a set of subregions that co	omprise the whole region.
		the number of maps provided. the requested map information in colu	umns (a) through (d).

#### SCHEDULE 6 PART A & B: EXISTING AND PROJECTED TRANSMISSION CIRCUIT MILES AND CHARACTERISTICS OF PROJECTED TRANSMISSION ADDITIONS

## PART A: Existing Transmission Circuit Miles

1. For the following lines, report transmission lines in WHOLE number circuit miles for the specified voltages:

Operative Voltage Range(kV) Voltage		је Туре
100-120	AC	
121-150	AC	
151-199	AC	
100-299		DC
200-299	AC	
300-399	AC	DC
400-599	AC	DC
600+	AC	DC

2. All transmission lines must be classified into one of the following categories:

- Existing
  - Energized line available for transmitting power
- Under Construction
  - Construction of the line has begun
- Planned (any of the following)
  - Permits have been approved to proceed
  - o Design is complete
  - Needed in order to meet a regulatory requirement
- Conceptual (any of the following)
  - A line projected in the transmission plan
  - A line that is required to meet a NERC TPL Standard or powerflow model and cannot be categorized as "Under Construction" or "Planned"
  - Projected transmission lines that are not "Under Construction" or "Planned"
- 3. For line 1, report Existing transmission lines as of the last day in the prior reporting year. (For example, the 2011 Report Year, enter the amount of circuit miles existing as of 12/31/2010.)
- 4. For line 2, report Under Construction transmission lines as of the first day in the current reporting year. (For example, the 2011 Report Year, enter the amount of circuit miles existing as of 1/1/2011.)
- 5. For line 3, report Planned transmission lines to be completed within the first 5 years starting the first day in the current reporting year.
- 6. For line 4, report Conceptual transmission lines to be completed within the first 5 years starting the first day in the current reporting year.
- 7. For line 5, report Planned transmission lines to be completed within the second 5 years starting the first day of the 5<sup>th</sup> projection year.
- 8. For line 6, report Conceptual transmission lines to be completed within the second 5 years starting the first day of the 5<sup>th</sup> projection year.
- 9. For line 7, report the sum of all Existing, Under Construction, and Planned transmission line circuit miles for the ten year projection period.
- 10. For line 8, report the sum of all Existing, Under Construction, Planned, and Conceptual transmission line circuit miles for the ten year projection period.

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	PART	B: Characteristics of Projected Tran	smission Line Additions
	<ol> <li>This SCHEDUI additions at 100 the current report For transmission planning process</li> <li>For line 1, Projet</li> <li>For line 2, Projet</li> <li>Under Consson o Conto</li> <li>Planned (anto o Perrono o Dession o Neet</li> <li>Conceptual o A linto</li> <li>A linto</li> </ol>	LE must be completed by each Re o kV and above projected for the ten-ye orting year. In classified as Conceptual, the assu as and in the planning models are to be ect Name, enter the project name ect Status, enter the level of certainty de <b>struction</b> struction of the line has begun <b>hy of the following)</b> mits have been approved to proceed ign is complete ded in order to meet a regulatory requi <b>(any of the following)</b> me projected in the transmission plan	gional Entity for all transmission line ear period beginning with the first day of imptions used during the transmission e reported in this schedule. efined by the following criteria: rement TPL Standard or powerflow model and tion" or "Planned"
	(YES/NO). 6. For line 4a & 4b • Reliab • Gener • Va • No • Fo • Hy • Conge	o, <b>Primary</b> and <b>Secondary Driver</b> , spe	or combination of sources) nation of sources)
	line.		e of the beginning terminal point of the
		ninal Location (To), enter the name of pany Name, enter the company name	
		A Company Code, identify each o	rganization by the six-character code
	11. For line 9, <b>Typ</b> line owner incl	e of Organization, identify the type of	of organization that best represents the – Investor-owned (I), Municipality (M), i), or other (O).
		ercent Ownership, if the transmission owner.	on line will be jointly-owned, enter the
	and ending term	ninal points of the line.	circuit line miles between the beginning
		<b>ne Type</b> , select physical location of IG), or submarine (SM).	the line conductor – overhead (OH),
			g current (AC) or direct current (DC). which the line will be normally operated
	. ,		hich the line is designed to operate in
		nductor Size, enter the size of the line	e conductor in thousands of circular mils

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			e conductor material type - aluminum,
		ndling Arrangement, enter the bundlingle, double, triple, quadruple, or other	ng arrangement/configuration of the line
	21. For line 19, <b>Circ</b> on the structure		e current number of three-phase circuits
		rcuits per Structure Ultimate, enter structures of the line are designed to a	er the ultimate number of three-phase accommodate.
	wood, concrete		nant pole/tower material for the line – rial, or other. Also include the type of rground, or other.
	24. For line 22, <b>Cap</b> volt-amperes (N		arrying capacity of the line in millions of
	energized under 26. For line 24, <b>Ex</b> energized under	r the control of the system operator.	inally projected date the line was to be currently projected date the line will be
		ise of Delay, if the line has been delay	
		CHEDULE 7. ANNUAL DATA ON TR R EHV LINES, GENERAL INSTRUCT	
	consistent with the ir (TADS) Data Report at <u>http://www.nerc.com</u> AC Circuits, DC Cir	nstructions and definitions in the NERC ing Instruction Manual and TADS Def n/page.php?cid=4 62 An <b>Element</b> include	this schedule and are intended to be C Transmission Availability Data System initions (Appendix 7 of the Instructions) des certain specified voltage classes of <b>twice State</b> means an Element that is
			to be reported only once by one or the international borders must be reported.
	device, causing an E successful AC single	<b>ge</b> is an outage which results from the lement to change from an In-Service S -pole (phase) reclosing event is not ar ease note in SCHEDULE 9 Comments	State to a not In-Service State. A A Automatic Outage. If practices are
	greater.	<b>.</b>	ith an Outage Duration of a minute or
	(1) minute.	Nomentary outages should not be incluin	
	An <b>Event</b> is a tra Momentary) of one o		the Automatic Outage (Sustained or
	supervisory control)	<b>Dutage</b> is an outage which results of a switching device, causing an Elem	from the manual operation (including nent to change from an In-Service State m this, please note in SCHEDULE 9

Comments.

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	<ul> <li>A Planned Outage is a Non-Automatic Outage with advance notice for the purpose of maintenance, construction, inspection, testing, or planned activities by third parties that may be deferred. Outages of Elements of 30 minutes or less in duration resulting from switching steps or sequences that are performed in preparation for or restoration from an outage of another Element are not reportable.</li> </ul>
	<ul> <li>An Operational Outage is a Non-Automatic Outage for the purpose of avoiding an emergency (i.e., risk to human life, damage to equipment, damage to property) or to maintain the system within operational limits and that cannot be deferred.</li> </ul>
	Automatic Outage Causes
	<ul> <li>Weather, excluding lightning, covers all outages in which severe weather conditions (snow, extreme temperature, rain, tornado, hurricane, ice, high winds, etc.) are the primary cause of the outage, with the exception of lightning. This includes flying debris caused by wind.</li> <li>Lightning</li> </ul>
	<ul> <li>Environmental, includes environmental conditions such as earth movement (earthquake, subsidence, earth slide), flood, geomagnetic storm, or avalanche.</li> <li>Foreign Interference, includes objects such as aircraft, machinery, vehicles, kites,</li> </ul>
	<ul> <li>events where animal movement or nesting impacts electrical operations, flying debris not caused by wind, and falling conductors from one line into another.</li> <li>Contamination, covers outages caused by bird droppings, dust, corrosion, salt spray, industrial pollution, smog, or ash.</li> </ul>
	<ul> <li>Fire, includes outages caused by fire or smoke.</li> <li>Vandalism, Terrorism, or Malicious Acts, includes intentional activity such as gunshots, removed bolts, or bombs.</li> <li>Failed AC Substation Equipment, includes equipment inside the substation fence, but</li> </ul>
	<ul> <li>excludes protection system equipment.</li> <li>Failed AC/DC Terminal Equipment, includes equipment inside the terminal fence, including power-line carrier filters, AC filters, reactors and capacitors, transformers, DC valves, smoothing reactors, and DC filters. This excludes protection system equipment.</li> </ul>
	• Failed Protection System Equipment, includes any relay and/or control misoperations except those that are caused by incorrect relay or control settings that do not coordinate with other protective devices (these should be categorized as Human Error)
	• Failed AC Circuit Equipment, includes overhead or underground equipment outside the substation fence.
	<ul> <li>Failed DC Circuit Equipment, includes equipment outside the terminal fence.</li> <li>Human Error, covers any incorrect action traceable to employees and/or contractors for companies operating, maintaining, and/or providing assistance to the utility. This includes any human failure or interpretation of standard industry practices and guidelines that cause an outage.</li> </ul>
	<ul> <li>Power System Condition, include instability, overload trip, out-of-step, abnormal voltage, abnormal frequency, or unique system configurations.</li> <li>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.</li> </ul>
	<ul> <li>Unknown, any unknown causes should be reported in this category.</li> <li>Other, includes outages for which the cause is known; however, the cause is not included in the above list.</li> </ul>
	Non-Automatic, Operational Outage Causes
	<ul> <li>Emergency, includes outages taken to avoid risk to human life, damage to equipment, damage to property, or similar threatening consequences</li> <li>System Voltage Limit Mitigation, covers outages taken to maintain the voltage on the transmission system within desired levels (i.e., voltage control).</li> <li>System Operating Limit Mitigation (excluding voltage limit mitigation) covers outages</li> </ul>

• System Operating Limit Mitigation, (excluding voltage limit mitigation) covers outages

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taken to ratings, Amperes • Other O Non-Automatic,	keep the transmission system within Sy transient stability ratings, and voltage s, Frequency, or Volts. perational Outage, includes all other cau Planned Outage Causes	vstem Operating Limits, including facility stability ratings covering MW, MVar, uses, including human error.
maintena	ance and Construction covers an ance and construction of electric facilities,	, including testing.
highway	arty Requests, covers outages taken a department, Coast Guard, etc. lanned Outage, includes all other causes	
	PART A: Annual Data on AC Transmi	
<ul> <li>kV and abov</li> <li>2. For the app Operational)</li> <li>Number the report</li> <li>Number out of ser across all the report</li> <li>Outage ( code, as Initiating</li> </ul>	sion line outages involving Extra High Volt re are to be aggregated by each Regional propriate outage type (Automatic; Non-A , enter the following: of Outages (lines 2, 5, and 8), report the ting period for each voltage class. of Circuit-Hours Out of Service (lines 3 rvice for all of the outages for each voltag l circuits of the number of hours each circ ting period. Cause (lines 4, 7, and 10), report the num listed above. For Automatic Outages, re g Cause and the Sustained Cause. For t describes the cause that contributed to t	Entity and reported on this schedule. Automatic, Planned; or Non-Automatic, total number of outages that occurred in 3, 6, and 9), report the total circuit-hours e class during the year. This is the sum suit was not in an In-Service State during mber of outages by the pertinent cause eport the number of outages for both the or the Sustained Cause, use the Cause
	PART B: Annual Data on DC Transmi	ssion Line Outages
<ul> <li>±100 kV an schedule.</li> <li>4. For the app Operational)</li> <li>Number the report</li> <li>Number out of ser across all the report</li> <li>Outage (code, as Initiating</li> </ul>	sion line outages involving Extra High V d above are to be aggregated by each propriate outage type (Automatic; Non-A , enter the following: of Outages (lines 2, 5, and 8), report the ting period for each voltage class. of Circuit-Hours Out of Service (lines 3 rvice for all of the outages for each voltag I circuits of the number of hours each circ ting period. Cause (lines 4, 7, and 10), report the num listed above. For Automatic outages, re I Cause and the Sustained Cause. For t describes the cause that contributed to t	Automatic, Planned; or Non-Automatic, total number of outages that occurred in 3, 6, and 9), report the total circuit-hours e class during the year. This is the sum suit was not in an In-Service State during mber of outages by the pertinent cause port the number of outages for both the or the Sustained Cause, use the Cause
	PART C: Annual Data on Transfe	ormer Outages
are to be ago 6. For the app Operational) • <b>Number</b>	ner outages involving <b>Transformer Eleme</b> gregated by each Regional Entity and rep propriate outage type (Automatic; Non-A , enter the following: <b>of Outages</b> (lines 2, 5, and 8), report th eporting period for each voltage class b	orted on this schedule. Automatic, Planned; or Non-Automatic, he total number of outages that occurred

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Form EIA-411 (2011)	transformer- voltage) duri each transfo • Outage Cau code, as list Initiating Ca	<b>Transformer-Hours Out of Service</b> hours out of service for all of the outaging the year. This is the sum across rmer was not in an In-Service State du <b>ise</b> (lines 4, 7, and 10), report the numed above. For Automatic outages, rep	mber of outages by the pertinent cause port the number of outages for both the r the Sustained Cause, use the Cause
		PART D: Element Inventory and E	Event Summary
		bry data collected on Part D can be use B, and C. The Event summary data c arts A, B, and C.	
	<ol> <li>For line 2, an AC bound by AC sulf</li> <li>For line 2a, enter</li> <li>For line 2b, enter</li> <li>For line 3, an AC Overhead or Und</li> <li>For line 3a, enter</li> <li>For line 3b, enter</li> <li>For line 4, enter</li> <li>Circuit Structure Overhead AC Ci mile." A Transmi structure miles s</li> <li>For line 5, report</li> <li>For line 6, a DC AC/DC Terminal</li> <li>For line 7, a DC</li> <li>For line 7a, enter</li> <li>For line 8, report</li> <li>For line 8, report</li> <li>For line 8, report</li> <li>For line 9, enter</li> <li>for line 9, enter</li> <li>of three single-pl bounded by its a</li> </ol>	ostations. Radial circuits are AC Circuit r the Number of Overhead AC Circuit r the Number of Underground AC Circuit circuit Mile is one mile of a set of three derground AC Circuit r the Number of Overhead AC Circuit r the Number of Underground AC Circuit r the Number of Multi-Circuit Structur Mile is a one-mile linear distance of set rcuits. (Note: this definition is <i>not</i> the s ssion Owner's Multi-Circuit Structure N ince not all structures contain multiple in accordance with the applicable volt circuit is one pole of an overhead or ur on each end. the Number of Overhead DC Circuit r the Number of Underground DC Circuit r the Number of Underground DC Circuit r the Number of Transformers in each hase transformers or a single three-phase ssociated switching or interrupting dev r the total annual Number of Events a	round three-phase conductors that are uits. its in each voltage class. rcuits in each voltage class. ee-phase AC conductors in an it Miles in each voltage class. rcuit Miles in each voltage class. re Miles in each voltage class. re Miles in each voltage class. A Multi- equential structures carrying multiple ame as the industry term "structure Ailes will generally be less than its circuits.) rage class indicated. Inderground line which is bound by an ts in each voltage class. rcuits in each voltage class. a DC Circuit. it Miles in each voltage class. rcuit Miles in each voltage class. rcuit Miles in each voltage class. rouit Miles in each voltage class. a DC Circuit. it Miles in each voltage class. rouit Miles in each voltage class. routage class. A Transformer must voltage class. A Transformer is a bank ase transformer. A Transformer is
	SCHEDU	ILE 8. BULK TRANSMISSION FACIL	ITY POWER FLOW CASES
	flow information (including lines compensators) over the next tw 2. If the prospecti	n on prospective new bulk transmis , transformers, HVDC terminal facil that have been approved for construc vo years. ive bulk transmission facilities are re	data on basic electrical data and power ssion facilities of 100 kV and above lities, phase shifters, and static VAR tion and are scheduled to be energized epresented in the respondent's current of an annual peak load power flow case

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U.S. Energy Information Ad	Iministration	SUPPLY AND DEMAND PROGRAM REPORT	Approval Expires: 12/31/2013 Burden: 17 hours
Form EIA-411 (2011)	submitted which		years into the future and complete (see
	Instructions 6 th		
			's current FERC Form 715 submission,
			e prospective facilities. The respondent se that includes all prospective facilities
	to be energized	I in the next two years. Alternatively,	the respondent may provide a copy of
		•	the new facility for the year it is to be zed in a given year, it is acceptable to
			at includes all the new facilities added in
		power flow shall be in the same form	hat as used for the respondent's FERC
	Form 715 filing.	flow case that is provided in response	e to Items 2 and 3 above, please identify
			ot currently in service and the projected
			for each new power flow case. In each
		nly the new facility by type and list to the the transmitted with electrically.	bus numbers and names that the new
5.	The EIA expects	s that in nearly all cases the power flow	v format will be one of the following:
			Technologies, Inc.) PSS/E power flow
	<ul> <li>progran</li> <li>The Ca</li> </ul>	ո; rd Deck Image format of the Philadelpl	hia Electric power flow program:
		rd Deck format of the WSCC power flo	
			tric (formerly Electric Power Consultant,
		EPC), or the PSLF power flow program E Common Format for Exchange of S	
		•	the input data to the solved base cases
	and associated	ACSII output data on compact disk i	n the format associated with the power
	described above		urse of their transmission studies, as
6.	For Line 1, ente	r the case name.	
7.	For Line 2, ente	r the year studied in this power flow ca	ase.
		r the case number assigned by respor	
	facility included	on the power flow case.	line transformer, etc.) of a prospective
		umn b, enter the projected in-service ind year (e.g., 12-2004).	e date of the proposed facility. Please
		mn c and d, enter the number and nar cted. Use one line for each bus.	ne respectively of each bus to which the
12.	Repeat Instructi	ons 9 through 12 for each prospective	facility.
		SCHEDULE 9. COMME	ENTS
			line number, column identifier and page
	onsidered sensi		ent referencing sensitive information will

U.S. Department of E U.S. Energy Informat Form EIA-411 (2011)		COORDINATED BULK POWER SUPPLY AND DEMAND PROGRAM REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 17 hours	
GLOSSARY	The glossary for this http://www.eia.gov/g	form is available online at the followi lossary/index.html	ng URL:	
		For NERC definitions, see <u>www.nerc.com</u> , or this EIA copy at:		
	http://www.eia.gov/cneaf/electricity/page/eia411/nerc_glossary_2009.pdf			
SANCTIONS	13(b) of the Federal I Failure to respond m or a fine of not more civil action to prohibit preliminary or perma mandatory injunction 18 U.S.C. 1001 make to any Agency or De	ay result in a penalty of not more than than \$5,000 per day for each criminal reporting violations, which may resul nent injunction without bond. In such s commanding any person to comply	EAA) (Public Law 93-275), as amended. a \$2,750 per day for each civil violation, l violation. The government may bring a lt in a temporary restraining order or a civil action, the court may also issue with these reporting requirements. <b>Title</b> <b>son knowingly and willingly to make</b>	
REPORTING BURDEN	for the Regional Entitic council, including the maintaining the data weighted average b hours needed by the Send comments regation information, including Administration, Statis Building, Washingtor Office of Managemer	ties and NERC, and 16 hours per resp time of reviewing instructions, search needed, and completing and reviewin <b>urden for the Form EIA-411 is 17 h</b> Regional Entities and NERC, but also arding this burden estimate or any oth suggestions for reducing this burden tics and Methods Group, EI-70, 1000 p. D.C. 20585-0670; and to the Office	ning existing data sources, gathering and ng the collection of information. <b>The</b> <b>ours.</b> The burden includes not only the o for the members within each council. her aspect of this collection of n, to the U.S. Energy Information 0 Independence Avenue S.W., Forrestal of Information and Regulatory Affairs, 03. A person is not required to respond	
PROVISIONS REGARDING THE CONFIDENITALITY OF INFORMATION	The information co SCHEDULES 7A, 7E Outages, and SCHE not disclosed to the Information Act (FOI the FOIA, and the T EIA-411 are conside form. The Federal Energy Federal agencies wh be made available, to any Committee of C authorized by law to information in respon such as administrativ Disclosure limitation	ntained on SCHEDULE 5, Bulk 3, and 7C, Annual Data on AC and DULE 8, Bulk Transmission Facility F e extent that it satisfies the criteria A), 5 U.S.C. §552, the DOE regulati rade Secrets Act, 18 U.S.C. §1905. red public information and may be p Administration Act requires the EIA to en requested for official use. The infu- upon request, to another component congress, the Government Accountar receive such information. A court of use to an order. The information may re, regulatory, law enforcement, or ad procedures are applied to the pr and 8, on Form EIA-411 to ensure to	Electric Transmission System Maps, DC Transmission Line and Transformer Power Flow Cases, will be protected and a for exemption under the Freedom of ions, 10 C.F.R. §1004.11, implementing All other information reported on Form publicly released in company identifiable o provide company-specific data to other formation reported on this form may also t of the Department of Energy (DOE) to ability Office, or other Federal agencies of competent jurisdiction may obtain this y be used for any nonstatistical purposes	

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<b>NOTICE:</b> This report is <b>mandatory</b> under the Federal Energy Administration Act of 1974 (Public Law 93-275) for all parts. 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. <b>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.</b>			
sc	CHEDULE 1. IDENTIFICATION	N	
	Survey Contact		
First Name:	Last Name:		
Title:			
Telephone (include extension):	Fax:		
Email:			
Supervisor of Contact Person for Survey			
First Name:	Last Name:		
Title:			
Telephone (include extension):	Fa	ax:	
Email:			
	Report For		
Regional Entity:			
Reporting Party (Regional Entity or subregion):			
For questions about the da	ata requested on Form EIA-411, cont	act the Survey Manager:	
Marie Rinkoski Spangler Telephone Number: (202) 586-2446 FAX Number: (202) 287-1934 Email: marie.rinkoski-spangler@eia.gov			

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<b>U.S. Energy Information Administration</b>
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Regional Entity:

Reporting Party:\_\_\_\_\_

	SCHEDULE	2. PART /	A. HISTO	ORICA				TED	PEAK	( DE	EMA	ND A	ND EI	NERGY	-
	k Demand oorted	Non-Coinci	dent			С	oine	cider	nt						
plea why	pincident, ase explain / not non- ncident														
							Y	<b>EAR</b>	1						
		2011	(Prior Ye	ar)		2012						20	13 (No	vt Voar)	
LIN E NO.	MONTH	PEAK HOU DEMAND (MEGAWATTS (a)	R (THO	ENERG USANDS ( MEGA- ITHOURS (b)	OF   PE   [	EAK HOU DEMANE EGAWATT (a)	JR D	NET (THC	FENER DUSANDS MEGA- ATTHOURS (b)	OF	2013 (Next Year)PEAK HOUR DEMAND (MEGAWATTS) (a)NET ENERGY (THOUSANDS OF MEGAWATTHOURS) (b)			IDS OF	
1	January														
2	February														
3	March														
4	April														
5	May														
6	June														
7	July														
8	August														
9	September														
9 1 0	October														
1 1	November														
1 2	December														
SC	HEDULE 2. P	ART B. HIS	STORIC	AL AN	D PRC	<b>JECTE</b>	ED	PEA		ΛΑΝ	ID A		NERG	GY - AN	NUAL
									YEAR						
			Actual Year	Year 1	Year 2	Year 3		ear 4	Year 5	Yea 6		Year 7	Year 8	Year 9	Year 10
1	Summer Peak I Demand, June- (Megawatts) Winter Peak Ho	September	1001					•		5					
	Demand, Decer	nber -													
2	February (Mega														
3	Net Annual Ene														

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### COORDINATED BULK POWER SUPPLY AND DEMAND PROGRAM REPORT

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Regional Entity:\_

Reporting Party:\_\_\_

30	HEDULE 3. PART A. HIST		ND PROJEC		EAR		
LINE		Actual	Year 1	Year 2		Year 9	Year 10
NO.		(eg 2011)	(eg 2012)	(eg 2013)		(eg 2020)	(eg 2021)
	Į		IAND (IN MEGA		,	(09-0-0)	(•9)
1	Unrestricted Non-coincident Peak Demand						
1a	New Conservation						
1b	Estimated Diversity						
1c	Additions for non- member load						
1d	Stand-by Load Under Contract						
2	Total Internal Demand						
2a	Direct Control Load Management						
2b	Contractually Interruptible						
2c	Critical Peak Pricing with Control						
2d	Load as a Capacity Resource						
3	Net Internal Demand						
4a	Demand Response Used for Reserves - Spinning						
4b	Demand Response Used for Reserves – Non-Spinning						
4c	Demand Response used for Regulation						
4d	Demand Response used for Energy, Voluntary – Emergency						
	ł	CAP	ACITY (IN MEG	AWATTS)	Į		
5	TOTAL INTERNAL CAPACITY (sum of 6 and 7)						
6	EXISTING CAPACITY						
6a	Existing, Certain						
6a1	Wind Expected On-peak						
6a2	Solar Expected On-peak						
6a3	Hydro Expected On- Peak						
6a4	Biomass Expected On- Peak						
6a5	Load as a Capacity Resource Expected On- Peak						

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Regional Entity:\_ Reporting Party:\_

NO.       (eg 2011) (eg 2012) (eg 2013) (eg 2020) (eg 20         CAPACITY (IN MEGAWATTS)       (eg 2020) (eg 20         6b1       Wind Derate On-peak       (eg 2013) (eg 2		ING Party:					PACITY - S	
Link     Actual     Year 1     Year 2      Year 9     Year       (eg 2011)     (eg 2012)     (eg 2013)      (eg 2020)     (eg 202)     (eg 20)     <								
NO.       (eg 2011)       (eg 2020)       (eg 202)       (eg 201)       (eg 201)       (eg 201)       (eg 201)			Actual	Year 1			Year 9	Year 10
CAPACITY (IN MEGAWATTS)       CAPACITY (IN MEGAWATTS)         6b1       Wind Derate On-peak	NO.							(eg 2021)
6b1       Wind Derate On-peak          6b2       Solar Derate On-peak          6b3       Hydro Derate On-peak          6b4       Biomass Derate On-peak          6b5       Resource Derate On-peak          6b5       Resource Derate On-peak          6b6       Energy Only           6b7       Maintenance           6b8       Transmission-Limited           7       Forced Outage On-peak           6c1       Existing, Certain Capacity           7       Forced Outage On-peak           6c2       Existing Other Capacity           7a       Future, Planned           7a1       Wind Expected On-peak           7a3       Solar Expected On-peak           7a4       Solar Derpeak           7a5       Hydro Derace On-peak           7a4       Solar Derpeak           7a5       Hydro Derace On-peak           7a6		·						
6b2       Solar Derate On-peak         6b3       Hydro Derate On-peak         6b4       Biomass Derate On-peak         6b5       Resource Derate On-peak         6b6       Energy Only         6b7       Scheduled Outage - Maintenance         6b8       Transmission-Limited Resources         6c       Existing, Inoperable         6c1       Existing, Certain Capacity Forced Outage On-peak         6c2       Existing, Other Capacity Forced Outage On-peak         7       FUTURE CAPACITY ADDITIONS         7a       Future, Planned         7a1       Wind Derate On-peak         7a3       Solar Expected On-peak         7a4       Solar Expected On-peak         7a5       Hydro Expected On-peak         7a6       Hydro Expected On-peak         7a7       Biomass Expected On-peak         7a8       Biomass Expected On-peak         7a10       Demand Response Derate On-peak         7a11       Transmission-Limited Resources         7a2       Wind Derate On-peak         7a4       Biomass Expected On-peak         7a6       Hydro Derate On-peak         7a7       Biomass Derate On-peak         7a10       Demand Response Derate	6b	Existing, Other						
6b3       Hydro Derate On-peak         6b4       Biomass Derate On-peak         6b5       Load as a Capacity Resource Derate On-peak         6b6       Energy Only         6b7       Scheduled Outage - Maintenance         6b8       Transmission-Limited Resources         6c1       Existing, Certain Capacity Forced Outage On-peak         6c2       Existing, Other Capacity Forced Outage On-peak         7       FUTURE CAPACITY ADDITIONS         7a       Future, Planned         7a1       Wind Expected On-peak         7a2       Wind Derate On-peak         7a4       Solar Derate On-peak         7a5       Hydro Derate On-peak         7a6       Hydro Derate On-peak         7a6       Hydro Derate On-peak         7a6       Hydro Derate On-peak         7a7       Biomass Expected On-peak         7a8       Biomass Expected On-peak         7a9       Demand Response Derate         7a1       Transmission-Limited Resources         7a1       Transmission-Limited Resources         7a1       Demand Response Derate         7a2       Scheduled Outage – Maintenance         7a3       Derate On-peak         7a4       Solar Derate On-peak <td>6b1</td> <td>Wind Derate On-peak</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	6b1	Wind Derate On-peak						
6b4       Biomass Derate On-peak         6b5       Load as a Capacity Resource Derate On-peak         6b6       Energy Only         6b7       Scheduled Outage – Maintenance         6b8       Transmission-Limited Resources         6c       Existing, Inoperable         6c1       Existing, Certain Capacity         6c2       Existing, Other Capacity         Forced Outage On-peak	6b2	Solar Derate On-peak						
6b5         Load as a Capacity Resource Derate On-peak           6b6         Energy Only           6b7         Scheduled Outage – Maintenance           6b8         Transmission-Limited Resources           6c1         Existing, Inoperable           6c2         Existing, Certain Capacity Forced Outage On-peak           6c2         Existing, Other Capacity Forced Outage On-peak           7a         Future, Planned           7a1         Wind Expected On-peak           7a2         Wind Derate On-peak           7a3         Solar Derate On-peak           7a4         Solar Derate On-peak           7a5         Hydro Expected On-peak           7a6         Hydro Derate On-peak           7a7         Biomass Expected On-peak           7a8         Biomass Expected On-peak           7a9         Demand Response Expected           7a1         Transmission-Limited Resources           7a1         Transmission-Limited Resources           7a1         Transmission-Limited Resources           7a2         Scheduled Outage - Maintenance           7a3         All Other Derates           7a4         Solar Expected On-peak           7a5         Hydro Expected On-peak           7a4	6b3	Hydro Derate On-peak						
6b5       Energy Only         6b6       Energy Only         6b7       Scheduled Outage –         6b8       Transmission-Limited         6b8       Resources         6c       Existing, Inoperable         6c1       Existing, Certain Capacity         Forced Outage On-peak       Forced Outage On-peak         6c2       Existing, Other Capacity         Forced Outage On-peak       Forced Outage On-peak         7       FUTURE CAPACITY ADDITIONS         7a       Future, Planned         7a1       Wind Expected On-peak         7a2       Wind Derate On-peak         7a3       Solar Expected On-peak         7a4       Solar Expected On-peak         7a5       Hydro Derate On-peak         7a6       Hydro Derate On-peak         7a7       Biomass Expected On-peak         7a8       Biomass Expected On-peak         7a9       On-peak         7a10       Demand Response Expected         7a14       Transmission-Limited         Resources       Image: Compake         7a10       On-peak         7a11       Transmission-Limited         7a2       Scheduled Outage -         Maintenance<	6b4	Biomass Derate On-peak						
6b7       Scheduled Outage - Maintenance         6b8       Transmission-Limited Resources         6c       Existing, Inoperable         6c1       Existing, Certain Capacity Forced Outage On-peak         6c2       Existing, Other Capacity Forced Outage On-peak         6c2       Existing, Other Capacity Forced Outage On-peak         7       FUTURE CAPACITY ADDITONS         7a1       Wind Expected On-peak         7a2       Wind Derate On-peak         7a3       Solar Expected On-peak         7a4       Solar Derate On-peak         7a5       Hydro Expected On-peak         7a6       Hydro Expected On-peak         7a7       Biomass Expected On-peak         7a8       Biomass Expected On-peak         7a9       Demand Response Derate         7a10       On-peak         7a11       Transmission-Limited Resources         7a12       Scheduled Outage - Maintenance         7a13       All Other Derates         7a2       Wind Derate On-peak         7a3       Solar Expected On-peak         7a9       Demand Response Expected         7a10       On-peak         7a11       Transmission-Limited Resources         7a12       Scheduled Outage	6b5							
6b7       Maintenance         6b8       Transmission-Limited Resources	6b6	Energy Only						
608       Resources       Image: Constant Capacity       Image: Constant Capacity         6c1       Existing, Certain Capacity       Image: Constant Capacity       Image: Constant Capacity         6c2       Existing, Other Capacity       Image: Constant Capacity       Image: Constant Capacity         6c2       Existing, Other Capacity       Image: Constant Capacity       Image: Constant Capacity         7       FUTURE CAPACITY ADDITIONS       Image: Constant Capacity       Image: Constant Capacity         7a1       Wind Expected On-peak       Image: Constant Capacity       Image: Constant Capacity         7a3       Solar Expected On-peak       Image: Constant Capacity       Image: Constant Capacity         7a3       Solar Expected On-peak       Image: Constant Capacity       Image: Constant Capacity         7a4       Solar Derate On-peak       Image: Constant Capacity       Image: Constant Capacity         7a5       Hydro Expected On-peak       Image: Constant Capacity       Image: Constant Capacity         7a6       Biomass Expected On-peak       Image: Constant Capacity       Image: Constant Capacity         7a7       Biomass Expected On-peak       Image: Constant Capacity       Image: Constant Capacity       Image: Constant Capacity         7a10       Demand Response Derate       Image: Constant Capacity       Image: C	6b7							
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6C1       Forced Outage On-peak         6C2       Existing, Other Capacity Forced Outage On-peak         7       FUTURE CAPACITY ADDITIONS         7a       Future, Planned         7a1       Wind Expected On-peak         7a2       Wind Expected On-peak         7a3       Solar Expected On-peak         7a4       Solar Expected On-peak         7a5       Hydro Expected On-peak         7a6       Hydro Expected On-peak         7a7       Biomass Expected On-peak         7a8       Biomass Expected On-peak         7a9       Demand Response Expected         On-peak       Image: Compasition of the compasit	6c							
6C2       Forced Outage On-peak       Image: Control of the second secon	6c1	Forced Outage On-peak						
7a       Future, Planned       Image: Second	6c2							
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7a3Solar Expected On-peak7a4Solar Derate On-peak7a5Hydro Expected On-peak7a6Hydro Derate On-peak7a7Biomass Expected On-peak7a8Biomass Derate On-peak7a9Demand Response Expected On-peak7a10Demand Response Derate On-peak7a11Transmission-Limited Resources7a12Scheduled Outage – Maintenance7a13All Other Derates7a14Energy Only7a12Wind Expected On-peak7a13Solar Expected On-peak7a14Energy Only7a15Solar Expected On-peak7a16On-peak7a17Wind Expected On-peak7a18Mil Derate On-peak7a19Only7a14Energy Only7a15Solar Expected On-peak7a2Wind Expected On-peak7a3Solar Expected On-peak7a4Solar Derate On-peak7a5Solar Expected On-peak7a6Solar Derate On-peak7a7Wind Expected On-peak7a8Solar Expected On-peak7a9Solar Expected On-peak7a4Solar Derate On-peak7b1Wind Expected On-peak7b2Wind Derate On-peak7b3Solar Expected On-peak7b4Solar Derate On-peak7b4Solar Derate On-peak7b3Solar Derate On-peak7b4Solar Derate On-peak7b4Solar Derate On-peak7b4Solar Derate On-peak<								
7a4       Solar Derate On-peak         7a5       Hydro Expected On-peak         7a6       Hydro Derate On-peak         7a7       Biomass Expected On-peak         7a8       Biomass Derate On-peak         7a9       Demand Response Expected         7a10       Demand Response Derate         7a11       Transmission-Limited         Resources			-					
7a5Hydro Expected On-peak7a6Hydro Derate On-peak7a7Biomass Expected On-peak7a8Biomass Expected On-peak7a9Demand Response Expected On-peak7a10Demand Response Derate On-peak7a11Transmission-Limited Resources7a12Scheduled Outage - Maintenance7a13All Other Derates7a14Energy Only7a13All Other Derates7a14Energy Only7a15Solar Expected On-peak7a16On-peak7a17Wind Derate On-peak7a18All Other Derates7a19Olar Expected On-peak7a11Mintenance7a12Model Expected On-peak7a13All Other Derates7a14Energy Only7a15Olar Expected On-peak7a2Wind Derate On-peak7a3Solar Expected On-peak7a4Solar Derate On-peak7a5Yind Derate On-peak7a6Image: Compeak7a7Wind Expected On-peak7a8Image: Compeak7a9Image: Compeak7a1Wind Expected On-peak7a3Solar Expected On-peak7a4Solar Expected On-peak7b1Wind Derate On-peak7b2Wind Derate On-peak7b3Solar Expected On-peak7b4Solar Derate On-peak7b3Solar Derate On-peak7b4Solar Derate On-peak7b5Solar Derate On-peak7b6So								
7a6Hydro Derate On-peakImage: Constraint of the system of the syst								
7a8Biomass Derate On-peakImage: Constraint of the system7a9Demand Response Expected On-peakImage: Constraint of the system7a10Demand Response Derate On-peakImage: Constraint of the system7a11Transmission-Limited ResourcesImage: Constraint of the system7a12Scheduled Outage - MaintenanceImage: Constraint of the system7a13All Other DeratesImage: Constraint of the system7a14Energy OnlyImage: Constraint of the system7a13Solar Expected On-peakImage: Constraint of the system7a2Wind Derate On-peakImage: Constraint of the system7a3Solar Expected On-peakImage: Constraint of the system7a4Solar Derate On-peakImage: Constraint of the system7bFuture, OtherImage: Constraint of the system7b1Wind Derate On-peakImage: Constraint of the system7b2Wind Derate On-peakImage: Constraint of the system7b3Solar Expected On-peakImage: Constraint of the system7b4Solar Derate On-peakImage: Constraint of the system	7a6							
7a9Demand Response Expected On-peakImage: Constraint of the system7a10Demand Response Derate On-peakImage: Constraint of the system7a11Transmission-Limited ResourcesImage: Constraint of the system7a12Scheduled Outage - MaintenanceImage: Constraint of the system7a13All Other DeratesImage: Constraint of the system7a14Energy OnlyImage: Constraint of the system7a15Wind Expected On-peakImage: Constraint of the system7a2Wind Derate On-peakImage: Constraint of the system7a3Solar Expected On-peakImage: Constraint of the system7a4Solar Derate On-peakImage: Constraint of the system7bFuture, OtherImage: Constraint of the system7b1Wind Expected On-peakImage: Constraint of the system7b2Wind Derate On-peakImage: Constraint of the system7b3Solar Expected On-peakImage: Constraint of the system7b4Solar Derate On-peakImage: Constraint of the system	7a7	Biomass Expected On-peak						
TabOn-peakImage: Constraint of the second sec	7a8							
TailoOn-peakImage: Constraint of the second constraint of the	7a9	On-peak						
7a11ResourcesImage: second seco	7a10							
Tat2MaintenanceImage: Constraint of the sector of th	7a11	<b>D</b>						
7a14Energy OnlyImage: Constraint of the system7a1Wind Expected On-peakImage: Constraint of the system7a2Wind Derate On-peakImage: Constraint of the system7a3Solar Expected On-peakImage: Constraint of the system7a4Solar Derate On-peakImage: Constraint of the system7a4Solar Derate On-peakImage: Constraint of the system7bFuture, OtherImage: Constraint of the system7b1Wind Expected On-peakImage: Constraint of the system7b2Wind Derate On-peakImage: Constraint of the system7b3Solar Expected On-peakImage: Constraint of the system7b4Solar Derate On-peakImage: Constraint of the system	7a12							
7a1Wind Expected On-peakImage: Control of the system7a2Wind Derate On-peakImage: Control of the system7a3Solar Expected On-peakImage: Control of the system7a4Solar Derate On-peakImage: Control of the system7a4Solar Derate On-peakImage: Control of the system7bFuture, OtherImage: Control of the system7b1Wind Expected On-peakImage: Control of the system7b2Wind Derate On-peakImage: Control of the system7b3Solar Expected On-peakImage: Control of the system7b4Solar Derate On-peakImage: Control of the system							1	
7a2Wind Derate On-peakImage: Constraint of the sector of the secto								
7a3Solar Expected On-peakImage: Solar Derate On-peakImage: Solar Derate On-peakImage: Solar Derate On-peak7bFuture, OtherImage: Solar Derate On-peakImage: Solar Derate On-peakImage: Solar Derate On-peak7b3Solar Expected On-peakImage: Solar Derate On-peakImage: Solar Derate On-peakImage: Solar Derate On-peak7b4Solar Derate On-peakImage: Solar Derate On-peakImage: Solar Derate On-peakImage: Solar Derate On-peak							ļ ļ	
7a4Solar Derate On-peakImage: Constraint of the sector of the sect								
7b     Future, Other     Image: Constraint of the state of th							<u>├</u> ────┤	
7b1Wind Expected On-peakImage: Control of the system7b2Wind Derate On-peakImage: Control of the system7b3Solar Expected On-peakImage: Control of the system7b4Solar Derate On-peakImage: Control of the system	784	Solar Derate Un-peak					<u>├</u> ───┤	
7b1Wind Expected On-peakImage: Constraint of the system7b2Wind Derate On-peakImage: Constraint of the system7b3Solar Expected On-peakImage: Constraint of the system7b4Solar Derate On-peakImage: Constraint of the system	7h	Future Other						
7b2     Wind Derate On-peak       7b3     Solar Expected On-peak       7b4     Solar Derate On-peak								
7b3     Solar Expected On-peak       7b4     Solar Derate On-peak								
7b4 Solar Derate On-peak								
						1		
	7b5	Hydro Expected On-peak						
7b6 Hydro Derate On-peak								
7b7 Biomass Expected On-peak								
7b8 Biomass Derate On-peak								
7b9 Energy Only	7b9	Energy Only						

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SCH	EDULE 3. PART A. HISTORICA	AL AND PRO	OJECTED D	DEMAND AN	ND CA	PACITY - S	UMMER
				YEAR			
LINE NO.		Actual	Year 1	Year 2		Year 9	Year 10
NO.		(eg 2011)	(eg 2012)	(eg 2013)		(eg 2020)	(eg 2021)
	CAPAC	CITY - Continu		WATTS)	•		
8	CONCEPTUAL CAPACITY						
8a	Conceptual						
8a1	Wind Expected On-peak						
8a2	Wind Derate On-peak						
8a3	Solar Expected On-peak						
8a4	Solar Derate On-peak						
8a5	Hydro Expected On-peak						
8a6	Hydro Derate On-peak						
8a7	Biomass Expected On- Peak						
8a8	Biomass Derate On-peak						
8a9	Energy Only						
9	ANTICIPATED INTERNAL CAPACITY						
10	CAPACITY TRANSACTIONS – IMPORTS						
10a	Firm						
10a1	Full-Responsibility Purchases						
10a2	Owned Capacity/Entitlement Located Outside the Region/subregion						
10b	Non-Firm						
10c	Expected						
10c1	Full-Responsibility Purchases						
10c2	Owned Capacity/Entitlement Located Outside the Region/subregion						
10d	Provisional – transactions under study, but negotiations have not begun.						
11	CAPACITY TRANSACTIONS –						
11a	EXPORTS Firm						
11a1	Full-Responsibility Purchases						
iiai	Owned Capacity/Entitlement						
11a2	Located Outside the Region/subregion						
11b	Non-Firm						
11c	Expected						
11c1	Full-Responsibility Purchases				1		
11c2	Owned Capacity/Entitlement Located Outside the Region/subregion						
11d	Provisional – transactions under study, but negotiations have not begun.						

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SCHE LINE NO. 12 13	ing Party: EDULE 3. PART A. HISTORICA		ROJECTED	DEMAND			
LINE NO. 12 13	EDULE 3. PART A. HISTORICA		ROJECTED	DEMAND	AND C	ADACITY - C	
NO. 12 13						<u> </u>	JUNINER
NO. 12 13				YEA	R		
12 13		Actual	Year 1	Year 2		Year 9	Year 10
12		(eg 2011)	(eg 2012)	(eg 2013)		(eg 2020)	(eg 2021)
12		CITY - Conti	nued (IN ME	GAWATTS)	-		
13	EXISTING, CERTAIN & NET FIRM TRANSACTIONS						
	ANTICIPATED CAPACITY RESOURCES						
	PROSPECTIVE CAPACITY RESOURCES						
15	TOTAL POTENTIAL CAPACITY RESOURCES						
	ADJUSTED POTENTIAL CAPACITY RESOURCES						
16a	Confidence of Future, Other (7b)						
16b	Net Future, Other Resources						
16c	Confidence of Conceptual (8)						
16d	Net Conceptual Resources						
	Region/subregion Target Capacity Margin						
	Region/subregion Target Reserve Margin						
Margins							
180	Existing Certain and Net Firm Transactions						
19C	Deliverable Capacity Resources						
	Prospective Capacity Resources						
21C	Total Potential Resources						
22C	Adjusted Potential Resources						
	Existing Certain and Net Firm Transactions						
19R	Deliverable Capacity Resources						
20R	Prospective Capacity Resources						
	Total Potential Resources						
22R	Adjusted Potential Resources						
23	Other Capacity < 1 MW						
24	Distributed Generator Capacity >= 1 MW						
25	EIA-860 Capacity Total						

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LINE					EAR		
NO.		Actual	Year 1	Year 2		Year 9	Year 10
		(eg 2011)				(eg 2020)	(eg 2021)
		DEM	AND (IN MEG	AWATTS)			
1	Unrestricted Non-coincident Peak Demand						
1a	New Conservation						
1b	Estimated Diversity						
1c	Additions for non- member load						
1d	Stand-by Load Under Contract						
2	Total Internal Demand						
2a	Direct Control Load Management						
2b	Contractually Interruptible						
2c	Critical Peak Pricing with Control						
2d	Load as a Capacity Resource						
3	Net Internal Demand						
4a	Demand Response Used for Reserves - Spinning						
4b	Demand Response Used for Reserves – Non-Spinning						
4c	Demand Response used for Regulation						
4d	Demand Response used for Energy, Voluntary – Emergency						
	·	CAPA	CITY (IN ME	GAWATTS)			
5	TOTAL INTERNAL CAPACITY (sum of 6 and 7)						
6	EXISTING CAPACITY						
6a	Existing, Certain						
<u>6a1</u>	Wind Expected On-peak						
6a2	Solar Expected On-peak						
6a3	Hydro Expected On- Peak						
6a4	Biomass Expected On- Peak						
6a5	Load as a Capacity Resource Expected On- Peak						

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Regional Entity:\_\_\_\_\_

Reporting Party:\_\_\_\_\_

SCH	IEDULE 3. PART B. HISTORIC	AL AND P	ROJECTE			PACITY - V	VINTER
LINE NO.		Actual (eg 2011)	Year 1 (eg 2012)	YEA Year 2 (eg 2013)		Year 9 (eg 2020)	Year 10 (eg 2021)
			IN MEGAWA	(0 <u>9 2010)</u> TTC)		(09 2020)	(09 2021)
6b	Existing, Other			113)	[		1
6b1							
	Wind Derate On-peak						
6b2	Solar Derate On-peak						
6b3	Hydro Derate On-peak						
6b4	Biomass Derate On-peak						
6b5	Load as a Capacity Resource Derate On-peak						
6b6	Energy Only						
6b7	Scheduled Outage –						
100	Maintenance						
6b8	Transmission-Limited Resources						
6c	Existing, Inoperable						
	Existing, Certain Capacity						
6c1	Forced Outage On-peak						
	Existing, Other Capacity						
6c2	Forced Outage On-peak						
7	FUTURE CAPACITY ADDITIONS	-					
7a	Future, Planned						
7a1	Wind Expected On-peak						
7a1	Wind Derate On-peak						
7a3	Solar Expected On-peak						
7a3	Solar Derate On-peak						
7a4 7a5	Hydro Expected On-peak						
7a5	Hydro Derate On-peak						
7a7	Biomass Expected On-peak						
7a8	Biomass Derate On-peak						
7a9	Demand Response Expected						
	On-peak Demand Response Derate	-					
7a10	On-peak						
7a11	Transmission-Limited Resources						
7a12	Scheduled Outage – Maintenance						
7a13	All Other Derates			l I		l I	
7a14	Energy Only						
71-	Future Other						
7b	Future, Other						
7b1 7b2	Wind Expected On-peak						
	Wind Derate On-peak						
7b3	Solar Expected On-peak						
7b4	Solar Derate On-peak						
7b5	Hydro Expected On-peak						
7b6	Hydro Derate On-peak						
7b7	Biomass Expected On-peak						
7b8	Biomass Derate On-peak						
7b9	Energy Only						

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LIN	E			YEAR	1	X- 0	N
NO		Actual (eg 2011)	Year 1 (eg 2012)	Year 2 (eg 2013)		Year 9 (eg 2020)	Year 10 (eg 2021)
		CAPACITY (II				(eg 2020)	(eg 2021)
8	CONCEPTUAL CAPACITY			13)	1	1	1
8a	Conceptual						
8a1	Wind Expected On-peak						
8a2	Wind Derate On-peak						
8a3	Solar Expected On-peak						
8a4	Solar Derate On-peak						
8a5	Hydro Expected On-peak						
8a6	Hydro Derate On-peak						
8a7	Biomass Expected On- Peak						
8a8	Biomass Derate On-peak						
8a9	Energy Only						
9	ANTICIPATED INTERNAL CAPACITY						
10	CAPACITY TRANSACTIONS – IMPORTS						
10a	Firm						
10a1	Full-Responsibility Purchases						
10a2	Owned Capacity/Entitlement Located Outside the Region/subregion						
10b	Non-Firm						
10c	Expected						
10c1	Full-Responsibility Purchases						
10c2	Owned Capacity/Entitlement Located Outside the Region/subregion						
10d	Provisional – transactions under study, but negotiations have not begun.						
11	CAPACITY TRANSACTIONS – EXPORTS						
11a	Firm				L		
11a1	Full-Responsibility Purchases						
11a2	Owned Capacity/Entitlement Located Outside the Region/subregion						
11b	Non-Firm						
11c	Expected						
11c1	Full-Responsibility Purchases						<u> </u>
11c2	Owned Capacity/Entitlement Located Outside the Region/subregion						
11d	Provisional – transactions under study, but negotiations have not begun.						

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Regional Entity:				

U							
	rting Party:						
SC	HEDULE 3. PART B. HISTORIC	AL AND P	ROJECTE			PACITY - V	VINTER
LINE				YEA			
NO.		2008 (eg 2011)	2009 (eg 2012)	2010 (eg 2013)	2011 	2012 (eg 2020)	2013 (eg 2021)
	САРА	CITY - Conti				(09 2020)	(09 2021)
12	EXISTING, CERTAIN & NET FIRM TRANSACTIONS						
13	ANTICIPATED CAPACITY RESOURCES						
14	PROSPECTIVE CAPACITY RESOURCES						
15	TOTAL POTENTIAL CAPACITY RESOURCES						
15a	ADJUSTED POTENTIAL CAPACITY RESOURCES						
160	Confidence of Eviture Other (75)						
<u>16a</u> 16b	Confidence of Future, Other (7b)						
	Net Future, Other Resources						
<u>16c</u> 16d	Confidence of Conceptual (8)						
160	Net Conceptual Resources						
17C	Region/subregion Target Capacity Margin						
17R	Region/subregion Target Reserve Margin						
Margin							
18C	Existing Certain and Net Firm Transactions						
19C	Deliverable Capacity Resources						
20C	Prospective Capacity Resources						
21C	Total Potential Resources						
22C	Adjusted Potential Resources						
18R	Existing Certain and Net Firm Transactions						
19R	Deliverable Capacity Resources						
20R	Prospective Capacity Resources						
21R	Total Potential Resources						
22R	Adjusted Potential Resources						
23	Other Capacity < 1 MW						
24	Distributed Generator Capacity >= 1 MW						
25	EIA-860 Capacity Total						

# **SCHEDULE 4 - RESERVED**

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### COORDINATED BULK POWER SUPPLY AND DEMAND PROGRAM REPORT

	nal Entity:				
Repor	ting Party:				
		K ELECTRIC TR	RANSMISS	SION SYSTEM MAPS	
NO.	Specify the Number of Map				
1	Provided:				
2	For each map provide file name	e, coverage, and ma	ap software:		
	MAP NUMBER (if applicable) (a)	FILE NAME (if a (b)	pplicable)	MAP SOFTWARE (if applicable (d)	)

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Regional Entity:\_ Reporting Party:\_

## SCHEDULE 6A. EXISTING AND PROJECTED CIRCUIT MILES

							CIRCUIT	MILES	i				
LINE NO.		AC (kV)							DC (kV)				
		100- 120	121- 150	151- 199	200- 299	300- 399	400- 599	600 +	100- 199	200- 299	300- 399	400- 599	600 +
1	Existing (as of last day of prior report year)												
2	Under Construction (as of first day of current report year)												
3	Planned (completion within first five years)												
4	Conceptual (completion within first five years)												
5	Planned (completion within second five years)												
6	Conceptual (completion within second five years)												
7	Sum of Existing, Under Construction, and Planned Transmission (full ten- year period)												
8	Sum of Existing, Under Construction, Planned, and Conceptual Transmission (full ten- year period)												

Note: Summation columns for AC, DC, and Grand Total are not shown.

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Regional Entity:\_\_\_

Reporting Party:\_

-	SCHEDULE 6B. CHARACTERISTICS OF PROJECTED TRANSMISSION LINES								
LINE			TRANSMISSION L	INE	TRANSMIS	SION LINE	TRANSMISSION LINE		
NO.			(a)		(b	)	(c)		
TRANS	MISSION LIN	E IDENTIFICATIO			·	•	•		
1	Project Name	e							
2	Project Statu	IS							
3	Tie line								
4a	Primary Driv	er							-
4b	Secondary D								
5	Terminal Loc								
6	Terminal Loc								
TRANS		E OWNERSHIP			•				
7	Company Na	ame							
8	EIA Compar								
9	Type of Org								
10	Percent Ow								
TRANS	MISSION LIN				•				
11	Line Length	(miles)							
12	Line Type	· · ·	[] [] [] OH UG SM		[] [] OH UG	[ ] SM	[ ] OH	[ ] UG	[ ] SM
13	Voltage Type		[][] AC DC		[ ] [ ] AC DC		[ ] AC	[ ] DC	
14	4 Voltage Operating (Kilovolts)								
15	Voltage Des	ign (Kilovolts)							
16	Conductor S	Size (MCM)							
17		Material Type es from legend							
18	Bundling Ar	rangement es from legend)							
19	Circuits per Present								
20	Circuits per Ultimate								
	Pole/Tower		Pole Material: [	]	Pole Mater			e Material	
21		es from legend)	Pole Type: [	]	Pole Type	e:[]	P	ole Type:	[ ]
22	Capacity Ra								
23	Original In-S								
24		-Service Date							
25	Line Delaye								
26	Cause of De	lay							
		r r	LEG	END					
Li	Line Type Voltage Type		Conductor Material Type	Bund	lling Arrangement	F	Pole/To	wer Type	
UG=Under	DH=Overhead G=Underground M=Submarine AC=Alternating Current DC=Direct Current R A Si C Si		L = Aluminum CCR = Aluminum omposite Conductor		ingle ouble riple uadruple Other	Pole Material W = Wood C = Concrete S = Steel B = Combination P = Composite O = Other		Pole Type P = Single pole H = H-frame T = Tower U = Underground O = Other	
			OT = Other						

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600-799 kV

(d)

Reserved

(e)

400-599kV

(c)

Regional Entity:

### Reporting Party:\_ SCHEDULE 7. PART A, ANNUAL DATA ON TRANSMISSION LINE OUTAGES FOR AC LINES (Report following data for each applicable EHV Voltage Class) LINE NO. 200-299 kV 300-399kV 1 Applicable AC Voltage Class (a) (b) Automatic (Unscheduled), Sustained Outages for Specified Voltage Class Number of Outages 2 Number of Circuit-Hours Out of Service 3

4	Initiating (I) and Sustained (S) Causes	1	S		S	I	S		s		s
4	(Count of Outages per Cause Category)	1	3		3	•	3	•	3	•	3
4a	Weather, excluding lightning										
4b	Lightning										
4c	Environmental										
4d	Foreign Interference										
4e	Contamination										
4f	Fire										
4g	Vandalism, Terrorism, or Malicious Acts										
4h	Failed AC Substation Equipment										
4i	Failed AC/DC Terminal Equipment										
4j	Failed Protection System Equipment										
4k	Failed AC Circuit Equipment										
41	Failed DC Circuit Equipment										
4m	Human Error										
4n	Vegetation										
40	Power System Condition										
4p	Unknown										
4q	Other										
	Non-Automatic, Operat	ional (	Dutages	for S	pecified	Volta	ge Clas	S		-	
5	Number of Outages										
6	Number of Circuit-Hours Out of Service										
7	Outage Cause (Count)										
7a	Emergency										
7b	System Voltage Limit Mitigation										
7c	System Operating Limit Mitigation (excluding voltage)										
7d	Other Operational Outage										
	Non-Automatic, Plan	ned Ou	itages fo	or Spe	cified V	oltag	e Class				
8	Number of Outages										
9	Number of Circuit-Hours Out of Service	•									
10	Outage Cause (Count)										
10a	Maintenance and Construction										
10b	Third Party Request										
10c	Other Planned Outage										

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10c

**Other Planned Outage** 

#### COORDINATED BULK POWER SUPPLY AND DEMAND PROGRAM REPORT

Regional Entity: Reporting Party: SCHEDULE 7. PART B. ANNUAL DATA ON TRANSMISSION LINE OUTAGES FOR DC LINES (Report following data for each applicable EHV Voltage Class) LINE NO. ± 100-+ 200-+ 300-+ 400-+ 500-± 600-399 kV 199 kV 299 kV 499 kV 599 kV 1 **Applicable DC Voltage Class** 799 kV (f) (b) (d) (a) (C) (e) Automatic (Unscheduled), Sustained Outages for Specified Voltage Class 2 Number of Outages Number of Circuit-Hours Out of Service 3 Initiating (I) and Sustained (S) Causes 4 L. S L S Е S L S Т S S Т (Count of Outages per Cause Category) 4a Weather, excluding lightning 4b Lightning 4c **Environmental** 4d **Foreign Interference** Contamination 4e 4f Fire Vandalism, Terrorism, or 4g **Malicious Acts** 4h **Failed AC Substation Equipment** 4i Failed AC/DC Terminal Equipment **Failed Protection System Equipment** 4i **Failed AC Circuit Equipment** 4k 41 Failed DC Circuit Equipment 4m Human Error Vegetation 4n **Power System Condition** 40 4p Unknown Other 4q Non-Automatic, Operational Outages for Specified Voltage Class 5 Number of Outages Number of Circuit-Hours Out of Service 6 7 **Outage Cause (Count)** 7a Emergency System Voltage Limit Mitigation 7b System Operating Limit Mitigation 7c (excluding voltage) 7d **Other Operational Outage** Non-Automatic, Planned Outages for Specified Voltage Class Number of Outages 8 Number of Circuit-Hours Out of Service 9 10 **Outage Cause (Count)** Maintenance and Construction 10a Third Party Request 10b

#### COORDINATED BULK POWER SUPPLY AND DEMAND PROGRAM REPORT

Form Approved OMB No. 1905-0129 Burden: 17 hours Approval Expires: 12/31/2013

Reserved

(e)

Regional Entity:\_ Reporting Party:\_

LINE NO.

1

#### SCHEDULE 7. PART C, ANNUAL DATA ON TRANSFORMER OUTAGES (Report following data for each applicable class) 300-399 400-599 600-799 Applicable Transformer High-Side Voltage Class 200-299 kV k٧ kV k٧ Note: To be reported on this form, the Transformer (a) (b) (c) (d) must have a low-side voltage $\geq$ 200 kV.

## Automatic (Unscheduled), Sustained Outages for Specified Voltage Class

	Automatic (Unscheduled), Sustaine	d Out	ages for	- Spec	ified \	Voltag	e Clas	55			
2	Number of Outages										
3	Number of Transformer-Hours Out of Service										
4	Initiating (I) and Sustained (S) Causes (Count of Outages per Cause Category)	I	S	I	S	I	S	Ι	S	I	S
4a	Weather, excluding lightning										
4b	Lightning		1	i	İ — —	<u> </u>	1	1			
4c	Environmental		1	<b> </b> i		<u> </u>	1	1			
4d	Foreign Interference		1			<u> </u>					
4e	Contamination		t –			<u> </u>	1	1			
4f	Fire	1					1	1			
4g	Vandalism, Terrorism, or Malicious Acts										
4h	Failed AC Substation Equipment										
4i	Failed AC/DC Terminal Equipment										]
4j	Failed Protection System Equipment										
4k											
41											
4m											
4n	Vegetation										
40	Power System Condition										
4p	Unknown										
4q	Other										
	Non-Automatic, Operational Ou	itages	for Spe	cified	Volta	ge Cl	ass				
5	Number of Outages			L		<u> </u>		L			
6	Number of Transformer-Hours Out of Service										
7	Outage Cause (Count)										
7a	Emergency	<u> </u>						<b> </b>		<u> </u>	
7b	System Voltage Limit Mitigation	<u> </u>						<b> </b>		<u> </u>	
7c	System Operating Limit Mitigation					ĺ				ļ	
	(excluding voltage)			<u> </u>		<u> </u>		<b> </b>		<u> </u>	
7d	Other Operational Outage	L									
	Non-Automatic, Planned Outa	ages fo	or Spec	itied V	oltage	e Clas	SS				
8	Number of Outages			<u> </u>		<u> </u>		<b> </b>		<u> </u>	
9	Number of Transformer-Hours Out of Service			L		L				ļ	
10	Outage Cause (Count)										
10a	Maintenance and Construction			<u> </u>		<u> </u>		<u> </u>		ļ	
10b											
10c	Other Planned Outage					<u> </u>		1		l	

#### COORDINATED BULK POWER SUPPLY AND DEMAND PROGRAM REPORT

Form Approved OMB No. 1905-0129 Burden: 17 hours Approval Expires: 12/31/2013

Regional Entity:

Reporting Party:\_

### SCHEDULE 7. PART D, ELEMENT INVENTORY AND EVENT SUMMARY (Report following data for each applicable voltage class)

NO.							
1	Applicable AC Circuit Voltage Class	200-299 kV (a)	300-399 kV (b)	400-599 kV (c)	600-799 kV (d)		eltages e)
2	Number of AC Circuits (Total)						
2a	Overhead						
2b	Underground						
3	Number of AC Circuit Miles (Total)						
3a	Overhead						
3b	Underground						
4	Number of AC Multi-Circuit Structure Miles						
5	Applicable DC Circuit Voltage Class	± 100- 199 kV (a)	± 200- 299 kV (b)	± 300- 399 kV (c)	± 400 - 499kV (d)	± 500 - 599kV (e)	± 600 - 799kV (f)
6	Number of DC Circuits (Total)						
6a	Overhead						
6b	Underground						
7	Number of DC Circuit Miles (Total)						
7a	Overhead						
7b	Underground						
8	Applicable Transformer High-Side Voltage Class Note: To be reported on this form, the Transformer must have a low-side voltage ≥200 kV.	200-299 kV (a)	300-399 kV (b)	400-599 kV (c)	600-799 kV (d)	Reserved (e)	
9	Number of Transformers						
10	Total Number of Events (all Voltage Classes)			1	1	1	

U.S. Department of Energy
<b>U.S. Energy Information Administration</b>
Form EIA-411 (2011)

### COORDINATED BULK POWER SUPPLY AND DEMAND PROGRAM REPORT

Regio	onal Entity:								
Repo	Reporting Party:								
	SCHEDULE 8.	BULK	TRANSM	ISSION	FACILITY	POWER F	LOW CASES		
LINE NO.									
1	Case Name:								
2	Year of Study:								
3	Case Number:								
				E FACILIT	IES AND CC	NNECTION	S		
		IN-SE	IECTED ERVICE ATE			CONNEC	TIONS		
4	NAME AND TYPE OF FACILITY (a)		12-2004) (b)		BUS NUMBI (c)	ER	BUS NAME (d)		

# U.S. Department of Energy U.S. Energy Information Administration Form EIA-411 (2011)

### COORDINATED BULK POWER SUPPLY AND DEMAND PROGRAM REPORT

Form Approved OMB No. 1905-0129 Burden: 17 hours Approval Expires: 12/31/2013

Regional Entity:

	Reporting Party:									
I				HEDULE 9	. COMMEN	TS				
LINE	SCHEDULE	PART	LINE NO.	COLUMN	PAGE	COMMENT				
NO.	(a)	(b)	(c)	(d)	(e)	(f)				
1										
2										
3										
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5										
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#### Subject: United States Department of Energy – EIA Annual Data Collection, Form EIA-826

Dear Respondent:

The Energy Information Administration's (EIA), Internet Data Collection (IDC) system is now ready for you to report your electric data for the year 2008. You are required to file **Form EIA-826**, "**Monthly Electric Sales and Revenue with State Distributions Report.**" The survey is due no later than 30 calendar days following the close of the reporting month. For example, if reporting data for February, the survey is due on March 30, 2008. The EIA electric surveys are a mandatory collection under the authority of the Federal Energy Administration Act of 1974 (P.L. 93-275). Non-respondents and late filers are subject to financial penalties. The EIA encourages you to file your data using our IDC system.

If you are currently registered in the IDC system for secure electronic access with a Single Sign-On (SSO) account, you can login to the IDC system at: <u>https://signon.eia.doe.gov/ssoserver/login</u> and enter your User ID and Password to access your EIA surveys. If you are registered and have forgotten your password, but know the User ID, you can reset your password. Log on to the IDC system at the website listed above. Type your User ID and click on Forgot <u>Your Password</u>. Follow the prompts and you will be allowed to reset your password. Please pay special attention to the password rules and be sure to record your new password. If you need assistance resetting your password, please call the Help Center at (202) 586-9595 or contact us via email at: <u>cneafhelpcenter@eia.doe.gov</u>.

If you are not registered, please contact the CNEAF Help Center at (202) 586-9595 or via email. Please choose only one method of contact for the CNEAF Help Center, either telephone or email. Please do not do both.

Edits have been built into the IDC system to assist you in providing accurate data. In order to successfully submit your forms, you must run the edits and address the warning messages for all flagged data by either correcting and/or commenting on each of the flagged data elements. Please go to the Error Log and click on the "Run EIA-826 Edits" button. Once you have corrected and/or commented on the appropriate edit flags, you should be able to submit your data by pressing the "Submit" button. If your data are accepted you should receive a message stating that your data have been successfully sent with the current date.

The timely submission of Form EIA-826 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. <u>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 civil violation.</u> 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.

Your cooperation is greatly appreciated.

Sincerely,

XXXXXXXXXX Survey Manager Electric Power Division Office of Coal, Nuclear, Electric and Alternate Fuels Energy Information Administration

U.S. Department of Er U.S. Energy Information		MONTHLY ELECTRIC SALES AND REVENUE WITH STATE	Form Approved OMB No. 1905-0129					
Form EIA-826 (2011)	Auministration	DISTRIBUTIONS REPORT	Approval Expires: 12/31/2013					
		INSTRUCTIONS	Burden: 1.6 hours					
PURPOSEForm EIA-826 collects information from electric utilities, energy service providers, and distribution companies that sell or deliver electric power to end users. Data collected on this form includes sales and revenue for all end-use sectors (residential, commercial, industrial, and transportation). The data from this form appear in the following EIA publications: <i>Electric Power Monthly, Monthly Energy Review,</i> and <i>Annual Energy Review.</i> The data collected on this form are used to monitor the current status and trends of the electric power industry and to evaluate the future of the industri								
REQUIRED RESPONDENTS								
RESPONSE DUE DATE		due to the Energy Information Administration for the content of the second second second second second second s the second s	ration (EIA) by the last day of the month or July, survey is due on August 31.					
METHODS OF FILING		electronically using EIA's secure e-filing t information against unauthorized acc						
RESPONSE		e not registered with EIA's Single Sign- e to: <u>EIA-826@eia.gov</u> .	On system, send an email requesting					
	<ul> <li>If you hav</li> </ul>	e registered with Single Sign-On, log or	n at <u>https://signon.eia.gov/ssoserver/login</u> .					
			g into the e-filing system or using the e- for further information. Contact the Help					
		Email: CNEAFhelpcente	r@eia.gov.					
		Phone: 202-586-9	595					
	If you nee	d an alternate means of filing your resp	oonse, contact the Help Desk.					
	Retain a complete	d copy of this form for your files.						
CONTACTS	Internet System information immed	•	the e-filing system, see the help contact					
	Data Questions: Manager:	For questions about the data requested	d on Form EIA-826, contact the Survey					
		Charlene Harris-Ru Telephone Number: (202 FAX Number: (202) 2 Email: Charlene.Harris-Rus	2) 586-2661 87-1959					

U.S. Department of Ene U.S. Energy Information Form EIA-826 (2011)		MONTHLY ELECTRIC SALES AND REVENUE WITH STATE DISTRIBUTIONS REPORT INSTRUCTIONS	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 1.6 hours		
GENERAL INSTRUCTIONS	Monthly data are following the rep	due to the Energy Information Administration (EIA) by the last day of the month prting period.			
		or States without revenue, megawattho ector. <b>Do not leave these data fields</b>	ours, or number of customers to report for a <b>blank.</b>		
	discovered.		on as possible after the error or omission is onth's form is due to send resubmission(s). ised page.		
		nable to make a revision through the E- cked, please email your revisions to wy	filing system because the monthly data file vw.eia-826@eia.gov.		
		ts should coordinate the information sul ver Report," and the Form EIA-826 to e			
	customer-bu	meter as a separate customer in cases uying groups have been aggregated un ounts for public-street and highway light			
ITEM-BY-ITEM		SCHEDULE 1. IDENTI	FICATION		
INSTRUCTIONS	1. Survey Co address.	ntact: Verify contact name, title, teleph	none number, fax number, and email		
	2. Superviso	r of Contact Person for Survey: Verif title, telephone number, fax number and	y for the supervisor of the survey contact,		
	<ol> <li>Report For: Verify all information, including Company Name, Company Identification Number, and reporting month and year for which data are being reported. These fields cannot be revised online. Contact EIA if corrections are needed.</li> </ol>				
		ove information is incorrect, revise the i ovide any missing information.	incorrect entry and provide the correct		
		SCHEDULE 2. SALES TO ULTIN	IATE CUSTOMERS		
		SCHEDULE 2. PART A. SALES TO UL ILL SERVICE - ENERGY AND DELIVE			
	Enter the reporting month revenue (thousand dollars to the nearest .001), megawatthours sold and delivered (to the nearest .001 MWh), and the number of customers for sales of electricity to ultimate customers by State and customer class category for whom your utility provided both energy and delivery service. For public street and highway lighting, count all poles in a community as one customer. Note: For sales to customer groups using brokers or aggregators, continue to count each customer separately. For instance, count a group of franchised commercial establishments aggregated through a single broker as separate customers (as reported in prior years). Enter the two-letter U.S. Postal Service abbreviation (if not preprinted) for the State in which the electric sales occur.				
	SCHEDULE 2. PART B. SALES TO ULTIMATE CUSTOMERS – ENERGY-ONLY SERVICE (WITHOUT DELIVERY SERVICE)				
Enter the reporting month revenue (thousand dollars to the nearest .001), megawatthours sol (to the nearest .001 MWh), and the number of customers for sales of electricity to ultimat customers by State and customer class category for which your company provided only th electricity consumed, where another electric company provided delivery services, including, for example, billing, administrative support, and line maintenance. Enter the two-letter U.S. Posta Service abbreviation (if not preprinted) for the State in which the electric sales occur. Submit					

### MONTHLY ELECTRIC SALES AND REVENUE WITH STATE DISTRIBUTIONS REPORT INSTRUCTIONS

Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 1.6 hours

complete list of the "Names of Transmission and Distribution Companies Within each State providing Delivery Service for Electricity Delivered to an end use customer". Do not use acronyms. Submit this list in January of each year or the first month in which you began reporting the EIA-826. In subsequent months of the reporting year only revise the list with newly active/inactive companies for the month being reported. This list of companies will aid the EIA in matching up sales and delivery service in each State.

### SCHEDULE 2. PART C. SALES TO ULTIMATE CUSTOMERS – DELIVERY-ONLY SERVICE (AND ALL OTHER CHARGES)

Enter the reporting month revenue (thousand dollars to the nearest .001), megawatthours delivered (to the nearest .001 MWh), and number of customers for sales of electricity to ultimate customers in your service territory by State and customer class category for which your company provided energy delivery services, where another electric entity or Power Marketer supplied the electricity. Do not provide delivery service provided on behalf of another delivery company or utility which would be defined as a sale for resale. Enter the two-letter U.S. Postal Service abbreviation (if not preprinted) for the State in which the electric sales occur. Submit a complete list of the 'Names of Companies (primarily Power Marketers) Within the State for which Electricity is Delivered to an end use customer". Do not use acronyms. Submit this list in January of each year or the first month in which you began reporting the EIA-826. In subsequent months of the reporting year only revise the list with newly active/inactive companies for the month being reported. This list of companies will aid the EIA in maintaining a current list of entities doing business in each State.

### SCHEDULE 2. PART D. SALES TO ULTIMATE CUSTOMERS – BUNDLED SERVICE BY RETAIL ENERGY PROVIDERS OR ANY POWER MARKETER THAT PROVIDES "BUNDLED SERVICE."

Enter the reporting month revenue (thousand dollars to the nearest .001), megawatthours sold and delivered (to the nearest .001 MWh), and the number of customers for sales of electricity to ultimate customers by State and customer class category for whom your company provided both energy and delivery service. For public street and highway lighting, count all poles in a community as one customer.

Note: For sales to customer groups using brokers or aggregators, continue to count each customer separately. For instance, count a group of franchised commercial establishments aggregated through a single broker as separate customers (as reported in prior years). (Note: Texas Retail Energy Providers (REPs) should include delivery revenues.) Enter the two-letter U.S. Postal Service abbreviation (if not preprinted) for the State in which the electric sales occur.

### SCHEDULE 2, PARTS A-D

- 1. For column a, **Residentia**l, enter the revenue, megawatthours, and number of customers for residential (household) purposes. For the residential class, do not duplicate the customer accounts due to multiple metering for special services (e.g., water heating, etc.). Show Revenue and Megawattshours Sold to the nearest 0.001 value.
- 2. For column b, **Commercial**, enter the revenue, megawatthours, and number of customers for commercial purposes. Show Revenue and Megawattshours Sold to the nearest 0.001 value.
- 3. For column c, **Industrial**, enter the revenue, megawatthours, and number of customers for industrial purposes. Show Revenue and Megawattshours Sold to the nearest 0.001 value.
- 4. For column d, **Transportation**, enter the revenue, megawatthours, and number of customers for electric energy supplied for transportation purposes. Show Revenue and Megawattshours Sold to the nearest 0.001 value.

U.S. Epergrimment of Energy       MONTHLY SLECTRIC SALES AND REVENUE WITH STATE DISTRIBUTIONS REPORT INSTRUCTIONS       Form Approved MDR No 905-0129 Approval Expires: 1231/2013 Burden: 1.6 hours         S. For column e, Total, enter, for each State, the sum of the revenue, megawatthours, and number of customers entered for residential, commercial, industrial, and transportation sales. Show Revenue and Megawatthours Sold to the nearest 0.001 row be included in the commercial sector. Irrigation data should now be included in the included in the commercial sector. Irrigation data should now be included in the included in the commercial sector. Irrigation data should now be included in the included in the commercial sector. Irrigation data should now be included in the included in the industrial sector.         Refer to the Glossary for the definition of selected terms.         SCHEDULE 3, PART A, GREEN PRICING         Green Pricing programs allow electricity customers the opportunity to purchase electricity generated from renewable resources. Renewable Energy Certificates (RECG), also known as green certificates, green tags, or tradable renewable carry the energy one-time environment attributes of the power produced. Form approximation are sold segarately from the electricity commodity. Customers can buy RECG seven if they do not have access to green power through their local time or customers in each customer class. Revenue should be reported in thousand dollary, Nervenue should include revenue from the green pricing program glugs the price of the electricity purchased.         Example: For 1000 kWh of electricity subs, of the nearest. 0.01 (reveample, 51,209 would be reported in thousand dollary, Nervenue should include revenue from the green pricing program glugs the price of the electricity purchased. <t< th=""><th></th><th></th><th></th></t<>			
<ul> <li>For column e. Total, enter, for each State, the sum of the revenue, megawatthours, and number of customers entered for residential, commercial, industrial, and transportation sales. Show Revenue and Megawattshours Sold to the nearest 0.001 value.</li> <li>Previously reported "public street and highway lighting" data should now be included in the commercial sector. <i>Imgation</i> data should now be included in the industrial sector.</li> <li>Attach additional sheet(s), if required.</li> <li>Refer to the Glossary for the definition of selected terms.</li> <li>SCHEDULE 3.</li> <li>SCHEDULE 3.</li> <li>SCHEDULE 3.</li> <li>SCHEDULE 3.</li> <li>SCHEDULE 3.</li> <li>Green Pricing programs allow electricity customers the opportunity to purchase electricity generated from renewable resources and to pay for renewable energy development.</li> <li>Renewable resources include solar, wind, geothermal, hydroelectric power, and wood.</li> <li>These programs are voluntary where customers pay an additional fee to purchase electricity generated from renewable sources. Renewable Energy Certificates (RECS), also known as green certificates, green tags, or tradable renewable energy projects and are sold separately from the electricity commodity. Customers can buy RECS even if they do not have access to green power through their local utility or a competitive electricity marketer. They can also purchase RECs without having to switch electricity suppliers.</li> <li>Line1: Report the Total Green Pricing Revenue for customers in each customer class. Revenue should be reported in thousands of dollars to the nearest. 001 (for example, \$1,299 would be reported as 1.299 thousand dollars). Revenue should include revenue from the green pricing program <u>plus</u> the price of the electricity purchased.</li> <li>Example: For 1000 KWh of electricity sales, if the normal price for electricity is \$1.40 per kWh:         <ul> <li>1000 KWh 52.00</li> <li>210000 + \$55.00</li></ul></li></ul>	U.S. Energy Information Administration	DISTRIBUTIONS REPORT	OMB No. 1905-0129 Approval Expires: 12/31/2013
number of customers entered for residential, commercial, industrial, and transportation sales. Show Revenue and Megawattshours Sold to the nearest 0.001 value. 6. Previously reported "public street and highway lighting" data should now be included in the commercial sector. 7. Attach additional sheet(s), if required. 8. Refer to the Glossary for the definition of selected terms. SCHEDULE 3. SCHEDULE 3. SCHEDULE 3. SCHEDULE 3. Green Pricing programs allow electricity customers the opportunity to purchase electricity generated from renewable resources and to pay for renewable renow development. Renewable resources include solar, wind, genethermal, hydroelectric power, and wood. These programs are voluntary where customers pay an additional flee to purchase electricity generated from renewable solar, wind, genethermal, hydroelectric power, and wood. These programs are voluntary where customers pay an additional flee to purchase electricity generated from renewable curces. Renewable renergy conflicates, (RECS), also known as green carificates, green tags, or tradable renewable Carificates, represent the environmental attributes of the power produced functional subject to and are sold separately from the electricity commodity. Customers can buty RECS even if they do not have access to green power through their local utility or a competitive electricity marketer. They can also purchase RECS without having to switch electricity purchased. Example: For 1000 kWh of electricity subjects of the normal price for electricity is \$0.10 per kWh: a) An entity sells Green Energy in blocks of 55.00 b) Alternatively, an Entity which sells Green Energy for a premium of \$0.02 per kWh: Total cost = (1.000kWh s \$0.10kWh) + ((\$0.02kWh) x (1.000kWh)) = \$120.00 Line 3: Report the Total Green Pricing Customers, the number of customers who purchased by customers for each green pricing Customers, the number of customers who purchased green power for each customer class. The sales volumes and the number of customers			
<ul> <li>commercial sector. Irrigation data should now be included in the industrial sector.</li> <li>Attach additional sheet(s), if required.</li> <li>Refer to the Glossary for the definition of selected terms.</li> <li>SCHEDULE 3.</li> <li>SCHEDULE 3, PART A. GREEN PRICING</li> <li>Green Pricing programs allow electricity customers the opportunity to purchase electricity generated from renewable resources and to pay for renewable energy development. Renewable resources include solar, wind, geothermal, hydroelectric power, and wood. These programs are voluntary where customers pay an additional fee to purchase electricity generated from renewable sources. Renewable Energy Certificates, represent the environmental attributes of the power produced from renewable energy projects and are sold separately from the electricity commodity. Customers can buy RECs even if they do not have access to green power through their local utility or a competitive electricity marketer. They can also purchase RECs without having to switch electricity suppliers.</li> <li>Line 1: Report the Total Green Pricing Revenue for customers in each customer class. Revenue should be reported in thousands of dollars to the nearest. (001 (for example, \$1,299 would be reported in thousands of dollars). Revenue should include revenue from the green pricing program <u>plus</u> the price of the electricity purchased.</li> <li>Example: For 1000 kWh of electricity sales, if the normal price for electricity is \$0.10 per kWh: (\$5.00 (100 kWh)) (\$5.50 (100 kWh) holeck) x (10 blocks of 100 kWh)) = \$150.00 = \$155.00 = \$155.00</li> <li>Alternatively, an Entity which selis Green Energy for a premium of \$0.02 per kWh: Total cost = (1,000 kWh x \$0.10/kWh) + ((\$0.02/kWh) x (1,000 kWh)) = \$100.00 + \$20.00 = \$120.00</li> <li>Stato cost = (1,000 kWh x \$0.10/kWh) + ((\$0.02/kWh) x (1,000 kWh)) = \$100.00 + \$20.00 = \$120.00</li> <li>Stato cost = (1,000 kWh x \$0.10/kWh) + (\$0.02/kWh) x (1,000 kWh) by customers for each customer cl</li></ul>	nur	mber of customers entered for residential, co	ommercial, industrial, and transportation
<ul> <li>8. Refer to the Glossary for the definition of selected terms.</li> <li>SCHEDULE 3.</li> <li>SCHEDULE 3, PART A. GREEN PRICING</li> <li>Green Pricing programs allow electricity customers the opportunity to purchase electricity generated from renewable resources and to pay for renewable energy development. Renewable resources include solar, wind, geothermal, hydroelectric power, and wood. These programs are voluntary where customers can buy RECs even if they do not have access to green power through their local utility or a competitive electricity marketer. They can also purchase RECs without having to switch electricity suppliers.</li> <li>Line1: Report the Total Green Pricing Revenue for customers in each customer class. Revenue should be reported as 1.299 thousand dollars). Revenue should include revenue from the green pricing program glus the price of the electricity purchased.</li> <li>Example: For 1000 kWh of electricity sales, if the normal price for electricity is \$0.10 per kWh: <ul> <li>a An entity sells Green Energy in blocks of \$5.50 per 100 kWh block:</li> <li>Total cost = (1,000 kWh &gt; \$0.10 kWh) + ((\$5.50/100 kWh block) × (10 blocks of 100 kWh))</li> <li>§ \$100.00 + \$55.00</li> <li>§ \$155.00</li> </ul> </li> <li>b) Alternatively, an Entity which sells Green Energy for a premium of \$0.02 per kWh:</li> <li>Cost = (1,000 kWh &gt; \$0.10 kWh) + ((\$0.02 kWh) × (1,000 kWh))((\$0.00 kWh))</li> <li>§ \$100.00 + \$52.00</li> <li>§ \$150.00</li> <li>b) Alternatively, an Entity which sells Green Energy for a premium of \$0.02 per kWh:</li> <li>Cost = (1,000 kWh &gt; \$0.10 kWh) + ((\$0.02 kWh) × (1,000 kWh)))</li> <li>E \$100.00 + \$20.00</li> <li>B) Alternatively.</li> <li>Line 2: Report the Total Green Pricing Customers, the number of customers who purchased by customers for each green pricing customer class (for example, 1,299 kWh would be reported as 1.299 kWWh).</li> <li>Line 3: Report the Total Green Pricing Customers, the number of customers should not exceed the values reported in Schedule 2, Parts A, B, or D</li></ul>			
SCHEDULE 3. SCHEDULE 3. Carry of the prioring programs allow electricity customers the opportunity to purchase electricity generated from renewable resources and to pay for nenewable energy development. Renewable resources include solar, wind, geothermal, hydroelectric power, and wood. These programs are voluntary where customers pay an additional fee to purchase electricity generated from renewable sources. Renewable renewable energy Certificates (RECs), also known as green certificates, green tags, or tradable renewable energy projects and are sold separately from the electricity commodity. Customers can buy RECs even if they do not have access to green power through their local utility or a competitive electricity marketer. They can also purchase RECs without having to switch electricity suppliers. Line 1: Report the Total Green Pricing Revenue for customers in each customer dass. Revenue should be reported as 1.299 thousand dollars). Revenue should include revenue from the green pricing program <u>plus</u> the price of the electricity purchased. Example: For 1000 kWh of electricity sales, if the normal price for electricity is \$0.10 per kWh: A nentity sells Green Energy in blocks of \$5.50 per 100 kWh block. Total cost = (1,000 kWh x \$0.10 kWh) + ((\$5.50/100 kWh block) x (10 blocks of 100 kWh)) e \$100.00 + \$55.00 E \$100 kWh) e \$100.00 + \$50.00 E \$100.00 + \$1	7. Atta	ach additional sheet(s), if required.	
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<pre>generated from renewable resources and to pay for renewable energy development. Renewable resources include solar, wind, geothermal, hydroelectric power, and wood. These programs are voluntary where customers pay an additional fee to purchase electricity generated from renewable sources. Renewable Energy Certificates (RECs), also known as green certificates, green tags, or tradable renewable certificates, represent the environmental attributes of the power produced from renewable energy projects and are sold separately from the electricity commodity. Customers can buy RECs even if they do not have access to green power through their local utility or a competitive electricity marketer. They can also purchase RECs without having to switch electricity suppliers. Line1: Report the Total Green Pricing Revenue for customers in each customer class. Revenue should be reported as 1.299 thousand odilars). Revenue should include revenue from the green pricing program <u>plus</u> the price of the electricity purchased. Example: For 1000 kWh of electricity sales, if the normal price for electricity is \$0.10 per kWh: a) An entity sells Green Energy in blocks of \$5.50 per 100 kWh block: Total cost = (1,000kWh x \$0.10/kWh) + ((\$5.50/100kWh block) x (10 blocks of 100 kWh)) = \$100.00 + \$55.00 = \$155.00 b) Alternatively, an Entity which sells Green Energy for a premium of \$0.02 per kWh: Total cost = (1,000kWh x \$0.10/kWh) + ((\$0.02/kWh) x (1,000kWh)) = \$102.00 Line 2: Report the Total Green Pricing Sales, the total amount of megawatthours purchased by customers for each green pricing Customers, the number of customers who purchased green power for each customer class. The sales volumes and the number of customers should not exceed the values reported in Schedule 2, Parts A, B, or D. Line 4: Report the rovenue from RECs for each customer class. This amount 1 above.</pre>		SCHEDULE 3, PART A. G	REEN PRICING
<ul> <li>Revenue should be reported in thousands of dollars to the nearest .001 (for example, \$1,299 would be reported as 1.299 thousand dollars). Revenue should include revenue from the green pricing program <u>plus</u> the price of the electricity purchased.</li> <li>Example: For 1000 kWh of electricity sales, if the normal price for electricity is \$0.10 per kWh: <ul> <li>a) An entity sells Green Energy in blocks of \$5.50 per 100 kWh block:</li> <li>Total cost = (1,000kWh x \$0.10/kWh) + ((\$5.50/100kWh block) x (10 blocks of 100 kWh))</li> <li>= \$100.00 + \$55.00</li> <li>= \$105.00</li> <li>b) Alternatively, an Entity which sells Green Energy for a premium of \$0.02 per kWh:</li> <li>Total cost = (1,000kWh x \$0.10/kWh) + ((\$0.02/kWh) x (1,000kWh))</li> <li>= \$100.00 + \$20.00</li> <li>= \$120.00</li> </ul> </li> <li>Line 2: Report the Total Green Pricing Sales, the total amount of megawatthours purchased by customers for each green pricing customer class (for example, 1,299 kWh would be reported as 1.299 MWh).</li> <li>Line 3: Report the Total Green Pricing Customers, the number of customers who purchased green power for each customer class. The sales volumes and the number of customers should not exceed the values reported in Schedule 2, Parts A, B, or D.</li> <li>Line 4: Report the revenue from RECs for each customer class in thousand of dollars to the nearest tenth. This revenue must not exceed the Total Green Power Revenue reported in line 1 above.</li> </ul>	genera Renew These genera green o attribut from th green p	ted from renewable resources and to pay fo able resources include solar, wind, geotherr programs are voluntary where customers pa ted from renewable sources. Renewable El certificates, green tags, or tradable renewable es of the power produced from renewable e e electricity commodity. Customers can buy power through their local utility or a competit	r renewable energy development. mal, hydroelectric power, and wood. ay an additional fee to purchase electricity nergy Certificates (RECs), also known as le certificates, represent the environmental energy projects and are sold separately RECs even if they do not have access to tive electricity marketer. They can also
<ul> <li>a) An entity sells Green Energy in blocks of \$5.50 per 100 kWh block: Total cost = (1,000kWh x \$0.10/kWh) + ((\$5.50/100kWh block) x (10 blocks of 100 kWh)) = \$100.00 + \$55.00 = \$155.00</li> <li>b) Alternatively, an Entity which sells Green Energy for a premium of \$0.02 per kWh: Total cost = (1,000kWh x \$0.10/kWh) + ((\$0.02/kWh) x (1,000kWh)) = \$100.00 + \$20.00 = \$120.00</li> <li>Line 2: Report the Total Green Pricing Sales, the total amount of megawatthours purchased by customers for each green pricing customer class (for example, 1,299 kWh would be reported as 1.299 MWh).</li> <li>Line 3: Report the Total Green Pricing Customers, the number of customers who purchased green power for each customer class. The sales volumes and the number of customers should not exceed the values reported in Schedule 2, Parts A, B, or D.</li> <li>Line 4: Report the revenue from RECs for each customer class in thousand of dollars to the nearest tenth. This revenue must not exceed the Total Green Power Revenue reported in line 1 above.</li> <li>Line 5: Report the sales from RECs in megawatthours for each customer class. This amount</li> </ul>	Revent would b	ue should be reported in thousands of dollar be reported as 1.299 thousand dollars). Rev	s to the nearest .001 (for example, \$1,299 venue should include revenue from the
<ul> <li>b) Alternatively, an Entity which sells Green Energy for a premium of \$0.02 per kWh: Total cost = (1,000kWh x \$0.10/kWh) + ((\$0.02/kWh) x (1,000kWh)) = \$100.00 + \$20.00 = \$120.00</li> <li>Line 2: Report the Total Green Pricing Sales, the total amount of megawatthours purchased by customers for each green pricing customer class (for example, 1,299 kWh would be reported as 1.299 MWh).</li> <li>Line 3: Report the Total Green Pricing Customers, the number of customers who purchased green power for each customer class. The sales volumes and the number of customers should not exceed the values reported in Schedule 2, Parts A, B, or D.</li> <li>Line 4: Report the revenue from RECs for each customer class in thousand of dollars to the nearest tenth. This revenue must not exceed the Total Green Power Revenue reported in line 1 above.</li> <li>Line 5: Report the sales from RECs in megawatthours for each customer class. This amount</li> </ul>	Examp	a) An entity sells Green Energy in blocks Total cost = (1,000kWh x \$0.10/kWh) + 100 kWh)) = \$100.00 + \$55.00	of \$5.50 per 100 kWh block:
Total cost = (1,000kWh x \$0.10/kWh) + ((\$0.02/kWh) x (1,000kWh)) = \$100.00 + \$20.00 = \$120.00Line 2: Report the Total Green Pricing Sales, the total amount of megawatthours purchased by customers for each green pricing customer class (for example, 1,299 kWh would be reported as 1.299 MWh).Line 3: Report the Total Green Pricing Customers, the number of customers who purchased green power for each customer class. The sales volumes and the number of customers should not exceed the values reported in Schedule 2, Parts A, B, or D.Line 4: Report the revenue from RECs for each customer class in thousand of dollars to the nearest tenth. This revenue must not exceed the Total Green Power Revenue reported in line 1 above.Line 5: Report the sales from RECs in megawatthours for each customer class. This amount		b) Alternatively, an Entity which sells Gre	en Energy for a premium of \$0.02 per
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nearest tenth. This revenue must not exceed the Total Green Power Revenue reported in line 1 above. Line 5: Report the sales from RECs in megawatthours for each customer class. This amount	green p	power for each customer class. The sales vo	plumes and the number of customers
	neares	t tenth. This revenue must not exceed the T	

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The Total for each customer class will automatically sum for the electronic online e-file system.

### **SCHEDULE 3, PART B. NET METERING**

**Net Metering** tariff arrangements permit a facility, typically generating electricity from a renewable resource, (using a meter that reads inflows and outflows of electricity) to sell any excess power it generates over its load requirement back to the electrical grid, typically at a rate equivalent to the retail price of electricity.

For net metering applications of 2 MW nameplate capacity or less, report the installed net metering capacity by State, customer class and technology. Report net metering data by sector and technology type for each state. Capacity should be reported in MW as AC load capable. Example: 8 kW should be 0.008 MW. Capacities should not exceed limits set up by each state. Please provide this capacity in MW, to the nearest 0.001 MW by technology. Do not report for net metering applications larger than 2 MW.

If the data is available, enter the amount of electric energy sold back to the utility (MWh) through the net metering application. Report the number of net metering customers by customer class. If you are unable to utilize the e-file system which creates the totals automatically; then provide the **Totals** for net metering megawatthours, installed net metering capacity and customers by State, customer class and technology. Complete all lines for Schedule 3, Part B.

### SCHEDULE 3, PART C. ADVANCED METERING

### This schedule should only include customers from Schedule 2 Part A or Part C.

Standard (Electric) Meters are electromechanical or solid state meters measuring aggregated kWh where data are manually retrieved over monthly billing cycles for billing purposes only. Standard meters may also include functions to measure time-of-use and/or demand with data manually retrieved over monthly billing cycles.

Automated Meter Reading (AMR): Meters that collect data for billing purposes only and transmit this data **one way**, usually from the customer to the distribution utility. Aggregated monthly kWh data captured on these meters may be retrieved by a variety of methods including drive-by vans with short-distance remote reading capabilities and communication over a fixed network such as a cellular network.

Enter the state and report the total number of AMR meters by sector. The number of AMR meters may be equal to but not exceed the number of customers on Schedule 2.

Advanced Metering Infrastructure (AMI): Meters that measure and record usage data at a minimum, in hourly intervals, and provide usage data to both consumers and energy companies at least once daily. Data are used for billing and other purposes. Advanced meters include basic hourly interval meters and extend to real-time meters with built-in two-way communication capable of recording and transmitting instantaneous data.

Enter the state and report the total number of AMI meters by sector.

For AMI meters that are only being used as AMR, report meters as AMR.

Energy Served through AMI (MWh) should be entered in megawatthours for customers served.

If the data is available, enter the amount of electric energy sold back to the utility (MWh) through the net metering application.

U.S. Department of Energy		MONTHLY ELECTRIC SALES AN			
U.S. Energy Information Administration Form EIA-826 (2011)		REVENUE WITH STATE	OMB No. 1905-0129		
		DISTRIBUTIONS REPORT	Approval Expires: 12/31/2013		
			Burden: 1.6 hours		
		SCHEDULE 4. MERGERS AI	ND/OR ACQUISITIONS		
		acquisition has occurred during the s whose operations are now included	reporting period, report those newly-acquired I in this report.		
		SCHEDULE 5. COMMENTS			
	Explanations of	entries or other comments may be pr	ovided in the comment section.		
GLOSSARY		this form is available online at the fo ov/glossary/index.html	llowing URL:		
SANCTIONS	The timely submission of Form EIA-826 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.				
REPORTING BURDEN	Public reporting burden for this collection of information is estimated to average 1.6 hours per response, 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 Energy Information Administration, 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.				
PROVISIONS REGARDING CONFIDENTIALITY OF INFORMATION	released in iden The information EIA-826 will be p year to the exter (FOIA), 5 U.S.C implementing th the end of the re- released in iden information and The Federal Ene Federal agencie be made availa any Committee authorized by la	tifiable form, except as noted below. reported on SCHEDULE 2 PARTS B protected and not disclosed for nine ( nt that it satisfies the criteria for exem . §552, the Department of Energy (De e FOIA, and the Trade Secrets Act, 1 eporting year this information will be of tifiable form. All other information rep may be publicly released in company ergy Administration Act requires the s when requested for official use. T ble, upon request, to another compo of Congress, the Government Acc aw to receive such information. A c	EIA to provide company-specific data to other ne information reported on this form may also onent of the Department of Energy (DOE) to puntability Office, or other Federal agencies purt of competent jurisdiction may obtain this		
	information in response to an order. The information may be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes. Disclosure limitation procedures are applied to the sensitive statistical data published from SCHEDULE 2, PARTS B and D, and SCHEDULE 3 PART A on Form EIA-826 relating to Revenue, Megawatthours Sold, and Number of Customers until nine (9) months after the end of the reporting year to ensure that the risk of disclosure of identifiable information is very small until thom.				

U.S. Department of Energy
U.S. Energy Information Administration
Form EIA-826 (2011)

MONTHLY ELECTRIC SALES
AND REVENUE WITH STATE
DISTRIBUTIONS REPORT

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comply may result concerning sanction information in the ir	ort is <b>mandatory</b> under the Federal Energy Administr in criminal fines, civil penalties and other sanction as and data protections see the provision on sanctions instructions. <b>Title 18 USC 1001 makes it a criminal</b> gency or Department of the United States any false urisdiction.	ns as provided by law. For further information s and the provision concerning the confidentiality of offense for any person knowingly and willingly
	SCHEDULE 1. IDENTIFIC	CATION
First Name: Title:	<u>Survey Contact</u> Last Nar	ne:
• •	ude extension): F	ax:
	Supervisor of Contact Persor	n for Survey
	Last Nar	ne:
• •	ude extension): F	ax:
	:	
Reporting Month	n/Year:	
Respondent Type (check one)	<ol> <li>Federal</li> <li>Political Subdivision</li> <li>Municipal Marketing Authority</li> <li>Cooperative</li> <li>Independent Power Producer or Qualifying Facility</li> </ol>	<ul> <li>[ ] State</li> <li>[ ] Municipal</li> <li>[ ] Investor-Owned</li> <li>[ ] Retail Power Marketer (or Energy Service Provider)</li> </ul>
For	questions or additional information about the Form ElA	A-826, contact the Survey Manager:
	Charlene Harris-Russe Telephone: (202) 586-26 FAX Number: (202) 287-1 Email: Charlene.Harris-Russell	61 959

U.S. Department of Energy Energy Information Administration Form EIA-826 (2011)	MONTHLY ELECTRIC SALES AND REVENUE WITH STATE DISTRIBUTIONS REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013
		Burden: 1.6 hours

Company Name:\_\_\_\_\_

Company ID:\_\_\_\_\_

Reporting Month/Year:\_

SCHEDULE 2. PAR	SCHEDULE 2. PART A. SALES TO ULTIMATE CUSTOMERS – FULL SERVICE - ENERGY AND DELIVERY SERVICE (BUNDLED)					
	RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)	
STATE						
<b>Revenue</b> (thousand dollars) (To nearest 0.001)						
Megawatthours Sold and Delivered (To nearest 0.001)						
Number of Customers						
STATE						
<b>Revenue</b> (thousand dollars) (To nearest 0.001)						
Megawatthours Sold and Delivered (To nearest 0.001)						
Number of Customers						
STATE						
<b>Revenue</b> (thousand dollars) (To nearest 0.001)						
Megawatthours Sold and Delivered (To nearest 0.001)						
Number of Customers						
STATE						
<b>Revenue</b> (thousand dollars) (To nearest 0.001)						
Megawatthours Sold and Delivered (To nearest 0.001)						
Number of Customers						

U.S. Department of Energy
U.S. Energy Information Administration
Form EIA-826 (2011)

## MONTHLY ELECTRIC SALES AND REVENUE WITH STATE DISTRIBUTIONS REPORT

Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 1.6 hours

Company N	Name:
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Company ID:\_\_\_

Reporting Month/Year:\_

SCHEDULE 2. PART B. SALES TO ULTIMATE CUSTOMERS – ENERGY-ONLY SERVICE (WITHOUT DELIVERY SERVICE)						
	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION	TOTAL	
	(a)	(b)	(c)	(d)	(e)	
STATE						
Revenue (thousand dollars)						
(To nearest 0.001) Megawatthours Sold						
(To nearest 0.001)						
Number of Customers						
Names of Companies within each State providing Delivery Service						
STATE						
<b>Revenue</b> (thousand dollars) (To nearest 0.001)						
Megawatthours Sold (To nearest 0.001)						
Number of Customers						
Names of Companies within each State providing Delivery Service						
STATE						
Revenue (thousand dollars) (To nearest 0.001)						
Megawatthours Sold (To nearest 0.001)						
Number of Customers						
Names of Companies within each State providing Delivery Service						

### U.S. Department of Energy U.S. Energy Information Administration Form EIA-826 (2011)

### MONTHLY ELECTRIC SALES AND REVENUE WITH STATE DISTRIBUTIONS REPORT

Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 1.6 hours.

Company Name:\_\_\_\_\_

Company ID:\_\_\_\_\_

Reporting Month/Year:\_\_\_\_\_

SCHEDULE 2. PART C. SALES TO ULTIMATE CUSTOMERS – DELIVERY-ONLY SERVICE (AND ALL OTHER CHARGES)						
	RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)	
STATE						
<b>Revenue</b> (thousand dollars) (To nearest 0.001)						
Megawatthours Delivered (To nearest 0.001)						
Number of Customers						
List Names of Companies (primarily Power Marketers) Within the State for which Electricity is Delivered to an end use customer						
STATE						
<b>Revenue</b> (thousand dollars) (To nearest 0.001)						
Megawatthours Delivered (To nearest 0.001)						
Number of Customers						
List Names of Companies (primarily Power Marketers) Within the State for which Electricity is Delivered to an end use customer						

U.S. Department of Ene U.S. Energy Information Form EIA-826 (2011)		istration	MONTHLY ELECTRIC SA WITH STATE DISTRIE		Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 1.6 hours	
Company Name:_						
Company ID:				Reporting Month/Yea		
SCHEDULE 2. P	ART D	. SALES TO ULTIN ANY POWER	MATE CUSTOMERS – MARKETER THAT PR	BUNDLED SERVICE OVIDES "BUNDLEI	E BY RETAIL ENERGY D SERVICE."	PROVIDERS, OR
		RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION	TOTAL
		(a)	(b)	(C)	(d)	(e)
STATE						
<b>Revenue</b> (thousand dol (To nearest 0.001)	ollars)					
Megawatthours Delive (To nearest 0.001)	ered					
Number of Customers	5					
STATE						
<b>Revenue</b> (thousand dol (To nearest 0.001)	ollars)					
Megawatthours Delive (To nearest 0.001)	ered					
Number of Customers	5					
STATE						
<b>Revenue</b> (thousand dol (To nearest 0.001)	ollars)					
Megawatthours Delive (To nearest 0.001)	ered					
Number of Customers	s					
STATE						
<b>Revenue</b> (thousand dol (To nearest 0.001)	ollars)					
Megawatthours Delive (To nearest 0.001)	ered					

Number of Customers

U.S. Ener	artment of Ene rgy Information 826 (2011)	rgy Administration		ELECTRIC SALES AND TATE DISTRIBUTIONS F	REVENUE WITH	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 1.6 hours		
Compar	ny Name:							
	ny ID:			Reporting Mor	nth/Year:			
			SCHEDUL	E 3. PART A. GRE				
				extra fee to purchase elect ble attribute created with re		newable sources. Renewable E	nergy Certificates	
Line No.	STATE		RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)	
1. Total Green Pricing Revenue (Thousand Dollars) (To nearest 0.001)								
2. (MWhs) (To nearest 0.001)								
3.	3. Total Green Pricing Customers							
4. Revenue from RECs (Thousand Dollars) (To nearest 0.001)								
5.	REC Sales							

U.S. Departme U.S. Energy Inf Form EIA-826 (	ormation Administration	MONTHLY ELECTRIC SALES AND REVENUE WITH STATE DISTRIBUTIONS REPORT Burden: 1.6 hours							
	e:	 Reporting Month/Yea	ar:						
	SCHEDULE 3, PART B. NET METERING								
	<b>Net Metering programs</b> allow customers to sell excess power they generate back to the electrical grid to offset consumption. For net metering applications of 2 MW nameplate capacity and less, provide the information about programs by State and customer class.								
STATE		RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)			
-	If Available, Enter the Electric Energe Sold Back to the Utility (MWh)	ЗУ							
Photovoltaic	Installed Net Metering Capacity (MW	V)							
	Number of Net Metering Customers								
Wind	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)	зу							
	Installed Net Metering Capacity (MW	V)							
	Number of Net Metering Customers								
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)	an a							
CHP/Cogen	Installed Net Metering Capacity (MW	v)							
	Number of Net Metering Customers								
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)	an la							
Other	Installed Net Metering Capacity (MW	V)							
	Number of Net Metering Customers								
	Total Energy Sold Back to the Utility (MWh)	<b>y</b>							
Total	Installed Net Metering Capacity (MW	V)							
	Number of Net Metering Customers								

U.S. Department of Energy U.S. Energy Information Administratic Form EIA-826 (2011)	on	-	ELECTRIC SALES AN ATE DISTRIBUTIONS	-	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 1.6 hours	
Company Name:						
Company ID:			Reporting Mc	onth/Year:		
		SCHEDULE	3. PART C. ADVA	ANCED METERI	NG	
Only customers from Schedule			ule. AMR – transmitt			ty. AMI – data can be
State		DENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION	TOTAL
		(a)	(b)	(c)	(d)	(e)
Number of AMR Meters						
Number of AMI Meters						
Energy Served Through AMI Meters (To nearest 0.001)	s (MWh)					
State	RES	DENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
Number of AMR Meters						
Number of AMI Meters						
Energy Served Through AMI Meters (To nearest 0.001)	s (MWh)					
State	RES	DENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
Number of AMR Meters		(a)			(0)	(6)
Number of AMI Meters						
Energy Served Through AMI Meters (To nearest 0.001)	s (MWh)					

U.S. Department of Energy U.S. Energy Information Administration Form EIA-826 (2011)	MONTHLY ELECTRIC SALES AND REVENUE WITH STATE DISTRIBUTIONS REPORT			Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 1.6 hours			
Company Name:							
Company ID:				Reporting Month/Yea	r:		
SCHE	EDULE 4. MER	RGEF	RS /	AND/OR ACQUISITIC	DNS		
Mergers and/or acquisitions during the re	porting months	Yes					
	porting month.	No					
If Yes, Provide:							
Date of Merger or Acquisition				Address			
Company merged with or acquired				Contact name:	Telephone No		
Name of new parent company				Email address:			

U.S. Department of Energy
U.S. Energy Information Administration
Form EIA-826 (2011)

## MONTHLY ELECTRIC SALES AND REVENUE WITH STATE DISTRIBUTIONS REPORT

Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 1.6 hours

\_\_\_\_\_

### Company Name:\_\_\_\_\_

Company ID:\_\_\_\_

Reporting Month/Year:\_\_

### SCHEDULE 5. COMMENTS

If explanation of any provided data is needed, please provide that information here.



#### Subject: United States Department of Energy – EIA Annual Data Collection, Form EIA-860

Dear Respondent:

The Energy Information Administration's (EIA), e-filing system is now ready for you to report your annual electric data for the year 2009. You are required to file **Form EIA-860**, "**Annual Electric Generator Report.**" The survey is due no later than May 14, 2010. The 2009 Form EIA-860 survey represents the status of plants and associated equipment as of December 31, 2009. Please verify and update the data as necessary. The EIA electric surveys are a mandatory collection under the authority of the Federal Energy Administration Act of 1974 (P.L. 93-275). Non-respondents and late filers are subject to financial penalties. The EIA encourages you to file your data using our e-filing system.

We currently have the following companies associated with you as the primary contact for the EIA-860: <%UTILITIES%>

If you are currently registered in the e-filing system for secure electronic access with a Single Sign-On (SSO) account, you can login to the e-file system at: <u>https://signon.eia.doe.gov/ssoserver/login</u> and enter your User ID and Password to access your EIA surveys.

If you are registered and have forgotten your password, but know the User ID, you can reset your password. Log on to the e-filing system at the website listed above. Type your User ID and click on <u>Forgot Your Password</u>. Follow the prompts and you will be allowed to reset your password. Please pay special attention to the password rules and be sure to record your new password. If you need assistance resetting your password, please call the Help Center at (202) 586-9595 or contact us via e-mail at: <u>cneafhelpcenter@eia.doe.gov</u>.

If you are not registered, please contact the CNEAF Help Center at (202) 586-9595 or via e-mail. Please choose only one method of contact for the CNEAF Help Center, either telephone or e-mail. Please do not do both. When you receive your new credentials, register immediately. Your credentials will expire in 30 days.

You must contact us if a record(s) for new or missing plant(s) needs to be added to Schedule 2. However, you have the capability to add record(s) for new or missing generator(s) in Schedule 3. Fields for certain data are unlikely to change. These fields (e.g., geographic location of power plant, initial year of commercial operation of generator) have been locked if data already exist in the fields. For such fields, if the data are incorrect, please contact me at 202-586-1029 with the correct data, or enter the correct data in Schedule 7 along with the identifiers and form location of the data. Otherwise, if the field is null, please provide the missing data, if applicable. To add a record for boiler or other equipment in Schedule 6A, please contact the EIA with the identifiers that your company uses to identify the equipment and we will add them to that schedule.

Edits have been built into the e-filing system to assist you in providing accurate data. In order to successfully submit your forms, you must run the edits and address the warning messages for all flagged data by either correcting and/or commenting on each of the flagged data elements. Please go to the Error Log and click on the "Run EIA-860 Edits" button. Once you have corrected and/or commented on the appropriate edit flags, you should be able to submit your data by pressing the "Submit" button. If your data are accepted you should receive a message stating that your data have been successfully submitted.

The timely submission of Form EIA-860 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.

Your cooperation is greatly appreciated.

Sincerely,

Patricia (Trisha) Hutchins EIA-860 Survey Analyst Electric Power Division Office of Coal, Nuclear, Electric and Alternate Fuels Energy Information Administration

U.S. Department or U.S. Energy Inform Form EIA-860 (201	ation Administration	ANNUAL ELECTRIC GEN REPORT INSTRUCTIO	-	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours				
PURPOSE	equipment (including get the United States, and specified reporting peri- <i>Electric Power Monthly</i> on this form are used to	Form EIA-860 collects data on the status of existing electric generating plants and associated equipment (including generators, boilers, cooling systems and flue gas desulfurization systems) in the United States, and those scheduled for initial commercial operation within 10 years of the specified reporting period. The data from this form appear in several EIA publications; including the <i>Electric Power Monthly, Electric Power Annual,</i> and the <i>Annual Energy Review.</i> The data collected on this form are used to monitor the current status and trends of the electric power industry and to evaluate the future of the industry.						
REQUIRED RESPONDENTS	The required respondents for Form EIA-860 are all existing plants and proposed (10-year plans plants that: 1) have a total generator nameplate capacity (sum for generators at a single site) o MW or greater; and 2) where the generator(s), or the facility in which the generator(s) resides, i connected to the local or regional electric power grid and has the ability to draw power from the or deliver power to the grid. See General Instructions for related details to determine total capa a site.							
	interconnected grid, ge	nerators that are connected to	a "public gr	not a part of the North American rid," meaning a local or regional plic, must be reported on Form EIA-				
	The operator or planne plants.	d operator of jointly-owned pla	nts should b	be the only respondent for those				
RESPONSE DUE DATE	Submit the completed F	Form EIA-860 directly to the EI	A annually	on or before February 15.				
METHODS OF FILING RESPONSE	Submit your data electr protocols to protect info	n. This system uses security ng transmission.						
RESPONSE		registered with EIA's Single Si EIA-860@eia.gov	ign-On syst	em, send an email requesting				
	If you have reg	istered with Single Sign-On, lo	g on at <u>http</u>	s://signon.eia.gov/ssoserver/login				
	<ul> <li>If you are having a technical problem with logging into the e-filing system or usin system contact the Help Center for further information. Contact the Help Desk a</li> </ul>							
		Email: <u>CNEAFhelpce</u> Phone: 202-58		gov				
	• If you need an alternate means of filing your response, contact the Help Desk.							
	Please retain a comple	ted copy of this form for your fi	les.					
CONTACTS	Internet System Que information immediately		I to the e-f	iling system, see the help contact				
	Data Questions: For q	uestions about the data reques	sted on For	m EIA-860, contact the survey staff:				
	Patricia Hutchins Vlad Dorjets Telephone Number: (202) 586-1029 Telephone Number: (202) 586-31 Fax Number: (202) 287-1960 Fax Number: (202) 287-1960 Email: Patricia.Hutchins@eia.gov Email: Vlad.Dorjets@eia.gov							

U.S. Department of U.S. Energy Inform Form EIA-860 (201	natior		ANNUAL ELECTRIC GENERATOR REPORT INSTRUCTIONS	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours			
GENERAL INSTRUCTIONS	1.	information. State information. If filing acceptable. Allow t	ided information. If incorrect, revise the incorrect entry and provide the correct e codes are two-letter U.S. Postal Service abbreviation. Provide any missing ing a paper copy of this form, typed or legible handwritten entries are the original entry to remain readable. See more specific instructions for SCHEDULE 2. POWER PLANT DATA, and SCHEDULE 3. GENERATOR				
	2.		consistency with the same or related da rm or in other forms or reports submitted COMMENTS.				
	3.	For planned power	plants and/or planned equipment, use	planning data to complete the form.			
	4.	Report in whole nu otherwise.	mbers (i.e., no decimal points), except	where explicitly instructed to report			
	5.	Indicate negative a	mounts by using a minus sign before th	ne number.			
	6.	Report date inform	ation as a two-digit month and four-digit	t year, e.g., "11 - 1980."			
	7.	of the end of the da of December 31, r contact information	ted information to reflect the status of yeata year. If your company no longer of report the name of the operator as of on (including contact person's name) in SCHEDULE 7. COMMENTS. Do n	operated a specific power plant as December 31 along with related , telephone number and email			
	8.	the contact information	nal blank schedules contact the U.S. En ation on page 1, or download the form fr / <u>cneaf/electricity/page/forms.html</u> .				
	9.		erms, refer to the U.S. Energy Information	on Administration glossary at			
	10.	of the maximum ra	determining reporting requirements, the tings (in megawatts) on the nameplates hotovoltaic (PV) solar, use the AC ratin	of all applicable generators at a			
ITEM-BY-ITEM			SCHEDULE 1. IDENTIFICA	TION			
INSTRUCTIONS	1.	Survey Contact: \address.	/erify contact name, title, address, telep	hone number, fax number, and email			
	2.	•	ntact Person for Survey: Verify the cole number, Fax number and email addres	•			
	3.		all information, including operator name a are being reported. These fields cann eded.				
			rmation is incorrect, revise the incorrect ny missing information.	t entry and provide the correct			
	Ор	erator and Prepare	er Information:				
	4.	power producer ow has a working inter related to the mana also be an electric	f <b>Operator</b> , enter the name. The operator, owner/joint owner of the plant or a subsidirest in the plant and who is responsible agement and physical operation of the power producer or a subsidiary of an el wholly owned by another electric power	ary of the electric power producer who for making the strategic decisions power plant. The operator entity may ectric power producer who operates a			

services companies under contract to operate the plant for the electric power producer; in these cases, the electric power producer should be reported as the legal operator.

- 5. For **Current Address of Principal Business Office of Plant Operator**, enter the principal name and address of where the operator's principal office is located. Include an attention line, room number, building designation, etc.
- 6. For **Preparer's Legal Name**, enter the name if different from **Legal Name of Operator**.
- 7. For **Current Address of Preparer's Office** enter preparer's current address if it is different from the address of the **Legal Name of Operator**.
- 8. For **Is the Operator an Electric Utility or Owned by an Electric Utility**; check "Yes" if so. Otherwise check "No."

### SCHEDULE 2. POWER PLANT DATA

Verify or complete one section for each existing power plant and each power plant planned for initial commercial operation within 10 years of the specified reporting period. To report a new plant or a plant that is not already identified, use a blank SCHEDULE 2.

- For line 1, Plant Name and EIA Plant Code, enter the name of the power plant, and the EIA Plant Code for the power plant. Each power plant must be uniquely identified. The type of plant does not need to be a part of the plant name, e.g., "Plant x Hydro" needs to be reported as "Plant x" only. The type of plant is recognized by the prime mover code(s) reported in SCHEDULE 3. GENERATOR INFORMATION. There may be more than one prime mover type associated with a single plant name (single site). Enter "NA 1," "NA 2," etc., for planned facilities that have no name(s).
- 2. For line 2, Street Address, enter the street address of the power plant.
- 3. For line 3, **County Name** and **City Name**, enter the county and city in which the plant is (will be) located. Enter "NA" for planned facilities that have not been sited. If a mobile power plant, indicate with a note in SCHEDULE 7. COMMENTS.
- 4. For line 4, **State**, enter the two-letter U.S. Postal Service abbreviation for the State in which the plant is located. Enter "NA" for planned facilities for which the State has not been determined. If the State is "NA," the county name must be "NA."
- 5. For line 5, **Zip Code**, enter the zip code of the plant. Provide, at a minimum, the five-digit zip code; however, the nine-digit code is preferred.
- 6. For line 6, **Latitude and Longitude**, enter the latitude and longitude of the plant in degrees, minutes, and seconds.
- 7. For line 7, Enter Datum for Latitude and Longitude, if Known; Otherwise Enter "UNK" the longitude and latitude measurement for a location depends in part on the coordinate system (or "datum") to which the measurement is keyed. "Datum systems" used in the United States, include the North American Datum 1927 (NAD27), North American Datum 1983 (NAD83) and World Geodetic Survey 1984 (WGS84). If you know the datum system for the plant longitude and latitude, enter the system name (e.g., NAD83) on line 7. If you do not know the datum system used, enter UNK.
- 8. For line 8a, **NERC Region**, enter the NERC region in which the plant is located.
- 9. For line 8b, **Does this Plant Belong to a RTO or ISO?**, check "Yes" or "No" for whether the plant belongs to a Regional Transmission Operator or Independent System Operator.
- 10. For line 8c, **Name of RTO or ISO**, if you answered "Yes" in line 8b, select the RTO or ISO from the list. If your RTO or ISO does not appear on the list, select "Other" and explain in SCHEDULE 7. COMMENTS.
- 11. For line 9, **Name of Water Source**, enter the name of the principal source from which cooling water for thermal-electric plants and water for generating power for hydroelectric plants is

directly obtained or the water source for hydrokinetic projects. If more than one water source is (will be) used, enter the name(s) of the other sources of water in SCHEDULE 7. COMMENTS. Enter "Municipality" if the water is from a municipality. Enter "wells" if water is from wells. Enter "NA" for planned facilities for which the water source is not known.

- 12. For line 10, **Steam Plant Status**, and line 11, **Steam Plant Type**, enter the appropriate status and type if this plant is a combustible-fueled steam generators, including heat recovery steam generators with duct firing and combustible renewable-fueled generators.
- 13. For line 12, **Primary Purpose of the Plant**, enter the North American Industry Classification System (NAICS) code that best describes the primary purpose of the reporting plant. Electric utility plants will generally use code 22. Independent power producers whose sole or primary business is the sale of electricity will also generally use code 22. For industrial and commercial generators whose primary business is an industrial or commercial process (e.g., paper mills, refineries, chemical plants, etc.), use Table 2 in these instructions to determine the code.
- 14. For line 13, **Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator Status**?, check "Yes" or "No"; if "Yes" provide all QF docket numbers granted to the facility. Please do not include the prefix (e.g. QF, EWG, etc.) when entering the docket numbers. Only include the numerical portion of the docket number, including dashes.
- 15. For line 14, **Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer Status**?, check "Yes" or "No"; if "Yes" provide all QF docket numbers granted to the facility. Please do not include the prefix (e.g. QF, EWG, etc.) when entering the docket numbers. Only include the numerical portion of the docket number, including dashes.
- 16. For line 15, Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator Status?, check "Yes" or "No"; if "Yes" provide all QF docket numbers granted to the facility. Please do not include the prefix (e.g. QF, EWG, etc.) when entering the docket numbers. Only include the numerical portion of the docket number, including dashes.
- 17. For line 16a, **Owner of Transmission/Distribution Facilities**, enter the name of the **current** owner of the transmission or distribution facilities to which the plant is interconnected. If the plant is interconnected to multiple owners, enter the name of the principal owner and list the other owners and their roles in SCHEDULE 7. COMMENTS.
- 18. For line 16b, **Grid Voltage (in kilovolts)**, enter the grid voltage at the point of interconnection to the transmission/distribution facilities. If the plant is interconnected to multiple transmission/distribution facilities, enter the highest grid voltage and list the other grid voltages in SCHEDULE 7. COMMENTS.

### SCHEDULE 3. GENERATOR INFORMATION

- Verify or complete for each existing or planned generator. Complete one column for each generator (up to three generators can be reported on one page) for all generators that are: (1) in commercial operation (whether active or inactive), or (2) expected to be in commercial operation within 10 years of the specified reporting period and are either planned, under construction, or in testing stage. Do not report auxiliary generators.
- 2. To report a new generator, use a separate (blank) section of SCHEDULE 3. To report a new generator that has replaced one that is no longer in service, update the status of the generator that has been replaced along with other related information (e.g., retirement date), then use a separate (blank) section of SCHEDULE 3 to report all of the applicable data about the new generator. Each generator must be uniquely identified within a plant. The EIA cannot use the same generator ID for the new generator that was used for the generator that was replaced.

### SCHEDULE 3. PART A. GENERATOR INFORMATION – GENERATORS

- 1. For line 1, **Plant Name**, enter the official or legal name of the power plant as reported on SCHEDULE 2. POWER PLANT DATA.
- 2. For line 2, **EIA Plant Code**, enter the EIA plant code as reported on SCHEDULE 2. POWER PLANT DATA.
- 3. For line 3, **Operator's Generator Identification**, enter the unique generator identification commonly used by plant management. Generator identification can have a maximum of four characters, and should be the same identification as reported on other EIA forms to be uniquely defined within a plant.
- 4. For line 4, **Associated Boiler Identifications**, enter, for combustible-fueled steam generators, including heat recovery steam generators with duct firing and combustible renewable-fueled generators with total generator nameplate capacity of 10 MW or greater, the identification (ID) code for each boiler that provides steam to the generator. The ID should match those provided in SCHEDULE 6. BOILER INFORMATION. The applicable parts of SCHEDULE 6. BOILER INFORMATION must be completed for each boiler.
- 5. For line 5, **Prime Mover**, enter one of the prime mover codes below. For combined cycle units, a prime mover code must be entered for each generator.

Prime Mover Code	Prime Mover Description
BA	Energy Storage, Battery
CP	Energy Storage, Concentrated Solar Power
FW	Energy Storage, Flywheel
ES	Energy Storage, Other (specify in SCHEDULE 7. COMMENTS)
ST	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)
GT	Combustion (Gas) Turbine (includes jet engine design)
IC	Internal Combustion Engine (diesel, piston, reciprocating)
CA	Combined Cycle Steam Part
СТ	Combined Cycle Combustion Turbine Part (type of coal or solid must be reported as energy source for integrated coal gasification).
CS	Combined Cycle Single Shaft (combustion turbine and steam turbine share a single generator)
CC	Combined Cycle Total Unit (use only for plants/generators that are in planning stage, for which specific generator details cannot be provided)
HA	Hydrokinetic, Axial Flow Turbine
HB	Hydrokinetic, Wave Buoy
HK	Hydrokinetic, Other (specify in SCHEDULE 7. COMMENTS)
HY	Hydroelectric Turbine (Conventional Hydroelectric; includes turbines associated with delivery of water by pipeline)
PS	Hydraulic Turbine, Reversible (pumped storage)
BT	Turbines Used in a Binary Cycle (including those used for geothermal applications)
PV	Photovoltaic
WT	Wind Turbine
CE	Compressed Air Energy Storage
FC	Fuel Cell
OT	Other (specify in SCHEDULE 7. COMMENTS)

Combined heat and power systems often generate steam with multiple sources and generate electric power with multiple prime movers. For reporting purposes, a simple cycle prime mover should be distinguished from a combined cycle prime mover by determining whether the power generation part of the steam system can operate independently of the rest of the steam system. If these system components cannot be operated independently, then the prime movers should

be reported as combined cycle types.

- 6. For line 6, **Unit Code (Multi-Generator Code)**, identify all generators that are operated with other generators as a single unit. Generators operating as a single unit should have the same unit (multi-generator code) code or four-character identifier. Identify combined cycle generators that operate as a unit with a unique four-character identifier. All generators that operate as a unit in combined cycle must have the same unique identifier. If generators do not operate as a single unit, this space should be left blank.
- 7. For line 7, **Ownership**, identify the ownership for each generator using the following codes: "S" for single ownership by respondent, "J" for jointly owned with another entity or "W" for wholly owned by an entity other than respondent.
- 8. For line 8, **Is this generator an electric utility generator?**, an *electric utility generator* shall mean a generator that is owned by an electric utility, or a jointly owned generator with the greatest share of the generator being electric utility owned. (Note: If two or more owners have equal shares of ownership in a generator, it is considered to be an electric utility generator if any one of the owners meets the definition of electric utility). For each electric utility generator, check "Yes" or "No."
- 9. For line 9, Date of Sale, If Sold, enter the month and year of the sale of the generator (e.g., 12-2007), if the generator has been sold in its entirety. For changes in shares of ownership only, with no change in operator, report in SCHEDULE 4. OWNERSHIP OF GENERATORS OWNED JOINTLY OR BY OTHERS. In SCHEDULE 7. COMMENTS provide the legal name, business address, contact person, phone number and email address of the entity to which this generator was sold.
- 10. For line 10, **Can This Generator Deliver Power to the Transmission Grid**?, indicate if the generator can or cannot deliver power to the transmission grid.
- 11. For line 11, **if the prime mover is "CA,"** (combined-cycle steam), "CS" or "CC" check "Yes" if the unit has duct-burners for supplementary firing of the turbine exhaust gas. Otherwise, check "No." If "Yes" SCHEDULE 6. BOILER INFORMATION must be completed, as applicable.

#### **SCHEDULE 3, PART B. GENERATOR INFORMATION – EXISTING GENERATORS**

- 1. For line 1, **Generator Nameplate Capacity**, report the highest value on the nameplate in megawatts rounded to the nearest tenth. If the nameplate capacity is expressed in kilovolt amperes (kVA), convert to kilowatts by multiplying the corresponding power factor by the kVA, divide by 1,000 to express in megawatts to the nearest tenth. If generator nameplate capacity is exceeded by net summer capacity, provide the reason(s) in SCHEDULE 7. COMMENTS.
- 2. For line 2, **Net Capacity**, enter the generator's net summer and net winter capacities for the primary energy source. Report in megawatts, rounded to the nearest tenth. For generators that are out of service for an extended period or on standby or have no generation during the respective seasons, report the estimated capacities based on historical performance. For generators that are tested as a unit, a single aggregate net summer capacity and a single aggregate net winter capacity may be reported. For hydroelectric, report the instantaneous capacity at maximum waterflow.
- 3. For line 3a, **Maximum Expected Reactive Power Output (MVAR)**, enter the maximum reactive power outputs (MVAR) at the high side of the generator step-up transformer for generators with nameplate capacity of 10 MW or greater. A MVAR is a Mega Voltampere Reactive.
- 4. For line 3b, **Maximum Reactive Power Absorption (MVAR)**, enter the maximum reactive power absorptions of the generator at the high side of the generator step-up transformer for generators with nameplate capacity of 10 MW or greater. A MVAR is a Mega Voltampere Reactive.

5. For line 4, **Status Code**, enter one of the following status codes:

5.	Tor line 4, Status	code, enter one of the following status codes.
	Status Code OP	Status Code Description 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.
6.		<b>ronized to the Grid</b> , if the status code entered on line 4 is standby (SB) generator is currently equipped such that, when operating, it can be he grid.
7.	For line 6, Initial	Date of Operation, enter the month and year of initial commercial operation.
8.	For line 7, <b>Retire</b>	ment Date, enter the month and year that the generator was retired.
9.	either "Yes" or "N bottoming cycle, a waste heat from t space heating/co	<b>generator associated with a Combined Heat and Power system</b> check lo." If the answer is "Yes," check whether the generator is part of a topping or as applicable. In a topping cycle system, electricity is produced first and any hat production is used in a manufacturing process or for direct heating, and/or oling. In a bottoming cycle system, thermal output is used in a process other oduction and any waste heat is then used to produce electricity.
10.	largest quantity (I out of service for the generator's la 1 in these instruct	<b>minant Energy Source</b> , enter the energy source code for the fuel used in the Btus) during the reporting year to power the generator. For generators that are an extended period of time or on standby, report the energy sources based on test operating experience. Select appropriate energy source codes from Table tions. For generators driven by turbines using steam that is produced from ect heat, report the original energy source used to produce the waste heat
11.		predominant energy source for powering the generator is coal or petroleum pes of technology and steam conditions that apply.
12.		prime mover is ST (steam turbine) report the <b>Start-Up and Flame</b> ergy <b>Sources</b> used by the combustion unit(s) associated with this generator; plank.
13.	energy source us generator. DO N appropriate energy turbines using ste	nd Most Predominant Energy Source, enter the energy source code for the ed in the second largest quantity (Btus) during the reporting year to power the OT include a fuel used only for start-up or flame stabilization. Select gy source codes from Table 1 in these instructions. For generators driven by eam that is produced from waste heat or reject heat, report the original energy roduce the waste heat (reject heat).
14.	energy sources a ones that the gen last 12 months. F standby, report th appropriate energy turbines using ste	<b>r Energy Sources</b> , enter the codes for other energy sources: first, list the ctually used in order of predominance (based on quantity of Btus), then list erator was capable of using but was not used to generate electricity during the For generators that are out of service for an extended period of time or on the energy sources based on the generator's latest operating experience. Select gy source codes from Table 1 in these instructions. For generators driven by earn that is produced from waste heat or reject heat, report the original energy produce the waste heat (reject heat).

source used to produce the waste heat (reject heat)

- 15. For line 13, **Is This Generator Part of a Solid Fuel Gasification System,** check "Yes" or "No" as appropriate.
- 16. For line 14, **Number of Turbines, Buoys, or Inverters**, if energy source is wind, enter the number of turbines; if the energy source is wave energy, enter the number of buoys; if energy source is other hydrokinetics, enter the number of turbines; if the energy source is solar photovoltaic, enter the number of inverters.
- 17. For line 15a, **Tested Heat Rate**, enter the tested heat rate under full load conditions for all combustible-fueled generators, nuclear-fueled generators, concentrated solar generators and geothermal generators. Report the heat rate as the fuel consumed in British thermal units (Btus) necessary to generate one net kilowatthour of electric energy. Report the tested heat rate under full load, not the actual heat rate, which is the quotient of the total Btu(s), consumed and total net generation. If generators are tested as a unit (not tested individually), report the same test result for each generator. For generators that are out of service for an extended period or on standby, report the heat rate based on the unit's latest test. If the generator is associated with a combined heat and power (CHP) system and no tested heat rate data are available, report either the manufacturer's specification for heat rate or an estimated heat rate. DO NOT report a heat rate that includes the fuel used for the production of useful thermal output. For Internal Combustion units, a manufacturer's specification or estimated heat rate should be reported, if no tested heat rate is available. For solar photovoltaic generators, provide the average module efficiency for all installed modules. If the reported value is not a tested heat rate, specify in SCHEDULE 7. COMMENTS.
- 18. For line 15b, **Fuel Used for Heat Rate Test**, enter the fuel code or "M" for multiple fuels for the fuel used to calculate the heat rate reported above. Select appropriate energy source codes from Table 1 in these instructions. For generators driven by turbines using steam that is produced from waste heat or reject heat, report the original energy source used to produce the waste heat (reject heat).
- 19. For line 16, Annual Average Operating Efficiency for Solar Photovoltaic, Wind and Hydroelectric Generators, enter the annual average operating efficiency for solar photovoltaic, wind and hydroelectric generators.

### Proposed Changes to Existing Generators (within the next 10 years)

- 20. For line 17a, indicate whether there are any planned capacity up-rates/de-rates, repowering, other modifications, or generator retirements scheduled to take place within the next 10 years.
- For line 17b, Planned Uprates, enter the increase in capacity expected to be realized from the uprate. Enter the planned effective date (MM-YYYY) that the generator is scheduled to enter operation after the modification.
- 22. For line 17c, **Planned Derates**, enter the decrease in capacity expected to be realized from the derate. Enter the planned effective date (MM-YYYY) that the generator is scheduled to enter operation after the modification.
- 23. For line 17d, **Planned Repowering**, if a repowering of the generator is planned, enter the new prime mover, the new energy source, and new nameplate capacity as well as the planned effective date (MM-YYYY) that the generator is scheduled to enter operation after the repowering is complete.
- 24. For line 17e, **Other Modifications**, enter the planned effective date (MM-YYYY) that the generator is scheduled to enter commercial operation after any other planned change is complete, that is not included in lines 17b through 17d. Please provide details of the planned change in SCHEDULE 7. COMMENTS. Other planned changes may include a second up-rate or de-rate to a unit or a reactivation of a previously retired generator,
- 25. For line 17f, **Retirement**, if the generator is expected to be retired within the next 10 years, enter the planned effective date (MM-YYYY) of that scheduled retirement.
- 26. For line 18, Can This Generator be Powered by Multiple Fuels?, indicate if the combustion

system that powers each generator has both:

- The regulatory permits necessary to either co-fire fuels or fuel switch, and
- The equipment, including fuel storage facilities in working order, necessary to either co-fire fuels or fuel switch.

If the answer to this question is "No," go to SCHEDULE 3, PART C. GENERATOR INFORMATION - PROPOSED GENERATORS.

Note: **Co-firing** means the simultaneous use of two or more fuels by a single combustion system to meet load. **Fuel switching** means the ability of a combustion system running on one fuel to replace that fuel in its entirety with a substitute fuel. Co-firing and fuel switching exclude the limited use of a second fuel for start-up or flame stabilization.

- 27. For line 19, **Can This Unit Co-Fire Fuels?**, indicate whether or not the combustion system that powers the generator has, in working order, the equipment and the regulatory permits necessary to co-fire fuels. If the answer is "No," skip to line 23.
- 28. For line 20, Fuel Options for Co-Firing, indicate up to six fuels that can be co-fired. Select appropriate energy source codes from Table 1 in these instructions. Note: fuel options listed for co-firing must also be included under either "Predominant Energy Source" (line 9), "Second Most Predominant Energy Source" (line 11), or "Other Energy Sources (line 12).
- 29. For line 21, **Can This Generator be Powered by Co-Fired Fuel Oil and Natural Gas?**, indicate if the combustion system that powers the generator can co-fire fuel oil with natural gas. If the answer is "No," skip to line 23.
- 30. For line 22, **Can This Generator be Run on 100% Oil?**, indicate whether or not the combustion system that powers the generator can run on 100 percent oil. If the answer to this question is "Yes," skip to line 23. If it is "No," indicate the maximum percentage of the heat input to the combustion system (percent of MMBtu) that can be supplied by oil when co-firing with natural gas, taking into account all applicable legal, regulatory, and technical limits. Also provide the maximum output (summer net MW) that the unit can achieve, taking into account all applicable legal, regulatory, and technical limits when making the maximum use of oil and co-firing natural gas.
- 31. For line 23, **Can This Unit to Fuel Switch?**, indicate whether or not the combustion system that powers the generator has, in working order, the equipment necessary to fuel switch and the regulatory permits to fuel switch. If "No," skip to SCHEDULE 3, PART C, GENERATOR INFORMATION PROPOSED GENERATORS.
- 32. For line 24, **Can This Unit Switch Between Oil and Natural Gas?**, indicate whether or not the combustion system that powers the generator has, in working order, the equipment and the regulatory permits necessary to switch between oil and natural gas. If "No," go to line 26. If "Yes," indicate whether the unit can switch fuels while operating (i.e., without shutting down the unit). Also enter the maximum output (summer net MW) that the unit can achieve, taking into account all applicable legal, regulatory, and technical limits, when running on natural gas, the maximum output (summer net MW) that the unit can achieve, taking into account all applicable legal, regulatory, and technical limits, when running into account all applicable legal, regulatory, and technical limits, when running it takes to switch the generator from using 100 percent natural gas to 100 percent oil.
- 33. For line 25, Are There Factors That Limit the Unit's Ability to Switch From Natural Gas to Oil?, indicate whether or not there are factors that limit the operation of the generator (e.g., limits on maximum output, limits on annual operating hours), when running on 100 percent oil. Check all factors that limit the ability of this generator to switch from natural gas to oil.
- 34. For line 26, **Fuel Switching Options**, enter the codes for up to six fuels, including (if applicable) oil and natural gas, which can be used as a sole source of fuel to power the generator. Select appropriate energy source codes from the table in these instructions. Note: Fuel options listed for fuel switching must also be included under either "Predominant Energy Source" (line 9), "Second Most Predominant Energy Source" (line 11), or "Other Energy Sources (line 12).

#### SCHEDULE 3, PART C. GENERATOR INFORMATION – PROPOSED GENERATORS

- 1. For line 1, **Generator Nameplate Capacity**, enter the highest value on the nameplate in megawatts rounded to the nearest tenth. If the nameplate capacity is expressed in kilovolt amperes (kVA), convert to kilowatts by multiplying the corresponding power factor by the kVA, divide by 1,000 to express in megawatts to the nearest tenth. If the generator nameplate is not known at this time, estimate the nameplate rating for the generator and note this as an estimate in SCHEDULE 7. COMMENTS.
- 2. For line 2, **Net Capacity**, enter the generator's net summer and net winter capacities in megawatts rounded to the nearest tenth that are expected when the generator goes into commercial operation.
- 3. For line 3a, **Maximum Expected Reactive Power Output (MVAR)**, enter the maximum expected reactive power outputs (MVAR) at the high side of the generator step-up transformer for generators with nameplate capacity of 10 MW or greater. A MVAR is a Mega Voltampere Reactive.
- 4. For line 3b, **Maximum Reactive Power Absorption (MVAR)**, enter the maximum expected reactive power absorptions of the generator at the high side of the generator step-up transformer for generators with nameplate capacity of 10 MW or greater. A MVAR is a Mega Voltampere Reactive.
- 5. For line 4, **Status Code**, enter one of the following status codes:

	Status Code	Status Code Description
	IP	Planned new generator canceled, indefinitely postponed, or no longer in resource plan
	TS	Construction complete, but not yet in commercial operation (including low power testing of nuclear units)
	Р	Planned for installation but regulatory approvals not initiated; Not under construction
	L	Regulatory approvals pending. Not under construction but site preparation could be underway
	Т	Regulatory approvals received. Not under construction but site preparation could be underway
	U	Under construction, less than or equal to 50 percent complete (based on construction time to date of operation)
	V	Under construction, more than 50 percent complete (based on construction time to date of operation)
	ОТ	Other (specify in SCHEDULE 7. COMMENTS)
6.	date that: 1) the g	ed Original Effective Date, enter the month and year of the original effective generator was scheduled to start operation after construction is completed. this date does not change once it has been reported the first time.)
7	For line 6 Plann	ad Current Effective Date, enter the month and year of the current effective

- 7. For line 6, **Planned Current Effective Date**, enter the month and year of the current effective date that the generator is scheduled to start operation.
- 8. For line 7, **Will This Generator be Associated with a Combined Heat and Power System?** Check either "Yes" or "No."
- 9. For line 8, Will This Generator be Part of a Solid Fuel Gasification System?, check "Yes" or "No," as appropriate.
- 10. For line 9, indicate if this generator is part of a site that was previously reported by either your company or a previous owner as an indefinitely postponed or cancelled plant.
- 11. For line 10, **Expected Predominant Energy Source**, enter the energy source code for the energy source expected to be used in the largest quantity (Btus) when the generator starts commercial operation. Select appropriate energy source codes from Table 1 in these

instructions.

- 12. For line 11, if the expected predominant energy source for powering the generator is coal or petroleum coke, check all the types of technology and steam conditions that apply.
- 13. For line 12, **Expected Second Most Predominant Energy Source**, enter the energy source code for the energy sources expected to be used in the second largest quantity (Btus) when the generator starts commercial operation. Select appropriate energy source codes from Table 1 in these instructions. Do not include fuels expected to be used only for start-up or flame stabilization.
- 14. For line 13, **Other Energy Source Options**, enter the codes for other energy sources that will be used at the plant to power the generator. Enter up to four codes in order of their expected predominance of use, where predominance is based on quantity of Btu(s) to be consumed. Select appropriate energy source codes from Table 1 in these instructions.
- 15. For line 14, **Number of Turbines, Buoys, or Inverters**, if the energy source will be wind, enter the number of turbines; if the energy source will be wave energy, enter the number of buoys; if the energy source will be other hydrokinetics, enter the number of turbines; if the energy source will be solar photovoltaic, enter the number of inverters.
- 16. For line 15, **Will This Generator be Able to be Powered by Multiple Fuels?**, indicate if the combustion system that will power each generator will have both:
  - The regulatory permits necessary to either co-fire fuels or fuel switch, and
  - The equipment, including fuel storage facilities, in working order, necessary to either co-fire fuels or fuel-switch.

If the answer is "No" or "Undetermined", go to SCHEDULE 4. OWNERSHIP OF GENERATORS OWNED JOINTLY OR BY OTHERS.

Note: **Co-firing** means the simultaneous use of two or more fuels by a single combustion system to meet load. **Fuel switching** means the ability of a combustion system running on one fuel to replace that fuel in its entirety with a substitute fuel. Co-firing and fuel switching exclude the limited use of a second fuel for start-up or flame stabilization.

- 17. For line 16, **Will this Unit be Able to Co-Fire Fuels?**, indicate whether or not the combustion system that will power the generator will have the equipment necessary to co-fire fuels and the regulatory permits to co-fire fuels. If "No," skip to line 20.
- For line 17, Fuel Options for Co-Firing, indicate up to six fuels that the generator will be designed to co-fire. Select appropriate energy source codes from Table 1 in these instructions. Note: fuel options listed for co-firing must also be included under either "Predominant Energy Source" (line 9a), "Second Most Predominant Energy Source" (line 11), or "Other Energy Sources (line 13).
- 19. For line 18, **Will This Generator be Able to be Powered by Co-Fired Fuel Oil and Natural Gas?**, indicate if the combustion system that powers the generator will be able to co-fire fuel oil with natural gas. If it cannot, skip to line 20.
- 20. For line 19, **Will This Generator be able to Run on 100% Oil?**, indicate whether or not the combustion system that will power the generator can run on 100 percent oil. If "Yes," skip to line 20, if "No," indicate the maximum percentage of the heat input to the combustion system (percent of MMBtu) that will be able to be supplied by oil when co-firing with natural gas. Also provide the maximum output (summer net MW) that the unit is expected to achieve, taking into account all applicable legal, regulatory, and technical limits, when making the maximum use of oil and co-firing natural gas.
- 21. For line 20, **Will This Unit be Able to Fuel Switch?**, indicate whether or not the combustion system that will power the generator will have the equipment necessary to fuel switch and have the regulatory permits to fuel switch. If "No," then skip to SCHEDULE 4. OWNERSHIP OF GENERATORS OWNED JOINTLY OR BY OTHERS.

- 22. For line 21, **Will This Unit be Able to Switch Between Oil and Natural Gas?**, indicate whether or not the combustion system that will power the generator will have the necessary equipment and the regulatory permits in place to switch between oil and natural gas. If "No," skip to line 23. If "Yes," indicate whether the unit will be able to switch fuels while operating (i.e., without shutting down the unit). Also enter the maximum output (summer net MW) that the unit is expected to achieve, taking into account all applicable legal, regulatory, and technical limits, when running on natural gas, the maximum output (summer net MW) that the unit is expected to achieve, taking into account all applicable legal, regulatory, and technical limits, when running on natural gas, the maximum output (summer net MW) that the unit is expected to achieve, taking into account all applicable legal, regulatory, and technical limits, when running on oil, and how long it is expected to take to switch the generator from using 100 percent natural gas to 100 percent oil.
- 23. For line 22, Limits Are There Factors That Will Limit the Unit's Ability to Switch From Natural Gas to Oil?, indicate whether or not there will be factors that will limit the operation of the generator (e.g., limits on maximum output, limits on annual operating hours), when running on 100 percent oil. Check all factors that will limit the ability of this generator to switch from natural gas to oil.
- 24. For line 23, **Fuel Switching Options**, enter the codes for up to six fuels, including (if applicable) oil and natural gas, that can be used as a sole source of fuel to power each generator. Select appropriate energy source codes from Table 1 in these instructions. Note: fuel options listed for fuel switching must also be included under either "Predominant Energy Source" (line 10), "Second Most Predominant Energy Source" (line 12), or "Other Energy Sources (line 13).

#### SCHEDULE 4. OWNERSHIP OF GENERATORS OWNED JOINTLY OR BY OTHERS

- 1. Complete a separate SCHEDULE 4 for each existing and planned generator operated by the respondent that is, or will be, jointly owned; and each generator that the respondent operates but is 100 percent owned by another entity. Only the current or planned operator of jointly-owned generators should complete this schedule. The total percentage of ownership must equal 100 percent.
- 2. For each generator, specify the **Plant Name, EIA Plant Code, and Generator Identification**, as listed on SCHEDULE 3, PART A. GENERATOR INFORMATION GENERATORS.
- 3. Enter the Owner/Joint Owner Name and Address, in order of percentage of ownership, of each generator. Enter the EIA Code for the owner, if known, otherwise leave blank. Enter the Percent Owned to two decimal places, i.e., 12.5 percent as "12.50." If a generator is 100 percent owned by an entity other than the operator, then enter the percentage ownership as "100.00."
- 4. Include any notes or comments in SCHEDULE 7. COMMENTS.

#### SCHEDULE 5. NEW GENERATOR INTERCONNECTION INFORMATION

- 1. Complete a separate SCHEDULE 5 for each generator that started commercial operation during the data year (calendar year for which this survey is being filed). For example, if Reporting is as of December 31, 2007, then data year is 2007.
- 2. For line 1, enter the **Name of the Power Plant** and the **EIA Power Plant Code**, as previously reported in SCHEDULE 3, PART A, GENERATOR INFORMATION GENERATORS.
- 3. For line 2, enter the **Generator ID**, as previously reported in SCHEDULE 3, PART A, GENERATOR INFORMATION GENERATORS.
- 4. For line 3, **Date of Actual Generator Interconnection**, report the month and year that the interconnection was put into place.
- 5. For line 4, **Date of Initial Interconnection Request**, report the month and year that the first request for interconnection was filed with the grid operator.
- 6. For line 5, Interconnection Site Location, specify the nearest city or town, and the state, where

the interconnection equipment is located.

- 7. For line 6, **Grid Voltage at the Point of Interconnection**, specify the grid voltage, in kV, at the point of interconnection between the generator and the grid.
- 8. For line 7, **Owner of the Transmission or Distribution Facilities to Which Generator is Interconnected**, provide the name of the owner of the transmission or distribution facilities to which the generator is interconnected. If the name of the owner of the facilities is unknown, provide the name of the contracting party.
- 9. For line 8, **Total Cost Incurred for the Direct, Physical Interconnection**, specify the total cost incurred, in thousands of dollars, to accomplish the physical interconnection.
- 10. For line 9, Equipment Included in the Direct Interconnection Cost, check each of the types of equipment that are included in the cost amount reported on line 8. If there are significant types of equipment that are not included in the list, please specify what additional equipment was needed for the interconnection in SCHEDULE 7. COMMENTS.
- 11. For line 10, (a)**Total Cost for Other Grid Enhancements/Reinforcements Needed to Accommodate Power Deliveries From the Generator**, specify the amount incurred, in thousands of dollars, for any other grid enhancements or reinforcements that were needed to accommodate power deliveries from the new generator. If these costs, or some portion of these costs, will be repaid to your company at some time in the future by the owner of the grid, or by the party with whom you contracted for the interconnection, please check "Yes" in line 10b; otherwise, check "No" in 10b.
- 12. For line 11, Were Specific Transmission Use Rights Secured As A Result Of The Interconnection Costs Incurred, check "Yes" or "No."

#### SCHEDULE 6. BOILER INFORMATION

This schedule is required to be completed for all existing and planned (10 year plans) combustiblefueled steam generators, including heat recovery steam generators with duct firing and combustible renewable-fueled generators, with a total generator nameplate capacity of at least 10 megawatts.

PART B, PART C, PART F, and PART I are only to be completed by those generators that meet the conditions above but that have a total generator nameplate capacity of at least 100 megawatts.

Nuclear plants and solar plants using a steam cycle should complete PART F only.

# SCHEDULE 6, PART A. PLANT CONFIGURATION

- Identification information should be a code commonly used by plant management for that equipment (e.g., "2," "A101," "7B," etc.). Select a code for each piece of equipment and use it for that equipment throughout this form. The code should be a maximum of six characters long and should conform to codes reported for the same equipment (especially generators) on other EIA forms. Do not use blanks in the code. Do not enter "NA" for those lines that are not applicable. Plants less than 100 MW should only complete lines 1, 2, 3, and if applicable, 5 and 6. Planned equipment that is on order and expected to go into commercial service within 10 years must be reported. If two or more pieces of equipment (e.g., two generators) are associated with a single boiler, report each identification code, separated by commas, under the appropriate boiler. Do not change preprinted equipment identification.
- 2. For line 1, using each boiler as a starting point, complete the entire column under the boiler identification with the requested information on each piece of associated existing or planned equipment (e.g., generators, cooling systems, etc.). Report waste-heat boilers with auxiliary firing. Do not report waste-heat boilers without auxiliary firing, or auxiliary house or start-up boilers. A waste-heat boiler is a boiler that receives all or a substantial portion of its energy input from the noncombustible exhaust gases of a separate fuel-burning process. Combined cycle units with auxiliary firing report the heat recovery steam generators (HRSGs) on line1.

- 3. For lines 2, 4, 5, 6, 7, and 8, if a piece of equipment (e.g., a generator or a cooling system) serves two or more boilers, repeat the identification information for that equipment under each appropriate boiler.
- 4. For line 2, **Associated Generator(s) ID**, do not report auxiliary generators. Multiple generators operated as a single unit (e.g., cross compound and topping generators) should be identified as a group with one identification code. Combined cycle units with auxiliary firing report only the steam generators. Do not report the combustion turbine portion of the combined cycle unit.
- 5. For line 3, **Generator Associations with Boiler as Actual or Theoretical,** indicate "A" for actual association during year or "T" for theoretical associations.
- 6. For line 4, **Associated Cooling System(s) ID**, a cooling system is an equipment system that provides water to the condensers and includes water intakes and outlets, cooling towers and ponds, pumps, and pipes. Identify a single plant cooling system, not separate systems, unless systems are physically separated, e.g., have separate water intake and outlet structures, where each system can be operated independently.
- 7. For line 5, **Associated Flue Gas Particulate Collector(s) ID**, if a combination particulate collector is associated with a single boiler, identify the collectors as a single group. If the particulate collector also removes sulfur dioxide, identify the unit in lines 5 and 6 using the same identification code.
- 8. For line 6, **Associated Flue Gas Desulfurization Units(s) ID**, for reporting purposes identify an associated flue gas desulfurization unit to include all the trains (or modules) associated with a single boiler. If the flue gas desulfurization unit also removes particulate matter, identify the unit in lines 5 and 6 using the same identification code.
- 9. For line 7, **Associated Flue(s) ID**, a flue is defined as an enclosed passageway within a stack for directing products of combustion to the atmosphere. For stacks with multiple flues, report in one column all flues that serve the boiler identified in line 1. Separate multiple entries with commas. If the stack has a single flue, use the stack identification for the flue identification.
- 10. For line 8, **Associated Stack(s) ID**, a stack is defined as a tall, vertical structure containing one or more flues used to discharge products of combustion into the atmosphere.

#### SCHEDULE 6, PART B. BOILER INFORMATION – AIR EMISSION STANDARDS (DATA NOT REQUIRED FOR PLANTS LESS THAN 100 MW)

- 1. Complete a separate page for each existing or planned boiler as reported on SCHEDULE 6, PART A, line 1.
- 2. For line 2a, **Type of Boiler Standards Under Which the Boiler Is Operating**, indicate the standards as described in the U.S. Environmental Protection Agency regulation under 40 CFR. Select from the following codes of the New Source Performance Standards (NSPS):

D	Standards of Performance for fossil-fuel fired steam boilers for which
	construction began after August 17, 1971.
Da	Standards of Performance for fossil-fuel fired steam boilers for which
	construction began after September 18, 1978.
Db	Standards of Performance for fossil-fuel fired steam boilers for which
	construction began after June 19, 1984.
Dc	Standards of Performance for small industrial-commercial-institutional steam
	generating units.
N	Not covered under New Source Performance Standards.

- 3. For line 2b, **Is Boiler Operating Under a New Source Review (NSR) Permit?,** check "Yes" or "No"; if "Yes," enter date and identification number of the issued permit.
- 4. For line 3, **Type of Statute or Regulation**, select from the following the most stringent type of statute or regulation code:

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- FD Federal
- ST State
- LO Local
- NA No Applicable Standard
- For line 4, Emission Standard Specified, refer to the numeric value for the unit of measurement in line 5. If no numeric value is specified, report "NA." For Sulfur Dioxide (column (b)), if the standard requires both an emission rate and a percent scrubbed, report the emission rate in terms of pounds of sulfur dioxide per million Btu on line 4a and report the percent scrubbed in terms of percent sulfur removal efficiency (by weight) on line 4b.
- 6. For line 5, **Unit of Measurement Specified**, column (a), Particulate Matter, select from the following unit of measurement codes (PB\* is the preferred measurement):

Code	Unit of Measurement
OP	Percent of opacity
PB*	Pounds of Particulate matter per million Btu in fuel
PC	Grains of particulate matter per standard cubic foot of stack gas
PG	Pounds of particulate matter per thousand pounds of stack gas
PH	Pounds of particulate matter emitted per hour
UG	Micrograms of particulate matter per cubic meter
OT	Other (specify in SCHEDULE 7. COMMENTS)

7. For line 5, **Unit of Measurement Specified**, column (b), Sulfur Dioxide, select from the following unit of measurement codes (DP\* is the preferred measurement):

Code	Unit of Measurement
DC	Ambient air quality concentration of sulfur dioxide (parts per million)
DH	Pounds of sulfur dioxide emitted per hour
DL	Annual sulfur dioxide emission level less than a level in a previous
	year
DM	Parts per million of sulfur dioxide in stack gas
DP*	Pounds of sulfur dioxide per million Btu in fuel
SB	Pounds of sulfur per million Btu in fuel
SR	Percent sulfur removal efficiency (by weight)
SU	Percent sulfur content of fuel (by weight)
OT	Other (specify in SCHEDULE 7. COMMENTS)

8. For line 5, **Unit of Measurement Specified**, column (c), Nitrogen Oxides, select from the following unit of measurement codes (NP\* is the preferred measurement):

Code	Unit of Measurement
NH	Pounds of nitrogen oxides emitted per hour
NL	Annual nitrogen oxides emission level less than a level in a previous
	year
NM	Parts per million of nitrogen oxides in stack gas
NO	Ambient air quality concentration of nitrogen oxides (parts per million)
NP*	Pounds of nitrogen oxides per million Btu in fuel
OT	Other (specify in SCHEDULE 7. COMMENTS)

9. For line 6, **Time Period Specified**, select from the following codes to indicate the period over which measurements were averaged:

Code	Time Period
NV	Never to exceed
FM	5 minutes

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SM	6 minutes
FT	15 minutes
OH	1 hour
WO	2 hours
TH	3 hours
EH	8 hours
DA	24 hours
WA	1 week
MO	30 days
ND	90 days
YR	Annual
PS	Periodic stack testing
DT	Defined by testing
NS	Not specified
OT	Other (specify in SCHEDULE 7. COMMENTS)

- 10. For line 7, **Year Boiler Was or Is Expected to Be in Compliance With Federal, State and/or Local Regulations**, if the boiler is currently in compliance, enter the year the boiler came into compliance or the year of the regulation, whichever came last. Report "9999" only if a revision of a governing regulation is being sought or no plans have been approved to bring the boiler into compliance.
- 11. For line 8, **If Not in Compliance**, **Strategy for Compliance**, select from the following strategy for compliance codes (separate multiple entries (up to three) with commas):

Code	Strategy for Compliance
BO	Burner out of service
FR	Flue gas recirculation
LA	Low excess air
LN	Low nitrogen oxide burner
MS	Currently meeting standard
NC	No plans to control
OV	Overfire air
SE	Seeking revision of governing regulation
OT	Other (specify in SCHEDULE 7. COMMENTS)

12. For line 9, Existing, and line 10, Planned Strategies to Meet the Sulfur Dioxide and Nitrogen Oxides Requirements of Title IV of the Clean Air Act Amendment of 1990, column (b), select from the following strategy for compliance codes (separate multiple entries (up to three) with commas):

Code	Strategy for Compliance (Sulfur Dioxide)
CF	Fluidized Bed Combustor
CU	Control unit under Phase I extension plan
IF	Install flue gas desulfurization unit (other than Phase I extension plan)
NC	No change in historic operation of unit anticipated
ND	Not determined at this time
RP	Repower Unit
SS	Switch to lower sulfur fuel
SU	Designate Phase II unit(s) as substitution unit(s)
TU	Transfer unit under Phase I extension plan
UC	Decrease utilization - designate Phase II unit(s) as compensating unit(s)
UE	Decrease utilization - rely on energy conservation and/or improved
	efficiency
US	Decrease utilization - designate sulfur-free generators to compensate
UP	Decrease utilization - purchase power

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WA	Allocated allowances and purchase allowances
OT	Other (specify in SCHEDULE 7. COMMENTS)

Code	Strategy for Compliance (Nitrogen Oxides)
AA	Advanced Overfire Air
BF	Biased Firing (alternative burners)
CF	Fluidized Bed Combustor
FR	Flue Gas Recirculation
FU	Fuel Reburning
H2O	Water Injection
LA	Low Excess Air
LN	Low NOx Burner
NH3	Ammonia Injection
NC	No change in historic operation of unit anticipated
ND	Not determined at this time
OV	Overfire Air
RP	Repower Unit
SC	Slagging
SN	Selective Noncatalytic Reduction
SR	Selective Catalytic Reduction
STM	Steam Injection
UE	Decrease utilization - rely on energy conservation and/or improved
	efficiency
NA	Not Applicable
OT	Other (specify in SCHEDULE 7. COMMENTS)

#### SCHEDULE 6, PART C. BOILER INFORMATION – DESIGN PARAMETERS (DATA NOT REQUIRED FOR PLANTS LESS THAN 100 MW)

- 1. Complete for each existing or planned boiler as reported on SCHEDULE 6, PART A, line 1. If a procurement contract has been signed for an upgrade or retrofit of a boiler: 1) complete a separate page for the existing boiler; 2) explain In SCHEDULE 7. COMMENTS how long the existing equipment will be out of service; and 3) using the same boiler identification, complete a separate SCHEDULE 6, PART C for the planned upgrade or retrofit.
- 2. For line 2, enter boiler status. Select from the following codes.

Code	Boiler 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 (expected to go into commercial service within 10 years)
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)
TS	Operating under test conditions (not in commercial service)

- 3. For line 3, **Boiler Actual or Projected In-service Date**, and line 4, **Boiler Actual or Projected Retirement Date**, the month-year date should be entered as follows: August 1959 as 08-1959. If the month is unknown, use the month of June.
- 4. For line 5, **Boiler Manufacturer**, select one code from the following boiler manufacturers' codes:

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Code	Boiler Manufacturer
AI	Aalborg Industries
AL	Alstrom
AS	American Shack
AT	Applied Thermal Systems
BR	BROS
BW	Babcock and Wilcox
DJ	De Jong Coen by
CE	Combustion Engineering
CN	Coen
DL	Deltak
DS	Doosan
EC	Econotherm
ER	Erie City Iron Works
ET	Entek
FW	Foster Wheeler
GE	General Electric
GT	Gotaverken
HT	Hitachi
ID	Indeck
IH	In House Design
IHI	Ishikawajima-Harima Heavy Industries
IS	Innovative Steam Technology
KL	Keeler Dorr Oliver
KP	Kvaerner Pulping
KW	Kawasaki Heavy Industries
ME	Mitchell Engineering
NB	Nebraska Boiler
NM	NEM
NT	Nooter/Erickson
PB	Peabody
PR	Pyro Power
RS	Riley Stoker
ST	Sterling
TM	Tampell
TS	Toshiba
VO	Vogt Machine Company/Vogt Power
WE	Westinghouse
WG	Wiegl Engineering
WI	Wickes
ZN	
OT	Other (specify in SCHEDULE 7. COMMENTS)

5. For line 6, **Type of Firing Used with Primary Fuels**, select from the following firing codes (separate multiple entries (up to three) with commas):

Firing	Firing Type Description
Code	
AF	Arch Firing
CB	Cell Burner
CF	Concentric Firing
CY	Cyclone Firing
DB	Duct Burner
FB	Fluidized Bed Firing
FF	Front Firing

OF	Opposed Firing
RF	Rear Firing
SF	Side Firing
SS	Spreader Stoker
TF	Tangential Firing
VF	Vertical Firing
OT	Other (specify in SCHEDULE 7. COMMENTS)

- 6. For lines 8 through 11, enter firing rate data for primary fuels as entered in line 13. Do not enter firing rate for startup or flame stabilization fuels. For waste-heat boilers with auxiliary firing, enter the firing rate for auxiliary firing and complete line 12 for waste heat.
- 7. For line 12, a waste-heat boiler is a boiler that receives all or a substantial portion of its energy input from the noncombustible exhaust gases of a separate fuel-burning process.
- 8. For line 13, **Primary Fuels Used**, see table of energy source (fuel) codes. Show design firing rates for each fuel in the associated lines 8, 9, 10, and 11. Do not include startup fuels. Predominance is based on Btu.
- 9. For line 16, **Total Air Flow**, report at standard temperature and pressure, i.e., 68 degrees Fahrenheit and one atmosphere pressure.
- 10. For line 17, Wet or Dry Bottom, enter "W" for Wet or "D" for Dry. Wet Bottom is defined as slag tanks that are installed at furnace throat to contain and remove molten ash from the furnace. Dry Bottom is defined as having no slag tanks at furnace throat area; throat area is clear; bottom ash drops through throat to bottom ash water hoppers. This design is used where the ash melting temperature is greater than the temperature on the furnace wall, allowing for relatively dry furnace wall conditions.

#### SCHEDULE 6, PART D. BOILER INFORMATION – NITROGEN OXIDE EMISSION CONTROLS

- 1. Complete a separate page for each existing or planned boiler.
- 2. For line 2, Nitrogen Oxide Control Status, select from the following status codes:

Code	Control 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)
OZ	Operated during the ozone season (May through September)
PL	Planned (expected to go into commercial service within 10 years)
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)
TS	Operating under test conditions (not in commercial service)

3. For line 3, **Low Nitrogen Oxide Control Process**, select from the following low nitrogen oxide control processes (separate multiple entries (up to three) with commas):

Code	Control Process
AA	Advanced Overfire Air
BF	Biased Firing (alternative burners)
CF	Fluidized Bed Combustor
FR	Flue Gas Recirculation
FU	Fuel Reburning
H2O	Water Injection
LA	Low Excess Air
LN	Low NOx Burner

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NA	Not Applicable
NH3	Ammonia Injection
OV	Overfire Air
SC	Slagging
SN	Selective Noncatalytic Reduction
SR	Selective Catalytic Reduction
STM	Steam Injection
NC	No change in historic operation of unit anticipated
RP	Repower Unit
UE	Decrease utilization - rely on energy conservation and/or improved
	efficiency
OT	Other (specify in SCHEDULE 7. COMMENTS)

4. For line 4, **Manufacturer of Low Nitrogen Oxide Control Burners**, select from the following low nitrogen oxide control burner manufacturers:

Code	Manufacturer
AB	Advanced Burner Technologies
ABB	ABB
AC	Advanced Combustion Technology
AL	Alstom
AP	AirPol
AT	Applied Thermal Systems
AU	Applied Utility Systems (AUS)
AZ	Alzeta
BC	Babcock Borsig Power
BM	Bloom
BMD	Burns & McDonnell
BW	Babcock and Wilcox
CE	Combustion Engineering
CM	Combustion Components Associates Inc
CN	Coen
CSI	Combustion Solutions Inc
СТ	Callidus Technologies
DB	Deutsche-Babcock
DD	Damper Design Inc
DQ	Duquesne Light Company & Energy Systems Associates
DV	Davis
DX	Deltex
EA	Eagle Air
EG	Energy and Environmental Research Corp (EER)
EL	Electric Power Technologies
EP	EPRI
ET	Entek
ETE	Entropy Technology and Environmental Construction Corp (ETEC)
FB	Faber
FN	Forney
FT	Fuel Tech Inc
FW	Foster Wheeler
GE	General Electric
GR	GE Energy and Environmental Research Corp (GEEER)
HL	Holman
HT	Hitachi
IC	International Combustion Limited
ID	Indeck

IH	In House Design
JZ	John Zink Todd Combustion/Todd Combustion
KL	Keeler Dorr Oliver
MB	Mitsui-Babcock
MI	Mitsubishi Industries
MT	Mobotec
NA	Not Applicable
NB	Nebraska Boiler
NC	Natcom, Inc
NE	NEI
NL	Noell, Inc
PA	Procedair
PB	Peabody
PS	Peerless Manufacturing Company
PL	Pillard
PX	Phoenix Combustion
RD	Rodenhuis and Verloop
RI	Riley
RJ	RJM
RR	Rolls Royce
RS	Riley Stoker/Riley Power
RV	RV Industries
SC	Southern Company
SW	Siemans-Westinghouse
TC	Todd Combustion
TEC	Thermal Equipment Corporation
ТМ	Tampella
TS	Toshiba
WG	Weigel Engineering
ZC	Zeeco
OT	Other (specify in SCHEDULE 7. COMMENTS)

# SCHEDULE 6, PART E. BOILER INFORMATION - MERCURY EMISSION CONTROLS

1. For line 2, if "Yes" is checked on line 1, select up to three mercury emissions controls codes from the following list:

Code	Mercury Emission Control
ACI	Activated Carbon Injection System
BS	Baghouse, shake and deflate
BP	Baghouse, pulse
BR	Baghouse, reverse air
DS	Dry Scrubber
EC	Electrostatic precipitator, cold side, with flue gas conditioning
EH	Electrostatic precipitator, hot side, with flue gas conditioning
EK	Electrostatic precipitator, cold side, without flue gas conditioning
EW	Electrostatic precipitator, hot side, without flue gas conditioning
FGD	Flue Gas Desulfurization
LIJ	Lime Injection
WS	Wet Scrubber
OT	Other (specify in SCHEDULE 7. COMMENTS)

SCHEDULE 6, PART F. COOLING SYSTEM INFORMATION – DESIGN PARAMETERS (DATA NOT REQUIRED FOR PLANTS LESS THAN 100 MW)

- If a procurement contract has been signed for an upgrade or retrofit of a cooling system: 1) complete a separate page for the existing cooling system; 2) specify in SCHEDULE 7. COMMENTS how long the existing equipment will be out of service; and 3) using the same cooling system identification, complete a separate SCHEDULE 6, PART F. COOLING SYSTEM INFORMATION - DESIGN PARAMETERS for the planned upgrade or retrofit.
- 2. For line 2, **Cooling System Status**, select from the following equipment status codes:

Code	System 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 (expected to go into commercial service within 10 years)
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)
TS	Operating under test conditions (not in commercial service)

3. For line 4a, **Type of Cooling System**, select from the following cooling system codes (separate multiple entries (up to four) with commas):

Code	Cooling System Description
DC	Dry (air) cooling system
HRC	Hybrid: recirculating cooling pond(s) or canal(s) with dry cooling
HRF	Hybrid: recirculating with forced draft cooling tower(s) with dry cooling
HRI	Hybrid: recirculating with induced draft cooling tower(s) with dry cooling
OC	Once through with cooling pond(s) or canal(s)
OF	Once through, fresh water
OS	Once through, saline water
RC	Recirculating with cooling pond(s) or canal(s)
RF	Recirculating with forced draft cooling tower(s)
RI	Recirculating with induced draft cooling tower(s)
RN	Recirculating with natural draft cooling tower(s)
ОТ	Other (specify in SCHEDULE 7. COMMENTS)

- 4. For line 4b, in the case of a hybrid cooling system, indicate the percent of total cooling load that is served by any dry cooling components.
- 5. For line 5a, **Source of Cooling Water**, provide name of river, lake, etc. For line 5b, select the **Type of Cooling Water Source** from the following codes:

Code	Type of Water Source
SW	Surface Water (ex: river, canal, bay)
GW	Ground Water (ex: aquifer, well)
PD	Plant Discharge Water (ex: wastewater treatment plant discharge)
ОТ	Other (specify in SCHEDULE 7. COMMENTS)

6. For line 5c, **Type of Cooling Water**, select the **Type of Cooling Water** from the following codes:

Code	Type of Water
BR	Brackish water
FR	Fresh water
TW	Treated wastewater effluent
SA	Saline water
ОТ	Other (specify in SCHEDULE 7. COMMENTS)

- 7. For line 6, **Design Cooling Water Flow Rate at 100 percent Load at Intake**, if more than one source of cooling water is used by a cooling system, enter other sources in a footnote in SCHEDULE 7. COMMENTS. If water is purchased, report "municipal." If water is taken from wells, report "wells." If source of water is "municipal" or "wells," do not complete lines 19, 20, 21, and 22 and provide the total amount of water used at 100 percent load in line 6.
- 8. For lines 8, 9, and 10, a cooling pond is a natural or man-made body of water that is used for dissipating waste heat from power plants.
- 9. For line 12, **Type of Towers**, select from the following cooling tower codes (separate multiple entries (up to two) with commas):

Code	Type of Towers
MD	Mechanical draft, dry process
MW	Mechanical draft, wet process
ND	Natural draft, dry process
NW	Natural draft, wet process
WD	Combination wet and dry processes
OT	Other (specify in SCHEDULE 7. COMMENTS)

- 10. For lines 15, 16, 17, and 18, enter the actual installed cost for the existing system or the anticipated cost to bring a planned system into commercial operation. Installed cost should include the cost of all major modifications. A major modification is any physical change which results in a change in the amount of air or water pollutants or which results in a different pollutant being emitted.
- 11. For line 15, **Total System**, the cost should include amounts for items such as pumps, piping, canals, ducts, intake and outlet structures, dams and dikes, reservoirs, cooling towers, and appurtenant equipment. The cost of condensers should not be included.
- 12. For lines 19 through 22, if the cooling system is a zero discharge type (RC, RF, RI, RN), do not complete column (b). The intake and the outlet are the points where the cooling system meets the source of cooling water found on line 5. For all longitude and latitude coordinates, provide degrees, minutes, and seconds.
- 13. For line 23, Enter Datum for the above Latitude and Longitude, if Known; Otherwise Enter "UNK": The longitude and latitude measurement for a location depends in part on the coordinate system (or "datum") the measurement is keyed to. "Datum systems" used in the United States include the North American Datum 1927 (NAD27), North American Datum 1983 (NAD83) and World Geodetic Survey 1984 (WGS84).

# SCHEDULE 6, PART G. FLUE GAS PARTICULATE COLLECTOR INFORMATION

1. For line 3, Flue Gas Particulate Collector Status, select from the following equipment status codes:

Code	Status
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 (expected to go into commercial service within 10 years)
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
TS	Operating under test conditions (not in commercial service).

2. For line 4, **Type of Flue Gas Particulate Collector**, select from the following flue gas particulate collector codes (for combination units, separate multiple entries (up to three) with commas):

Code	Description
BS	Baghouse, shake and deflate
BP	Baghouse, pulse
BR	Baghouse, reverse air
EC	Electrostatic precipitator, cold side, with flue gas conditioning
EH	Electrostatic precipitator, hot side, with flue gas conditioning
EK	Electrostatic precipitator, cold side, without flue gas conditioning
EW	Electrostatic precipitator, hot side, without flue gas conditioning
MC	Multiple Cyclone
SC	Single Cyclone
WS	Wet Scrubber
OT	Other (specify in SCHEDULE 7. COMMENTS).

- 3. For line 5, **Installed Cost of Flue Gas Particulate Collector Excluding Land**, enter the actual installed cost for the existing system or the anticipated cost to bring a planned system into commercial operation. Installed cost should include the cost of all major modifications. A major modification is any physical change which results in a change in the amount of air or water pollutants or which results in a different pollutant being emitted.
- 4. For lines 6, 7, 8 and 9 enter value for fuel. Enter range of values, if applicable.

# SCHEDULE 6, PART H. FLUE GAS DESULFURIZATION UNIT INFORMATION – DESIGN PARAMETERS

 If a procurement contract has been signed for an upgrade or retrofit of a Flue Gas Desulfurization Unit: 1) complete a separate page for the existing unit; 2) specify in SCHEDULE 7. COMMENTS, how long the existing equipment will be out of service; and 3) using the same FGD identification, complete a separate SCHEDULE 6, PART H. FLUE GAS DESULFURIZATION UNIT - DESIGN PARAMETERS for the planned upgrade or retrofit. 2. For line 2, Flue Gas Desulfurization Unit Status, select from the following equipment status codes:

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 (expected to go into commercial service within 10 years)
RE	Retired (no longer in service and not expected to be returned to service)
SB	Standby (or inactive reserve, i.e., not normally used by available for service)
SC	Cold Standby (Reserve); deactivated. Usually requires 3 to 6 months to activate
TS	Operating under test conditions (not in commercial service)

- 3. If the code selected is "OP" complete lines 4 through 14, otherwise do not complete these lines.
- 4. For line 4, **Type of Flue Gas Desulfurization Unit**, select from the following FGD unit codes (for combination units, separate multiple entries (up to four) with commas):

Code	Type of Unit
BR	Jet Bubbling Reactor
CD	Circulating Dry Scrubber
DP	Dry Powder Injection type
MA	Mechanically aided type
PA	Packed type
SD	Spray dryer type
SP	Spray type
TR	Tray type
VE	Venture type
OT	Other (specify in SCHEDULE 7. COMMENTS)

5. For line 5, **Type of Sorbent**, select from the following sorbent codes (separate multiple entries (up to four) with commas):

Code	Type of Sorbent
AF	Alkaline fly ash
CC	Calcium carbide slurry
CEF	CE filtrate
CSH	Caustic Sodium hydroxide
DB	Dibasic acid
DL	Dolomitic limestone
LA	Lime and alkaline fly ash
LF	Limestone and alkaline fly ash
LI	Lime
LS	Limestone
MO	Magnesium oxide
SA	Soda ash
SB	Sodium bicarbonate
SC	Sodium carbonate
SF	Sodium formate
SL	Soda liquid
SS	Sodium sulfite
TW	Treated wastewater
WT	Water
OT	Other (specify in SCHEDULE 7. COMMENTS)

For line 7, **Flue Gas Desulfurization Unit Manufacturer**, select one code from the following flue gas desulfurization unit manufacturer codes:

Code Manufacturer						
AA	Advanced Air Technologies					
ABB	ABB Environmental Systems					
AL	Alstom					
AM	American Air Filter					
AP	Airpol					
API	Air Pollution Industries					
AX	Amerex Industries					
BE	Bact Engineering					
BI	Bleco Industries					
BL	Bechtel Corporation					
BMD	Burns and McDonnell					
BO	Bionomics					
BPC	Belco Pollution Control					
BPE	Babcock Power Environmental Inc (BPEI)					
BT	Belco Technologies					
BW	Babcock and Wilcox					
CA	Chiyoda					
CC	Chemico					
CE	Combustion Engineering					
CO	Combustion Equipment					
DA	Delta Conveying Systems					
DC	Ducon					
DM	Davey McKee					
EE	Environmental Engineering					
EEC	Environmental Elements Corporation					
EI	Entoleter Inc					
FL	Flakt, Inc					
FM	FMC					
FW	Foster Wheeler					
GE	General Electric					
GF	Grafwolff					
HA	Hamon					
IH	In House Design					
JO	Joy Manufacturing					
KC	Korea Cottrell					
KE	M.W. Kellogg					
KR	Krebs Equipment					
LLB	Lurgi Lentjes Bischoff					
MC	Macrotek					
MG	McGill Air Clean					
MI	Mitsubishi Industry					
MT	Mobotec					
MX	Marselex					
NPA	Neptune Airpol					
NSP	NSP					
PA	Procedair					
PB	Peabody					
PR	Pyro Power					
PU	Pure Air					
RC	Research Cottrell					

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RS	Riley Stoker			
SHU	Saarberg-Holter Umwelttechnick GmbH			
SK	Schenck Weigh Feeders			
TC	Turbosonic			
TH	Thyssen/CEA			
TK	Turbotak			
TP	Tempala Power			
UE	Utility Engineering			
UM	United McGill			
UO	Universal Oil Products			
WAP	Wheelabrator Air Pollution Control			
ZN	Zurn			
OT	Other (specify in SCHEDULE 7. COMMENTS)			

- 6. For line 15, **Removal Efficiency for Sulfur Dioxide**, report the removal efficiency as the percent by weight of gases removed from the flue gas.
- 7. For lines 20, 21, 22, and 23, enter the actual installed costs for the existing systems or the anticipated costs to bring a planned system into commercial operation. Installed cost should include the cost of all major modifications. A major modification is any physical change which results in a change in the amount of air or water pollutants or which results in a different pollutant being emitted. The total (line 23) will be the sum of lines 20, 21, and 22 which includes any other costs pertaining to the installation of the unit.

#### SCHEDULE 6, PART I. STACK AND FLUE INFORMATION – DESIGN PARAMETERS (DATA NOT REQUIRED FOR PLANTS LESS THAN 100 MW)

- 1. If a procurement contract has been signed for an upgrade or retrofit of a stack or flue: 1) complete a page for the existing stack or flue; 2) specify in SCHEDULE 7. COMMENTS, how long the existing structure will be out of service; and 3) using the same flue and stack identifications, complete a separate SCHEDULE 6, PART I for the planned upgrade or retrofit.
- 2. For line 1, **Flue ID**, and line 2, **Stack ID**, there must be an entry. If there is only one flue, also use the stack ID as the flue ID. Identification codes must be the same as reported on SCHEDULE 6, PART A. PLANT CONFIGURATION.
- 3. For line 3, **Stack (or Flue) Actual or Projected In-Service Date of Commercial Operation**, the month-year should be entered as follows: e.g., August 1959 as 08-1959.
- 4. For line 4, **Status of Stack**, select one from the following equipment status codes:

   Status
   Code

Status	Code			
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 10			
	years)			
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			
TS	Operating under test conditions (not in commercial service).			

5. For lines 7 and 8, the rate should be approximately equal to the cross-sectional area multiplied by the velocity, multiplied by 60.

- 6. For lines 13 and 14, seasonal average flue gas exit temperatures should be reported in degrees Fahrenheit, based on the arithmetic mean of measurements during operating hours. Summer season includes June, July, and August. Winter season includes January, February, and December.
- 7. For line 15, **Source**, enter "M" for measured or "E" for estimated.
- 8. For lines 16 and 17, **Stack Location**, enter the latitude and longitude in degrees, minutes, and seconds.
- 9. For line 18, Enter Datum for Latitude and Longitude, if Known; Otherwise Enter "UNK": The longitude and latitude measurement for a location depends in part on the coordinate system (or "datum") the measurement is keyed to. "Datum systems" used in the United States, include the North American Datum 1927 (NAD27), North American Datum 1983 (NAD83) and World Geodetic Survey 1984 (WGS84). If you do not know the datum system used, enter UNK.

#### **SCHEDULE 7. COMMENTS**

This schedule provides additional space for comments. Please identify schedule and line number and identifying information (e.g., plant code, boiler id, generator id) for each comment and use additional pages, if necessary.

# Table 1. Energy Source Codes and Heat Content

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Fuel Type	Energy	Unit	Higher Heating Value Range			
	Source	Label	MMBtu	MMBtu	<ul> <li>Energy Source Description</li> </ul>	
	Code		Lower	Upper		
	Fossil Fuels					
F	ANT	tons	22	28	Anthracite Coal	
	BIT	tons	20	29	Bituminous Coal	
	LIG	tons	10	14.5	Lignite Coal	
~ ·	SUB	tons	15	20	Subbituminous Coal	
Coal	WC	tons	6.5	16	Waste/Other Coal (including anthracite culm, bituminous gob fine coal, lignite waste, waste coal)	
	RC	tons	20	29	Refined Coal	
	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	
Petroleum Products	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)	
	BFG	Mcf	0.07	0.12	Blast Furnace Gas	
	NG	Mcf	0.8	1.1	Natural Gas	
Natural Gas and Other	OG	Mcf	0.32	3.3	Other Gas (specify in SCHEDULE 7. COMMENTS)	
Gases	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	
		•	Renewable	e Fuels		
	AB	tons	7	18	Agricultural By-Products	
	MSW	tons	9	12	Municipal Solid Waste	
Solid Renewable Fuels	OBS	tons	8	25	Other Biomass Solids (specify in SCHEDULE 7. COMMENTS)	
	WDS	tons	7	18	Wood/Wood Waste Solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids)	

 Table 1. Energy Source Codes and Heat Content (continued)

Fuel Type	Energy Source	Unit Label	Higher Heating Value Range	Energy Source Description
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# ANNUAL ELECTRIC GENERATOR REPORT INSTRUCTIONS

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	Code		MMBtu Lower	MMBtu Upper	
			Renewabl	e Fuels	
	OBL	barrels	3.5	4	Other Biomass Liquids (specify in SCHEDULE 7. COMMENTS
Liquid	SLW	tons	10	16	Sludge Waste
Renewable	BLQ	tons	10	14	Black Liquor
(Biomass) Fuels	WDL	barrels	8	14	Wood Waste Liquids excluding Black Liquor (including red liquor, sludge wood, spent sulfite liquor, and other wood- based liquids)
-	LFG	Mcf	0.3	0.6	Landfill gas
Gaseous Renewable (Biomass) Fuels	OBG	Mcf	0.36	1.6	Other Biomass Gas (including digestor gas, methane, and other biomass gases; specify in SCHEDULE 7. COMMENTS)
	SUN	N/A	0	0	Solar
	WND	N/A	0	0	Wind
	GEO	N/A	0	0	Geothermal
All Other	WV	N/A	0	0	Water used in Wave Buoy Hydrokinetic Technology
Renewable Fuels	CUR	N/A	0	0	Water used in Current Hydrokinetic Technology
	TID	N/A	0	0	Water used in Tidal Hydrokine Technology
	WAT	N/A	0	0	Water at a <b>Conventional</b> Hydroelectric Turbine
			All Other	Fuels	
	WAT	MWh	0	0	Electric power (MWh) consum by <b>Pumped Storage</b> <b>Hydroelectric</b> plants for pumping energy, <b>Compressee</b> <b>Air Energy Storage</b> for air compression, and energy storage into <b>Battery Energy Storage</b>
	NUC	N/A	0	0	Nuclear including Uranium, Plutonium, Thorium
All Other	PUR	N/A	0	0	Purchased Steam
Energy Sources	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 SCHEDULE 7. COMMENTS

 Table 2. Commonly Used North American Industry Classification System (NAICS)

 Codes

U.S. Department of Energy U.S. Energy Information Administration Form EIA-860 (2011)	ANNUAL ELECTRIC GENERATOR REPORT INSTRUCTIONS	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013
		Burden: 9.4 hours
Code	Description	
	AGRICULTURE, FORESTRY, AND FISHI	NG
111	Agriculture production - crops	
112	Agriculture production, livestock and anima	l specialties
113	Forestry	
114	Fishing, hunting, and trapping	
115	Agricultural services	
	MINING	
211	Oil and gas extraction	
2121	Coal mining	
2122	Metal mining	
2123	Mining and quarrying of nonmetallic minera	ls except fuels
23	CONSTRUCTION	
	MANUFACTURING	
311	Food and kindred products	
3122	Tobacco products	
314	Textile and mill products	
315	Apparel and other finished products made f	rom fabrics and similar materials
316	Leather and leather products	
321	Lumber and wood products, except furnitur	e
322	Paper and allied products (other than 3221)	22 or 32213)
322122	Paper mills, except building paper	,
	Paperboard mills	
	Printing and publishing	
324	Petroleum refining and related industries (o	ther than 32411)
32411	Petroleum refining	,
325	Chemicals and allied products (other than 3	325188, 325211, 32512, or 325311)
32512	Industrial organic chemicals	
325188	Industrial inorganic chemicals	
325211	Plastic materials and resins	
325311	Nitrogenous fertilizers	
326	Rubber and miscellaneous plastic products	
327	Stone, clay, glass, and concrete products (	
32731	Cement, hydraulic	
331	Primary metal industries (other than 33111	1 or 331312)
331111	Blast furnaces and steel mills	
331312	Primary aluminum	
332	Fabricated metal products, except machine	ry and transportation equipment
333	Industrial and commercial equipment and c equipment	omponents except computer
3345	Measuring, analyzing, and controlling instruoptical goods, watches and clocks	ments, photographic, medical, and
335	Electronic and other electrical equipment and equipment	nd components except computer
336	Transportation equipment	
337	Furniture and fixtures	
339	Miscellaneous manufacturing industries	

U.S. Department of Energy U.S. Energy Information Administration Form EIA-860 (2011)	ANNUAL ELECTRIC GENERATOR REPORT INSTRUCTIONS	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours				
	RANSPORTATION AND PUBLIC UTILIT	IES				
	ailroad transportation					
	ocal and suburban transit and interurban h					
	lotor freight transportation and warehousir	ng				
	lectric, gas, and sanitary services					
	atural gas transmission					
	/ater supply					
22131 Ir	rigation systems					
22132 S	ewerage systems					
481 T	ransportation by air					
482 R	ailroad Transportation					
483 V	/ater transportation					
	lotor freight transportation and warehousir	DQ				
485 L	ocal and suburban transit and interurban h	highway passenger transport				
	ipelines, except natural gas	5 71 5 1				
	ransportation services					
	Communications					
	efuse systems					
	HOLESALE TRADE					
	ETAIL TRADE					
	INANCE, INSURANCE, AND REAL EST	ATE SERVICES				
	lotion pictures					
	usiness services					
	liscellaneous services					
	egal services					
	ngineering, accounting, research, manage	ment and related services				
	ducation services					
	ealth services					
	ocial services					
	luseums, art galleries, and botanical and z	roological gardens				
	musement and recreation services	sological garacris				
	otels					
	liscellaneous repair services					
	utomotive repair, services, and parking					
	ersonal services					
	lembership organizations					
	rivate Households					
92 <b>P</b>						

U.S. Department of U.S. Energy Informa Form EIA-860 (2011	ation Administration	ANNUAL ELECTRIC GENERATOR REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours						
GLOSSARY		The glossary for this form is available online at the following URL: http://www.eia.gov/glossary/index.html							
SANCTIONS	The timely submission of Form EIA-860 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.								
REPORTING BURDEN	response for respond respondents with envi existing data sources, collection of information response. Send common information, including Administration, Statist Building, Washington, Office of Management	reporting burden for this collection of information is estimated to average 6.75 hours per se for respondents without environmental information and 12.5 hours per response for lents with environmental information, including the time for reviewing instructions, searching data sources, gathering and maintaining the data needed, and completing and reviewing the on of information. The weighted average burden for the Form EIA-860 is 9.4 hours per se. Send comments regarding this burden estimate or any other aspect of this collection of tion, including suggestions for reducing this burden, to the U.S. Energy Information stration, Statistics and Methods Group, EI-70, 1000 Independence Avenue S.W., Forrestal Washington, DC 20585-0670; and to the Office of Information and Regulatory Affairs, f Management and Budget, Washington, D.C. 20503. A person is not required to respond to ection of information unless the form displays a valid OMB number.							
PROVISIONS REGARDING CONFIDENTIALITY OF INFORMATION	Information reported on Form EIA-860 will be treated as non-sensitive and may be publicly released in identifiable form except as noted below. The information reported for the data element "Tested Heat Rate" contained on SCHEDULE 3, PART B. GENERATOR INFORMATION – EXISTING GENERATORS will be treated as sensitive								
	Information Act (FOIA)	ected to the extent that it satisfies the criteria for exemption under the Freedom of on Act (FOIA), 5 U.S.C. §552, the Department of Energy regulations, 10 C.F.R. §1004.11, ting the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.							
	Federal agencies when made available, upon Committee of Congres by law to receive such response to an order	al Energy Administration Act requires the EIA to provide company-specific data to other encies when requested for official use. The information reported on this form may also be lable, upon request, to another component of the Department of Energy (DOE); to any e of Congress, the Government Accountability Office, or other Federal agencies authorized receive such information. A court of competent jurisdiction may obtain this information in to an order. The information may be used for any nonstatistical purposes such as tive, regulatory, law enforcement, or adjudicatory purposes.							
Disclosure limitation procedures are applied to the sensitive statistical data publi SCHEDULE 3 PART B. GENERATOR INFORMATION – EXISTING GENERATORS, To Rate, on Form EIA-860 to ensure that the risk of disclosure of identifiable information is ve									

U.S. Department of Energy U.S. Energy Information Administration Form EIA-860 (2011)	ANNUAL ELECTRIC GENERATOR REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours							
<b>NOTICE:</b> This report is <b>mandatory</b> under the Federal Energy Administration Act of 1974 (Public Law 93-275). Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For further information concerning sanctions and disclosure information, see the provisions stated on the last page of the instructions. <b>Title 18 USC 1001</b> 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:									
Title:									
Phone (include extension):									
Email:									
	ervisor of Contact Person for Surve								
First Name:									
Title:									
Phone (include extension):									
Email:									
	Report For								
Operator Name:									
Operator ID:									
Reporting as of December 31 of year:									
-	Operator and Preparer Information								
Legal Name of Operator:									
Current Address of Principal Business Office	e of Plant Operator:								
Preparer's Legal Name (If Different From Op	perator's Legal Name):								
Current Address of Preparer's Office (If Diffe	erent From Current Address of Principa	Il Business Office of Entity):							
Is the Operator an Electric Utility?	[] Yes [] N	0							
For questions or additional information about	t the Form EIA-860, contact the survey	/ staff:							
Patricia Hutchins Telephone Number: (202) 586- Fax Number: (202) 287-196 Email: <u>Patricia.Hutchins@eia.</u>	i0 Fax	Vlad Dorjets one Number: (202) 586-3141 (Number: (202) 287-1960 ail: <u>Vlad.Dorjets@eia.gov</u>							

#### ANNUAL ELECTRIC **GENERATOR REPORT**

Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013

					Burden: 9.4 h	ours	
Operato	r Name:						
Operato	r ID:	_	Rep	orting as of Dec	cember 31 of Yea	ar:	
			SCHEDULE 2. POWER	PLANT DATA			
(EXIST	ING POWER PL	ANTS AND THO	SE PLANNED FOR INIT	IAL COMMER	CIAL OPERATIC	ON WITHIN 10	YEARS)
LINE		1	PLA	NT 1			
1	Plant Name		EIA F Code				
2	Street Address						
3	County Name		City I	lame			
4	State						
5	Zip Code						
6	Latitude (Degr Seconds)	ees, Minutes,		gitude (Degrees onds)	s, Minutes,		
7	Enter Datum fo	or Latitude and L	ongitude, if Known; Ot.	herwise Enter	"UNK"		
8a	NERC Region						
8b	Does this Plan	t Belong to a RT	O or ISO?			[]Yes	[ ] No
8c	Name of RTO or ISO       [] California ISO       [] Electric Reliability         [] Southwest Power Pool       [] Midwest ISO         [] PJM Interconnection       [] New York ISO         [] ISO New England       [] Other						exas
9	Name of Water	r Source (For Pu	rpose of Cooling or Hy	Iroelectric)			
10	Steam Plant St	tatus	[] existing [	] planned	[ ] retired	[]	NA
11	Steam Plant Ty		ombustible 100 MW or n ombustible 10 MW or Gr A	-		-	te capacity
12	Primary Purpo Code)	ose of the Plant (	North American Industr	y Classificatio	n System		
13	Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma.						[ ]No
14	Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.						[ ]No
15	Facility (QF) E		nergy Regulatory Com e Generator status? If ` a comma.			[]Yes	[ ] No
16a	Owner of Tran	smission and/or	<b>Distribution Facilities</b>				
16b	Grid Voltage (i	n kilovolts)					

#### ANNUAL ELECTRIC **GENERATOR REPORT**

Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013

	• •				burden: 9.4 n	ours	
Operator	r Name:						
Operator	r ID:	-	Rep	orting as of Dece	ember 31 of Yea	ar:	
		S	CHEDULE 2. POWER	PLANT DATA			
(EXIST	ING POWER PI	LANTS AND THOS	E PLANNED FOR INIT	AL COMMERC	IAL OPERATIC	ON WITHIN 1	) YEARS)
LINE			PLA	IT 2			
1	Plant Name		EIA P Code	ant			
2	Street Address						
3	County Name		City N	ame			
4	State	•					
5	Zip Code						
6	Latitude (Degr Seconds)	ees, Minutes,	Long Seco	itude (Degrees, nds)	, Minutes,		
7	Enter Datum fo	or Latitude and Lo	ngitude, if Known; Oth	erwise Enter "	UNK"		
8a	NERC Region						
8b	Does this Plan	t Belong to a RTO	or ISO?			[]Yes	[ ] No
8c	Name of RTO or ISO       [] California ISO       [] Electric Reliability Council o         [] Southwest Power Pool       [] Midwest ISO         [] PJM Interconnection       [] New York ISO         [] ISO New England       [] Other						
9	Name of Water	r Source (For Purp	ose of Cooling or Hyd	roelectric)			
10	Steam Plant St	tatus [	] existing [	] planned	[ ] retired	[]	NA
11	Steam Plant Ty		nbustible 100 MW or m nbustible 10 MW or Gr	-		-	te capacity
12	Primary Purpo Code)	ose of the Plant (No	orth American Industry	Classification	System		
13	Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma.						[ ] No
14	Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.						[ ] No
15	Facility (QF) E		ergy Regulatory Comr Generator status? If Y comma.			[]Yes	[ ] No
16a	Owner of Tran	smission and/or D	Distribution Facilities				
16b	Grid Voltage (i	in kilovolts)					

Grid Voltage (in kilovolts)

16b

#### ANNUAL ELECTRIC **GENERATOR REPORT**

Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours

Operator Nam	ne
Operator ID:_	

Operator	<sup>.</sup> Name:										
Operator	· ID:	_		Repo	rting as	of Decem	ber 3	31 of Yea	ar:		
(EXIST	ING POWER PI	LANTS AND TH	SCHEDULE 2. PO OSE PLANNED FO					ERATIO		l 10 YE	ARS)
LINE				PLAN	Г 3						
1	Plant Name			EIA Pla Code	int						
2	Street Address										
3	County Name			City Na	ime						
4	State										
5	Zip Code										
6	Latitude (Degr Seconds)	ees, Minutes,		Longit Secon		egrees, M	linut	es,			
7	Enter Datum fo	or Latitude and	Longitude, if Know	wn; Othe	erwise E	Enter "UN	IK"				
8a	NERC Region										
8b	Does this Plan	it Belong to a F	TO or ISO?						[]Yes	]	] No
8c	Name of RTO or ISO       [] California ISO       [] Electric Reliability Council of Texas         [] Southwest Power Pool       [] Midwest ISO         [] PJM Interconnection       [] New York ISO         [] ISO New England       [] Other							S			
9	Name of Water	r Source (For F	urpose of Cooling	or Hydr	oelectri	c)					
10	Steam Plant St	tatus	[ ] existing	[]	planne	d	[	] retired	]	] NA	
11	Steam Plant T		Combustible 100 M Combustible 10 MW IA		-		-	-	-	olate ca	apacity
12	Primary Purpo Code)	ose of the Plant	(North American I	ndustry	Classifi	ication Sy	yster	n			
13	Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying         Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s).         Separate by using a comma.							[ ] No			
14	Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying         Facility (QF) Small Power Producer status? If Yes, provide all QF docket         number(s). Separate by using a comma.							[ ] No			
15	Facility (QF) E		Energy Regulatory ale Generator statu g a comma.						[]Yes		[ ] No
16a	Owner of Tran	smission and/	or Distribution Faci	ilities					1		

Operator Name:	U.S. En	partment of Energy ergy Information Ac IA-860 (2011)	Iministration	ANNUAL ELECTRIC OMB No. 1905 GENERATOR REPORT Approval Expi Burden: 9.4 h			-0129 res: 12/31/2	013			
SCHEDULE 2. POWER PLANT DATA           (EXISTING POWER PLANTS AND THOSE PLANNED FOR INITIAL COMMERCIAL OPERATION WITHIN 10 YEARS)           LINE         PLANT 4           1         Plant Name         EIA Plant           2         Street Address											
(EXISTING POWER PLANTS AND THOSE PLANNED FOR INITIAL COMMERCIAL OPERATION WITHIN 10 YEARS)         LINE       PLANT 4         1       Plant Name       EIA Plant         2       Address	Operato	r ID:					ember 31 of Yea	ar:			
1       Plant Name       EIA Plant Code         2       Street Address	(EXIST										
1       Plant Name       Code         2       Address	LINE				PLANT 4						
2       Address         3       County Name       City Name         4       State         5       Zip Code         6       Latitude (Degrees, Minutes, Seconds)         7       Enter Datum for Latitude and Longitude, if Known; Otherwise Enter "UNK"         8a       NERC Region         8b       Does this Plant Belong to a RTO or ISO?       []Yes         [] Southwest Power Pool       []Hectric Reliability Council of Texas         [] Southwest Power Pool       [] New York ISO         [] ISO New England       [] Other         9       Name of Water Source (For Purpose of Cooling or Hydroelectric)         10       Steam Plant Status       [] existing         [] Combustible 100 MW or more generator nameplate capacity       [] NA         11       Steam Plant Type       [] Combustible 100 MW or more generator nameplate capacity         [] Na       [] Combustible 100 MW or more generator nameplate capacity         [] Na       [] Combustible 100 MW or Greater to Under 100 MW generator nameplate capacity         11       Steam Plant Type       [] Combustible 100 MW or Greater to Under 100 MW generator nameplate capacity         13       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma. </td <td>1</td> <td>Plant Name</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	1	Plant Name									
4       State         5       Zip Code         6       Latitude (Degrees, Minutes, Seconds)         7       Enter Datum for Latitude and Longitude, if Known; Otherwise Enter "UNK"         8a       NERC Region         8b       Does this Plant Belong to a RTO or ISO?       []Yes         8       Name of RTO or ISO       [] Electric Reliability Council of Texas         8c       Name of RTO or ISO       [] Southwest Power Pool       [] Midwest ISO         9       Name of Water Source (For Purpose of Cooling or Hydroelectric)       [] No         10       Steam Plant Status       [] Pomulterconnection       [] planned       [] retired       [] NA         11       Steam Plant Type       [] Combustible 100 MW or more generator nameplate capacity       [] Onbustible 10 MW or Greater to Under 100 MW generator nameplate capacity         12       Primary Purpose of the Plant (North American Industry Classification System Code)       [] Yes       [] No         13       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes	2										
5       Zip Code         6       Latitude (Degrees, Minutes, Seconds)         7       Enter Datum for Latitude and Longitude, if Known; Otherwise Enter "UNK"         8a       NERC Region         8b       Does this Plant Belong to a RTO or ISO?       [] Yes [] No         8c       Name of RTO or ISO       [] California ISO       [] Electric Reliability Council of Texas         8c       Name of RTO or ISO       [] Southwest Power Pool       [] New York ISO         9       Name of Water Source (For Purpose of Cooling or Hydroelectric)       1         10       Steam Plant Status       [] existing       [] planned       [] retired       [] NA         11       Steam Plant Type       [] Combustible 100 MW or Greater to Under 100 MW generator nameplate capacity       [] Iombustible 100 MW or Greater to Under 100 MW generator nameplate capacity         11       Steam Plant Type       [] Combustible 100 MW or Greater to Under 100 MW generator nameplate capacity         13       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes [] No         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes [] No         15       <	3	County Name			City Name						
6       Latitude (Degrees, Minutes, Seconds)       Longitude (Degrees, Minutes, Seconds)         7       Enter Datum for Latitude and Longitude, if Known; Otherwise Enter "UNK"         8a       NERC Region       Image: Comparison of the second s	4	State									
0       Seconds)       Seconds)         7       Enter Datum for Latitude and Longitude, if Known; Otherwise Enter "UNK"         8a       NERC Region       []Yes []No         8b       Does this Plant Belong to a RTO or ISO?       []Yes []No         8c       Name of RTO or ISO       []California ISO       []Electric Reliability Council of Texas         8c       Name of RTO or ISO       []Southwest Power Pool       []How York ISO         9       Name of Water Source (For Purpose of Cooling or Hydroelectric)       []No         10       Steam Plant Status       []existing       []planned         11       Steam Plant Type       []Combustible 100 MW or Greater to Under 100 MW generator nameplate capacity         11       Steam Plant Type       []Combustible 100 MW or Greater to Under 100 MW generator nameplate capacity         12       Primary Purpose of the Plant (North American Industry Classification System Code)         13       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma.         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       []Yes []No         15       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Fa	5	Zip Code									
8a       NERC Region       []Yes       ]No         8b       Does this Plant Belong to a RTO or ISO?       []Yes       ]No         8c       Name of RTO or ISO       []California ISO       []Electric Reliability Council of Texas         9       Name of Water Source (For Purpose of Cooling or Hydroelectric)       []No         10       Steam Plant Status       []existing       []planned       []retired       []NA         11       Steam Plant Type       []combustible 100 MW or more generator nameplate capacity       []combustible 100 MW or Greater to Under 100 MW generator nameplate capacity         12       Primary Purpose of the Plant (North American Industry Classification System Code)       []Yes       []No         13       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma.       []Yes       []No         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       []Yes       []No         15       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket number(s). Separate by using a comma.       []Yes       []No         16a       Owner of Transmission and/or Distribution Facilities <td>6</td> <td></td> <td>Minutes,</td> <td></td> <td></td> <td>Degrees</td> <td>s, Minutes,</td> <td></td> <td></td>	6		Minutes,			Degrees	s, Minutes,				
8b       Does this Plant Belong to a RTO or ISO?       []Yes       []No         8c       Name of RTO or ISO       []California ISO       []Electric Reliability Council of Texas         8c       Name of RTO or ISO       []Southwest Power Pool       []Midwest ISO         9       Name of Water Source (For Purpose of Cooling or Hydroelectric)       []No         10       Steam Plant Status       []existing       []planned         11       Steam Plant Type       []Combustible 100 MW or more generator nameplate capacity         11       Steam Plant Type       []Combustible 10 MW or Greater to Under 100 MW generator nameplate capacity         12       Primary Purpose of the Plant (North American Industry Classification System Code)       []Yes         13       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma.       []Yes       []No         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       []Yes       []No         15       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       []Yes       []No         15       Does this plant have Fed	7	Enter Datum for La	atitude and Lor	ngitude, if Know	n; Otherwise	e Enter '	'UNK"				
8c       Name of RTO or ISO       [] California ISO       [] Electric Reliability Council of Texas         8c       Name of RTO or ISO       [] Southwest Power Pool       [] Midwest ISO         [] PJM Interconnection       [] New York ISO       [] New York ISO         9       Name of Water Source (For Purpose of Cooling or Hydroelectric)       [] Other         10       Steam Plant Status       [] existing       [] planned       [] retired       [] NA         11       Steam Plant Type       [] Combustible 100 MW or more generator nameplate capacity       [] Combustible 10 MW or Greater to Under 100 MW generator nameplate capacity         12       Primary Purpose of the Plant (North American Industry Classification System Code)       [] Yes       [] NA         13       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         15       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         15       Does this plan	8a	NERC Region									
8c       Name of RTO or ISO       [ ] Southwest Power Pool       [ ] Midwest ISO         9       Name of Water Source (For Purpose of Cooling or Hydroelectric)       [] Other         9       Name of Water Source (For Purpose of Cooling or Hydroelectric)       [] NA         10       Steam Plant Status       [] existing       [] planned       [] retired       [] NA         11       Steam Plant Type       [] Combustible 100 MW or more generator nameplate capacity       [] Combustible 10 MW or Greater to Under 100 MW generator nameplate capacity         12       Primary Purpose of the Plant (North American Industry Classification System Code)       [] Yes       [] NA         13       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         15       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         15       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket n	8b	Does this Plant Be	long to a RTO	or ISO?				[]Yes	[ ] No		
10       Steam Plant Status       [] existing       [] planned       [] retired       [] NA         11       Steam Plant Type       [] Combustible 100 MW or more generator nameplate capacity       [] Combustible 10 MW or Greater to Under 100 MW generator nameplate capacity         12       Primary Purpose of the Plant (North American Industry Classification System Code)	8c	Name of RTO or ISO       [] California ISO       [] Electric Reliability         [] Southwest Power Pool       [] Midwest ISO         [] PJM Interconnection       [] New York ISO						Council of	Texas		
11       Steam Plant Type       [] ] Combustible 100 MW or more generator nameplate capacity         11       Steam Plant Type       [] ] Combustible 100 MW or more generator nameplate capacity         12       Primary Purpose of the Plant (North American Industry Classification System Code)         13       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] ] Yes       [] ] No         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] ] Yes       [] ] No         15       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] ] Yes       [] ] No         15       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] ] Yes       [] ] No         16a       Owner of Transmission and/or Distribution Facilities       [] Yes       [] No	9	Name of Water So	urce (For Purp	ose of Cooling o	or Hydroelec	tric)					
11       Steam Plant Type       [] Combustible 10 MW or Greater to Under 100 MW generator nameplate capacity         12       Primary Purpose of the Plant (North American Industry Classification System Code)         12       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma.         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         15       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         15       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         16a       Owner of Transmission and/or Distribution Facilities       [] Yes       [] No	10	Steam Plant Status	s [	] existing	[] plan	ned	[ ] retired	[]	NA		
12       Code)         13       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         15       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         16a       Owner of Transmission and/or Distribution Facilities       [] Yes       [] No	11	Steam Plant Type	[]Com		-			-	ate capacity		
13       Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma.       []Yes       []No         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket       []Yes       []No         14       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket       []Yes       []No         15       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket       []Yes       []No         16a       Owner of Transmission and/or Distribution Facilities       []Yes       []No	12		of the Plant (No	orth American In	dustry Class	sification	n System				
14       Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.       []Yes       []No         15       Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket number(s). Separate by using a comma.       []Yes       []No         16a       Owner of Transmission and/or Distribution Facilities       []Yes       []No	13	Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s).							[ ]No		
15       Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket number(s). Separate by using a comma.       [] Yes       [] No         16a       Owner of Transmission and/or Distribution Facilities	14	Facility (QF) Small Power Producer status? If Yes, provide all QF docket							[ ]No		
	15	Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket						[]Yes	[ ] No		
16b Grid Voltage (in kilovolts)	16a	Owner of Transmi	ssion and/or D	istribution Facil	ities						
	16b	Grid Voltage (in ki	lovolts)								

U.S. Ene	partment of Ener ergy Information A-860 (2011)		stration	-	ANNUAL ELECTRIC OMB No. 1905 GENERATOR REPORT Approval Expin Burden: 9.4 https://www.commonstance.com/commonstance.com/commonstance.com/commonstance.com/commonstance.com/com/com/com/com/com/com/com/com/com/			-0129 res: 12/31/2	013	
•	Operator Name:									
Operator	· ID:					-	ecember 31 of Yea	ar:		
(EXIST	SCHEDULE 2. POWER PLANT DATA (EXISTING POWER PLANTS AND THOSE PLANNED FOR INITIAL COMMERCIAL OPERATION WITHIN 10 YEARS)									
LINE					PLANT 5					
1	Plant Name				EIA Plant Code					
2	Street Address									
3	County Name				City Name	•				
4	State									
5	Zip Code									
6	Latitude (Degre Seconds)	es, Minu	ıtes,		Longitud Seconds		es, Minutes,			
7	Enter Datum fo	r Latitud	le and Lor	ngitude, if Knov	vn; Otherw	ise Ente	r "UNK"			
8a	NERC Region									
8b	Does this Plant	Belong	to a RTO	or ISO?				[]Yes	[ ] No	
8c	Name of RTO or ISO       [] California ISO       [] Electric Reliability         [] Southwest Power Pool       [] Midwest ISO         [] PJM Interconnection       [] New York ISO         [] ISO New England       [] Other						Council of	Texas		
9	Name of Water	Source	(For Purp	ose of Cooling	or Hydroel	ectric)				
10	Steam Plant Sta	atus	[	] existing	[ ] pla	anned	[ ] retired	[]	] NA	
11	Steam Plant Ty	pe				-	or nameplate capa er 100 MW genera	-	ate capacity	
	Primary Purpos Code)	se of the	Plant (No	orth American Ir	ndustry Cla	assificati	on System			
13	Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying         Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s).         Separate by using a comma.							[ ]No		
14	Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.							[ ]No		
15	Does this plant Facility (QF) Ex number(s). Se	empt Wl	holesale C	Generator statu		•	,	[]Yes	[ ]No	
16a	Owner of Trans	mission	and/or D	istribution Faci	lities					
16b	Grid Voltage (ir	n kilovolt	ts)							

U.S. Department of Energy U.S. Energy Information Administration Form EIA-860 (2011)			-	AL ELECTR	Form Approve OMB No. 1905 Approval Expi Burden: 9.4 h	05-0129 xpires: 12/31/2013					
•	Name:										
Operator	· ID:				•	-	ecember 31 of Yea	ar:			
(EXIST	SCHEDULE 2. POWER PLANT DATA (EXISTING POWER PLANTS AND THOSE PLANNED FOR INITIAL COMMERCIAL OPERATION WITHIN 10 YEARS)										
LINE	PLANT 6										
1	Plant Name				EIA Plant Code						
2	Street Address										
3	County Name				City Name	•					
4	State										
5	Zip Code										
6	Latitude (Degrees, Minutes, Seconds)Longitude (Degrees, Minutes, Seconds)										
7	Enter Datum fo	r Latitud	le and Lor	ngitude, if Knov	vn; Otherw	ise Ente	r "UNK"				
8a	NERC Region										
8b	Does this Plant		[]Yes	[ ] No							
8c	Name of RTO or ISO       [] California ISO       [] Electric Reliability         [] Southwest Power Pool       [] Midwest ISO         [] PJM Interconnection       [] New York ISO         [] ISO New England       [] Other							Council of	Texas		
9	Name of Water	Source	(For Purp	ose of Cooling	or Hydroel	ectric)					
10	Steam Plant Sta	atus	[	] existing	[ ] pla	anned	[ ] retired	[]	] NA		
11	Steam Plant Ty	pe				-	or nameplate capa er 100 MW genera	-	ate capacity		
	Primary Purpos Code)	se of the	Plant (No	orth American Ir	ndustry Cla	assificati	on System				
13	Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s).								[ ]No		
14	Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.								[ ]No		
15	Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket number(s). Separate by using a comma.								[ ]No		
16a	Owner of Trans	mission	and/or D	istribution Faci	lities						
16b	Grid Voltage (ir	n kilovolt	ts)								

#### ANNUAL ELECTRIC GENERATOR REPORT

Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours

Operator Name:\_\_\_\_

Operator ID:\_\_

Reporting as of December 31 of Year:\_\_\_

# SCHEDULE 3. GENERATOR INFORMATION (EXISTING GENERATORS AND THOSE PLANNED FOR INITIAL COMMERCIAL OPERATION WITHIN 10 YEARS) SCHEDULE 3, PART A. GENERATOR INFORMATION – GENERATORS

# (COMPLETE ONE COLUMN FOR EACH GENERATOR, BY PLANT)

1	Plant Name							
2	EIA Plant Code							
		Genera	itor (a)	Genera	ator (b)	Generator (c)		
3	Operator's Generator Identification							
4	Associated Boiler Identifications	1 2 3 4	5 6 7 8	1 2 3 4	5 6 7 8	1 2 3 4	5 6 7 8	
5	Prime Mover							
6	Unit Code (Multi-Generator Code)							
7	Ownership							
8	Is This Generator an Electric Utility Generator?	[ ]Yes	[ ] No	[ ] Yes	[ ]No	[ ] Yes	[ ] No	
9	Date of Sale If Sold (MM-YYYY)							
10	Can This Generator Deliver Power to the Transmission Grid?	[ ]Yes	[ ] No	[ ] Yes	[ ] No	[ ] Yes	[ ] No	
11	For Combined-Cycle Steam Turbines (i.e. Prime Mover = CA, CS or CC) Does this Generator Have Duct-Burners?	[]Yes	[ ] No	[]Yes	[ ] No	[]Yes	[ ] No	

U.S. Department of Energy U.S. Energy Information Administration Form EIA-860 (2011) ANNUAL ELECTRIC GENERATOR REPORT Burden: 9.4 hours						/2013								
Oper	ator Name:					Operator ID:								
Plant	t Name:		Plant Code:											
Repo	orting as of December 31 of Yea	ır:												
	SCHEDULE 3, PART B. GENERATOR INFORMATION – EXISTING GENERATORS (COMPLETE ONE COLUMN FOR EACH GENERATOR, BY PLANT)													
	(COMPLE	TE ON				1				T)				
	1		Genera	ator (a)			Genera	ator (b)		Generator (c)				
1	Generator Nameplate Capacity (Megawatts)													
2	Not Consoity (Magawatta)	Summ	er:			Summ	er:			Summ	ner:			
2	Net Capacity (Megawatts)	Winter	r:			Winter	r:			Winte	r:			
3a	Maximum Expected Reactive Power Output (MVAR)													
3b	Maximum Reactive Power Absorption (MVAR)													
4	Status Code													
5	If Status Code is Standby, Can the Generator be Synchronized to the Grid?	[	] Yes	[]	No	[	] Yes	[]	No	Ι	] Yes	[]	] No	
6	Initial Date of Operation (MM-YYYY)													
7	Retirement Date (MM-YYYY)													
8a	Is This Generator Associated with a Combined Heat and Power System?	[	] Yes	[]	No	[	] Yes	[	] No	[	] Yes	[]	] No	
8b	If Yes, Is This Generator Part of a Topping or Bottoming Cycle?		[]To []Bot	•••	)		[]To []Bot	•••	g	[ ] Topping [ ] Bottoming				
	ENERGY SOURCES													
9a	Predominant Energy Source													
9b	If coal-fired or petroleum coke fired, check all combustion technologies that apply to the associated boiler(s) and steam conditions	<ul> <li>Pulverized coal</li> <li>Fluidized Bed</li> <li>Sub-critical</li> <li>Super-critical</li> <li>Ultra super-critical</li> <li>Carbon-capture</li> </ul>				[] [] [] [] [] []	Pulveri Fluidize Sub-cri Super-c Jltra su Carbon	ed Bed tical critical uper-cr	itical	<ul> <li>Pulverized coal</li> <li>Fluidized Bed</li> <li>Sub-critical</li> <li>Super-critical</li> <li>Ultra super-critical</li> <li>Carbon-capture</li> </ul>				
10	Start-Up and Flame Stabilization Energy Sources	а	b	С	d	а	b	с	d	а	b	с	d	
11	Second Most Predominant Energy Source													
12	Other Energy Sources	а	b	С	d	a	b	с	d	a	b	с	d	

U.S. E Form	Department of Energy Energy Information Administrat EIA-860 (2011)	ANNUAL ELECTRIC GENERATOR OMB No. 1905-0129 REPORT Approval Expires: 12/31/2013 Burden: 9.4 hours					/2013				
Oper	ator Name:										
Plant	Name:					Plar	nt Code:				
Repo	orting as of December 31 of Year:										
	RATORS T)										
			Genera	ator (	(a)	Generat	or (b)	Generator (c)			
13	Is This Generator Part of a Solid Fuel Gasification System?	[	] Yes	[	] No	[]Yes	[ ] No	[]Yes	[ ] No		
14	Number of Turbines, Buoys, or Inverters										
15a	Tested Heat Rate										
15b	Fuel Used For Heat Rate Test										
16	Annual Average Operating Efficiency for Solar Photovoltaic, Wind and Hydroelectric Generators										
	PROPOSED CHANGES TO EX	ISTIN	G GEN	ERA	TORS (W	ITHIN THE NEX	T 10 YEARS	)			
17a	Are There Any Planned Modifications to This Generator, Including Retirement?	[	] Yes	[]	] No	[]Yes	[ ] No	[]Yes	[ ] No		
	Planned Uprates:										
	1. Incremental Net Summer capacity (MW)										
17b	2. Incremental Net Winter capacity (MW)										
	3. Planned Effective Date (MM-YYYY)										
	Planned Uprates:										
	1. Incremental Net Summer capacity (MW)										
17c	2. Incremental Net Winter capacity (MW)										
	3. Planned Effective Date (MM-YYYY)										
	Planned Repowering:										
	1. New Prime Mover										
17d	2. New Energy Source										
17u	3. New Nameplate Capacity										
	4. Planned Effective Date (MM-YYYY)										
47.	Other Modifications? (explain in Notes)	[	] Yes	[]	] No	[]Yes	[ ] No	[ ] Yes	[ ] No		
17e	Planned Effective Date (MM- YYYY)										

U.S. F	Department of Energy Energy Information Administra EIA-860 (2011)	ation A	NNUAL E	ELECTRIC REPOI	C GENER. RT	ERATOR Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours						
Oper	ator Name:				Operator ID:							
	Name:			Plant Code:								
Repo	Reporting as of December 31 of Year:											
	SCHEDULE 3, PART B. GENERATOR INFORMATION – EXISTING GENERATORS (COMPLETE ONE COLUMN FOR EACH GENERATOR, BY PLANT)											
	-	G	enerator	(a)	Generator (b)			Generator (c)				
17f	Planned Generator Retirement Date (MM-YYYY)											
	FUEL SWITCHING AND CO-F	IRING CA	APABILIT	Y	1			1				
18	Can This Generator be	[]	Yes [	] No	[]]	Yes [	] No	[]Yes []No				
10	Powered by Multiple Fuels?		kip to SC⊦ 3, PART C		If No, Skip to SCHEDULE 3, PART C.			If No, Skip to SCHEDULE 3, PART C.				
19	Can This Unit Co-Fire		Yes [	] No	[]Yes []No			[]Yes []No				
	Fuels?	If No, Skip to Line 23.			If No, Skip to Line 23.			If No, Skip to Line 23.				
		а	b	С	а	b	С	а	b	С		
20	Fuel Options for Co-Firing											
		d	е	f	d	е	f	d	е	f		
21	Can This Generator be Powered by Co-Fired Fuel	[]Yes []No			[]Yes []No			[]Yes []No				
	Oil and Natural Gas?	If Yes,	Skip to L	ine 23.	If Yes,	Skip to L	ine 23.	[ ] Yes [ ] No		ine 23.		
	Can This Generator be Run	[]Yes []No			[]Yes []No			[]Yes []No				
	on 100% Oil?	lf Yes,	Skip to L	ine 23.	If Yes,	Skip to L	ine 23.	lf Yes,	Skip to L	ine 23.		
22	If No, What is the Maximum Oil Heat Input When Co- Firing with Natural Gas?	_	%			%			%			
	What is the Maximum Output Achievable (Net Summer Capacity in MW) When Making the Maximum Use of Oil and Co-Firing Natural Gas?	_		īW	MW			MW				
23	Can This Unit Fuel Switch?	[]	Yes [	] No	[]]	Yes [	] No	[]	Yes [	] No		
23		If No, Skip to Schedule 3, Part C.			If No, Skip to Schedule 3, Part C.			If No, Skip to Schedule 3, Part C.				
	Can This Unit Switch Between Oil and Natural	[]	Yes [	] No	[]Yes []No			[]Yes []No				
24	Gas?	lf No,	Skip to Li	ne 26.	lf No,	Skip to Li	ne 26.	If No, Skip to Line 26.				
	If Yes, Can the Unit Switch Fuels While Operating?	[]	Yes [	] No	[ ]	Yes [	] No	[]	Yes [	] No		

U.S. E	Department of Energy Energy Information Administra EIA-860 (2011)	ation A	NNUAL E	ELECTRIC REPOI	C GENER. RT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours					
Oper	ator Name:					Operate	or ID:				
Plant	Name:					Plant C	ode:				
Repo	Reporting as of December 31 of Year:										
	SCHEDULE 3, PART B. GENERATOR INFORMATION – EXISTING GENERATORS (COMPLETE ONE COLUMN FOR EACH GENERATOR, BY PLANT)										
		Ge	enerator	(a)	Ge	enerator	(b)	G	enerator	(c)	
	What is the Maximum Net Summer Output Achievable (MW) When Running on Natural Gas?		MW			N	IW	MW			
	What is the Maximum Net Summer Output Achievable (MW) When Running on Fuel Oil?		N	IW	MW			MW			
	How Much Time is Required to Switch This Unit From Using 100% Natural Gas to Using 100% Oil?	[] over ]		nours	[] over 2	6 to 24 ho 24 to 72 h 72 hours.	ours Iours	<ul> <li>[] 0 to 6 hours</li> <li>[] over 6 to 24 hours</li> <li>[] over 24 to 72 hours</li> <li>[] over 72 hours.</li> <li>[] Unknown or uncertain</li> </ul>			
	Are There Factors That Limit the Unit's Ability to Switch From Natural Gas to		Yes [			Yes [			Yes [	-	
	Oil?	If No,	Skip to Li	ne 26.	If No, Skip to Line 26.			If No, Skip to Line 26.			
25	If Yes, Check All Factors That Apply		ermit limi (specify ILE 7.	ts		ermit limi ' (specify ILE 7.	ts	If No, Skip to Line 26 [ ] Limited on site fuel storage. [ ] Air Permit limits [ ] Other (specify in SCHEDULE 7. COMMENTS)		ts	
		а	b	С	а	b	С	а	b	С	
26	Fuel Switching Options	d	e	f	d	e	f	d	е	f	

U.S. F	J.S. Department of Energy J.S. Energy Information Administratio Form EIA-860 (2011)								1905-01 Expires	905-0129 Expires: 12/31/2013			
Oper	ator Name:						Ор	erator	ID:				
Plant	Name:						Pla	ant Cod	le:		_		
Repo	orting as of December 31 of Yea	r:											
	SCHEDULE 3, PA										RS		
	(COMPLE					r				T)			
	Generator Nameplate		Genera	ator (a)			Genera	ator (D)			Genera	ator (c)	
1	Capacity (Megawatts)												
		Summ	er:			Summ	er:			Summ	ner:		
2	Net Capacity (Megawatts)	Winter								Winto			
		winter	•			Winter:			Winte	r:			
3a	Maximum Expected Reactive Power Output (MVAR)												
3b	Maximum Reactive Power Absorption (MVAR)												
4	Status Code												
5	Planned Original Effective Date (MM-YYYY)												
6	Planned Current Effective Date (MM-YYYY)												
7	Will This Generator be Associated with a Combined Heat and Power System?	[]	Yes	[]	No	[]	] Yes	[]	] No	[	] Yes	[]	No
8	Will This Generator be Part of a Solid Fuel Gasification System?	[]	Yes	[]	No	[]	] Yes	[	No	[	] Yes	[]	No
9	Is This Generator Part of a Site That Was Previously Reported as Indefinitely Postponed or Cancelled?	[]	Yes	[]	No	[]	] Yes	[]	] No	[	] Yes	[]	No
	PLANNED ENERGY SOURCE	S											
10	Expected Predominant Energy Source												
11	If coal-fired or petroleum coke fired, check all combustion technologies that apply to the associated boiler(s) and steam conditions	[ ] F [ ] S [ ] S [ ] U	luidize ub-crit uper-c ltra su	ical	tical	[ ] F [ ] S [ ] S [ ] U	Pulveriz Fluidize Sub-crif Super-c Jltra su Carbon	ed Bed tical critical per-cr	itical	[ ] [ ] [ ] [ ]	Fluidize Sub-cri Super-c Ultra su	tical	tical
12	Expected Second Most Predominant Energy Source												
13	Other Energy Sources	а	b	С	d	а	b	С	d	a	b	с	d
14	Number of Turbines, Buoys, or Inverters			1	1		1		1		1	1	

U.S. 6	Department of Energy Energy Information Administra EIA-860 (2011)	ation A	NNUAL E	ELECTRIC REPOI		ATOR C	Burden: 9	1905-0129 Expires: 1 ).4 hours	) 12/31/2013	3	
Oper	ator Name:						or ID:				
	Name:					Plant C	ode:				
Repo	orting as of December 31 of Yea								_		
	SCHEDULE 3, PAI (COMPLE								5		
			enerator (		1	enerator (		r -	enerator	(c)	
	FUEL SWITCHING AND CO-F	IRING CA	PABILIT	Y							
15	Will This Generator be Able 15 to be Powered by Multiple		Yes [ Jndeterm	-		Yes [ Jndeterm	-	[ ] Yes [ ] No [ ] Undetermined			
	Fuels?	If No or Undetermined, Skip I to SCHEDULE 4.				Indetermi CHEDUL	ned, Skip E 4.		If No or Undetermined, Skip to SCHEDULE 4.		
16	Will this Unit be Able to Co-	[]]	Yes [	] No	[]	Yes [	] No	[]Yes []No			
	Fire Fuels?		If No, Skip to Line 20.			Skip to Li	ne 20.	If No, Skip to Line 20.			
		а	b	С	а	b	С	а	b	С	
17	Fuel Options for Co-Firing										
		d	е	f	d	е	f	d	е	f	
18	Will This Generator be Able to be Powered by Co-Fired	[]Yes []No			[]	Yes [	] No	[]	Yes [	] No	
	Fuel Oil and Natural Gas?	If No, Skip to Line 20.			If No, Skip to Line 20.			If No, Skip to Line 20.			
	Will This Generator be able	[]Yes []No			[]Yes []No			[]Yes []No			
	to Run on 100% Oil?	If Yes, Skip to Line 20.			If Yes, Skip to Line 20.			If Yes, Skip to Line 20.			
19	If No, What is the Expected Maximum Oil Heat Input When Co-Firing with Natural Gas?	_	c	%	%			%			
	What is the Expected Maximum Output Achievable (Net Summer Capacity in MW) When Making the Maximum Use of Oil and Co-Firing Natural Gas?		MW			MW		MW			
20	Will This Unit be Able to	[]	Yes [	] No	[]	Yes [	] No	[]	Yes [	] No	
20	Fuel Switch?	lf No, Sl	kip to Sch	edule 4.	If No, S	kip to Sch	edule 4.	If No, S	kip to Sch	edule 4.	
	Will This Unit be Able to	[]	Yes [	] No	[]	Yes [	] No	[]	Yes [	] No	
21	Switch Between Oil and Natural Gas?	lf No,	Skip to Liı	ne 23.	lf No,	Skip to Li	ne 23.	lf No,	Skip to Li	ne 23.	

U.S. E	Department of Energy Energy Information Administra EIA-860 (2011)	ation A	n ANNUAL ELECTRIC GENERATOR ON REPORT Ap				OMB No. 1 Approval I	orm Approved MB No. 1905-0129 pproval Expires: 12/31/2013 urden: 9.4 hours			
Oper	ator Name:				Operator ID:						
	Name:				Plant Code:						
	orting as of December 31 of Yea										
•	SCHEDULE 3, PAI		NERATO		ATION -	PROPOS	SED GENI	ERATOR	6		
	(COMPLE		COLUMN	FOR EAC	CH GENE	RATOR, E	BY PLAN	Г)			
		G	enerator	(a)	G	enerator	(b)	G	enerator (	(c)	
	If Yes, Will this Unit be Able to Switch Fuels While Operating?	[]	Yes [	] No	[]	Yes [	] No	[]	Yes [	] No	
	What is the Expected Maximum Net Summer Output Achievable (MW) When Running on Natural Gas?		MW		MW			MW			
	What is the Expected Maximum Net Summer Output Achievable (MW) When Running on Fuel Oil?		N	IW		N	IW		N	IW	
	How Much Time is Expected to be Required to Switch This Unit From Using 100% Natural Gas to Using 100% Oil?	[ ] over ( [ ] over : [ ] over :	6 hours 6 to 24 ho 24 to 72 h 72 hours. own or u	nours	<ul> <li>[] 0 to 6 hours</li> <li>[] over 6 to 24 hours</li> <li>[] over 24 to 72 hours</li> <li>[] over 72 hours.</li> <li>[] Unknown or uncertain</li> </ul>			<ul> <li>[] 0 to 6 hours</li> <li>[] over 6 to 24 hours</li> <li>[] over 24 to 72 hours</li> <li>[] over 72 hours.</li> <li>[] Unknown or uncertain</li> </ul>			
	Are There Factors That Will										
	Limit the Unit's Ability to Switch From Natural Gas to Oil?	[ ] Yes [ ] No If No, Skip to Line 26.			[]Yes []No If No, Skip to Line 26.			[]Yes []No If No, Skip to Line 26.			
22	If Yes, Check All Factors That Apply	storage. [ ] Air Pe [ ] Other SCHEDU	atorage. si ] Air Permit limits [ ] Other (specify in [ SCHEDULE 7. si ] SCHEDULE 7.			<ul> <li>[ ] Limited on site fuel storage.</li> <li>[ ] Air Permit limits</li> <li>[ ] Other (specify in SCHEDULE 7.</li> <li>COMMENTS)</li> </ul>			<ul> <li>[ ] Limited on site fuel storage.</li> <li>[ ] Air Permit limits</li> <li>[ ] Other (specify in SCHEDULE 7.</li> <li>COMMENTS)</li> </ul>		
		а	b	С	а	b	С	а	b	С	
23	Fuel Switching Options	d	е	f	d	е	f	d	е	f	

# U.S. Department of Energy U.S. Energy Information Administration Form EIA-860 (2011)

# ANNUAL ELECTRIC GENERATOR REPORT

Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours

Operator Name:		
Operator ID:	Reporting as of December 31 of Year:	-
SCHEDULE 4. OWNERS	SHIP OF GENERATORS OWNED JOINTLY OR BY OTHERS	
PLANT NAME (a)		
EIA PLANT CODE (b)		
OPERATOR'S GENERATOR IDENTIFICAT	ΓΙΟΝ (c)	
IF JOINTLY OWNER	D – OWNER NAME AND CONTACT INFORMATION (d)	
Owner/Joint Owner 1: Name	% OWNED (e):	
Street Address		
City, State and Zip Code	EIA CODE:	
Joint Owner 2: Name	% OWNED (e):	
Street Address		
City, State and Zip Code	EIA CODE:	
Joint Owner 3: Name	% OWNED (e):	
Street Address	· · · ·	
City, State and Zip Code	EIA CODE:	
Joint Owner 4: Name	% OWNED (e):	
Street Address		
City, State and Zip Code	EIA CODE:	
Joint Owner 5: Name	% OWNED (e):	
Street Address		
City, State and Zip Code	EIA CODE:	
Joint Owner 6: Name	% OWNED (e):	
Street Address		
City, State and Zip Code	EIA CODE:	
Joint Owner 7: Name	% OWNED (e):	
Street Address		
City, State and Zip Code	EIA CODE:	
Joint Owner 8: Name	% OWNED (e):	
Street Address		
City, State and Zip Code	EIA CODE:	
Joint Owner 9: Name	% OWNED (e):	
Street Address		
City, State and Zip Code	EIA CODE:	
Joint Owner 10: Name	% OWNED (e):	
Street Address		
City, State and Zip Code	EIA CODE:	
	Total	100%

## U.S. Department of Energy U.S. Energy Information Administration Form EIA-860 (2011)

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Operator Name:\_\_\_\_

Operator ID:\_

Reporting as of December 31 of Year:\_

	SCHEDULE 5. NEW GENI (COMPLETE FOR EACH GENERATO			(FAR 2010)
LINE				I LAN 2010
1	Plant Name and EIA Plant Code	Name:	Name:	Name:
		Code:	Code:	Code:
2	Generator ID			
3	Date of Actual Generator Interconnection (MM-YYYY)			
4	Date of Initial Interconnection Request (MM-YYYY)			
5	Interconnection Site Location	City:	City:	City:
		State:	State:	State:
6	Grid Voltage At The Point Of Interconnection (kV)			
7	Owner of The Transmission or Distribution Facilities to Which Generator is Interconnected			
8	Total Cost Incurred for the Direct, Physical Interconnection (Thousand \$)			
	Equipment Included in the Direct Interconnection Cost (Check All of the Following that Apply:)			
	a. Transmission or Distribution Line	[]Yes []No	[]Yes []No	[]Yes []No
9	b. Transformer	[]Yes []No	[]Yes []No	[]Yes []No
	c. Protective Devices	[]Yes []No	[]Yes []No	[]Yes []No
	d. Substation or Switching Station	[]Yes []No	[]Yes []No	[]Yes []No
	e. Other Equipment (specify in SCHEDULE 7. COMMENTS)	[]Yes []No	[]Yes []No	[]Yes []No
10	a. Total Cost for Other Grid Enhancements/ Reinforcements Needed to Accommodate Power Deliveries From the Generator (Thousand \$)			
	b. Will This Cost Be Repaid?	[]Yes []No	[]Yes []No	[]Yes []No
11	Were Specific Transmission Use Rights Secured as a Result of the Interconnection Costs Incurred?	[]Yes []No	[]Yes []No	[]Yes []No

U.S. E Form	Department of Energy Energy Information Adr EIA-860 (2011) ator Name:			NUAL ELECTRIC ( REPORT	GENERATOR	OM App Bur	m Approved B No. 1905-0129 proval Expires: 12 den: 9.4 hours ator ID:	/31/2013
-	Name:					-	Code:	
	orting as of December 31					an	Code:	
	SCHEDULE 6. BOILER INFORMATION PART A. PLANT CONFIGURATION (FOR PLANTS EQUAL TO OR GREATER THAN 10 MW BUT LESS THAN 100 MW, COMPLETE ONLY LINES 1, 2, 3, AND IF APPLICABLE LINES 5 AND 6) EQUIPMENT EQUIPMENT EQUIPMENT EQUIPMENT EQUIPMENT							
LINE	EQUIPMENT TYPE			EQUIPMENT IDENTIFICATION (b)	EQUIPMEN IDENTIFICAT (c)		EQUIPMENT IDENTIFICATION (d)	EQUIPMENT IDENTIFICATION (e)
1	Boiler ID							
2	Associated Generator(s) ID							
3	Generator Associations with Boiler as Actual or Theoretical							
4	Associated Cooling System(s) ID							
5	Associated Flue Gas Particulate Collector(s) ID							
6	Associated Flue Gas Desulfurization Unit(s) ID							
7	Associated Flue(s) ID							
8	Associated Stack(s) ID							

U.S. Ener	artment of Energy gy Information Administration -860 (2011)	ANNUAL EL	ECTRIC GE REPORT	NERATOR	Form Approve OMB No. 1909 Approval Exp Burden: 9.4 h	5-0129 ires: 12/31/20	)13	
Operator	Name:	•		(	Operator ID:			
	me:			F	Plant Code:			
	g as of December 31 of Year:							
	SCHEDULE 6, PART B			- AIR EMIS	SION STAND	ARDS		
		REQUIRED FO						
LINE								
1	Boiler ID							
2a	Type Of Boiler Standards Under Which The Boiler Is Operating (use codes)				D[] Da[ Dc[]	] Db[] N[]		
2h	Is Boiler Operating Under a Ne Permit?		iew (NSR)		[ ] Yes			
25	If Yes, list date (MM-YYYY) and of the issued permit			Date		Permit Number		
	CATEGORY	PARTIC MAT (a	FER )		R DIOXIDE (b)	NITROGEI (c	;)	
3	Type of Statute or Regulation (use codes)	FD[] LO[]	ST[] NA[]	FD[] LO[]	ST[] NA[]	FD[] LO[]	ST[] NA[]	
	Emission Standard Specified							
4a	Emission Rate							
4b	Percent Scrubbed	N/	A			N/	Ά	
5	Unit of Measurement Specified (use codes)							
6	Time Period Specified (use codes)							
7	Year Boiler Was or is Expected to Be in Compliance With Federal, State and/or Local Regulation							
8	If Not in Compliance, Strategy for Compliance (use codes)	N/2	A		N/A			
9	9 Select Existing Strategies to meet the Sulfur Dioxide and Nitrogen Oxides <i>N/A</i> Requirements of Title IV of the Clean Air Act Amendment of 1990 (use codes)							
10	Select Planned Strategies to meet the Sulfur Dioxide and Nitrogen Oxides Requirements of Title IV of the Clean Air Act Amendment of 1990 (use codes)	N/A	A					

	we article and the first summer		
U.S. En	partment of Energy ergy Information Administration IA-860 (2011)	ANNUAL ELECTRIC GENERATOR REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours
Operat	or Name:		Operator ID:
Plant N	lame:		Plant Code:
Reporti	ing as of December 31 of Year:		
	(Except for Lines 1 ar	PART C. BOILER INFORMATION – DE nd 2, DATA NOT REQUIRED FOR PLA PLETE A SEPARATE PAGE FOR EAC	NTS LESS THAN 100 MW)
LINE			
1	Boiler ID		
2	Boiler Status (use codes)		
3	Boiler Actual or Projected Date of	f Commercial Operation (MM-YYYY)	
4	Boiler Actual or Projected Retire	ment Date (MM-YYYY)	
5	Boiler Manufacturer (use code)		
6	Type of Firing Used with Primary	Fuels (use codes)	
7	Maximum Continuous Steam Flo per hour)	w at 100 Percent Load (thousand pou	nds
8	Design Firing Rate at Maximum ( 0.1 ton per hour)	Continuous Steam Flow for Coal (near	rest
9	Design Firing Rate at Maximum ( (nearest 0.1 barrels per hour)	Continuous Steam Flow for Petroleum	
10	Design Firing Rate at Maximum ( 0.1 thousand cubic feet per hour)	Continuous Steam Flow for Gas (near )	est
11	Design Firing Rate at Maximum ( (specify fuel and unit in SCHEDU	Continuous Steam Flow for Other LE 7. COMMENTS)	
12	Design Waste Heat Input Rate at (million Btu per hour)	Maximum Continuous Steam Flow	
13	Primary Fuels Used in Order of P	redominance (use codes)	
14	Boiler Efficiency When Burning F (nearest 0.1 percent)	Primary Fuel at 100 Percent Load	
15	Boiler Efficiency When Burning F 0.1 percent)	Primary Fuel at 50 Percent Load (near	est
16	Total Air Flow Including Excess minute at standard conditions)	Air at 100 Percent Load (cubic feet pe	r
17	Wet Or Dry Bottom (for coal-capa for Dry)	able boilers), (enter "W" for Wet or "D	"
18	Fly Ash Re-injection (enter "Y" fo	or Yes or "N" for No)	

U.S. I Form	Department of Energy Energy Information Administration EIA-860 (2011) rator Name:		INUAL ELECTRIC GENER REPORT	0	Approval Expires: 12/31/2013 Burden: 9.4 hours perator ID:	
Plant Name: Reporting as of December 31 of Year:				P	ant Code:	
SCHEDULE 6, PART D. BOILER			NFORMATION – NITROG			
1	Boiler ID					
2	Nitrogen Oxide Control Status (use codes)	•				
	NITROGEN O	XIDE	CONTROL EQUIPMENT	AND OF	PROCESS	
3	Low Nitrogen Oxide Control Proces (use codes)	SS				
4	Manufacturer of Low Nitrogen Oxic Control Burners (use code)	le				
	SCHEDULE 6, PART E. E	BOIL	ER INFORMATION – MER	RCURY	MISSION CONTROLS	
1	Does This Boiler Have Mercury Emission Controls?		Yes [ ]		No [ ]	
2	If "Yes," Select Up To Three Mercu Emission Controls (use codes)	ry				

U.S. Ener	artment of Energy gy Information Administration -860 (2011)	ANNUAL ELECTRIC GENERATOR REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/ Burden: 9.4 hours	31/2013
Operator	Name:	C	Dperator ID:	
Plant Nam	ne:	F	Plant Code:	
Reporting	as of December 31 of Year:			
	(DATA NOT F	COOLING SYSTEM INFORMATION - I REQUIRED FOR PLANTS LESS THAN SEPARATE PAGE FOR EACH COOLI	N 100 MW)	
LINE				
1	Cooling System ID (as reported	I on SCHEDULE 6, PART A, Line 4)		
2	Cooling System Status (use co	des)		
3	Cooling System Actual or Proje (MM-YYYY)	ected In-Service Date of Commercial	Operation	
4a	Type of Cooling System (use co	odes)		
4b	For Hybrid Cooling Systems, In Components.	dicate Percent of Cooling Load Serv	ed by Dry Cooling	
5a	Source (Name) of Cooling Wate water body, specify in SCHEDU	er Including Makeup Water (if discha ILE 7. COMMENTS)	rge is into different	
5b	Type of Cooling Water Source	(use codes)		
5c	Type of Cooling Water (use coo	les)		
6	Design Cooling Water Flow Rat	e at 100 percent Load at Intake (cubi	c feet per second)	
7	Actual or Projected In-Service I Equipment (MM-YYYY)	Date for Chlorine Discharge Control	Structures and	
		COOLING PONDS		
8	Actual or Projected In-Service I 1982)	Date (month and year of commercial	operation, e.g. 12-	
9	Total Surface Area (acres)			
10	Total Volume (acre-feet)			
		COOLING TOWERS		
11	Actual or Projected In-service	Date (MM-YYYY)		
12	Type of Towers (use codes)			
13	Maximum Design Rate of Water	r Flow at 100 Percent Load (cubic fee	et per second)	
14	-	at 100 Percent Load (megawatts)		
		SYSTEM EXCLUDING LAND AND CO	NDENSERS (thousand	dollars)
15	Total System			
16	Ponds (if applicable)			

U.S. Ene	partment of Energy ergy Information Administration A-860 (2011)	ANNUAL ELECTRIC GENERATOR REPORT		Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours		31/2013
17	Towers (if applicable)					
18	Chlorine Discharge Control Str					
	COOLING	WATER INTAKE AND OUTLE	T LOCA	TIONS		
	ITEN		IN	TAKE (a)	(	OUTLET (b)
19	Maximum Distance from Shore	(feet)				
20	Average Distance below Water	Surface (feet)				
21	Latitude (degrees, minutes, sec	conds)				
22	Longitude (degrees, minutes, s	econds)				
23	Enter Datum for Latitude and L Otherwise Enter "UNK"	ongitude, if Known;				

J.S. Ene	artment of Energy rgy Information Administration A-860 (2011)	ANNUAL ELECTRIC GENERATOR REPORT	Approval Expires: 12/31/201 Burden: 9.4 hours	3		
Operato	r Name:	0	Operator ID:			
			Plant Code:			
Reportin	g as of December 31 of Year:					
		B. FLUE GAS PARTICULATE COLLEC E PAGE FOR EACH FLUE GAS PART				
LINE				_		
1	Flue Gas Particulate Collector	ID (as reported on SCHEDULE 6, PAF	RT A line 5)			
2	Flue Gas Particulate Collector Operation (e.g., 12-2001)	Actual or Projected In-Service Date o	of Commercial			
3	Flue Gas Particulate Collector Status (use code)					
4	Type of Flue Gas Particulate Collector (use codes)					
5	Installed Cost of Flue Gas Part	iculate Collector Excluding Land (the	ousand dollars)			
	DESIGN FUEL SPECIFICATIONS	FOR ASH (AS BURNED, TO NEARES	ST 0.1 PERCENT BY WEIGH	T)		
6	For Coal					
7	For Petroleum					
D	ESIGN FUEL SPECIFICATIONS F	OR SULFUR (AS BURNED, TO NEAR	EST 0.1 PERCENT BY WEIG	HT)		
8	For Coal					
9	For Petroleum					
	DESIGN SPECI	FICATIONS AT 100 PERCENT GENER	ATOR LOAD			
10	Collection Efficiency (to neares	st 0.1 percent)				
11	Particulate Emission Rate (pou	nds per hour)				
12	Particulate Collector Gas Exit I	Rate (actual cubic feet per minute)				

Particulate Collector Gas Exit Temperature (degrees Fahrenheit)

U.S. Ener	artment of Energy gy Information Administration -860 (2011)	ANNUAL ELECTRIC GENERATOR REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12 Burden: 9.4 hours	2/31/2013	
Operator	Name:		Operator ID:	-	
			Plant Code:	-	
Reporting	g as of December 31 of Year:				
		UE GAS DESULFURIZATION UNIT			
LINE				/	
1	Flue Gas Desulfurization Unit	ID (as reported on SCHEDULE 6, P.	ART A line 6)		
2	Flue Gas Desulfurization Unit	Status (use codes)			
3	Flue Gas Desulfurization Unit Operation (MM-YYYY)	Actual or Projected In-Service Date	of Commercial		
4	Type of Flue Gas Desulfurizati	ion Unit (use code)			
5	Type of Sorbent (use code)				
6	Salable Byproduct Recovery (	enter "Y" for Yes or "N" for No)			
7	Flue Gas Desulfurization Unit	Manufacturer (use code)			
8	Annual Pond and Land Fill Requirements (nearest acre foot per year)				
9	Is Sludge Pond Lined (enter ")				
10	Can Flue Gas Bypass Flue Gas Desulfurization Unit (enter "Y" for Yes or "N" for No)				
	DESI	GN FUEL SPECIFICATIONS FOR CO	DAL		
11	Ash (to nearest 0.1 percent by	weight)			
12	Sulfur (to nearest 0.1 percent				
	NUMBER OF FLUE GAS DE	SULFURIZATION UNIT SCRUBBER	R TRAINS (OR MODUL	ES)	
13	Total				
14	Operated at 100 Percent Load				
		GAS DESULFURIZATION UNIT AT		ATOR LOAD	
15	Removal Efficiency for Sulfur	Dioxide (to nearest 0.1 percent by v	weight)		
16	Sulfur Dioxide Emission Rate	(pounds per hour)			
17	Flue Gas Exit Rate (actual cub	ic feet per minute)			
18	Flue Gas Exit Temperature (de	egrees Fahrenheit)			
19	•	esulfurization Unit (percent of total)			
INS	FALLED COST OF FLUE GAS D	ESULFURIZATION UNIT, EXCLUDIN	NG LAND (THOUSAND	DOLLARS)	
20	Structures and Equipment				
21	Sludge Transport and Disposa	al System			

U.S. Department of Energy U.S. Energy Information Administration Form EIA-860 (2011)		ANNUAL ELECTRIC GENERATOR REPORT Burden: 9.4 hours		2/31/2013	
22	Other (installed cost of flue ga	Other (installed cost of flue gas desulfurization unit)			
23	Total (sum of lines 20, 21, 22)				

U.S. Ener	artment of Energy gy Information Administration -860 (2011)	ANNUAL ELECTRIC GENERATOR REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours
Operator	Name:	(	Dperator ID:
Plant Nar	ne:	F	Plant Code:
Reporting	as of December 31 of Year:		
	(DATA NOT I	TACK AND FLUE INFORMATION - DI REQUIRED FOR PLANTS LESS THAN SEPARATE PAGE FOR EACH STAC	N 100 MW)
LINE			
1	Flue ID (as reported on SCHED	ULE 6, PART A line 8)	
2	Stack ID (as reported on SCHE	DULE 6, PART A line 7)	
3	Stack (or Flue) Actual or Projec 2001)	cted In-Service Date of Commercial C	Operation (e.g., 12-
4	Status of Stack (or Flue) (use c	ode)	
5	Flue Height at Top from Ground	d Level (feet)	
6	Cross-Sectional Area at Top of	Flue (nearest square foot)	
	DESIG	IN FLUE GAS EXIT (AT TOP OF STA	СК)
7	Rate at 100 Percent Load (actu	al cubic feet per minute)	
8	Rate at 50 Percent Load (actua	I cubic feet per minute)	
9	Temperature at 100 Percent Lo	ad (degrees Fahrenheit)	
10	Temperature at 50 Percent Loa	d (degrees Fahrenheit)	
11	Velocity at 100 Percent Load (f	eet per second)	
12	Velocity at 50 Percent Load (fe	· ·	
	ACTUAL SEASONAL FI	LUE GAS EXIT TEMPERATURE (DEG	REES FAHRENHEIT)
13	Summer Season		
14	Winter Season		
15	Source (enter "M" for measure	•	
		STACK LOCATION	
16	Stack Location - Latitude (degr	ees, minutes, seconds)	
17	Stack Location - Longitude (de	grees, minutes, seconds)	
18	Enter Datum for Latitude and L	ongitude, if Known; Otherwise Enter	"UNK"

## U.S. Department of Energy U.S. Energy Information Administration Form EIA-860 (2011)

## ANNUAL ELECTRIC GENERATOR REPORT

Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.4 hours

Operator Name:\_\_\_\_

Operator ID:\_

Reporting as of December 31 of Year:\_

SCHEDULE 7. COMMENTS (USE ADDITIONAL PAGES IF NECESSARY)					
SCHEDULE NUMBER	PART	LINE NUMBER	COMMENTS (Including all identifying codes such as plant code, generator ID, or boiler ID to which the comment applies)		



#### Subject: United States Department of Energy – EIA Monthly Data Collection, Form EIA-860M

Dear Respondent:

Note: The EIA 860M data collection for this reporting month will take into account both January and February 2010 updates to the 860M form.

#### Entities: [ENITITYNUMBER, ENTITYNAMES]

Facilities: [PLANTNAMES]

This message was sent to notify you that the February 2010 EIA-860M, Monthly Update to the Annual Electric Generator Report, is now available for e-filing. Before you submit your form, please consider the following:

If there is no change in the data shown for a generator, click in the "Check if no change" box; otherwise update (e.g., status code and/or planned current effective date/planned retirement date) the data in all applicable schedules and include any applicable notes in Schedule 4.

If a proposed retirement has occurred, remove the "Planned Modification or Retirement" indicator (Schedule 3, Line 1) by selecting null from the drop down list and enter the actual month and year of retirement in line 19.

If the "Planned Current Effective Date" (Schedule 2, Line 8) or the "Planned Retirement Month/Year" (Schedule 3, Line 19) is January or February 2010 or earlier the "Check if no change" box is not applicable. In this case, updates to status code/indicator and/or effective date(s) are required.

Please contact me if you are encountering difficulties with the form. I can be reached at (202) 586-1029 or <u>EIA-860M@eia.doe.gov</u>. The February 2010 EIA-860M is due February 15, 2010.

The website for accessing the EIA-860M is https://signon.eia.doe.gov/ssoserver/login .

Thank you for your time and cooperation in submitting timely, accurate data to the Energy Information Administration.

Sincerely,

Patricia Hutchins Survey Analyst, Form EIA-860M Electric Power Division Office of Coal, Nuclear, Electric and Alternate Fuels Energy Information Administration

U.S. Department of Ene U.S. Energy Informatio Form EIA-860M (2011)		MONTHLY UPDATE TO THE ANNUAL ELECTRIC GENERATOR REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 0.3 hrs		
PURPOSE	Form EIA-860M co	ollects data on the status of:			
	a) Proposed months,	new generators scheduled to begin commercial operation within the next			
	b) Existing ge	enerators scheduled to retire from serv	vice within the next 12 months,		
	c) Existing g within one	· · ·	ations that are scheduled for completion		
		tor the current status and trends of the	cation <i>Electric Power Monthly.</i> They are electric power industry and to evaluate		
REQUIRED RESPONDENTS	ANNUAL ELECT filing to EIA that th to start commercia retire from service modification sched	<b>RIC GENERATOR REPORT</b> , response by have either one of the following: (* al operation within the next 12 months by within the next 12 months or (3) fulled for completion within one month,			
RESPONSE DUE DATE	Reporting on the EIA-860M must begin when either a new generator is within 12 months of entering commercial operation, an existing generator proposed for retirement is within 12 months of being retired from service, or a proposed modification to an existing generator is within one month of completion.				
			be the status of the generator as of the e 15 <sup>th</sup> day of the month following the data		
METHODS OF FILING RESPONSE		lectronically using EIA's secure Internetity protocols to protect information aga			
		not registered with EIA's Single Sign- to: <u>EIA-860M@eia.gov</u>	On system, send an email requesting		
			th Single Sign-On, log on at <u>https://signon.eia.gov/ssoserver/login</u>		
		having a technical problem with logging into the IDC or using the IDC contact lelp Desk for further information. Contact the Help Desk at:			
		Email: <u>CNEAFhelpcenter@eia.gov</u>			
		Phone: 202-586-9595			
		l an alternate means of filing your resp npleted copy of this form for your files.			
CONTACTS		<i>Questions</i> : For questions related to t formation immediately above.	the Internet Data Collection system, see		
	<i>Data Questions:</i> Manager:	For questions about the data requeste	d on Form EIA-860M, contact the Survey		
	Telephone N FAX Num	tricia Hutchins umber: (202) 586-2402 ber: (202) 287-1960 icia.Hutchins@eia.gov			

#### ITEM-BY-ITEM INSTRUCTIONS

## SCHEDULE 1. IDENTIFICATION

- 1. **Survey Contact:** Verify contact name, title, address, telephone number, fax number, and email address.
- 2. **Supervisor of Contact Person for Survey:** Verify the contact's supervisor's name, title, address, telephone number, fax number and email address.
- 3. **Report For:** Verify the Legal Name of the Entity, Entity Identification Number, address, city, state, zip code and reporting month and year. If incorrect, provide the correct information. Provide changes to Legal Name of the Entity in SCHEDULE 4. COMMENTS. Note that the Entity ID is assigned by EIA and cannot be altered.

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

## SCHEDULE 2. UPDATES TO PROPOSED NEW GENERATORS

**Changes to the generator data:** If there is no change to the preprinted data, check "no change."

- 1. Identification Information (applicable in all Schedules):
  - **Plant Name:** Provide an explanation of name changes in SCHEDULE 4. COMMENTS.
  - Plant Code: If the information is incorrect, contact EIA.
  - **Plant State:** If the State listed is the incorrect location for the plant, provide correct State. Use the two-letter U.S. Postal abbreviation to show the State in which the plant is physically located.

If data are incorrect, provide revisions or updates in columns for updates. If data are missing, provide data.

2. For line 1, verify **Status Code**. Use the status codes from the following table:

Status Code	Status Code Description
IP	Planned new generator canceled, indefinitely postponed, or no
	longer in resource plan
TS	Construction complete, but not yet in commercial operation (including
	low power testing of nuclear units)
Р	Planned for installation but regulatory approvals not initiated; not
	under construction
L	Regulatory approvals pending; not under construction, but site
	preparation could be underway
Т	Regulatory approvals received; not under construction but site
	preparation could be underway
U	Under construction, less than or equal to 50 percent complete (based
	on construction time to date of operation)
V	Under construction, more than 50 percent complete (based on
	construction time to date of operation)
OP	Operating (in commercial operation)
OT	Other (Explain in SCHEDULE 4. COMMENTS)

3. For line 2, verify **Prime Mover Type.** If re-powering is completed, update prime mover type, as appropriate.

- For combined cycle units, enter a prime mover code for each generator.
- Use the prime mover codes from the following table:

#### Prime

# Mover Description

- BA Energy Storage, Battery
- CP Energy Storage, Concentrated Solar Power
- ES Energy Storage, Other (Describe in Schedule 4, COMMENTS)
- FW Energy Storage, Flywheel
- Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle).
- CT Combustion (Coc) Turbing Simple
- GT Combustion (Gas) Turbine Simple Cycle (includes jet engine design)
- IC Internal Combustion Engine (diesel, piston, reciprocating)
- CA Combined Cycle Steam Part
- Combined Cycle Combustion Turbine Part (type of coal or solid must be reported as energy source for integrated coal gasification).
- Combined Cycle Single Shaft (combustion turbine and steam turbine share a single generator)
- Combined Cycle Total Unit (use only for plants/generators that are in planning stage, for which specific generator details cannot be provided).
- HA Hydrokinetic, Axial Flow Turbine
- HB Hydrokinetic, Wave Buoy
- Hydraulic Turbine (includes turbines associated with delivery of water by pipeline)
- HK Hydrokinetic, Other (Describe in SCHEDULE 4, COMMENTS)
- PS Hydraulic Turbine Reversible (pumped storage)
- BT Turbines Used in a Binary Cycle (such as used for geothermal applications)
- PV Photovoltaic
- WT Wind Turbine
- CE Compressed Air Energy Storage
- FC Fuel Cell
- OT Other (Describe in SCHEDULE 4, COMMENTS)
- 4. For line 3, verify **Nameplate Capacity**. If the nameplate capacity is expressed in kilovolt amperes (kVA), convert to kilowatts by multiplying the power factor by the kVA, divide by 1,000 to express in megawatts to the nearest tenth.
- 5. For lines 4 and 5, verify Net Summer Capacity and Net Winter Capacity, respectively.
- 6. For line 6, verify **Energy Source 1**, the energy source that is expected to be used in the largest quantity (Btus) to power the generator. Select appropriate energy source codes from the table of energy source codes in these instructions. For generators driven by turbines using steam that is produced from waste heat or reject heat, report the original energy source used to produce the waste heat (reject heat).
- 7. For line 7, verify **Energy Source 2**, the energy source that is expected to be used in the second largest quantity (Btus) to power the generator. Select appropriate energy source codes from the table of energy source codes in these instructions. For generators driven by turbines using steam that is produced from waste heat or reject heat, report the original energy source used to produce the waste heat (reject heat).

- 8. For line 8, verify the **Planned Current Effective Date** that the generator is scheduled to start commercial operation, or enter the date the generator started commercial operation if reported status is "OP".
- 9. For line 9, enter **Reason for Change** in status or change in scheduled date. Check all of the reasons that apply; if "Other," explain in SCHEDULE 4, COMMENTS.

# SCHEDULE 3. UPDATES TO PROPOSED CHANGES TO EXISTING GENERATORS

1. For line 1, verify **Status Code**. Use the status codes from the following table:

Status Code	Status Code Description
RP	Proposed for life extension or repowering
A	Proposed generator net capacity increase (rerating or relicensing)
D	Proposed generator net capacity decrease (rerating or relicensing)
RT	Existing generator scheduled for retirement
RE	Retired - no longer in service and not expected to be returned to
	service
CN	Proposed change has been cancelled or indefinitely postponed
OP	Proposed change completed, generator available for commercial
	operation
OT	Other modification (Explain in SCHEDULE 4. COMMENTS)

- 2. For line 2, verify Existing Prime Mover, use codes from the table in these instructions.
- 3. For line 3, verify **Nameplate Capacity.** Report the highest value on the nameplate in megawatts rounded to the nearest tenth. If the nameplate capacity is expressed in kilovolt amperes (kVA), convert to kilowatts by multiplying the power factor by the kVA, divide by 1,000 to express in megawatts to the nearest tenth.
- 4. For line 4, verify Existing Net Summer Capacity.
- 5. For line 5, verify the Incremental Net Summer Capacity.
- 6. For line 6, verify **New Net Summer Capacity**, (sum of lines 4 and 5).
- 7. For line 7, verify Existing Net Winter Capacity.
- 8. For line 8, verify the Incremental Net Winter Capacity.
- 9. For line 9, verify New Net Winter Capacity, (sum of lines 7 and 8).
- 10. For line 10, verify **Energy Source 1. (Predominant Energy Source).** Update, as appropriate, based on the completion of any modification resulting in a change in energy source. Enter the appropriate energy source code from the table in these instructions.
- 11. For line 11, verify **Energy Source 2**, (**Second Most Predominant Energy Source**). Update, as appropriate, based on the completion of any modification resulting in a change in energy source. Enter the appropriate energy source code from the table in these instructions.
- 12. For line 12, verify **New Prime Mover**. For existing generators with a status code of "RP", enter the prime mover code that is applicable once the modification is complete if it will be different from the current prime mover. Use the codes for prime mover provided in these instructions.
- 13. For line 13, verify the **Planned Current Effective Date**. Enter the month and year that the modification is expected to be completed or the month and year that the generator is scheduled for retirement, as applicable . If the proposed modification is completed, enter

U.S. Department of Energy U.S. Energy Information Administration Form EIA-860M (2011)		MONTHLY UPDATE TO THE ANNUAL ELECTRIC GENERATOR REPORTForm Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 0.3 hrs		OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 0.3 hrs
		date of completion tus code to "OP".		ted' in SCHEDULE 4. COMMENTS and
	14. For line 14	, enter <b>Reason fo</b>	or Change in the pla	nned current effective <b>date</b> . Check all of IEDULE 4. COMMENTS.
ENERGY SOURCE		Energy Source Code		Description
CODES		Code	Fos	sil Fuels
		BIT	Anthracite Coal and	
		LIG	Lignite Coal	
	Coal and Syncoal	SC	Coal-based Synfue processed by a coa such as briquettes,	I. Coal-based solid fuel that has been al synfuel plant; and coal based fuels pellets, or extrusions, which are formed led coal and binding materials.
		SUB	Subbituminous Coa	al
		WC	gob, fine coal, lignit	Including anthracite culm, bituminous te waste, waste coal.
		DFO	Distillate Fuel Oil. Ir Fuel Oils.	ncluding Diesel, No. 1, No. 2, and No. 4
		JF	Jet Fuel	
		KER	Kerosene	
	Petroleum	PC	Petroleum Coke	
	Products	RFO	Bunker C Fuel Oil.	ncluding No. 5, No. 6 Fuel Oils, and
		WO	Propane, Oil Waste	cluding Crude Oil, Liquid Butane, Liquid e, Re-Refined Motor Oil, Sludge Oil, Tar eum-based liquid wastes.
		BFG	Blast Furnace Gas	
	Natural Gas	NG OG	Natural Gas Other Gas	
	and Other			JLE 4. COMMENTS
	Gases	PG SG	Gaseous Propane	or then each derived
		SGC	Synthetic Gas, deri	er than coal-derived ved from coal
				Energy Sources
		AB	Agricultural Crop By	yproducts/Straw/Energy Crops
	Solid	MSW	Municipal Solid Wa	
	Renewable (Biomass)	OBS	Other Biomass Soli	ids JLE 4. COMMENTS.
	Fuels	WDS	Wood/Wood Waste	Solids. Including paper pellets, railroad ood chips, bark, & wood waste solids
		OBL		uids. Specify in SCHEDULE 4.
	Liquid Renewable	SLW	Sludge Waste	
	(Biomass)	BLQ	Black Liquor	
	Fuels	WDL		ds, excluding Black Liquor. Includes vood, spent sulfite liquor, and other

U.S. Department of Energy U.S. Energy Information Administration Form EIA-860M (2011)		MONTHLY UPDATE TO THE ANNUAL ELECTRIC GENERATOR REPORT		Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 0.3 hrs
	Gaseous	LFG	Landfill Gas	
	Renewable (Biomass) Fuels	OBG		s. Includes digester gas, methane, and es. Specify in SCHEDULE 4.
		SUN	Solar	
	Other Renewable	WND	Wind	
	Energy Sources	GEO	Geothermal	
		WAT	Water at a Conven	tional Hydroelectric Turbine
				Energy Sources
		PUR	Purchased Steam	
	All Other Energy	WH	should only be rep waste heat is unde	
	Sources	TDF	Tire-derived Fuels	
		NUC		Uranium, Plutonium, Thorium
		OTH	Specify in SCHED	ULE 4. COMMENTS.
SANCTIONS	The glossary for this form is available online at the following URL: http://www.eia.gov/glossary/index.html The timely submission of Form EIA-860M 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.			
REPORTING BURDEN	Public reporting burden for this collection of information is estimated to average 0.3 hours per response, including the time of 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 U.S. Energy Information Administration, 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.			
PROVISIONS REGARDING THE CONFIDENTIALITY OF INFORMATION	Information reported on Form EIA-860M will be treated as non-sensitive and may be publicly released in identifiable form. In addition to the use of the information by EIA for statistical purposes, the information may be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.			

U.S. Department of Energy
U.S. Energy Information Administration
Form EIA-860M (2011)

### MONTHLY UPDATE TO THE ANNUAL ELECTRIC GENERATOR REPORT

Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 0.3 hrs

		n Act of 1974 (Public Law 93-275). Failure to		
		as provided by law. For further information		
		I the provision concerning the confidentiality of nse for any person knowingly and willingly		
		ctitious, or fraudulent statements as to any		
matter within its jurisdiction.		-		
SC	HEDULE 1. IDENTIFICAT	ION		
	Survey Contact			
First Name:	Last Name:			
Title:				
Telephone (include extension):		Fax:		
Email:				
<u>Superv</u>	isor of Contact Person for	<u>r Survey</u>		
First Name:	Last Name:	Last Name:		
Title:	_			
Telephone (include extension):		Fax:		
Email:				
	Report For			
Legal Name of Entity:		Entity ID:		
Address:				
	ate:	Zip Code:		
Reporting Month/Year:				
For questions or additional info	ormation about the Form EIA-860	M contact the Survey Managers:		
Patricia Hutchins				
Telephone Number: (202) 586-2				
FAX Number: (202) 287-1960 Email: Patricia.Hutchins@eia.g				

U.S. Department of Energy U.S. Energy Information Administration Form EIA-860M (2011)

#### MONTHLY UPDATE TO THE ANNUAL ELECTRIC **GENERATOR REPORT**

Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 0.3 hrs

1

Legal Name of Entity:\_\_\_\_ Entity ID:\_

## State:\_ Reporting Month/Year:\_

# SCHEDULE 2. UPDATES TO PROPOSED NEW GENERATORS

Identification Information: Plant Name Plant Code

Plant State \_\_\_\_\_

		ue					
		Check if no change			Check if no change		
		Generator <eia< th=""><th>gen ID preprint&gt;</th><th>&gt;</th><th colspan="2">Generator <eia gen="" id="" prepri<="" th=""><th>lt&gt;</th></eia></th></eia<>	gen ID preprint>	>	Generator <eia gen="" id="" prepri<="" th=""><th>lt&gt;</th></eia>		lt>
Line	Data Element	Last Data Reported		's	Last Data Reported		
No.		to EIA	Updates		to EIA	Updates	5
1	Status Code	Pre-printed			Pre-printed		
2	Prime Mover Code	Pre-printed			Pre-printed		
3	Nameplate Capacity (MW)	Pre-printed			Pre-printed		
4	Net Summer Capacity	Pre-printed			Pre-printed		
4	(MW)						
5	Net Winter Capacity (MW)	Pre-printed			Pre-printed		
6	Energy Source 1	Pre-printed			Pre-printed		
7	Energy Source 2	Pre-printed			Pre-printed		

5	Net Winter Capacity (MW)	Pre-printed				Pre-printed		
6	Energy Source 1	Pre-printed				Pre-printed		
7	Energy Source 2	Pre-printed				Pre-printed		
8	Planned Current Effective	Pre-printed				Pre-printed		
0	Date: MM/YYYY							
9	Reason for Change (check all that apply; if	Financial	[]	Equipment	[]	Financial	[]	Equipment
9	"Other" explain in SCHEDULE 4)	Permitting	[]	Other	[]	Permitting	[]	Other

U.S. Department of Energy U.S. Energy Information Administration Form EIA-860M (2011)			MONTHLY UPDATE TO THE ANNUAL ELECTRIC GENERATOR REPORT				R OMB No. 19 Approval Ex	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 0.3 hrs			
Legal I	Legal Name of Entity: Entity ID:										
	Name:					Pla	ant ID:				
State:							eporting Month				
Olale		<b>TEO T</b>									
-	SCHEDULE 3. UPDA				ANGES	10					
			Check if no change				Check if no change				
			erator <eia< th=""><th></th><th></th><th colspan="4">Generator <eia gen="" id="" preprint=""></eia></th></eia<>			Generator <eia gen="" id="" preprint=""></eia>					
Line	Data Element	Last Data		-	This Month's		Last Data		This Month's		
No.				ted to EIA Updates			Reported to EIA		Updates		
1	Status Code	Pre-pri					Pre-printed				
2	Prime Mover (existing)	Pre-pri					Pre-printed				
3	Nameplate Capacity (MW)	Pre-pri				P	Pre-printed				
4	Existing Net Summer Capacity (MW)	Pre-printed				P	Pre-printed				
F	Incremental Net	Pre-printed				P	Pre-printed				
5	Summer Capacity (MW)										
6	New Net Summer Capacity (MW) (lines 4	Pre-printed				P	Pre-printed				
	+5)										
7	Existing Net Winter Capacity (MW)	Pre-pri	nted			P	Pre-printed				
8	Incremental Net Winter Capacity (MW)	Pre-pri	nted			P	Pre-printed				
9	New Net Winter Capacity (MW) (lines 7	Pre-pri	nted			P	Pre-printed				
10	+ 8) Energy Source 1	Dro pri	atad				Pro printed				
10 11	Energy Source 1 Energy Source 2	Pre-printed					Pre-printed Pre-printed				
12	New Prime Mover Code	Pre-printed Pre-printed					Fie-plilled				
12	Planned Current	Pre-pri					Pre-printed				
13	Effective Date: MM/YY				_						
14	Reason for Change (check all that apply; if	Financ	ial []	Equipm	ent [	]   F	Financial	[]	Equipment [ ]		
14	"Other" explain in SCHEDULE 4. COMMENTS)	Permit	ting []	Other	[	] P	Permitting	[]	Other []		

U.S. Department of Energy U.S. Energy Information Administration Form EIA-860M (2011)	MONTHLY UPDATE TO THE ANNUAL ELECTRIC GENERATOR REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 0.3 hrs	
Legal Name of Entity:			
Entity ID:	Reporting Month/Year:		

SCHEDULE 4. COMMENTS					
SCHEDULE NUMBER (a)	LINE NUMBER (b)	NOTES (c)			



#### Subject: United States Department of Energy - EIA Annual Data Collection, Form EIA-861

Dear Respondent:

The Energy Information Administration's (EIA), electronic filing system (e-file) is now ready for you to report your annual electric data for the year 2010. You are required to file **Form EIA-861**, "**Annual Electric Power Industry Report.**" The survey is due no later than April 30, 2011. The EIA electric surveys are a mandatory collection under the authority of the Federal Energy Administration Act of 1974 (P.L. 93-275). Non-respondents and late filers are subject to financial penalties. The EIA encourages you to file your data using our IDC system.

If you are currently registered in the e-file system for secure electronic access with a Single Sign-On (SSO) account, you can login to the e-file system at: <u>https://signon.eia.doe.gov/ssoserver/login</u> and enter your User ID and Password to access your EIA surveys. If you are registered and have forgotten your password, but know the User ID, you can reset your password. Log on to the e-file system at the website listed above. Type your User ID and click on <u>Forgot Your Password</u>. Follow the prompts and you will be allowed to reset your password.

Please pay special attention to the password rules and be sure to record your new password. If you need assistance resetting your password, please call the Help Center at (202) 586-9595 or contact us via email at: <u>cneafhelpcenter@eia.doe.gov</u>.

If you are not registered, please contact the CNEAF Help Center at (202) 586-9595 or via email. Please choose only one method of contact for the CNEAF Help Center, either telephone or email. Please do not do both.

Edits have been built into the e-file system to assist you in providing accurate data. In order to successfully submit your forms, you must run the edits and address the warning messages for all flagged data by either correcting and/or commenting on each of the flagged data elements. Please go to the Error Log and click on the "Run EIA-861 Edits" button. Once you have corrected and/or commented on the appropriate edit flags, you should be able to submit your data by pressing the "Submit" button. If your data are accepted you should receive a message stating that your data have been successfully sent with the current date.

The timely submission of Form EIA-861 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.

Your cooperation is greatly appreciated.

Sincerely,

XXXXXXXXXXX Survey Manager Electric Power Division Office of Coal, Nuclear, Electric and Alternate Fuels Energy Information Administration

U.S. Department of E U.S. Energy Informat Form EIA-861 (2011)		ANNUAL ELECTRIC POWER INDUSTRY REPORT INSTRUCTIONS	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.0 hrs			
PURPOSE	Form EIA-861 collects information on the status of electric power industry participants involved in the generation, transmission, and distribution of electric energy in the United States, its territories, and Puerto Rico. The data from this form are used to accurately maintain the EIA list of electric utilities, to draw samples for other electric power surveys, and to provide input for the following EIA reports: <i>Electric Power Monthly, Monthly Energy Review, Electric Power Annual,</i> <i>Annual Energy Outlook, and Annual Energy Review.</i> The data collected on this form are used to monitor the current status and trends of the electric power industry and to evaluate the future of the industry.					
REQUIRED RESPONDENTS	The Form EIA-861 is to be completed by electric power industry entities including: electric utilities, all DSM Program Managers (entities responsible for conducting or administering a DSM program), wholesale power marketers (registered with the Federal Energy Regulatory Commission), energy service providers (registered with the States), and electric power producers. Responses are collected at the business level (not at the holding company level).					
RESPONSE DUE DATE	Submit the completed Form EIA-861 to the EIA by April 30, following the end of the calendar year.					
METHODS OF FILING RESPONSE	<ul> <li>Submit your data electronically using EIA's secure internet data collection system (e-file). This system uses security protocols to protect information against unauthorized access during transmission.</li> <li>If you have not registered with EIA's Single Sign-On system, send an email requesting assistance to: EIA-861@eia.gov.</li> </ul>					
	<ul> <li>If you have registered with Single Sign-On, log on at <u>https://signon.eia.gov/ssoserver/login</u></li> </ul>					
	<ul> <li>If you are having a technical problem with logging into e-file or using e-file contact Help Desk for further information. Contact the Help Desk at:</li> </ul>					
Email: CNEAFhelpcenter@eia.gov			<u>@eia.gov</u>			
		Phone: 202-586-9595				
	If you need	an alternate means of filing your res	sponse, contact the Help Desk.			
	Please retain a completed copy of this form for your files.					
CONTACTS	Internet System Q immediately above.	uestions: For questions related to	e-file, see the help contact information			
	<b>Data Questions:</b> For questions about the data requested on Form EIA-861, contact the S Manager:					
			Stephen Scott (202) 586-5140 1938			

	Burden: 9.0 hrs
GENERAL INSTRUCTIONS	Submit the completed Form EIA-861 to the EIA by April 30, following the end of the calendar year.
	Respondents, who also submit the Form EIA-826, "Monthly Electric Sales and Revenue Report with State Distributions," should coordinate the information submitted on the Form EIA-861, and Form EIA-826 to ensure consistency.
2.	Complete the information at the top portion of the form with the name, telephone and FAX number, and address, of the current contact person, and the contact person's supervisor.
3.	Report peak demand in megawatts and energy values (e.g., generation and sales) in megawatthours, except where noted. One megawatthour equals 1,000 kilowatthours. To convert kilowatthours to megawatthours, divide by 1,000 and round to the nearest whole number. For example, sales of 5,245,790 kilowatthours should be reported as 5,246 megawatthours.
4.	Report in whole numbers (i.e., no decimal points), except where explicitly instructed to report otherwise. For example: revenue of \$8,459,688.42 should be reported as 8,460 (thousand dollars). There is one decimal place on the revenue on Schedule 3 and 4. Lines 4, 6 and 7 on Schedule 6A and line 3 on schedule 2C also contain one decimal point.
5.	A state code can only be removed by highlighting the state and clicking on the <b>Remove</b> <b>Record</b> icon (Schedule 2C, 2D, 4A-D and 6D). The Remove Record icon is the last one in the icon row at the top (same row as the save and print button).
6.	For number of customers, enter the average of the 12 close-of-month customer accounts.
	• All respondents having end-use customers, including retail power marketers selling power in deregulated, competitive State programs must use the average of the 12 close-of-month customer counts when reporting on Schedule 4, even if your company began business after the beginning of the reporting year, or ended business before the close of the year.
	• Count each meter as a separate customer in cases where commercial franchise or residential customer-buying groups have been aggregated under one buyer representative. The customer counts for public-street and highway lighting should be one customer per community.
	• Please do not count each pole as a separate customer even if billing is by a flat rate per pole per month.
7.	Use a minus sign for reporting negative numbers. Line 9 on schedule 2B must be a negative number. On schedule 2B, line 1 and schedule 3, line 4 and 5, the number may either positive or negative.
8.	Where exact data are unavailable, report estimated data.
9.	See the Glossary for terms used in this survey. The financial and accounting terms are consistent as outlined in the Uniform System of Accounts for Public Utilities and Licensees (U.S. of A.) (18 CFR Part 101).

#### ITEM-BY-ITEM INSTRUCTIONS

#### SCHEDULE 1. IDENTIFICATION

- 1. **Survey Contact:** Verify contact name, title, address, telephone number, fax number, and address.
- 2. Supervisor of Contact Person for Survey: Verify the contact's supervisor's name, title, address, telephone number, Fax number and address. Supervisor contact must be different than the survey contact.
- 3. **Report For:** Verify all information, including entity name, entity identification number, and reporting year for which data are being reported. These fields cannot be revised online. Contact EIA if corrections are needed.

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

#### **Entity and Preparer Information**

- 4. **Legal Name of Entity:** Enter the legal name of the entity for which this form is being prepared.
- Current Address of Entity's Principal Business Office: Enter the complete address, excluding the legal name, of the entity's principal business office (i.e., headquarters, main office, etc.).
- 6. **Preparer's Legal Name:** Enter the legal name of the company, which prepares this form, if different from the **Legal Name of Entity**.
- 7. Current Address of Preparer's Office: Enter the address to which this form should be mailed, if different from the Current Address of Entity's Principal Business Office. Include an attention line, room number, building designation, etc. to facilitate the future handling and processing of the Form EIA-861.

## SCHEDULE 2. PART A. GENERAL INFORMATION

1. For line 1, please check all of the Regional Entities within the North American Electric Reliability Corporation (NERC), in which your organization conducts operations.

The Regional Entities are:

TRE	Texas Regional Entity
FRCC	Florida Reliability Coordinating Council
MRO	Midwest Reliability Organization
NPCC	Northeast Power Coordinating Council
RFC	Reliability First Corporation
SERC	Southeastern Electric Reliability Council
SPP	Southwest Power Pool
WECC	Western Electric Coordinating Council

For line 1a, select the RTO or ISO from the list:

- California ISO
- Electric Reliability Council of Texas
- Southwest Power Pool
- Midwest ISO
- PJM Interconnection
- New York ISO
- ISO New England
- Other

If your RTO or ISO does not appear on the list, select "Other" and explain in SCHEDULE 9. COMMENTS

- 2. For line 3, **Balancing Authority(s)**, enter the name of the balancing authority(s) responsible for your oversight. If your balancing authority is not on the list, use "Other" and list the authority in the Comments (Schedule 9).
- 3. For line 4, **Operate Generating Plant(s)**, Check Yes to indicate that organization operated a generating plant(s) during the reporting period. Otherwise, Check No.
- 4. For line 5, **Activities**, Check the appropriate activities the electric entity was engaged in during the reporting year. **You must check at least one.**

Generation from company owned plant. Owned power generation only.

Transmission. Owned or leased transmission lines.

**Buying transmission services on other electrical systems.** Types of services include borderline customers, transmission line rental, transmission capacity, transmission wheeling, and system operational services.

**Distribution using owned/leased electrical wires.** Power delivery to your own end-use customers over distribution facilities.

**Buying distribution on other electrical systems.** Types of support include customer billing, distribution system support charges for energy delivered, line maintenance, and/or equipment charges.

**Wholesale power marketing.** Wholesale transactions with other electric utilities, purchases from power producers, and transactions to export and/or import electricity to, or from, Canada or Mexico. Also includes electrical sales and purchases among Federal Energy Regulatory Commission registered power marketers and similar participation in transactions with electric utilities.

**Retail power marketing.** Provision of electrical energy to end-use customers in areas where the customer has been given the legal right to select a power supplier other than the "traditional electric utility."

**Bundled services.** Provision of electricity in combination with gas, water, cable, Internet, and/or telephone for a single price.

- 5. For line 6, **Highest Hourly Electrical Peak System Demand**, electric utility companies should enter the maximum hourly summer load (for months of June through September) based on net energy for the system during the reporting year. Net energy for the system is the sum of energy an electric utility needs to satisfy their service area and includes full and partial wholesale requirements customers, and the losses experienced in delivery. The maximum hourly load is determined by the interval in which the 60-minute integrated demand is the greatest. If such data are unavailable, adjust available data to approximate a 60-minute demand interval and explain the adjustment on Schedule 9, **Comments**. If adjustments cannot be made, furnish data as available and explain on Schedule 9, **Comments**. For winter enter the maximum hourly winter load (for months of January through March, and the previous December) based on the net energy for the system during the reporting year. Please note: These data elements should be provided in megawatts, to the nearest tenth.
- 6. For line 7, Alternative Fueled Vehicles, Check Yes to indicate that your company owns/operates, or plans to own and operate, alternative fueled vehicles; otherwise Check No. If "Yes," provide the name, title, FAX number, telephone number and address of a contact person. Note: For the purpose of this question, an "alternative-fueled vehicle" is either designed or manufactured by an original equipment manufacturer or is a converted vehicle designed to operate in either dual-fuel, flexible-fuel, or dedicated modes on fuels other than gasoline or diesel. This does not include a conventional vehicle that is limited to operation on blended or reformulated gasoline fuels.

# SCHEDULE 2. PART B. ENERGY SOURCES AND DISPOSITION

- 1. Enter the annual megawatthours (MWh) for all sources of electricity and disposition of electricity listed.
- 2. For line 1, **Net Generation**, enter the net generation (gross generation minus station use) from all respondent-owned plants. If a plant is jointly owned, enter only the reporting party's share of generation. Include generation used to replace system losses arising from wheeling transactions. Include net generation supplied as part of a tolling arrangement.
- 3. For line 2, Purchases from Electricity Suppliers, enter the total amount of energy purchased from electricity suppliers including: nonutility power producers and power marketers (reported separately in previous years), municipal departments and power agencies, cooperatives, investor-owned utilities, political subdivisions, State agencies and power pools, and marketing agencies of the United States Government and Canada; these agencies include Bonneville Power Administration (BPA), Southeastern Power Administration (SEPA), Southwestern Power Administration (SWPA), Western Area Power Administration (WAPA), Tennessee Valley Authority (TVA), United States Army Corps of Engineers, the United States Bureau of Reclamation, United States Bureau of Indian Affairs, International Boundary and Water Commission, Hydro-Quebec, etc. This entry includes requirements power, firm power and all other nonfirm service. Note: Please identify on Schedule 9, Comments, the portion of purchased power obtained through tolling arrangements, and any international purchases.
- 4. For line 3, **Exchanges Received (In)**, enter the amount of exchange energy received. Do not include power received through tolling arrangements.
- 5. For line 4, **Exchanges Delivered (Out)**, enter the amount of exchange energy delivered. Do not include power delivered as part of a tolling arrangement.
- 6. For line 5, **Exchanges (Net)**, enter the net amount of energy exchanged. Net exchange is the difference between the amount of exchange received and the amount of exchange delivered (lines 3-4). This entry should not include wholesale energy purchased from or sold to regulated companies or unregulated companies for other systems.
- 7. For line 6, **Wheeled Received (In)**, enter the total amount of energy entering your system from other systems for transmission through your system (wheeling) for delivery to other systems. Do not report as Wheeled Received, energy purchased or exchanged for consumption within your system, which was wheeled to you by others.
- 8. For line 7, **Wheeled Delivered (Out)**, enter the total amount of energy leaving your system that was transmitted through your system for delivery to other systems. If Wheeling Delivered is not precisely known, please estimate based on your system's known percentage of losses for wheeling transactions.
- 9. For line 8, **Wheeled (Net)**, enter the difference between the amount of energy entering your system for transmission through your system and the amount of energy leaving your system (line 6 minus line 7). Wheeled net represents the energy losses on your system associated with the wheeling of energy for other systems.
- 10. For line 9, **Transmission by Others, Losses**, enter the amount of energy losses associated with the wheeling of electricity provided to your system by other utilities. Transmission by Others Losses should always be expressed as a negative value.
- For line 11, Sales to Ultimate Customers, enter the amount of electricity sold to customers purchasing electricity for their own use and not for resale. This entry should correspond to the revenue from sales to ultimate customers reported on Schedule 3, line 1, and should be equal to the total megawatthours reported on Schedule 4, Parts A, B and D, when summed for all reported States.

- 12. For line 12, Sales for Resale, enter the amount of electricity sold for resale purposes. This entry should include sales for resale to power marketers (reported separately in previous years), full and partial requirements customers, firm power customers and nonfirm customers. This entry should also correspond to the revenue from sales for resale reported in Schedule 3, line 3. Note: Please identify on Schedule 9, Comments, the portion of sales for resale power sold through tolling arrangements, and any international sales.
- 13. For line 13, **Energy Furnished Without Charge**, enter the amount of electricity furnished by the electric utility without charge, such as to a municipality under a franchise agreement or for public street and highway lighting. This entry does not include data entered in line 14.
- 14. For line 14, **Energy Consumed by Respondent Without Charge**, enter the amount of electricity used by the electric utility in its electric and other departments without charge. This entry does not include data entered in line 13.
- 15. For line 15, Total Energy Losses, enter the total amount of electricity lost from transmission, distribution, and/or unaccounted for. This is the difference between line 10, "Total Sources," and the sum of lines 11, 12, 13, and 14. Total Energy Losses should always be expressed as a positive value.

# SCHEDULE 2. PART C. GREEN PRICING

**Green Pricing** programs allow electricity customers the opportunity to purchase electricity generated from renewable resources and to pay for renewable energy development. Renewable resources include solar, wind, geothermal, hydroelectric power, and wood.

These programs are voluntary. Retail Customers pay an additional fee to purchase electricity generated from renewable sources. In addition, Renewable Energy Certificates (RECs), also known as green certificates, green tags, or tradable renewable certificates representing the environmental attributes of power produced from renewable energy projects may be purchased and incorporated into Green Pricing Programs when available renewable generation is insufficient to cover the requirements of the program for energy delivered in the reporting year.

Line1: Report the Total Green Pricing Revenue for customers in each customer class. Revenue should be reported in thousands of dollars to the nearest tenth (for example, \$1,299 would be reported as 1.3 thousand dollars). Revenue should include revenue from the green pricing program <u>plus</u> the price of the electricity purchased.

Example: For 1000 kWh of electricity sales, if the normal price for electricity is \$0.10 per kWh:

- a) An entity sells Green Energy in blocks of \$5.50 per 100 kWh block:
  - Total cost = (1,000kWh x \$0.10/kWh) + ((\$5.50/100kWh block) x (10 blocks of 100 kWh))
    - = \$100.00 + \$55.00
    - = \$155.00
- b) Alternatively, an Entity which sells Green Energy for a premium of \$0.02 per kWh:
  - Total cost =  $(1,000kWh \times 0.10/kWh) + ((0.02/kWh) \times (1,000kWh))$ 
    - = \$100.00 + \$20.00
    - = \$120.00

Line 2: Report the Total Green Pricing Sales, the total amount of megawatthours purchased by customers for each green pricing customer class (for example, 1,299 kWh would be reported as 1 MWh).

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Line 3: Report the Total Green Pricing Customers, the number of customers who purchased green power for each customer class. The sales volumes and the number of customers should not exceed the values reported in Schedule 4, Parts A, B, or D.

Line 4: Report the revenue from RECs for each customer class in thousand of dollars to the nearest tenth. Enter only the amount associated with RECs as part of a Retail Green Pricing Program. This revenue must not exceed the Total Green Power Revenue reported in line 1 above.

Line 5: Report the sales from RECs in megawatthours for each customer class. This amount should not exceed the Total Green Pricing Sales reported in line 2 above,

The Total for each customer class will automatically sum for the electronic online e-file system.

## SCHEDULE 2. PART D. NET METERING

**Net Metering** tariff arrangements permit a facility, typically generating electricity from a renewable resource, (using a meter that reads inflows and outflows of electricity) to sell any excess power it generates over its load requirement back to the electrical grid, typically at a rate equivalent to the retail price of electricity.

For net metering applications of 2 MW nameplate capacity or less, report the installed net metering capacity by State, customer class and technology. Report net metering data by sector and technology type for each state. Capacity should be reported in MW as AC load capable. Example: 8 kW should be 0.008 MW. Capacities should not exceed limits set up by each state. Please provide this capacity in MW, to the nearest 0.001 MW by technology. Do not report for net metering applications larger than 2 MW.

Report the number of net metering customers by customer class. They should not exceed the values in Schedule 4 Parts A and C. <u>If you are unable to utilize the e-file system which creates the totals automatically</u>; then provide the Totals for net metering megawatt hours, installed net metering capacity and customers by State, customer class and technology. Complete all lines for Schedule 2, Part D.

If the data is available, enter the amount of electric energy sold back to the utility (MWh) through the net metering application.

#### SCHEDULE 3. ELECTRIC OPERATING REVENUE

- 1. All electric operating revenue data should be rounded to the nearest tenth and reported in thousand dollars (for example, revenue of \$8,461,688.42 should be reported as 8,461.7 (thousand dollars).
- 2. For line 1, Electric Operating Revenue from Sales to Ultimate Customers, enter the amount of revenue from sales of electricity to those customers purchasing electricity for their own use and not for resale. Revenue reported on Schedule 4, Part C, for delivery service (and all other charges) should not be reported on Schedule 3, line 1, but should be reported in Schedule 3, line 2, Revenue from Unbundled (Delivery) Customers. This entry is gross revenue and includes the revenue from State and local income taxes, energy or demand charges, customer service charges, environmental surcharges, franchise fees, fuel adjustments and other miscellaneous charges applied to end-use customers during normal billing operations. This entry should not include deferred

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charges, credits, or other adjustments, such as fuel or revenue from purchased power, from previous reporting periods which are included in Schedule 3, line 4, **Electric Credits/ Other Adjustments**. This entry should correspond to electricity sales reported in Schedule 2, Part B, line 11. (This entry should also be the same total revenue reported on Schedule 4, column e, Parts A and B, when summed for all reported States). This entry should include all unbilled revenue resulting from power sold during the reporting period.

- 3. For line 2, **Revenue from Unbundled (Delivery) Customers**, enter the amount of revenue from unbundled customers who purchase their electricity from a supplier other than the electric utility that distributes power to their premises. This electric operating revenue does not include the charges for electric energy but does include the revenue required to cover power delivery.
- 4. For line 3, **Electric Operating Revenue from Sales for Resale**, enter the amount of revenue from sales of electricity sold for resale purposes. This entry should include revenue from sales for resale to wholesale or retail power marketers, full and partial requirements customers (firm) and to nonrequirements (nonfirm) customers. This entry should also correspond to the sales for resale reported in Schedule 2, Part B, line 12.
- 5. For line 4, **Electric Credits/Other Adjustments**, enter the amount of deferred revenue, which corresponds to Account 449.1 of the Uniform System of Accounts including revenue not applied to end-use or resale customers during the normal billing cycle. Funds included in this entry consist of refunds to customers resulting from rate commission rulings delayed beyond the reporting year in which the funds were originally collected. Also, include revenue distributions to customers from rate stabilization funds where the distribution occurred during the current reporting year but the funds were collected during previous reporting years.
- 6. For line 5, **Revenue from Transmission**, enter the amount of revenue derived from the transmission of electricity for others (wheeling).
- 7. For line 6, **Other Electric Operating Revenue**, enter the amount of revenue received from electric activities other than selling electricity. This may include revenue from selling or servicing electric appliances, revenue from the sale of water and water power for irrigation, domestic, industrial or hydroelectric operations, revenue from electric plants leased to others, revenue from the sale of steam, but not including sales made by a steam heating department or transfers of steam under joint facility operations, revenue from interdepartmental rents or sale of electric property, revenue from late fees, penalties or reconnections, and revenue from interest.

## SCHEDULE 4. PART A. SALES TO ULTIMATE CUSTOMERS. FULL SERVICE – ENERGY AND DELIVERY SERVICE (BUNDLED)

Please note that data for the Transportation Sector (see definitions) has replaced the "Other" Sector on all parts of Schedule 4. Non-Transportation customers previously reported under "Other," including street and highway lighting, should now be included in the Commercial Sector. Irrigation customers should be reported in the Industrial Sector.

Enter the reporting year revenue (thousand dollars, to the nearest tenth), megawatthours, and number of customers for sales of electricity to ultimate customers by State and customer class category for whom your company provides both energy and delivery service. Power marketers providing both energy and delivery service should report on Part D. Note: For sales to customer groups using brokers or aggregators, continue to count each customer separately. For instance, count a group of franchised commercial establishments aggregated through a single broker as separate customers (as reported in prior years). Enter the 2-letter U.S. Postal Service abbreviation for the State in which the electric sales occurred.

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## SCHEDULE 4. PART B. SALES TO ULTIMATE CUSTOMERS. ENERGY – ONLY SERVICE (WITHOUT DELIVERY SERVICE)

Enter the reporting year revenue (thousand dollars, to the nearest tenth), megawatthours, and number of customers for sales of electricity to ultimate customers by State and customer class category for whom your company provides only the energy consumed, where another electric utility provides delivery services, including, for example, billing, administrative support, and line maintenance.

# SCHEDULE 4. PART C. SALES TO ULTIMATE CUSTOMERS. DELIVERY – ONLY SERVICE (AND ALL OTHER CHARGES)

Enter the reporting year revenue (thousand dollars, to the nearest tenth), megawatthours delivered, and number of customers for sales of electricity to ultimate customers in your service territory by State and customer class category for whom your company provides only billing and related energy delivery services, where another company supplies the energy.

# SCHEDULE 4. PART D. SALES TO ULTIMATE CUSTOMERS. BUNDLED SERVICE BY RETAIL ENERGY PROVIDERS, OR ANY POWER MARKETER THAT PROVIDES "BUNDLED SERVICE"

Note: typically, the only entities that report on Schedule D are Texas Retail Energy Providers. Any other entity that believes it should report on Schedule D should first contact EIA.

Enter the reporting period revenue (thousand dollars, to the nearest tenth), megawatthours, and number of customers for sales of electricity to ultimate customers by State and customer class category for whom your company provided both energy and delivery service. For public street and highway lighting, count all poles in a community as one customer. Note: For sales to customer groups using brokers or aggregators, continue to count each customer separately. For instance, count a group of franchised commercial establishments aggregated through a single broker as separate customers (as reported in prior years). Enter the two-letter U.S. Postal Service abbreviation (if not preprinted) for the State in which the electric sales occur. (Note: Texas Retail Energy Providers (REPs) should include delivery revenues.)

# Common Instructions: SCHEDULE 4. PARTS A, B, C, AND D

- 1. For column a, **Residential**, enter the revenue, megawatthours, and number of customers for electric energy supplied for residential (household) purposes. For the residential class, do not duplicate the customer accounts due to multiple metering for special services (e.g., water heating, etc.).
- 2. For column b, **Commercial**, enter the revenue, megawatthours, and number of customers for electric energy supplied for commercial purposes.
- 3. For column c, **Industrial**, enter the revenue, megawatthours, and number of customers for electric energy supplied for industrial purposes.

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4. For column d, **Transportation**, enter the revenue, megawatthours, and number of customers for electric energy supplied for transportation purposes.

# SCHEDULE 5. MERGERS AND/OR ACQUISITIONS

If a merger or acquisition has occurred during the reporting period, report those newlyacquired corporate entities whose operations are now included in this report.

# SCHEDULE 6. DEMAND-SIDE MANAGEMENT INFORMATION

Demand-side management (DSM) programs are designed to modify patterns of electricity usage, including the timing and level of electricity demand. SCHEDULE 6 is divided into four parts: Part A, **Actual Effects**, Part B, **Annual Costs**, Part C, **Supplemental Information** and Part D, **Advanced Metering.** SCHEDULE 6 is to be completed by DSM program managers (entities responsible for conducting or administering a DSM program). In previous years, companies with sales to ultimate customers or sales for resale which were less than 150,000 megawatthours were required to complete only the **INCREMENTAL EFFECTS** portion of Part A and annual cost to achieve in Part B, line 13, **Total Cost. For this reporting year and forward, all companies including those non-utility DSM Program Managers are required to complete the entire schedule.** 

The DSM information provided should: 1) reflect only activities that are undertaken specifically in response to company-administered programs, including activities implemented by third parties under contract to the company; 2) account for the complete range of DSM programs, including energy efficiency and load management; and 3) represent the energy and load effects at the customer meter (i.e., transmission and distribution or reserve requirement savings should be excluded). The DSM information should exclude, to the extent possible, energy and load effects that are not attributable to DSM program activities.

Non-program related effects include changes in energy and load attributable to: 1) nonparticipants (e.g., customers known as free-riders, who would adopt program-recommended actions even without the program); 2) government-mandated energy-efficiency standards that legislate improvements in building and appliance energy usage; 3) natural operations of the marketplace (e.g., reductions in customer energy usage due to higher prices); and 4) weather and business-cycle fluctuations.

Power supply cooperatives, municipal joint action agencies, and Federal Power Marketing Administrations should coordinate the reporting of DSM information with their power purchasing utilities to avoid double counting the effects and costs of DSM programs. Utilities that have their DSM activities reported on Schedule 6 of another company should name that company in the space provided on line 2 of the schedule and proceed to Schedule 6, Part D.

# SCHEDULE 6. PART A. ACTUAL EFFECTS

This part of the Schedule collects information on the energy and load effects of DSM programs implemented, and measures installed, for each program category by major customer sector within a State. It is divided into two subparts, **Incremental Effects** and **Annual Effects**.

1. Incremental Effects: The changes in energy use (measured in megawatthours) and peak load (measured in megawatts) caused in the current reporting year by new participants in existing DSM programs and all participants in your new DSM programs (that is programs begun during the current reporting year). Reported Incremental Effects should be annualized.

Please leave blanks, not zeros, if the questions do not apply. For example, your company operates industrial programs but does not expect any incremental effects in the current reporting year, the field would have a value of zero. However, if your company does not operate any industrial programs, then the field should be left blank.

- 2. Annual Effects: The total changes in energy use (measured in megawatthours) and peak load (measured in megawatts) caused in the current reporting year by all participants in all of your DSM programs. This includes new and existing participants in existing programs. (those implemented prior to the current reporting year that were in place during prior reporting year), all participants in new programs (those implemented during current reporting year), and participants in programs terminated since 1992 (those effects continue even though the programs have been discontinued). DSM programs have a useful life, and the net effects of these programs will diminish over time. To the extent possible, the Annual Effects should consider the useful life of efficiency and load control measures by accounting for building demolition, equipment degradation, and program attrition. The effects of new participants in existing programs and all participants in new programs should be based on their start-up dates (i.e., if participants enter a program in July, only the effects from July to December are to be reported). If start-up dates are unknown and cannot be reasonably estimated, the effects can be annualized (i.e., assume the participants were initiated into the program on January 1). Please note that Annual Effects are not a summation of 12 monthly peaks, but are the total DSM program effects of all programs and all participants for the current reporting year.
- 3. For Part A, under the appropriate customer sector: Residential, Commercial, Industrial, and Transportation, enter the aggregate Energy Effects (megawatthours, to one decimal point, if possible) and Actual Peak Reduction (megawatts to one decimal point, if possible) attributable to Energy Efficiency and Load Management programs. For Load Management also enter the Potential Peak Reduction (megawatts to one decimal point, if possible) attributable to each customer sector. Please leave blanks, not zeros, if the questions do not apply. For example, your company operates industrial programs but does not expect any incremental effects in the current reporting year, the field would have a value of zero. However, if your company does not operate any industrial programs, then the field should be left blank.

# SCHEDULE 6. PART B. ANNUAL COSTS

This part of the schedule collects information on actual DSM program costs in the current reporting year. Program costs consist of the cash expenditures, reported in thousands of dollars, incurred by the company. Costs should reflect the total cash expenditures for the year, reported in thousands of dollars that flow out to support DSM programs. They should be reported in the year they are incurred, regardless of when the actual effects occurred. For example, the cash expenditures to purchase 1,000 load control devices for installation in customers' homes could be incurred a year in advance of the actual load savings that result from operation of the devices.

Annual Costs: For each State enter for each sector your actual Direct Costs, Incentive Payments, and Indirect Costs, incurred in the current reporting year. Direct Costs are those costs that are directly attributable to a particular DSM program (e.g., Energy Efficiency or Load Management).

Incentives are the total financial value provided to a customer for program participation, whether cash payment, in-kind services (e.g. design work), or other benefits directly provided customer for their program participation.

Indirect Costs may include other costs that have not been included in any program category, but could be meaningfully identified with operating the company's DSM programs (e.g., Administrative, Marketing, Monitoring & Evaluation, Company-Earned Incentives, Other).

Report Energy Efficiency and Load Management Costs separately. The Total Cost row, line 13 and the Total column (e) will be summed automatically for respondents that file electronically through the e-file system. Provide the actual costs breakdown in thousand dollars.

# SCHEDULE 6. PART C. SUPPLEMENTAL INFORMATION

- 1. Please indicate, by checking "Yes" or "No" on line 14, whether DSM program changes, tracking procedures, evaluations, or reporting methods have affected the data reported on this schedule (since 1992).
- 2. Please indicate, by checking "Yes" or "No" on line 15, whether your company currently operates any incentive-based demand response programs, i.e., direct load control, interruptible programs, demand bidding/buyback, emergency demand response, capacity market programs, and ancillary service market programs. If the answer is "Yes," enter the number of participating customers, by state and class, on line 16.
- 3. Please indicate, by checking "Yes" or "No" on line 17, whether your company currently operates any time-based rate programs, e.g., real-time pricing, critical peak pricing, variable peak pricing and time-of-use rates administered through a tariff. If the answer is "Yes," enter the number of participating customers, by state and class, on line 18.

# SCHEDULE 6. PART D. ADVANCED METERING

# This schedule should only include customers from Schedule 4 Part A or Part C.

**Standard (Electric) Meters** are electromechanical or solid state meters measuring aggregated kWh where data are manually retrieved over monthly billing cycles for billing purposes only. Standard meters may also include functions to measure time-of-use and/or demand with data manually retrieved over monthly billing cycles.

Automated Meter Reading (AMR): Meters that collect data for billing purposes only and transmit this data **one way**, usually from the customer to the distribution utility. Aggregated monthly kWh data captured on these meters may be retrieved by a variety of methods including drive-by vans with short-distance remote reading capabilities and communication over a fixed network such as a cellular network.

Enter the state and report the total number of AMR meters by sector. The number of AMR meters may be equal to but not exceed the number of customers on Schedule 4.

Advanced Metering Infrastructure (AMI): Meters that measure and record usage data at a minimum, in hourly intervals, and provide usage data to both consumers and energy companies at least once daily. Data are used for billing and other purposes. Advanced meters include basic hourly interval meters and extend to real-time meters with built-in two-way communication capable of recording and transmitting instantaneous data.

Enter the state and report the total number of AMI meters by sector.

For AMI meters that are only being used as AMR, report meters as AMR.

Energy Served Through AMI (MWh) should be entered in megawatthours for customers served.

# SCHEDULE 7. DISTRIBUTED AND DISPERSED GENERATION

This schedule collects information from distribution companies on industrial and commercial

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generators of less than 1 megawatt (1000 kilowatts) installed at or near a customer's site, or other sites within the system. Provide all of the requested information for grid connected/synchronized distributed generators in column a, and for dispersed generators that are not grid connected/synchronized in column b. Also provide the data on all industrial and commercial dispersed generators in the Total column. Provide actual data if available, otherwise provide best estimates, and indicate the nature of the data by checking the appropriate box on the form.

Schedule 7 is intended to collect information about generators on the systems that are NOT reported on Form EIA-860, "Annual Electric Generator Report." Plants with capacity of 1 MW or greater which ARE grid-connected, meet the threshold criteria for reporting on the 860 and as such, **need not** be reported on Schedule 7 of the EIA-861. Residential applications should not be reported.

# SCHEDULE 7. PART A. NUMBER AND CAPACITY

- 1. For line 1, Number of generators, provide in column (a), the number of distributed generators in the area served by your distribution system. (Less than 1 megawatt) In column (b), provide the number of dispersed generators. (Total and less than 1 megawatt) If you are unable to provide the breakout, please explain in Schedule 9, Comments. The total number of dispersed generators must be greater than or equal to the number of dispersed generators less than 1 MW.
- 2. For line 2, Total combined capacity, columns (a) and (b), provide the nameplate capacity (to the nearest tenth) for all generators with less than 1 megawatt that reported on line 1. For column (b), also provide the sum of the capacity for all generators. The total capacity must be greater than or equal to the capacity less than 1 MW.
- **3.** For line 3, columns (a) and (b), capacity that consists of **backup-only units**, provide the total nameplate capacity of generators that are used **only** for emergency backup service.
- 4. For Line 4, columns (a) and (b), capacity owned by respondent, provide the total nameplate capacity listed in line 2 that the respondent owns.
- 5. For Line 5, columns (a) and (b), Nature of data reported, provide actual data if available, otherwise provide best estimates, and indicate the nature of the data by checking the appropriate box on the form.
- 6. For Line 6, columns (a) and (b), State, provide the 2-letter U.S. Postal Service abbreviation for the State in which the generators are located.

# SCHEDULE 7. PART B, CAPACITY BY GENERATING TYPE AND TECHNOLOGY

For each of the technologies listed in columns (a) and (b), lines 1 through 8, provide the capacity. The total of lines 1 through 8 (line 9) should equal the total combined capacity in line 2 in each column, (a, < 1MW) and (b - Total).

# SCHEDULE 8. DISTRIBUTION SYSTEM INFORMATION

Please verify the EIA provided names of the counties, parishes, etc. (dropdown menu), by State, where your utility-owned distribution system's electrical equipment are located. The information may have been reported by the respondent last year or the result of independent research by the EIA staff processing the Form EIA-861. If the information is incorrect, please provide the correct information in Schedule 9.

# **SCHEDULE 9. COMMENTS**

This schedule provides additional space for comments. For clarification purposes, identify schedule, part, line number and column (if applicable) for each comment.

U.S. Department of E U.S. Energy Informat Form EIA-861 (2011)		ANNUAL ELECTRIC POWER INDUSTRY REPORT INSTRUCTIONS	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.0 hrs				
GLOSSARY		is form is available online at the follow (glossary/index.html	ving URL:				
SANCTIONS	13(b) of the Federa amended. Failure t civil violation, or a f government may be temporary restraini action, the court may these reporting req <b>person knowingly</b>	The timely submission of Form EIA-861 by those required to report is mandatory under Secti 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 eac 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 ci action, the court may also issue mandatory injunctions commanding any person to comply w these reporting requirements. <b>Title 18 U.S.C. 1001 makes it a criminal offense for any</b> <b>person knowingly and willingly to make to any Agency or Department of the United</b> <b>States any false, fictitious, or fraudulent statements as to any matter within its</b> <b>jurisdiction.</b> Public reporting burden for this collection of information is estimated to average 9.0 hours pe					
REPORTING BURDEN	response, including gathering and main information. Send collection of inform Information Admini S.W., Forrestal Bui Regulatory Affairs,	g the time for reviewing instructions, s ntaining the data needed, and comple comments regarding this burden estir ation, including suggestions for reduc stration, Statistics and Methods Grou Iding, Washington, D.C. 20585-0670;	earching existing data sources, ting and reviewing the collection of mate or any other aspect of this sing this burden, to the U.S. Energy p, EI-70, 1000 Independence Avenue and to the Office of Information and Vashington, D.C. 20503. A person is				
PROVISIONS REGARDING CONFIDENTIALITY OF INFORMATIONInformation reported on Form EIA-861 will be treated as non-sensitive and may I released in identifiable form. In addition to the use of the information by EIA for purposes, the information may be used for any nonstatistical purposes such as administration regulatory, law enforcement, or adjudicatory purposes.							

U.S. Department of U.S. Energy Informa Form EIA-861 (2011)	ation Administration	ANNUAL ELECTRIC INDUSTRY REPO		Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.0 hrs					
comply may result i concerning sanctions of information in the willingly to make to	<b>NOTICE:</b> This report is <b>mandatory</b> under the Federal Energy Administration Act of 1974 (Public Law 93-275). 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 provisions on sanctions and the provisions concerning the confidentiality of information in the instructions. <b>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.</b>								
SCHEDULE 1. IDENTIFICATION									
Title:	Survey Contact         First Name:       Last Name:         Title:								
• •			ax						
	Supervi	sor of Contact Person	for Survey	1					
		Last Name:							
Telephone (incluc	le extension):	Fa	ax:						
		Report For							
Entity Name:									
Entity ID: Reporting Year:									
		ity and Preparer Infor							
Legal Name of Er	ntity:								
Current Address of Business Office:	of Entity's Principal								
Preparer's Legal From Entity's Leg	Name (If Different al Name):								
	of Preparer's Office Current Address of Business Office):								
Respondent	[] Federal		[] State						
Туре	[] Political Subdivi	sion	[] Munici	ipal					
(check one)	[] Municipal Marke	eting Authority	[] Invest	or-Owned					
	[ ] Cooperative			Power Marketer (or Energy					
		wer Producer or	Service Pro						
	Qualifying Facility [ ] Transmission		[ ] Wholes	sale Power Marketer					
For qu	5 J	rmation about the Form EIA	-861 contact t	he Survey Managers:					
Phone	McDaniel e: (202) 586-4280 : karen.mcdaniel@eia.	gov	Pł	ephen Scott none: (202) 586-5140 stephen.scott@eia.gov					
		FAX Number: (202) 287-19 Email: EIA-861@eia.go							

U.S. En	partment of Energy ergy Information Administration A-861 (2011)	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/ Burden: 9.0 hrs	OMB No. 1905-0129 Approval Expires: 12/31/2013		
Entity	Name:					
Entity	ID:	Reporting Year				
	S	CHEDULE 2, PART A. GENERAL INFOR	RMATION			
LINE NO.						
	Regional North American Electric	[ ] TRE (ERCOT)	[ ] NPCC	[ ] SPP		
1	Reliability Corporation Region (not applicable for power marketers) (mark	[ ] FRCC	[ ] RFC	[ ] WECC		
	all that apply)	[ ] MRO	[ ] SERC			
		[ ] California ISO	[ ] New York ISO	[ ] ISO New England		
1a	Name of RTO or ISO	[ ] Electric Reliability Council of Texas	[ ] Southwest Power Pool	[ ] Other		
		[ ] PJM Interconnection	[ ] Midwest ISO			
2	(For EIA Use Only) Identify the North American Electric Reliability Corporation where you are physically located					
3	Enter Balancing Authority(s) Responsible					
	for Your Oversight					
4	Did Your Company Operate Generating Plant(s)? (check one)	[ ]Yes [ ]No				
		[ ] Generation from company owned plant	[ ] Buying distributio systems	n on other electrical		
	Identify the Activities Your Company Was	[ ] Transmission	[ ] Wholesale power marketing			
5	Engaged in During the Year (check appropriate activities)	[ ] Buying transmission services on other electrical systems	[ ] Retail power mark	teting		
		[ ] Distribution using owned/leased electrical wires		Services (electricity plus ch as gas, water, etc. ctric service)		
	Highest Hourly Electrical Peak System	Summer (MW)				
6	Demand Did Your Company Operate Alternative-	Winter (MW)				
	Fueled Vehicles During the Year?	[ ]Yes [ ]No				
7	Does Your Company Plan to Operate Such Vehicles During the Coming Year?	[ ]Yes [ ]No				
,	If "Yes", Please Provide Additional	Name:				
	Contact Information.	Title:				
		Telephone: ( )Fax: ( )	Email address:			

U.S. E	epartment of Energy nergy Information Administr EIA-861 (2011)	ration	ANNUAL EL	ANNUAL ELECTRIC POWER INDUSTRY REPORT Approval Expires: 12/31/2013 Burden: 9.0 hrs			POWER INDUSTRYOMB No. 1905-0129ORTApproval Expires: 12/31/2013				
Entity Name:											
Entity	y ID:				Reportin	ng Year:					
	SCHEDULE 2. PART B. ENERGY SOURCES AND DISPOSITION										
LINE	SOURCE O	LINE NO.		Γ	DISPOSITI						
NO. 1	(MWh)				Salas to Lilt	timate Custon	arc	(MWh)			
2	Purchases from Electricity S	Suppliers		11 12	Sales to Uli		liers				
3	Exchanges Received (In)			12		nished Witho	ut Charge				
4	Exchanges Delivered (Out)			14				t Without Charge			
5	Exchanges (Net)	- F		15		y Losses (po					
6	Wheeled Received (In)										
7	Wheeled Delivered (Out)			-							
8	Wheeled (Net)	ł									
9	Transmission by Others, Lo number)										
10	Total Sources (sum of lines 1	, 2, 5, 8, and 9)		16	Total Dispos	sition (sum of	lines 11, 1	12, 13, 14, and, 15)			
			SCHEDULE	2, PAR	T C. GREE	EN PRICINO	3				
(RECs)	Pricing programs are voluntary are a category of Green Pricing								e Energy Certificates		
LINE NO.	STATE/TERRITORY:	F	ESIDENTIAL (a)		IERCIAL (b)	INDUST (c)	RIAL	TRANSPORTATION (d)	TOTAL (e)		
1	Total Green Pricing Reve (Thousand Dollars)	enue									
2	Total Green Pricing Sales	(MWh)									
3	Total Green Pricing Customers										
4	4 Revenue from RECs (Thousand Dollars)										
5	REC Sales (MWhs)										

#### U.S. Department of Energy U.S. Energy Information Administration Form EIA-861 (2011)

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Entity Name:\_\_\_\_\_

Entity ID:\_\_\_\_\_

Reporting Year:\_\_\_

# SCHEDULE 2, PART D. NET METERING

**Net Metering programs** allow customers to sell excess power they generate back to the electrical grid to offset consumption. For net metering applications of 2 MW nameplate capacity and less, provide the information about programs by State and customer class.

STATE/TERRIT	ORY:	RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)					
Photovoltaic	Installed Net Metering Capacity (MW)					
	Number of Net Metering Customers					
Wind	If Available, Enter the Electric Energy Sold Back to the Utility ( <b>MWh</b> )					
	Installed Net Metering Capacity (MW)					
	Number of Net Metering Customers					
CHP/Cogen	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)					
	Installed Net Metering Capacity (MW)					
	Number of Net Metering Customers					
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)					
Other	Installed Net Metering Capacity (MW)					
Other	Number of Net Metering Customers					
	Total Energy Sold Back to the Utility (MWh)					
Total	Installed Net Metering Capacity (MW)					
	Number of Net Metering Customers					

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Entity	Name:					
Entity	ID:	Rep	orting Year:			
		SCHEDULE 3. ELECTRIC	OPERATING REV	ENUE		
LINE NO.	TYPE OF OPERATING	REVENUE	REVENUE (THO	JSAND DOLLARS)		
1	Electric Operating Revenue From Sales to (Schedule 4, Parts A and B)	OUItimate Customers				
2	Revenue From Unbundled (Delivery) Cust	omers (Schedule 4, Part C)				
3	Electric Operating Revenue from Sales for	r Resale				
4	Electric Credits/Other Adjustments					
5	Revenue from Transmission					
6	Other Electric Operating Revenue					
7	Total Electric Operating Revenue (sum of	f lines 1, 2, 3, 4, 5 and 6)				

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Entity Name:										
Entity ID:	Entity ID: Reporting Year:									
SCHEDULE 4. PART A.	SALES TO ULTIN	IATE CU		SERVICE – EN			INDLED)			
	RESIDENTIA (a)	AL .	COMMERCIAL (b)	INDUSTRIA (c)	L TRANSPORT (d)		TAL e)			
STATE / TERRITORY						,				
Revenue (thousand dollars)										
Megawatthours Sold and Delivered										
Number of Customers										
STATE / TERRITORY										
Revenue (thousand dollars)										
Megawatthours Sold and Delivered										
Number of Customers										
STATE / TERRITORY										
Revenue (thousand dollars)										
Megawatthours Sold and Delivered										
Number of Customers										
STATE / TERRITORY		÷								
Revenue (thousand dollars)										
Megawatthours Sold and Delivered										
Number of Customers										

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Entity Name:										
Entity ID:				Report	ing Year:					
SCHEDULE 4. PA	RT B.			MATE CUSTOMERS. ENERGY – ONLY SERVICE (WITHOUT DELIVERY						
		RESIDENTIAL (a)		COMMERCIAL (b)	INDUSTRIAI (c)	-	TRANSPORTATION (d)	TOTAL (e)		
STATE/TERRITORY										
Revenue (thousand dollars	5)									
Megawatthours Sold										
Number of Customers										
STATE/TERRITORY					·					
Revenue (thousand dollars	5)									
Megawatthours Sold										
Number of Customers										
STATE/TERRITORY				•						
Revenue (thousand dollars	5)									
Megawatthours Sold										
Number of Customers										
STATE/TERRITORY										
Revenue (thousand dollars	5)									
Megawatthours Sold										
Number of Customers										
STATE/TERRITORY				·				·		
Revenue (thousand dollars	;)									
Megawatthours Sold										
Number of Customers										

U.S. Department of Energy U.S. Energy Information Admir Form EIA-861 (2011)	nistration	ANNUAL ELECTRIC POV REPORT		Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.0 hrs			
Entity Name:							
Entity ID:		Re	porting Year:				
SCHEDULE 4. PART	C. SALES TO UL1	IMATE CUSTOMERS. D	ELIVERY - ONLY	Y SERVICE (AND ALL OT	HER CHARGES)		
	RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)		
STATE/TERRITORY	(u)			(4)			
Revenue (thousand dollars)							
Megawatthours Delivered							
Number of Customers							
STATE/TERRITORY			•				
Revenue (thousand dollars)							
Megawatthours Delivered							
Number of Customers							
STATE/TERRITORY			1				
Revenue (thousand dollars)							
Megawatthours Delivered							
Number of Customers							
STATE/TERRITORY			•				
Revenue (thousand dollars)							
Megawatthours Delivered							
Number of Customers							
STATE/TERRITORY		•	·				
Revenue (thousand dollars)							
Megawatthours Delivered							
Number of Customers							

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Entity Name:										
Entity ID:	Entity ID: Reporting Year:									
SCHEDULE 4. PART D.	SCHEDULE 4. PART D. BUNDLED SERVICE BY RETAIL ENERGY PROVIDERS, OR ANY POWER MARKETER THAT PROVIDES "BUNDLED SERVICE"									
	RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)					
STATE/TERRITORY				· · · · ·						
Revenue (thousand dollars)										
Megawatthours Sold and Delivered										
Number of Customers										
STATE/TERRITORY										
Revenue (thousand dollars)										
Megawatthours Sold and Delivered										
Number of Customers										
STATE/TERRITORY										
Revenue (thousand dollars)										
Megawatthours Sold and Delivered										
Number of Customers										
STATE/TERRITORY			•							
Revenue (thousand dollars)										
Megawatthours Sold and Delivered										
Number of Customers										

U.S. Department of Energy U.S. Energy Information Administration Form EIA-861 (2011)	ANNUAL		C POWER INDUSTRY PORT		OMB No. 1905-0129 Approval Expires: 12/31/2013		
Entity Name:		_					
Entity ID:			Reporting Year:				
SC	HEDULE 5. N	<b>IERGER</b>	S AND/OR ACQUISI	TIONS			
Mergers and/or acquisitions during the re	porting period:	Yes No (	(If no, skip to Schedule 6)				
If Yes, Provide: Date of merger or acquisition Company merged with or acquired Name of new parent company			Address New contact name Email address		_Telephone No		

U.S. D	S. Department of Energy								rm Approved	Approved		
	inergy Information A	dministration						ON	1B No. 1905-0	129		
Form	EIA-861 (2011)			ANNUA			DUS		proval Expire rden: 9.0 hrs		3	
E a tita	News				REPORT B							
Entity	Name:											
Entity	ID:				Reporting Y	ear:						
		S	CHEDULE	6. DEMAN	ND-SIDE MANA	AGEMI	EN		IATION			
LINE												
NO.												
1	Do you have company administered Demand-Side Management Programs? (check Yes or No)       [] Yes       [] No											
2	If your Demand-Side Management activities are reported on Schedule 6 of another company's form, identify the company.											
	NOTE: If you answered "No," to Line 1 or another Company Reports your Demand-Side Management Activities on their Schedule 6, proceed to Schedule 6, Part D.											
	SCHEDULE 6. PART A. ACTUAL EFFECTS											
		1A	NUALIZED I	NCREMENT	AL EFFECTS				ACTUAL	ANNUAL EF	FECTS	
				INDUSTRIAL	TRANSPORTATION			RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION	Total
		RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION	Total		RESIDENTIAL	CONIMERCIAL	INDUSTRIAL	TRANSFORTATION	TOLAT
		(a)	(b)	(c)	(d)	(e)		(f)	(g)	(h)	(i)	(j)
	STATE / TERRITORY											
	ENERGY											
	EFFICIENCY Energy Effects											
3	(MWh)											
4	Actual Peak Reduction (MW)											
	LOAD		•	Ł					L	L		
	MANAGEMENT											
5	Energy Effects (MWh)											
c	Potential Peak											
6	Reduction (MW) Actual Peak											
7	Reduction (MW)											
7b	Were these saving	s verified thro	ugh an indep	endent eval	uation?	[ ]Ye	es	[ ] No	)	-		
7c	Are these savings	estimates bas	ed on a forec	ast or on th	e report of one o	r more	Ind	lependent ev	valuators?	[ ] Yes	[ ] No	

U.S. Department of Energy						Form Ap	•			
	U.S. Energy Information Administration Form EIA-861 (2011)				AL ELECTRIC P		OMB No. 1905-0129 R Approval Expires: 12/31/2013			
FOIII					DUSTRY REPOR		Burden:		51/2013	
Entity	Entity Name:									
Entity	v ID:				R	eporting	Year:			
		SCHE	DULE 6. PAF	RT B. ANN	UAL COSTS	· · ·		LARS)	-	
			RESIDE	NTIAL	COMMERCIA		INDUSTRIAL	TRANSP	ORTATION	TOTAL
STAT	re /		(a)		(b)		(c)		(d)	(e)
	RITORY									
8		excluding incentive Energy Efficiency								
9		excluding incentive Load Management								
10	Incentive Payments – Energy           10         Efficiency									
11	Incentive Payments – Load 11 Management									
12	2 Indirect Costs									
13	Total Cost (su	m of all of the above)								
	SCHEDULE 6. PART C. SUPPLEMENTAL INFORMATION						1			
14	reporting methods that affect the comparison of demand-side management data reported on this schedule to data from previous years?						[]Yes []No			
	[]Yes						[]Yes			
15	Toad control, interruptible programs, demand bidding/buyback, emergency demand response, capacity market programs, and ancinary						[ ] No			
	If the answer to line 15 is "Yes", please disclose the number of		ber of		F	Residential	Commercial	Industrial	Transportation	
16	participating cu	stomers by state & class.			State:					
17	Does your company currently operate any time-based rate programs (e.g., real-time pricing, critical peak pricing, variable peak pricing and time-of-use rates administered through a tariff)? (check Yes or No)						[]Yes [ ]No			
		line 17 is "Yes", please d		ber of		F	Residential	Commercial	Industrial	Transportation
18	8 participating customers by state & class.				State:					

U.S. Department of Energy U.S. Energy Information Administration Form EIA-861 (2011)	AN	NUAL ELECTRIC POW REPORT	IER INDUSTRY	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.0 hrs	
Entity Name:					
Entity ID:		Reporti	ng Year:		
	SCHEDUL	E 6. PART D. ADV	ANCED METER	ING	
Only customers from Schedule 4A and 4C ne AMI – data can be transmitted in both direction				ted one-way, <i>from the custon</i>	ner to the utility.
State/ Territory	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION	TOTAL
	(a)	(b)	(c)	(d)	(e)
Number of AMR Meters					
Number of AMI Meters					
Energy Served Through AMI Meters (MWh)					
State/ Territory	RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
Number of AMR Meters					
Number of AMI Meters					
Energy Served Through AMI Meters (MWh)					
State/ Territory	RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
Number of AMR Meters					
Number of AMI Meters					
Energy Served Through AMI Meters (MWh)					

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Entity	y Name:								
Entity	y ID:			Re	eporting Year:				
	SC	HEDULE 7.	DISTRIBUT	ED AN	ID DISPERSED GENE	RATION			
	company owns and/or operates a dis ity may be utility or customer-owned.	stribution syst	em, please rep	oort info	ormation on known distrik	outed generation of	apacity on the	e system.	Such
Capac	ity may be utility of customer-owned.	SCHEDI	II F 7 PART	Δ ΝΙ	JMBER AND CAPACI	тү			
	DISTRIBUTED GEN			1		DISPERSED GEN	FRATORS		
LINE	(COMMERCIAL AND IND		ID	LINE		L AND INDUSTRI		ORS NOT	
NO.		ED GENERAT	rors)	NO.	CONNEC	TED/SYNCHRONI	ZED TO THE (	GRID)	
	(a)		Total			(b)			
		(<1MW)					Total (<	<1 <b>MW)</b>	
1	Number of generators (N)		1	Number of generators (	N)				
2	Total combined capacity (MW)		2	Total combined capacit					
3	Capacity that consists of backup-only units			3	Capacity that consists of backup-only units				
4	Capacity owned by respondent		4	Capacity owned by respondent					
5	Nature of data reported	Actual	[]	5	Nature of data reported Actual		[	]	
5		Estimated	[]	<b>J</b>		Estimated			]
6	State/Territory			6	State/Territory				
	S	CHEDULE 7	7. PART B. (	CAPAC	CITY by TECHNOLOG	Y (MW)			
								Total («	<1 <b>MW)</b>
1	Internal combustion/reciprocating e	naines	(<1MW)	1	Internal combustion/rec	iprocating engine	s		
2	Combustion turbine(s)	5		2	Combustion turbine(s)	1			
3	Steam turbine(s)			3	Steam turbine(s)				
4	Hydroelectric		4	Hydroelectric					
5	Wind turbine(s)		5	Wind turbine(s)					
6	Photovoltaic		6	Photovoltaic					
7	7 Storage			7	Storage				
8				8	Other				
9	Total			9	Total				
10	Nature of data reported	Actual	[]	10	Nature of data reported		Actual	]	]
		Estimated	[]				Estimated	<u> </u>	]

U.S. Er	epartment of Energy hergy Information Adr IA-861 (2011)	ninistration	ANNUAL ELECTRIC POWER INDUSTRY REPORT			Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.0 hrs				
Entity	Name:									
Entity ID: Reporting Year:										
	SCHEDULE 8. DISTRIBUTION SYSTEM INFORMATION									
If your located		ribution system, please	e identify the names of th	ne coui	nties (parish, etc.) by	State in which the electric wire/equipment are				
LINE NO.	U.S. POSTAL (U.S. POSTAL ABBREVIATION) (a)	(PARIS	UNTY SH, ETC.) (b)	LINE NO.	STATE/TERRITORY (U.S. POSTAL ABBREVIATION) (a)	COUNTY (PARISH, ETC.) (b)				
1				20						
2				21						
3				22						
4				23						
5				24						
6				25						
7				26						
8				27						
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U.S. Department of Energy U.S. Energy Information Administration Form EIA-861 (2011)				ANNUAL ELECT	RIC POWER INDUSTRY PEPORT	Form Approved OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 9.0 hrs	
Entity Nam	ne:						
Entity ID: Reporting Year:							
SCHEDULE 9. COMMENTS							
SCHEDULE (a)	PART (b)	LINE NO. (c)	COLUMN (d)		NOTE (e)	(S)	
					(*)		



#### Subject: United States Department of Energy – EIA Annual Data Collection, Form EIA-923 (Annual)

Dear Respondent:

The Annual Form EIA-923, "Power Plant Operations Report," is now open for 2009 data collection. Your filing is due by April 5, 2010. The Form EIA-923 can be accessed through EIA's Single Sign On (SSO) website at:

#### https://signon.eia.doe.gov/ssoserver/login

Choose "EIA-923 Power Plant Operations Report - Annual" on the SSO screen.

Please verify the accuracy of the information we have on file for you.

Primary contact name: Email: SSO User ID: Telephone:

Please send us a return email at eia-923@eia.doe.gov to acknowledge receipt of this email and, if needed, to update the information in our records.

Our records show you are the primary contact to file the report for the plants listed below. Contact EIA immediately if this list is not complete and accurate.

For questions about the Form EIA-923, instructions, a copy of the form, and a list of contact people, please see:

http://www.eia.doe.gov/cneaf/electricity/2008forms/consolidate 923.html

Sincerely,

Channele Wirman Project Manager, EIA-923 Energy Information Administration United States Department of Energy

List of Plants:

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Subject: United States Department of Energy – EIA Monthly Data Collection, Form EIA-923 (Monthly)

Dear Respondent:

The monthly Form EIA-923, "Power Plant Operations Report," is now open for January 2010 data collection. Your filing of the Form EIA-923 for January 2010 is due by March 1, 2010.

Please note the data entry process for coal mine information on Schedule 2 Page 3 has been changed. For all coal purchases, a State or country of origin must be chosen first, and then a choice must be made for a mine by double clicking on the MSHA ID field. With your choice of mine, all fields will automatically be populated with the MSHA ID, Mine Name, Mine County and Mine Type.

The report can be accessed through EIA's Single Sign On website at:

https://signon.eia.doe.gov/ssoserver/login

For questions about using or accessing the Single Sign On system, please contact our Help Center at 202-586-9595 or CNEAFHelpCenter@eia.doe.gov. For questions about the Form EIA-923 and a list of contact people, please see:

http://www.eia.doe.gov/cneaf/electricity/2008forms/consolidate\_923.html

Sincerely,

Channele Wirman Project Manager, EIA-923 Energy Information Administration United States Department of Energy



Subject: United States Department of Energy - EIA Annual Data Collection, Form EIA-923 (Supplemental)

Dear Respondent:

The Supplemental Form EIA-923, "Power Plant Operations Report," is now open for 2009 data collection. The Supplemental Form EIA-923 is required for plants that reported Schedules 2 through 5 on the Monthly Form EIA-923 in 2009. The Supplemental form is comprised of the annual Schedules 6, 7 and 8, and completes the filing requirements for the 2009 data year for your power plant.

Your filing is due by April 5, 2010. The Form EIA-923 can be accessed through EIA's Single Sign-On website at:

https://signon.eia.doe.gov/ssoserver/login

Choose "EIA-923 Power Plant Operations Report - Supplementary" on the SSO screen.

Please verify the accuracy of the information we have on file for you:

Primary contact name: Email: SSO User ID: Telephone:

Please send us a return email at eia-923@eia.doe.gov to acknowledge receipt of this email and, if needed, to update the information in our records.

Our records show you are the primary contact to file the report for the plants listed below. Contact EIA immediately if this list is not complete and accurate.

For questions about the Form EIA-923, instructions, a copy of the form, and a list of contact people, please see:

http://www.eia.doe.gov/cneaf/electricity/2008forms/consolidate 923.html

Sincerely,

Channele Wirman Project Manager, EIA-923 Energy Information Administration United States Department of Energy

List of Plants:

U.S. Department of U.S. Energy Informa Form EIA-923 (2011	ation Administration	POWER PLANT OPERATIONS REPORT INSTRUCTIONS Burden: 2.8 Hours					
PURPOSE	in the United States (s electric power generat byproducts, operationa control equipment. Th appear in many U.S. E <i>Monthly, Electric Powe</i> <i>Natural Gas Annual, C</i> Further information can Period" information (St	Form EIA-923 collects information from electric power plants and combined heat and power (CHP) plants in the United States (see Required Respondents immediately below). Data collected on this form include electric power generation, fuel consumption, fossil fuel stocks, delivered fossil fuel cost, combustion byproducts, operational cooling water data, and operational data for NO <sub>x</sub> , SO <sub>2</sub> , and particulate matter control equipment. These data are used to monitor the status and trends of the electric power industry and appear in many U.S. Energy Information Administration (EIA) publications including: <i>Electric Power</i> <i>Monthly, Electric Power Annual, Monthly Energy Review, Annual Energy Review, Natural Gas Monthly,</i> <i>Natural Gas Annual, Cost and Quality of Fuels, Quarterly Coal Report,</i> and the <i>Renewable Energy Annual.</i> Further information can be found at <u>http://www.eia.gov/fuelelectric.html</u> . 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.					
REQUIRED RESPONDENTS	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. Facilities that do not generate electricity but serve either as a transfer terminal or offsite storage facility for fossil fuel stocks for generating stations may be required to report on the Form EIA-923.						
	See instructions for ea	ch schedule for more specific filing requi	rements.				
RESPONSE DUE DATE	<b>Monthly respondents</b> are required to file SCHEDULE 1 through SCHEDULE 5 and SCHEDULE 9 of the with EIA by the last day of the month following the reporting period. For example, if reporting for July, su data are due on August 31.						
	<b>Supplemental responses</b> (monthly respondent's filings of Schedule 6 through later than 45 days after the form opens for data entry – typically around Marc reporting year.		<b>.</b> ,				
	entry - typically around	<b>espondents</b> are required to file the form approximately 45 calendar days after the form opens for bically around March 31 following the end of the reporting year. (Schedules 3A, 5A, and 8D received data for the calendar year. All other schedules collect aggregated annual data for the calendar year.					
	See instructions for ea	ach schedule for more specific filing req	uirements.				
METHODS OF FILING RESPONSE	protect information aga	ainst unauthorized access during transmi					
	If you have not registe assistance to: EIA-923	red with the e-file Single Sign-On (SSO) @eia.gov.	system, send an email requesting				
	If you have registered	with SSO, log on at: <u>https://signon.eia.go</u>	ov/ssoserver/login				
			ne e-file system, contact the Help Desk at:				
		ter@eia.gov or Phone: 202-586-9595					
	If you need an alternat this form for your files.		the Help Desk. Retain a completed copy of				

U.S. Department of U.S. Energy Informa Form EIA-923 (2011	ation Administration	POWER PLANT OF REPORT INSTRU		Form Approval OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 2.8 Hours	
CONTACTS	immediately above. <b>Data Questions</b> : For a Schedules 1 & 4: C Schedule 2: F Schedules 3 & 5: F Schedules 6, 7, & 8: C EIA-923 Fax: 2	Rebecca Peterson Ron Hankey	requested on th <u>christopher.cas</u> rebecca.peterso ronald.hankey@ <u>channele.wirma</u>	e Form EIA-923, cc <u>sar@eia.gov</u> on@eia.gov <u>}eia.gov</u>	
GENERAL INSTRUCTIONS	<ul> <li>omission is discovered Revisions or adjustment not adjust the current rent rent adjust the current rent rent adjust the current rent adjust the current rent rent adjust the current rent adjust the current rent adjust the current rent rent rent rent rent rent rent</li></ul>	mit revisions to data prev d. Do not wait to revise d ints to data should be mar month to reflect a revision of the e-file system, re-key evision, and resubmit the oper to save and RESUBM ake a revision through the your changes to <u>EIA-923</u> the specific revision, and <b>ated information:</b> For e- Verify the administrative is esses, or email addresses not be changed. Contact for e-file users, data that for he system will notify you if portunity to either revise the n will ask for a comment/explain the anomaly, you w report via facsimile or en HEDULE 9: (1) that it is a the date of the revision. I ating the 4 items listed ab d for respondents to provi- tails that are pertinent to the state of the revision of the set of the tails that are pertinent to the state of the revision.	ata until the nex de only to the su or adjustment to v revised data, in data. IT (click on the e e-file system b e e-fil	t reporting month's invey month(s) to will to a prior month such adicate in SCHEDU SUBMIT button). ecause the monthly dicate 'Revision' in s being revised. of the information of make corrections to hat PLANT NAME, if nager if these items be amassed into ar edits in the log. Yo on or override it. W ch explanation is re for a more detailed and a corrected copy month that is being the e-file system, so	form is due. hich they pertain. (Do omission.) ILE 9 the nature and y data file has been subject line. Be sure to on the form is o the contact name, PLANT CODE, and s are incorrect. In edit log. Upon hitting ou will be directed to the hen an edit is eviewed by EIA and, if it d clarification. y of the form, but be g revised, (3) what has end an email to the

# **SCHEDULE 1. IDENTIFICATION ITEM-BY-ITEM** INSTRUCTIONS 1. Survey Contact: Verify contact name, title, address, telephone number, fax number, and email address. 2. Supervisor of Contact Person for Survey: Verify the contact's supervisor's name, title, address telephone number, Fax number and email address. The Survey Contact and Supervisor cannot be the same person. 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 twocharacter U.S. Postal Service abbreviations. These fields cannot be revised online. Contact the EIA-923 survey manager if corrections are needed. 4. 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. 5. CHP Checkbox: Verify that the check correctly indicates whether or not this facility is a combined heat and power plant, regardless of its utility/nonutility status. Contact the EIA-923 survey manager if a correction is needed. 6. CHP Plant Efficiency: If the CHP checkbox is "YES", enter the efficiency of the combined heat and power plant. To calculate the total plant efficiency, divide the sum of the energy outputs (in British thermal units (Btu)), including net generation and useful thermal output by the sum of the energy inputs (fuels converted to Btu). Report the annual average total CHP plant efficiency. SCHEDULE 2. COST AND QUALITY OF FUEL PURCHASES - 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 or the combined production of electric power and useful thermal output must complete the appropriate data on Schedule 2, Cost and Quality of Fuel Receipts. All fuel purchases should be reported at the plant level. However, for fuel received at transfer terminals or storage facilities that CANNOT be allocated to individual plants or vendor information for cost and quality of the fuel at a terminal is not available to the plant, the terminal or storage facility must report the fuel purchases, including cost and quality data. Terminals and storage facilities must list the plants where the fuel will be utilized on Schedule 9, Comments. In order to avoid duplicate data, report purchases at **either** the storage site **or** at the plant, but not both. Purchases 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 prepopulated information for these items at the top of this (and all) page(s).

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

U.S. Department of Energy
<b>U.S. Energy Information Administration</b>
Form EIA-923 (2011)

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 Purchases:** Report data by supplier and mine source. (Purchased coal or petroleum coke which will be converted to synthesis gas should be reported as it is received, i.e. as coal or petroleum coke.)

<u>Monthly Respondents:</u> Coal received from spot-market purchases and from contract purchases must be reported separately. Data on coal received under each purchase order or contract from the same supplier must be reported separately. Coal purchases can be aggregated when supplier, purchase type, contract date, coal rank, transportation mode, costs, fuel quality, and all mine information are identical. If coal received under a purchase order or contract originates in more than one State/county/mine and the mines 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). Mine information is reported on Page 3 of Schedule 2. If the mine or group of mines is not available on the list of mines provided for data entry on the e-filing system, contact EIA immediately (see contacts on Page 1 of the form or instructions). EIA will add appropriate choices for purchases from multiple sources to the drop down list.

<u>Annual Respondents</u>: Coal received from spot market purchases and from contract purchases must be reported separately. Aggregation of coal shipments is allowed ONLY IF shipments are identical in purchase type, coal rank, mine name, mine type, Mine Safety and Health Administration (MSHA) ID, State of origin, county of origin, and supplier. For aggregated purchases, report the weighted average cost and quality of the fuel. If the mine or group of mines is not available on the list of mines provided for data entry on the e-filing system, contact EIA immediately (see contacts on Page 1 of the form or instructions).

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

<u>Monthly Respondents</u>: Oil received from spot-market purchases and from contract purchases must be reported separately. Report individual shipments as separate line items.

<u>Annual Respondents:</u> Oil received from spot-market purchases and from contract purchases must be reported separately. Aggregation for the entire year is allowed by fuel type and supplier. If aggregated, report the weighted average cost and quality of the fuel.

**Gas Purchases (monthly and annual respondents):** Report data by fuel type and supplier. Aggregation of gas deliveries from various suppliers is allowed only if 1) the deliveries are spot purchases, 2) the type of gas is the same (either NG, OG, or PG), and 3) the transportation contracts are identical (either firm or interruptible). For aggregated deliveries, report the pipeline or distributor in the supplier column and the weighted average cost and quality of the fuel. Contract purchases must be reported as separate line items and should never be aggregated. For gas produced by the plant (e.g., BFG), list the suppler 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. Do not report gas injected into storage. Report it when it is delivered to the plant. Do not report any costs associated with storage.

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 with 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 "1112" for a November "2012" expiration date. This column should be left blank if Contract Type contains an "S" for spot-market purchase.

#### Purchases

- 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, petroleum products, petroleum coke, 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. Fuel purchases reported should pertain to the fuel that will ultimately be used only in the electric power plant for the generation of electricity and at combined heat and power plants for useful thermal output (process steam, district heating/cooling, space heating, or steam delivered to other end users). As far as possible, do not include fuel that will be used in boilers with no connection to an electric power generator and are not part of the electric power station. If these fuels cannot be separated, please provide a comment on Schedule 9, Comments. Start-up and flame-stabilization fuels should be reported. When fuel is purchased by and received at the plant and is resold, report the total receipts minus the amount sold. See the below instruction regarding how to report the costs.

#### 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. If fuel received at the plant is resold, report the commodity cost and the total delivered cost as the cents per MMBtu paid for the original receipt. Do not discount the costs by the revenue received for the sale of the fuel.
- 7. 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 edit log override comment, e.g. "This price includes a reservation fee of x dollars."
- 8. Commodity Cost (Coal, Petroleum Coke, 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 mine/transportation pipeline (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.
- 9. For fuel purchased via a hedging contract, report the actual fuel supplier, not the hedge contract. Report the cost net of gains/losses as a result of the contract.

#### **Quality of Fuel**

**Fuel Supplier Name, Contract Type, Quantity Purchased, and Energy Source** is prepopulated for efile users based on the data entered on page 1 of SCHEDULE 2.

- 1. **Heat Content:** Enter the actual (not contractual) average Btu content for each fuel purchase in terms of million (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 coal types, petroleum coke, residual fuel oil, and waste oil, 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 and petroleum coke, enter the ash content of the fuel in terms of percent ash by weight. Show to the nearest 0.1 percent. Enter a comment in Schedule 9 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 0.001 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. If mercury content is unknown, enter 9.

	Table	1	
Fuel	% Sulfur	% Ash	Mercury (ppm)
BIT	0.4 - 6.0	4.0 - 30.0	0.020 0.500
LIG	0.4 - 3.0	5.0 - 35.0	0.020 0.500
SUB	0.2 – 1.5	3.0 - 15.0	0.020 0.200
ANT	0.4 - 6.0	4.0 - 30.0	0.020 0.500
RC	0.2 - 6.0	3.0 - 30.0	0.020 0.500
WC	0.3 - 6.0	5.0 - 50.0	0.020 1.200
PC	1.0 – 7.0	0.1 1.2	
RFO	0.2 – 4.5		
WO	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, i.e. 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 provided under schedules or contracts which anticipate and permit interruption on short notice, such as 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 reported 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 second longest method used to transport the fuel to 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 minemouth 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

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

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.

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

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

 State or Country of Origin: Choose the two-letter U.S. Postal Service abbreviation or country code from the drop down list of coal producing states (countries). For imported coal, insert the two-letter country code shown here.

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

**RS** – Russia; **VZ** – Venezuela; **OT** – Other (specify the country in Schedule 9).

The State of Origin is mandatory. If purchases originate from a broker, barge site or other third party, you must contact the broker, barge site or other party and find out the State(s) where the coal originates. If the broker or supplier is not forthcoming with State of Origin information or Mine Information, provide the name and telephone number of the supplier on Schedule 9, Comments.

If coal purchased under a purchase order or contract originates in more than one State, determine from the supplier the most dominant or probable State(s) of origin for the coal. Contact EIA to have the supplier and State(s) added to the drop down list of choices for State of Origin and Mine Information on Schedule 2 Page 3. If the amount of coal from each State/Mine is known, allocate the purchase among multiple States, or report the State where the majority of the coal originates and report identical quality and costs are known).

Contact EIA immediately (see contacts on Page 1 of the form or instructions) for assistance in reporting coal State of Origin or Mine Information. EIA will add appropriate choices for purchases from multiple sources to the drop down list.

Mine Information: Choose from the drop down list the mine of origin. The list will display only those
mines located in the State/country of origin. The displayed information includes the mine operating
company for informational purposes to aid in identifying the mine of origin. Upon choosing a mine, the
MSHA ID, Mine Name, Mine Type and Mine County will automatically be populated.

Mine Information is mandatory. Determine from the supplier the most dominant or probable mine(s) of origin for the coal. List the mines on Schedule 9, Comments. If the broker or supplier is not forthcoming with State of Origin information or Mine Information, provide the name and telephone number of the supplier on Schedule 9, Comments.

In cases where coal originates from multiple mines or the specific mine information cannot be determined, list the tipple/loading point or dock on Schedule 9, Comments. EIA will add appropriate choices to the drop down list of Mine Information to accommodate multiple mines or undetermined mine sources. Use Schedule 9, Comments, to provide detailed explanations of mine origin data, including names of multiple mines for a specific supplier/broker or dock, or the most probable origin of the coal (county/State) if not specifically known.

Contact EIA immediately (see contacts on Page 1 of the form or instructions) for assistance in reporting coal State of Origin or Mine Information. EIA will add appropriate choices for purchases from multiple sources to the drop down list.

#### SCHEDULE 3. PART A. BOILER-LEVEL 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. If no fuel is consumed, for example in combined cycle steam units (HRSG) without supplementary firing, report zero. Do not leave the field blank. Report fuels consumed in gas turbines, including the gas turbines at combined-cycle plants, and IC engines on SCHEDULE 3 PART B.

For combined heat and power plants, 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.

For those plants that report annually, Schedules 3A and 5A must be reported for each month.

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.

**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 prepopulated. If the prepopulated code is incorrect, delete the code and choose the correct prime mover code from the drop-down list.

**Boiler ID:** The boiler ID is prepopulated. For an ID not prepopulated, choose the ID from the drop down list of boiler IDs that were reported for your plant on the Form EIA-860. If the boiler ID is not on the list, contact EIA immediately to have the ID added to your form. Boiler IDs must match those reported on the Form EIA-860.

**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)
TS	Operating under test conditions (not in commercial service)

**Energy Source:** Use the fuel codes in Table 8. For bituminous and subbituminous coal that is blended, where possible report each coal rank consumed separately. If no allocation can be determined, report the fuel that is predominant in quantity. An estimated allocation between coal ranks is acceptable.

**Quantity Consumed:** For each month, report the amount of fuel consumed for electric power generation and, at combined heat and power stations, for useful thermal output. Combined-cycle units should report only the auxiliary firing fuel associated with the HRSG. Do not report the fuel consumed in the combustion turbine portion of the combined-cycle unit on Schedule 3A. CT consumption must be reported on Schedule 3B.

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 to the nearest 0.001 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: ANT, BIT, LIG, RC, SUB, WC, PC, RFO, and WO. Refer to Table 1 for approximate ranges.

Ash Content (coal and petroleum coke only): For each month, enter ash content to the nearest 0.1 percent. Ash content should be reported for the following fuel codes: ANT, BIT, LIG, SUB, WC, RC, and PC. 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 gas turbines, including the combustion turbine part of combined-cycle plants, internal combustion engines, steam-electric plants under 10 megawatts, fuel cells, and electric power input to pumped-storage hydroelectric plants, compressed air units, and other miscellaneous energy storage technologies. Excluded from this schedule are conventional hydroelectric plants and all other plants that are not required to report energy consumed (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 total steam-electric capacity is less than 10 MW. All steam-electric plants and supplementary-fired HRSGs at combined cycle plants with a total steam electric nameplate of 10 MW and above must report fuel consumption at the boiler level 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.

For combined heat and power plants, 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, CE, CS, CT, FC, GT, IC, PS, ST, and OT can be used in Schedule 3. Part B. For e-file users, the code is prepopulated. If the prepopulated code is incorrect, choose the correct code from the drop-down list. Each prime mover type on Schedule 3B must have a corresponding entry on Schedule 5B for electric power generation.

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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, where possible report each coal rank consumed separately. If no allocation can be determined, report the fuel that is predominant in quantity. An estimated allocation between coal ranks is acceptable. Quantity Consumed: For each month, report the amount of fuel consumed for electric power generation and, at combined heat and power stations, for useful thermal output. Include start-up and flamestabilization fuels. Pumped storage hydroelectric plants and compressed air plants report the megawatthours of energy input for pumping water or compressing air for energy storage. Combined cycle plants with no supplementary firing must report the CA unit on Schedule 3B with ZERO for fuel consumed. Each prime mover type on Schedule 3B must have a corresponding entry on Schedule 5B for electric power generation. 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) Pumped storage hydro and compressed air -- Megawatthours Average Heat Content: For each month, report the heat content of the fuels burned to the nearest .001 MMBtu (million Btu) per physical unit (MMBtu per ton/barrel/thousand cubit feet). 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. Heat content can be blank if fuel consumed is zero and for pumped storage and compressed air plants.

#### 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 for plants 50 MW and above, 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. Include 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

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

To avoid duplication, do not report receipts in Schedule 2 at the plant level that have already been reported by a transfer terminal or storage facility and then transferred to a plant(s). Designate such transfers in Schedule 4 as negative adjustments to stocks at the transfer terminal or storage facility and positive adjustments to stocks at the plant, including appropriate comments. Depending on the required data at transfer terminals or storage sites and associated plants, the energy balance may require an explanatory comment. **ENTER ZERO** in the Ending Stocks column if a plant has no stocks. Do not leave the field blank.

**Energy Source:** Add the energy source code from Table 8. For e-file users the code is prepopulated. If the code is incorrect, 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 populated into the schedule from the previous reporting period.
- 2. **Current Month's Purchases:** These data have been reported (above in SCHEDULE 2) and the sum by energy source is automatically populated.
- 3. **Current Month's Consumption:** These data have been reported (in SCHEDULE 3A and 3B) and the sum by energy source is automatically populated.
- 4. **Ending Stocks:** Report this month's ending stocks. Include all on-site stocks held for eventual use in the electric power plant regardless of actual ownership of the fuel.
- 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 an explanation for the adjustment in the section provided on Schedule 4.
- 6. 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 Purchases 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 in the box on Schedule 4 for Balance comments to explain any discrepancy. Fuel receipts that are not used for the production of electricity but for other purposes at the plant (e.g. as a feed material to produce chemical byproducts such as fertilizers, etc.) may cause an imbalance in the equation. Likewise, fuel that is sold during the month may cause an imbalance. Enter an adjustment to balance the equation and enter an explanation for the adjustment or other situation that result in an imbalance. Note that there are separate areas on Schedule 4 for adjustment explanations and explanations for balances not equal to zero.

### 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 organicfueled plants with a total steam turbine capacity of 10 megawatts and above, including the steam turbine generation from combined cycle units. Report generation for all other types of prime movers (combustion turbines, IC engines, wind, and hydraulic turbines), and steam turbine capacity of less than 10 megawatts and all plants 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.

For those plants that report annually, Schedules 3.A. and 5.A. must be reported for each month.

**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 is prepopulated. If the prepopulated code is incorrect, choose the correct prime mover code from the drop-down list.

**Generator ID:** The generator ID is prepopulated. For an ID not prepopulated, choose the ID from the drop down list of generator IDs that were reported for your plant on the Form EIA-860. If the generator ID is not on the list, contact EIA immediately to have the ID added to your form. Generator IDs must match those reported on the Form EIA-860.

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

Status Code	Status Code Description
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 net generation (gross generation minus the parasitic station load, i.e. station use). If the monthly station service load exceeded the monthly gross electrical generation, report negative net generation with a minus sign. Do not use parentheses. For each month, enter that amount in MWh. Combined heat and power plants in the industrial and commercial sectors may choose to leave net generation blank in cases where net generation cannot be determined. Please note that net generation is not defined as electric power sold to the grid (net of direct use), but as gross minus station use. If station use is not separable from direct use at combined heat and power plants, report only gross generation and leave net generation blank.

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#### 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, compressed air units, pumped-storage hydroelectric turbines, and other miscellaneous energy storage technologies. 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, CE, CS, CT, FC, GT, IC, PS, ST, and OT can be used in Schedule 5. Part B. For e-file users, the code is prepopulated. If the prepopulated code is incorrect, choose the correct prime mover code from the drop-down list. Each prime mover type on Schedule 5B must have a corresponding entry on Schedule 3B for fuel consumption. Note that for prime mover type CA, the entry on Schedule 3B (fuel consumed) is ZERO. 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 net generation (gross generation minus the parasitic station load, i.e. station use). If the monthly station service load exceeded the monthly gross electrical generation, report negative net generation with a minus sign. Do not use parentheses. For each month, enter that amount in MWh. Combined heat and power plants in the industrial and commercial sectors may choose to leave net generation blank in cases where net generation cannot be determined. Please note that net generation is not defined as electric power sold to the grid (net of direct use), but as gross minus station use. If station use is not separable from direct use at combined heat and power plants, report only gross generation and leave net generation blank.

### 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, conventional hydroelectric or other plants where the energy source is not required to be reported on Schedules 3A or 3B, such as purchased steam or waste heat. No fuel consumption data 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. For all other plant types, ignore the unit column. Do not report generation at a combined-cycle plant. All combined-cycle generation is reported on SCHEDULE 5. PARTS A or B, even though the fuel consumption for non-supplementary fired HRSG units is zero (reported on Schedule 3A or 3B with a zero for fuel).

**Prime Mover Code:** Prime mover codes are shown in Table 7. Only HY, HA, HB, HK, BT, PV, ST, WT, and OT can be used in Schedule 5. Part C. For e-file users, the code is prepopulated. If the prepopulated code is incorrect, 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:** The nuclear unit code is prepopulated. Contact EIA if it is incorrect. All other plants ignore this field.

**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 net generation (gross generation minus the parasitic station load, i.e. station use). If the monthly station service load exceeded the monthly gross electrical generation, report negative net generation with a minus sign. Do not use parentheses. For each month, enter that amount in MWh. Combined heat and power plants in the industrial and commercial sectors may choose to leave net

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generation blank in cases where net generation cannot be determined. Please note that net generation is not defined as electric power sold to the grid (net of direct use), but as gross minus station use. If station use is not separable from direct use at combined heat and power plants, report only gross generation and leave net generation blank.

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

**Required Respondents:** Nonutility plants report annual calendar year data for the source and disposition of electricity.

- If you file the EIA-923 <u>monthly</u>, this schedule is completed on the Form EIA-923 Supplemental Form and is filed annually.
- If you file the EIA-923 annually, this schedule is completed on the Form EIA-923 Annual.

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. Note that for monthly respondents this should equal the sum of the gross generation reported each month on Schedules 5A, 5B, and 5C.
- 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, which is the electricity used in the operation and maintenance of the facility (e.g., parasitic loads from auxiliary equipment and onsite heating and lighting loads), 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 (Industrial and Commercial Sector Plants, both CHP and non-CHP): 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. (Plants that cannot separate Station Use and Direct Use may enter zero in Station Use and the sum of Station Use and 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 directly to retail (end-use) customers (power that is not re-sold or distributed by another entity). 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 file the Form EIA-861 "Annual Electric Power Industry Report," for more detailed information on the nature of the retail sales.
- 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.
- 10. **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, power marketers, or other entities for resale to end-use consumers. This excludes energy supplied under tolling agreements that is intended for resale to end use customers. Report energy supplied under tolling agreements in "Other Outgoing Electricity." Report all revenue from Sales for Resale in thousand dollars to the nearest whole number.

#### SCHEDULE 8. ANNUAL ENVIRONMENTAL INFORMATION

**Required Respondents:** SCHEDULE 8 is filed annually and must be reported by steam-electric organicfueled power plants and combined cycle plants with a total steam turbine capacity of 10 megawatts and above (that is the set of plants that reported boiler-level consumption on SCHEDULE 3. Part A.). Parts A through F are required for plants 100 MW and above, and only Parts C, E and F are required for plants from 10 megawatts to less than 100 MW.

- If you file the EIA-923 <u>monthly</u>, this schedule is completed on the Form EIA-923 Supplemental and is filed annually.
- If you file the EIA-923 annually, this schedule is completed on the Form EIA-923 Annual.

#### 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.
- 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 CaS0<sub>4</sub>•2H<sub>2</sub>0 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 must be reported in million Btu (MMBtu).

### SCHEDULE 8. PART B. FINANCIAL INFORMATION RELATED TO COMBUSTION BYPRODUCTS

- 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. Record expenditures for IGCC slag or fly ash collection/disposal in Column (1) or Column (2), respectively.
- 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.

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- 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 NO<sub>x</sub> Controls: Place a check in this box if the plant has no NO<sub>x</sub> control equipment or processes.
- 2. **Boiler ID:** The boiler ID must match and correspond to the boiler ID and associated information reported on the EIA-860. The boiler ID is prepopulated for e-file users. If it is not prepopulated, choose the boiler ID from the drop down list. If the boiler ID is not on the list, contact EIA.
- 3. **NO<sub>x</sub> 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. MONTHLY COOLING SYSTEM OPERATIONS

NOTE: All steam-electric plants of 100 MW nameplate capacity or greater, including combined cycle and nuclear energy plants, must respond to this schedule. A separate page must be completed for each month.

- 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 Cooling Water Temperature sections.
- 3. **Cooling System ID or PLANT:** The cooling system ID must match and correspond to the data reported on the EIA-860. The ID is prepopulated for e-file users. If the ID is not prepopulated, choose the ID from the drop down list. If the cooling system ID is not on the list, contact EIA to have new IDs added. If the data to be reported are for the entire plant (because the data cannot be broken down by separate cooling systems), choose "PLANT" from the drop-down list.
- 4. Cooling System Status: Select from the equipment status codes on Table 4.

# POWER PLANT OPERATIONS REPORT INSTRUCTIONS

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### PRIME MOVER CODES AND DESCRIPTION

#### Table 4

Code	System 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)
TS	Operating under test conditions (not in commercial service)

- 5. **Hours in Service: Enter the** hours each cooling system was in service for the reporting period..
- 6. **Monthly 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. Report amount of chlorine to the nearest whole number in thousand pounds.
- 7. Average Monthly Rate of Cooling Water data should be the rate of flow reported in cubic feet per second (to the nearest 0.1 ft<sup>3</sup>). *Diversion* is the water moved from a watercourse without immediate beneficial use, for purposes such as filling a cooling pond or adding water to a lake from which thermoelectric power water withdrawals can occur. *Withdrawal* is the water removed from a water body for beneficial use such as cooling water, boiler make-up water, ash sluicing, and dust suppression. *Discharge* is the water returned to a water body, not necessarily the same water body as the withdrawal. (Do not include water discharged to a recirculation pond that will be re-used at this power plant.) *Consumption* is the water that is withdrawn from a water body and not returned (discharged), because of evaporation losses and onsite consumption such as for dust control and flue gas desulfurization.
- 8. For **Measured or Estimated**, if all data reported under either the Average Monthly Rate of Cooling Water section or the Intake or Discharge Temperature section have been measured, choose one of the choices for "Measured" from the drop-down list. If one or more entries have been estimated in a particular section choose one of the estimation methodologies given in the drop-down list for that section. If "Other" is chosen, provide details of the estimation method on Schedule 9.
- 9. For the Cooling Water Temperature sections, report the Average Monthly Temperature and the Maximum Temperature for the Month in degrees Fahrenheit to the nearest whole number, measured at the withdrawal point from the natural body of water or cooling pond in the case where water s first diverted and discharge into the natural body of water.

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

- 1. Flue Gas Particulate Collector ID: The flue gas particulate collector ID must match and correspond to the data reported on the Form EIA-860. The ID is prepopulated for e-file users. For an ID not prepopulated, choose the ID from the drop down list. If the ID is not on the list, contact EIA.
- 2. FGP Collector Status: Select from the equipment status codes in Table 5.

# POWER PLANT OPERATIONS REPORT INSTRUCTIONS

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### ENERGY SOURCE CODES AND HEAT CONTENT

Code Status Cancelled (previously reported as "planned") CN 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) SC Cold Standby (Reserve); deactivated (usually requires 3 – 6 months to reactivate) TS Operating under test conditions (not in commercial service)

Table 5

- 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 leave the test date blank. Test results should not be reported 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 must match and correspond to the data reported on the Form EIA-860. The ID is prepopulated for e-file users. For an ID not prepopulated, choose the ID from the drop down list. If the ID is not on the list, contact EIA.
- 2. 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.

# POWER PLANT OPERATIONS REPORT INSTRUCTIONS

### Form Approval OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 2.8 Hours

#### Table 6

Code	Status
CN	Cancelled (previously reported as "planned")
СО	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)
SB	Standby (or inactive service); i.e. not normally used, but available for service
SC	Cold Standby (Reserve); deactivated (usually requires 3 – 6 months to reactivate
TS	Operating under test conditions (not in commercial 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, enter zero for the efficiency and leave the test data blank. 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**

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.

## POWER PLANT OPERATIONS REPORT INSTRUCTIONS

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|--|

Prime Mover Code	Prime Mover Description
ВТ	Turbines Used in a Binary Cycle (such as used for geothermal applications)
CA	Combined-Cycle – Steam Part
CE	Compressed Air Energy Storage
СР	Energy Storage, Concentrated Solar Power
CS	Combined-Cycle Single-Shaft Combustion turbine and steam turbine share a single generator
СТ	Combined-Cycle Combustion Turbine Part
FC	Fuel Cell
GT	Combustion (Gas) Turbine (including jet engine design)
HA	Hydrokinetic, Axial Flow Turbine
HB	Hydrokinetic, Wave Buoy
НК	Hydrokinetic, Other
HY	Hydraulic Turbine (including turbines associated with delivery of water by pipeline)
IC	Internal Combustion (diesel, piston) Engine
ОТ	Other – Specify on SCHEDULE 9.
PS	Hydraulic Turbine – Reversible (pumped storage)
PV	Photovoltaic
ST	Steam Turbine (including nuclear, geothermal and solar steam, excluding combined-cycle)
WT	Wind Turbine

# POWER PLANT OPERATIONS REPORT INSTRUCTIONS

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Table 8					
			"Higher Hea Ran		
	Energy Source Code	Unit Label	MMBtu Lower	MMBtu Upper	Energy Source Description
		1	1	Fossil Fuel	s
	ANT	tons	22	28	Anthracite Coal
	BIT	tons	20	29	Bituminous Coal
-	LIG	tons	10	14.5	Lignite Coal
Coal	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)
	RC	tons	20	29	Refined Coal
	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
Petroleum Products	KER	barrels	5.6	6.1	Kerosene
FIGURE	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, sludg oil, tar oil, or other petroleum-based liquid wastes)
	BFG	Mcf	0.07	0.12	Blast Furnace Gas
Natural Gas	NG	Mcf	0.8	1.1	Natural Gas
and Other Gases	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
Renewable Fuels					
	AB	tons	7	18	Agricultural By-Products
Solid	MSW	tons	9	12	Municipal Solid Waste
Renewable Fuels	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)

# POWER PLANT OPERATIONS REPORT INSTRUCTIONS

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	Energy	Unit	-	Heating Range	
	Source Code	Label	MMBtu Lower	MMBtu Upper	Energy Source Description
			Renev	vable Fuel	s (cont.)
Liquid	OBL	barrels	3.5	4	Other Biomass Liquids (specify in Comment Section of SCHEDULE 9)
	SLW	tons	10	16	Sludge Waste
Renewable	BLQ	tons	10	14	Black Liquor
(Biomass) Fuels	WDL	barrels	8	14	Wood Waste Liquids excluding Black Liquor (includes red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids)
Gaseous	LFG	Mcf	0.3	0.6	Landfill Gas
Gaseous Renewable (Biomass) Fuels	OBG	Mcf	0.36	1.6	Other Biomass Gas (includes digester gas, methane, and other biomass gasses) (specify in Comment Section of SCHEDULE 9)
	SUN	N/A	0	0	Solar
	WND	N/A	0	0	Wind
	GEO	N/A	0	0	Geothermal
All Other Renewable	WV	N/A	0	0	Water used in Wave Buoy Hydrokinetic Technology
Fuels	CUR	N/A	0	0	Water used in Current Hydrokinetic Technolog
-	TID	N/A	0	0	Water used in Tidal Hydrokinetic Technology
	WAT	N/A	0	0	Water at a <b>Conventional</b> Hydroelectric Turbine
			A	Il Other Fu	iels
	WAT	MWh	0	0	Pumping Energy for Reversible (Pumped Storage) Hydroelectric Turbine
All Other Fuels	N/A	MWh	0	0	Compressed Air
	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.

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Plant Name:				
Plant ID:		State:	Reporting Month	n/Year:
GLOSSARY	The glossary for this fo	orm is available online at	the following UF	RL: <u>http://www.eia.gov/glossary/index.html</u>
SANCTIONS	the Federal Energy Ac respond may result in more than \$5,000 per reporting violations, wh injunction without bond any person to comply for any person knowin	Iministration Act of 1974 a penalty of not more that day for each criminal vio hich may result in a temp d. In such civil action, th with these reporting requ	(FEAA) (Public I an \$2,750 per da lation. The gove porary restraining e court may also uirements. Title to any Agency o	port is mandatory under Section 13(b) of Law 93-275), as amended. Failure to by for each civil violation, or a fine of not ernment may bring a civil action to prohibit g order or a preliminary or permanent issue mandatory injunctions commanding 18 U.S.C. 1001 makes it a criminal offense or Department of the United States any its jurisdiction.
REPORTING BURDEN	monthly respondents, annual respondents w data sources, gatherin information. The weig comments regarding th suggestions for reduci Avenue S.W., Forresta Regulatory Affairs, Off	3.2 hours per response to ith boiler level data, inclu- ag and maintaining the da hted average burden for his burden estimate or al ng this burden, to the El- al Building, Washington, fice of Management and	for annual respor uding the time for ata needed, and the Form EIA-92 ny other aspect of A, Statistics and D.C. 20585-0670 Budget, Washing	hated to average 2.7 hours per response for reviewing instructions, searching existing completing and reviewing the collection of 23 is 2.8 hours per response. Send of this collection of information, including Methods Group, EI-70, 1000 Independence 0; and to the Office of Information and gton, D.C. 20503. A person is not required ays a valid OMB number.
DISCLOSURE OF INFORMATION	"Commodity Cost" info "Stocks at End of Rep- disclosed to the extent (FOIA), 5 U.S.C. §552 the FOIA, and the Tra- considered public infor The Federal Energy A agencies when reques available, upon reques Congress, the Govern such information. A co The information may b enforcement, or adjud	ormation for all plants in s orting Period" information t that it satisfies the criter de Secrets Act, 18 U.S.C rmation and may be pub dministration Act require sted for official use. The st, to another component ment Accountability Offic ourt of competent jurisdic be used for any non-statisticatory purposes.	SCHEDULE 2 an n reported on SC ria for exemption rgy (DOE) regula 2. §1905. All oth licly released in c is the EIA to prov information repo t of the Departme ce, or other Fede ction may obtain stical purposes s the protected sta	received at nonutility power plants and d "Previous Month's Ending Stocks" and CHEDULE 4 will be protected and not of under the Freedom of Information Act ations, 10 C.F.R. §1004.11, implementing her information reported on Form EIA-923 is company identifiable form. Wide company-specific data to other Federal orted on this form may also be made ent of Energy (DOE), to any Committee of oral agencies authorized by law to receive this information in response to an order. Such as administrative, regulatory, law atistical data published from SCHEDULES f identifiable information is very small.

U.S. Department of Energy U.S. Energy Information Administra Form EIA-923 (2011)	tion POWER	PLANT OPERATIONS REPORT	Form Approval OMB No. 1905-0129 Approval Expires: 12/31/2013 Burden: 2.8 Hours					
NOTICE: This report is mandatory under the Federal Energy Administration Act of 1974 (Public Law 93-275). 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 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								
	5	Survey Contact						
First Name:		_ Last Name:						
Title:		_						
Telephone (include extension):		Fax:						
Email:		_						
Address:								
State:		Zip:						
	Supervisor of	f Contact Person for Surv	ey					
First Name:		_ Last Name:						
Title:								
Telephone (include extension):								
Email:								
Address:								
State:		Report For						
Company Name:								
Plant Name:		Reg	ulated 🛛 Yes 🗆 No					
Plant ID: Plant County	:	CHF	Yes 🗆 No					
Address:			Efficiency %					
City:			Code:					
Reporting Month/Year:								
Contacts								
For questions related to E-filing:		CNEAFHelpcenter@eia.gov	202-586-9595					
For questions about the data requested on this form:								
Schedules 1 & 4: Chris C		christopher.cassar@eia.gov	202-586-5448					
	a Peterson	rebecca.peterson@eia.gov	202-586-4509					
Schedules 3 & 5: Ron Ha		rhankey@eia.gov	202-586-2630					
, ,	ele Wirman	channele.wirman@eia.gov	202-586-5356					
	7-1959 or 202-287-1960							
EIA-923 Mailbox: <u>EIA-92</u>	<u>3@eia.gov</u>							

U.S. Department of Energy U.S. Energy Information Administration Form EIA-923 (2011)		-	NT OPERATIONS OMB N PORT Approv			n Approval 3 No. 1905-0129 roval Expires: 12/31/2013 den: 2.8 Hours	
Plant Name:							
Plant ID: State: Reporting Month/Year:							
SCHEDULE 2. PAGE 1. COST AND QUALITY OF FUEL PURCHASES – PLANT LEVEL CONTRACT INFORMATION, RECEIPTS, AND COSTS For fossil-fueled plants 50 megawatts and above							
□ No Receipts (If applicable, please check		☐ Is there a fuel tolling agreement in place for this plant? (If applicable, please check.)					
Contract Information	on		Receipts		Cost per Unit		
Fuel Supplier Name	Contract Type	Contract Expiration Date	Energy Source	Quantity Purchase (solids in to liquids in ba gases in M	ed ons, rrels,	Total Delivered Cost (cents per MMBtu, to the nearest 0.1)	Commodity Cost (Coal, Natural Gas) (cents per MMBtu, to the nearest 0.1)

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Plant Name: \_\_\_\_\_\_

Plant ID: \_\_\_\_\_

State: \_\_\_\_\_ Reporting Month/Year: \_\_\_\_\_

### SCHEDULE 2. PAGE 2. COST AND QUALITY OF FUEL PURCHASES – PLANT LEVEL QUALITY OF FUEL AND TRANSPORTATION For fossil-fueled plants 50 megawatts and above

	Purchases			Quality of Fuel as Received			Fuel Transportation				
	Carried Forward from Schedule 2. Page 1.				All Fuels	Coal, Pet Coke, RFO, and WO	Coal and Pet Coke	Coal Only	Natural Gas		Pet Coke, nd Oil
	Fuel Supplier Name	Contract Type	Energy Source	Quantity Purchased	Heat Content (MMBtus to nearest 0.001)	Sulfur Content (percent weight to nearest 0.01)	Ash Content (percent weight to nearest 0.1)	Mercury Content (ppm to nearest 0.001 or enter 9 if not available)	Firm or Interruptible	Predomin ant Mode (Mode used to transport fuel over the longest distance)	Secondary Mode (Mode used to transport fuel over the second- longest distance)

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Plant Name: \_\_\_\_\_

Plant ID: \_\_\_\_\_

State: \_\_\_\_\_ Reporting Month/Year: \_\_\_\_\_

# SCHEDULE 2. PAGE 3. COST AND QUALITY OF FUEL PURCHASES - PLANT LEVEL COAL MINE INFORMATION

# For fossil-fueled plants 50 megawatts and above

P	urchases Info	mation	Coal Mine Information					
Carried Fo	rward from Sch	edule 2. Page 1						Coal Mine
Fuel Supplier Name	Contract Type	Energy Source	Quantity Purchased	Coal Mine State	Coal Mine MSHA ID	Coal Mine Type	Coal Mine Name	County (for imported coal, enter IMP)

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Plant Name: \_\_\_\_\_

Plant ID: \_\_\_\_\_

S

State: \_\_\_\_\_ Reporting Month/Year: \_\_\_\_\_

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

This schedule will be completed by plants with a total steam turbine capacity of **10 megawatts and above** that burn organic fuels. Report only fuels consumed in the boilers, or for HRSGs in duct burners. If no fuel is consumed for the HRSG at combined cycle plants, report zero. Do not leave blank. Report consumption in combustion turbines or IC engines on SCHEDULE 3. PART B.

If this does not apply, go to SCHEDULE 3. PART B.

Complete a separate row for each Boiler ID.

Did any boiler produce steam for purposes other than electric power generation during this reporting period? (If applicable, please check.)

Prime Mover Code	Boiler ID	Boiler Status	Energy Source (See Table 8 on pages 22 through 23 in the Instructions.)	Quantity Consumed (Enter zero when a fuel has no consumption for this reporting period)	Type of Physical Units (tons, barrels, or Mcf)	Average Heat Content (as burned, to nearest 0.001 MMBtu per ton, barrel, or Mcf)	Sulfur Content (coal, pet coke, RFO, and WO, to nearest 0.01%)	Ash Content (coal and PC only, to nearest 0.1%)

If you reported the category of OTH, OBS, OBG, OBL, or OG in the Energy Source column, please identify the category and specific fuel name below. For example, "The OBG gas is methane."

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Plant Name:

Plant ID: \_\_\_\_\_

State: \_\_\_\_\_ Reporting Month/Year: \_\_\_\_\_

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

Report fuel consumed by plants with organic-fueled steam and combined cycle steam capacity under 10 MW, and all combustion turbines, IC engines, fuel cells, pumped storage hydroelectric units and compressed air units. Aggregate quantity consumed for prime movers of a single type. In other words, all natural gas consumed by all combustion gas turbines should be reported as one number. Report pumping energy in megawatthours for pumped-storage plants and compressed air units.

Complete a separate row for each Prime Mover Type. (See Table 7 of the instructions.).

#### Was steam produced for purposes other than electric power generation during this reporting period? (If applicable, please check.)

Prime Mover Code	Energy Source	Quantity Consumed	Type of Physical Units	Average Heat Content
	(See Table 8 on pages 22 through 23 in the Instr⊡ctions.)	(Enter zero when a fuel has no consumption for this reporting period.)	(tons, barrels, or Mcf)	(MMBtu per ton, barrel, or Mcf)

If you reported the category of OTH, OBS, OBC, OBL, or OG in the Energy Source column, please identify the category and specific fuel name below. For example, "The OBG gas is methane."

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Plant Name:

Plant ID: \_\_\_\_

State: \_\_\_\_\_ Reporting Month/Year: \_\_\_\_

### SCHEDULE 4. FOSSIL FUEL STOCKS AT THE END OF THE REPORTING PERIOD AND DATA BALANCE For Coal, Oil, and Natural Gas Plants

Report stocks for the following fuels:

Coal (tons)

Residual oil (No. 5 and No. 6 fuel oils) (barrels)

Distillate-type oils (including diesel oil, No. 2 oil, jet fuel and kerosene) (barrels)

Petroleum coke (tons)

Include back-up fuels.

Include start-up and flame-stabilization fuels.

Do not report stocks for waste coal, natural gas, or wood waste. Do enter a comment if the natural gas balance does not equal zero. Stocks held off-site that cannot be assigned to an individual plant are to be reported as stocks held at a central storage site. Each central storage site must be reported separately. New sites should be indicated in the Comment Section, located in SCHEDULE

9 of this form.

Enter zero if the plant has no stocks. Do not leave blank.

Enter adjustments to stocks. An adjustment can be positive or negative. See instructions for additional information. Provide a comment to explain adjustments in the adjustments grid.

Enter a comment if the balance does not equal zero in the balance grid.

Energy Source (See Table 8 in the Instructions.)	Type of Physical Units (tons, barrels, or Mcf)	Previous Month's Ending Stocks (1)	Current Month's Receipts (2)	Current Month's Consumption (3)	Ending Stocks (4)	Adjustment to Stocks* (5)	<b>Balance</b> ** (6) 4=(1+2-3+5)

\*Explain any adjustments below.

Adjustment (from Column 5 above)	Energy Source	Explanation

\*\*Previous Month's Stocks plus Receipts minus Consumption plus (or minus) Adjustment should equal Ending Stocks. The balance will appear in column (6). If the balance is not zero, provide an explanation below.

Balance (from Column 6 above)	Energy Source	Explanation

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

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 hydroelectric turbines, and compressed air units.), 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.

Industrial or Commercial Sector plants may report gross generation ONLY if net generation is not measured (see instructions for definition of net generation).

Complete a separate row for each Generator ID. See Generator ID information in the instructions for Schedule 5. Part A.

Prime Mover Code	Generator ID	Generator Status	Gross Generation (MWh)	Net Generation (MWh)

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

This schedule will be completed ONLY by steam-electric organic-fueled plants with a total steam turbine capacity less than 10 megawatts, by combined-cycle plants whose steam portion of the operation is under 10 MW, and all IC engines, fuel cells, combustion turbines, pumped-storage hydroelectric turbines, and compressed air units. Generation reported on this schedule corresponds to the fuel consumption reported on SCHEDULE 3. Part B.

In the applicable Gross Generation or Net Generation cell, enter the aggregate generation for prime movers of a single type. For example, enter the total generation from all combustion turbines. Industrial or Commercial Sector plants may report gross generation ONLY if net generation is not measured (see instructions for definition of net generation).

Complete a separate row for each Prime Mover Type. (See Table 7 of the instructions.)

Prime Mover Code	Gross Generation (MWh)	Net Generation (MWh)

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

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. Do not report generation at a combined-cycle plant. All combined-cycle generation is reported on SCHEDULE 5. PART A or B. Report nuclear data by generating unit.

In the applicable Gross Generation or Net Generation cell, enter the aggregate generation for prime movers of a single type. For example, enter the total generation from all combustion turbines. Industrial or Commercial Sector plants may report gross generation only if net generation is not measured (see instructions for definition of net generation).

Complete a separate row for each Prime Mover Type. (See Table 7 of the instructions.)

Prime Mover Code	Energy Source	<b>Unit Code</b> (nuclear)	Gross Generation (MWh)	Net Generation (MWh)

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

SCHEDULE 6 collects calendar year data (no monthly detail).

Report all generation in megawatthours (MWh) rounded to a whole number.

Source of Electricity	Disposition of Electricity
(1) Gross Generation (Annual)	(4) Station Use
(2) Other Incoming Electricity	(5) Direct Use (Industrial and Commercial Sector Plants, both CHP and non-CHP)
	(6) Total Facility Use (4 + 5)
	(7) Retail Sales to Ultimate Customers
	(8) Sales for Resale
	(9) Other Outgoing Electricity
(3) Total Sources (1 + 2)	(10) Total Disposition (6 + 7 + 8 + 9)

Total Sources must equal Total Disposition (3 = 10)

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

SCHEDULE 7 is to be completed by respondents who entered a positive amount 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, power marketers, or other entities for resale to end-use consumers.

Annual Revenues from Sales for Resale (in thousand dollars):

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State: \_\_\_\_\_ Reporting Month/Year: \_\_\_\_\_

#### SCHEDULE 8. ANNUAL ENVIRONMENTAL INFORMATION

SCHEDULE 8. PARTS A through F are filed annually by thermoelectric power plants (organic fueled, nuclear, and combined cycle) with a total steam turbine capacity of 10 megawatts and above (plants that reported on SCHEDULE 3. Part A and SCHEDULE 5 Part A.). Plants with a total steam turbine capacity of 10 megawatts to less than 100 MW file only Parts C, E, and F.

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

Enter the quantity of combustion byproducts for the year by type of disposal (to nearest 0.1 thousand tons). Report sales of steam in million Btu (MMBtu). If actual data are not available, provide an estimated value.

#### NO BYPRODUCTS

	Disposal			Sale or Beneficial Use			Storage		
Byproduct	On-Site Landfill	On-Site Ponds	Disposal Off-site	Sold	Used On-site	Used Off-site	Stored O⊡-site	Stored Off-site	Total
Fly ash from standard boiler/PCD units									
Fly ash from un⊟ts with dry FGD									
Fly ash from FBC units									
Bottom ash from standard boiler units									
Bottom (bed) ash from FBC units									
FGD Gypsum									
Other FGD byproducts									
Ash from coal gasification (IGCC) units									
Other (specify via footnote on SCHEDULE 9)									
Steam Sales (MMBtu)									

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# SCHEDULE 8. PART B. FINANCIAL INFORMATION RELATED TO COMBUSTION BYPRODUCTS

If actual data are not available, provide an estimated value.

Туре	(1) Fly Ash	(2) Bottom Ash		(3) Flue Gas Desulfurization	(4) Water Pollution Abatement	(5) Other Pollution Abatement		(6) <b>Total</b> (1 + 2 + 3 + 4 + 5)	
Collection									
Disposal									
Other									
Capital E	Expenditures	for New	Structu	res and Equipmen (Thousand		luding La	nd and In	terest Expense	
Туре	(7) Air Poll Abaten	ution		(8) ater Pollution Abatement	(9) Solid/Contained Waste Othe		Other	(10) r Pollution Abatement	
Amount	Amount								
			Ву	product Sales Rev (Thousand					
Туре	(11) Fly Ash	(12 Botton	,	(13) Fly and Bottom Ash Sold Intermingled	(14) Flue Gas Desulfurization Byproducts	Ot Bypr	5) her oduct enue	(16) <b>Total</b> (11+12+13+14+15	
Amount									

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Plant Name:											
Plant ID: State: Reporting Month/Year:											
SCHEDULE 8. PART C. BOILER INFORMATION NITROGEN OXIDE EMISSION CONTROLS											
	Complete a separate row for each boiler. Note: The Boiler ID must match the Boiler ID as reported on Form EIA-860, "Annual Electric Generator Report."										
No NO <sub>x</sub> Controls											
Boiler ID	NO <sub>x</sub> Co	ntrol In-Service	NO <sub>x</sub> En	nission Rate (Ibs/MMBtu)							
	(hou		Entire Year	May through September							
	I		1								

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Plant Name	e:												
Plant ID:					_	State:				Reporting Year:			
SCHEDULE 8. PART D. MONTHLY COOLING SYSTEM INFORMATION  Reporting Month:  Note: All steam-electric plants of 100 MW nameplate capacity or greater, including combined cycle plants and nuclear power plants, must respond to this schedule. Cooling System ID me match the ID as reported on Form EIA-860, "Annual Electric Generator Report." Complete a separate page for each month. Complete a separate row for each cooling system.													
Cooling	Cooling System Status	Monthly Amount of		(in cubic feet per second to the pearest 0.1 ff <sup>3</sup> )			Cooling Water Temperature at Intake (degrees Fahrenheit)		Cooling Water Temperature at Discharge Outlet (degrees Fahrenheit)				
System ID or Plant		Chlorine Added to Cooling Water (1000 lbs)	so Service	Diversion	Withdrawal	Discharge	Consumption	Measured or Estimated? (If any flow rate data was estimated, select methodology.)	Average Monthly Temperature	Maximum Temperature for the Month	Average Monthly Temperature	Maximum Temperature for the Month	Measured or Estimated? (If any temperature data was estimated, select methodology.)

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Plant Name:										
Plant ID:			State:	State: Reporting Year:						
	SCHEDULE 8. PART E. FLUE GAS PARTICULATE COLLECTION INFORMATION									
	<ul> <li>Does not apply.</li> <li>Complete a separate row for each flue gas particulate collector.</li> </ul>									
Flue Gas Particulate Collector ID	FGP Collector Status	Hours in Service	<b>Typical Particulate</b> <b>Emissions Rate</b> (to the nearest 0.01 lb/MMBtu)	Removal Efficiency of Particulate Matter (nearest 0.1% by weight)						
				At Annual Operating Factor	At 100% Load or Tested Efficiency	Date of Most Recent Efficiency Test (e.g., 12-2005)				

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Plant Name:										
Plant ID:				State: Reporting Year:						
SCHEDULE 8. PART F. FLUE GAS DESULFURIZATION UNIT INFORMATION – ANNUAL OPERATIONS										
				sulfurization ID must match the ID as reported on Form EIA-860, "Annual Electric Generator Report." ie row for each Flue Gas Desulfurization Unit.						
ANNUAL OPERATIONS										
Flue Gas	FGD L	nit	Hours In-	Quantity of FGD Sorbent Used	Electrical Energy	Removal Efficiency of Sulfur Dioxide (nearest 0.1% by wt)				
Desulfurization Unit ID	Status		Service	(to the nearest 0.1 thousand tons)	Consumption (MWh)	At Ani	At Annual Operating Factor Tested Efficience			
OPERATION AND MAINTENANCE EXPENDITURES DURING YEAR, EXCLUDING ELECTRICITY (THOUSAND DOLLARS)										
Flue Gas Desulfurization Unit ID		hit Feed Materials and Chemicals		Labor and Supervision	Waste Disposal		Maintenance, Materials, and All Other Costs		Total	

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Plant Name										
Plant ID:	Plant ID: State: Reporting Month/Year:									
				SCHEDULE 9. COMMENTS						
Comment S	ection: Ex	cplain any u	inusual valu	es, occurrences, or changes in ownership.						
Schedule	Part	ltem		Comment						
Changes in Ownership (Provide name of purchaser and date sold.)										