Attachment

Electric Quarterly Report Data Dictionary

Version 3.0 (Issued March 10, 2014)

Field #	Field	Required	Value	Definition
1	Filer Unique Identifier	~	FS# (where "#" is an integer)	(Seller) – An identifier (e.g., "FS1", "FS2") used to designate a record containing Seller identification information One record for each seller company must be included in an EQR for a given quarter.
1	Filer Unique Identifier	✓	FA1	(Agent) – An identifier (i.e., "FA1") used to designate a record containing Agent identification information. One record with the FA1 identifier must be included in an EQR for a given quarter.
2	Company Name	\checkmark	Unrestricted text (100 characters)	(Seller) – The name of the company that is authorized to make sales as indicated in the company's FERC tariff(s) or that is required to file the EQR under section 220 of the Federal Power Act.
2	Company Name	\checkmark	Unrestricted text (100 characters)	(Agent) – The name of the entity completing the EQR filing. The Agent's Company Name need not be the name of the company under Commission jurisdiction.
3	Company Identifier	✓	A 6-digit integer preceded by the letter "C" (or in case of Agent, it may be a 6-digit integer preceded by the letter "D")	(Seller) – The Company Identifier (CID) obtained through the Commission's Company Registration system. (Agent) – The CID or Delegate Identifier (DID) obtained through the Commission's Company Registration system.
4	Contact Name	✓	"FirstName LastName" or "FirstName MiddleInitial LastName" or "FirstName MiddleName LastName" (50 characters)	(Seller) – The name of the contact for the company authorized to make sales as indicated in the company's FERC tariff(s) or that is required to file the EQR under section 220 of the Federal Power Act.
4	Contact Name	~	"FirstName LastName" or "FirstName MiddleInitial LastName" or "FirstName MiddleName LastName" (50 characters)	(Agent) – Name of the person who prepared the filing
5	Contact Title	✓	Unrestricted text (50 characters)	Title of contact identified in Field Number 4.
6	Contact Address	\checkmark	Unrestricted text	Street address for contact identified in Field Number 4.
7	Contact City	✓	Unrestricted text (30 characters)	City for the contact identified in Field Number 4.

EQR Data Dictionary ID Data

Field #	Field	Required	Value	Definition
8	Contact State	~	Unrestricted text (2 characters)	Two character state or province abbreviation for the contact identified in Field Number 4.
9	Contact Zip	✓	Unrestricted text (10 characters)	Zip code for the contact identified in Field Number 4.
10	Contact Country Name	✓	CA - Canada MX - Mexico US – United States UK – United Kingdom (2 characters)	Country (USA, Canada, Mexico, or United Kingdom) for contact address identified in Field Number 4.
11	Contact Phone	✓	Unrestricted text (20 characters)	Phone number of contact identified in Field Number 4.
12	Contact E-Mail	\checkmark	Unrestricted text (200 characters)	E-mail address of contact identified in Field Number 4.
13	Transactions Reported to Index Price Publisher(s)	✓	Y – Yes N – No (1 character)	Sellers should indicate whether they have reported their sales transactions to index price publisher(s). If they have, Sellers should indicate specifically which index publisher(s) in Field Number 73.
14	Filing Quarter	~	ҮҮҮҮММ	A six digit reference number used by the EQR system to indicate the quarter and year of the filing. The first 4 numbers represent the year (e.g., 2007). The last 2 numbers represent the last month of the quarter (e.g., 03=1st quarter; 06=2nd quarter, 09=3rd quarter, 12= 4th quarter).

Field #	Field	Required	Value	Definition
15	Contract Unique ID	~	An integer preceded by the letter "C" (only used when importing contract data)	An identifier beginning with the letter "C" and followed by a number (e.g., "C1", "C2") used to designate a record containing contract information.
16	Seller Company Name	~	Unrestricted text (100 characters)	The name of the company that is authorized to make sales as indicated in the company's FERC tariff(s) or that is required to file the EQR under section 220 of the Federal Power Act. This name must match the name provided as a Seller's "Company Name" in Field Number 2 of the ID Data (Seller Data).
17	Customer Company Name	\checkmark	Unrestricted text (70 characters)	The name of the purchaser of contract products and services.
18	Contract Affiliate	~	Y (Yes) N (No) (1 character)	The customer is an affiliate if it controls, is controlled by, or is under common control with the seller. This includes a division that operates as a functional unit. A customer of a seller who is an Exempt Wholesale Generator may be defined as an affiliate under the Public Utility Holding Company Act and the FPA.
19	FERC Tariff Reference	✓	Unrestricted text (60 characters)	The FERC tariff reference cites the document that specifies the terms and conditions under which a Seller is authorized to make transmission sales, power sales or sales of related jurisdictional services at cost-based rates or at market-based rates. If the sales are market-based, the tariff that is specified in the FERC order granting the Seller Market Based Rate Authority must be listed. If a non-public utility does not have a FERC Tariff Reference, it should enter "NPU" for the FERC Tariff Reference.
20	Contract Service Agreement ID	~	Unrestricted text (30 characters)	Unique identifier given to each service agreement that can be used by the Seller to produce the agreement, if requested. The identifier may be the number assigned by FERC for those service agreements that have been filed with and accepted by the Commission, or it may be generated as part of an internal identification system.
21	Contract Execution Date	\checkmark	YYYYMMDD	The date the contract was signed. If the parties signed on different dates, use the most recent date signed.
22	Commencement Date of Contract Terms	V	YYYYMMDD	The date the terms of the contract reported in fields 18, 23 and 25 through 44 (as defined in the data dictionary) became effective. If those terms became effective on multiple dates (i.e., due to one or more amendments), the date to be reported in this field is the date the most recent amendment became effective. If the contract or the most recent reported amendment does not have an effective date, the date when service began pursuant to the contract or most recent reported amendment may be used. If the terms reported in fields 18, 23 and 25 through 44 have not been amended since January 1, 2009, the initial date the contract became effective (or absent an effective date the initial date when service began) may be used.
23	Contract	If specified in	YYYYMMDD	The date that the contract expires.

EQR Data Dictionary Contract Data

Field #	Field	Required	Value	Definition
	Termination Date	the contract. If not specified in the contract, field should remain blank.		
24	Actual Termination Date	If contract terminated. If contract has not terminated, field should remain blank.	YYYYMMDD	The date the contract actually terminates.
25	Extension Provision Description	✓ If not specified in contract, enter None or N/A.	Unrestricted text	Description of terms that provide for the continuation of the contract.
26	Class Name	√		See definitions of each class name below.
26	Class Name	✓	F - Firm	For transmission sales, a service or product that always has priority over non-firm service. For power sales, a service or product that is not interruptible for economic reasons.
26	Class Name	~	NF - Non-firm	For transmission sales, a service that is reserved and/or scheduled on an as-available basis and is subject to curtailment or interruption at a lesser priority compared to Firm service. For an energy sale, a service or product for which delivery or receipt of the energy may be interrupted for any reason or no reason, without liability on the part of either the buyer or seller.
26	Class Name	\checkmark	UP - Unit Power Sale	Designates a dedicated sale of energy and capacity from one or more than one specified generation unit(s).
26	Class Name	✓	N/A - Not Applicable	To be used only when the other available Class Names do not apply.
27	Term Name	v	LT - Long Term ST - Short Term N/A - Not Applicable	Contracts with durations of one year or greater are long-term. Contracts with shorter durations are short-term.
28	Increment Name	\checkmark		See definitions for each increment below.

EQR Data Dictionary Contract Data

Field #	Field	Required	Value	Definition
28	Increment Name	✓	H - Hourly	Terms of the contract (if specifically noted in the contract) set for up to 6 consecutive
				hours (≤ 6 consecutive hours).
28	Increment Name	✓	D - Daily	Terms of the contract (if specifically noted in the contract) set for more than 6 and up to
				$60 \text{ consecutive hours } (>6 \text{ and } \le 60 \text{ consecutive hours}).$
28	Increment Name	✓	W - Weekly	Terms of the contract (if specifically noted in the contract) set for over 60 consecutive hours and up to 168 consecutive hours (>60 and \leq 168 consecutive hours).
				Terms of the contract (if specifically noted in the contract) set for more than 168
28	Increment Name	✓	M - Monthly	consecutive hours up to, but not including, one year (>168 consecutive hours and < 1
20	merement rume		Wi Wondiny	year).
20	T (N	/	X7 X7 1	Terms of the contract (if specifically noted in the contract) set for one year or more (≥ 1
28	Increment Name	~	Y - Yearly	year).
28	Increment Name	✓	N/A - Not Applicable	Terms of the contract do not specify an increment.
29	Increment	✓		See definitions for each increment peaking name below.
2)	Peaking Name	,		
29	Increment	\checkmark	FP - Full Period	The product described may be sold during those hours designated as on-peak and off-
	Peaking Name			peak at the point of delivery.
29	Increment	\checkmark	OP - Off-Peak	The product described may be sold only during those hours designated as off-peak at the
	Peaking Name Increment			point of delivery.The product described may be sold only during those hours designated as on-peak at the
29	Peaking Name	✓	P - Peak	point of delivery.
• •	Increment			
29	Peaking Name	✓	N/A - Not Applicable	To be used only when the increment peaking name is not specified in the contract.
30	Product Type	✓		See definitions for each product type below.
30	Name	•		See definitions for each product type below.
30	Product Type	✓	CB - Cost Based	Energy or capacity sold under a FERC-approved cost-based rate tariff.
50	Name			
30	Product Type	\checkmark	CR - Capacity	An agreement under which a transmission provider sells, assigns or transfers all or
	Name Product Type		Reassignment	portion of its rights to an eligible customer.
30	Name	\checkmark	MB - Market Based	Energy or capacity sold under the seller's FERC-approved market-based rate tariff.
	Product Type			
30	Name	\checkmark	T - Transmission	The product is sold under a FERC-approved transmission tariff.
30	Product Type	✓	NPU – Non-Public	The product is sold by a non-public utility that is required to file the EQR under section
30	Name	v	Utility	220 of the Federal Power Act.
30	Product Type	✓	Other	The product cannot be characterized by the other product type names.

Field #	Field	Required	Value	Definition
	Name			
31	Product Name	\checkmark	See Product Name Table, Appendix A.	Description of product being offered.
32	Quantity	If specified in the contract. If not specified in the contract, field should remain blank.	Number with up to 4 decimals	Quantity for the contract product identified.
33	Units	If specified in the contract. If not specified in the contract, field should remain blank.	See Units Table, Appendix E.	Measure stated in the contract for the product sold.
34	Rate	One of four rate fields (34, 35, 36, or 37) must be included. If not specified in the contract, field should remain blank.	Number with up to 4 decimals	The charge for the product per unit as stated in the contract.
35	Rate Minimum	One of four rate fields (34, 35, 36, or 37) must be included. If not specified in the contract, field should	Number with up to 4 decimals	Minimum rate to be charged per the contract, if a range is specified.

Field #	Field	Required	Value	Definition
		remain blank.		
36	Rate Maximum	One of four rate fields (34, 35, 36, or 37) must be included. If not specified in the contract, field should remain blank.	Number with up to 4 decimals	Maximum rate to be charged per the contract, if a range is specified.
37	Rate Description	One of four rate fields (34, 35, 36, or 37) must be included	Unrestricted text (up to 300 characters)	Text description of rate. If the rate is currently available on the FERC website, a citation of the FERC Accession Number and the relevant FERC tariff including page number or section may be included instead of providing the entire rate algorithm. If the rate is not available on the FERC website, include the rate algorithm, if rate is calculated. If the algorithm would exceed the 300 character field limit, it may be provided in a descriptive summary (including bases and methods of calculations) with a detailed citation of the relevant FERC tariff including page number and section.
38	Rate Units	If specified in the contract	See Rate Units Table, Appendix F.	Measure stated in the contract for the product sold.
39	Point of Receipt Balancing Authority(PORB A)	If specified in the contract. If not specified in the contract, this field should remain blank.	See Balancing Authority Table Appendix B.	The registered Balancing Authority (formerly called NERC Control Area) where service begins for a transmission or transmission-related jurisdictional sale. The Balancing Authority will be identified with the abbreviation used in OASIS applications. If receipt occurs at a trading hub, the term "Hub" should be used.
40	Point of Receipt Specific Location (PORSL)	If specified in the contract. If not specified in the contract, this field should	Unrestricted text (50 characters). If "HUB" is selected for PORBA, see Hub Table, Appendix C.	The specific location at which the product is received if designated in the contract. If receipt occurs at a trading hub, a standardized hub name must be used. If more points of receipt are listed in the contract than can fit into the 50 character space, a description of the collection of points may be used. 'Various,' alone, is unacceptable unless the contract itself uses that terminology.

Field #	Field	Required	Value	Definition
		remain blank.		
41	Point of Delivery Balancing Authority(PODB A)	If specified in the contract. If not specified in the contract, field should remain blank.	See Balancing Authority Table Appendix B.	The registered Balancing Authority (formerly called NERC Control Area) where a jurisdictional product is delivered and/or service ends for a transmission or transmission-related jurisdictional sale. The Balancing Authority will be identified with the abbreviation used in OASIS applications. If delivery occurs at the interconnection of two control areas, the control area that the product is entering should be used. If delivery occurs at a trading hub, the term "Hub" should be used.
42	Point of Delivery Specific Location (PODSL)	If specified in the contract. If not specified in the contract, field should remain blank.	Unrestricted text (50 characters). If "HUB" is selected for PODBA, see Hub Table, Appendix C.	The specific location at which the product is delivered if designated in the contract. If receipt occurs at a trading hub, a standardized hub name must be used.
43	Begin Date	If specified in the contract. If not specified in the contract, field should remain blank.	YYYYMMDDHHMM	First date and time for the sale of the product at the rate specified.
44	End Date	If specified in the contract. If not specified in the contract, field should remain blank.	YYYYMMDDHHMM	Last date and time for the sale of the product at the rate specified.

Field #	Field	Required	Value	Definition
45	Transaction Unique ID	~	An integer preceded by the letter "T" (only used when importing transaction data)	An identifier beginning with the letter "T" and followed by a number (e.g., "T1", "T2") used to designate a record containing transaction information. One record for each transaction record must be included in an EQR for a given quarter. A new transaction record must be used every time a price changes in a sale.
46	Seller Company Name	~	Unrestricted text (100 Characters)	The name of the company that is authorized to make sales as indicated in the company's FERC tariff(s) or that is required to file the EQR under section 220 of the Federal Power Act. This name must match the name provided as a Seller's "Company Name" in Field 2 of the ID Data (Seller Data).
47	Customer Company Name	✓	Unrestricted text (70 Characters)	The name of the purchaser of contract products and services.
48	FERC Tariff Reference	V	Unrestricted text (60 Characters)	The FERC tariff reference cites the document that specifies the terms and conditions under which a Seller is authorized to make transmission sales, power sales or sales of related jurisdictional services at cost-based rates or at market-based rates. If the sales are market-based, the tariff that is specified in the FERC order granting the Seller Market Based Rate Authority must be listed. If a non-public utility does not have a FERC Tariff Reference, it should enter "NPU" for the FERC Tariff Reference.
49	Contract Service Agreement ID	✓	Unrestricted text (30 Characters)	Unique identifier given to each service agreement that can be used by the Seller to produce the agreement, if requested. The identifier may be the number assigned by FERC for those service agreements that have been filed and approved by the Commission, or it may be generated as part of an internal identification system.
50	Transaction Unique Identifier	\checkmark	Unrestricted text (24 Characters)	Unique reference number assigned by the Seller for each transaction.
51	Transaction Begin Date	\checkmark	YYYYMMDDHHMM	First date and time the product is sold during the quarter.
52	Transaction End Date	\checkmark	YYYYMMDDHHMM	Last date and time the product is sold during the quarter.
53	Trade Date	~	YYYYMMDD	The date upon which the parties made the legally binding agreement on the price of a transaction.
54	Exchange/Brokera ge Service		See Exchange/Brokerage Service Table, Appendix H.	If a broker service is used to consummate or effectuate a transaction, the term "Broker" shall be provided. If an exchange is used, the specific exchange that is used shall be selected from the Commission-provided list.
55	Type of Rate	\checkmark		See type of rate definitions below.
55	Type of Rate	✓	Fixed	A fixed charge per unit of consumption. No variables are used to determine this rate.
55	Type of Rate	\checkmark	Formula	A calculation of a rate based upon a formula that does not contain an electric index

Field #	Field	Required	Value	Definition
				component.
55	Type of Rate	✓	Electric Index	A calculation of a rate based upon an index or a formula that contains an electric index component. An electric index includes an index published by an index publisher such as those required to be listed in Field Number 73 or a price published by an RTO/ISO (e.g., PJM West or Illinois Hub).
55	Type of Rate	\checkmark	RTO/ISO	If the price is the result of an RTO/ISO market or the sale is made to the RTO/ISO.
56	Time Zone	\checkmark	See Time Zone Table, Appendix D.	The time zone in which the sale was made .
57	Point of Delivery Balancing Authority (PODBA)	✓	See Balancing Authority Table Appendix B.	The registered Balancing Authority (formerly called NERC Control Area) abbreviation used in OASIS applications.
58	Point of Delivery Specific Location (PODSL)	~	Unrestricted text (50 characters). If "HUB" is selected for PODBA, see Hub Table, Appendix C.	The specific location at which the product is delivered. If receipt occurs at a trading hub, a standardized hub name must be used.
59	Class Name	\checkmark		See class name definitions below.
59	Class Name	✓	F - Firm	A sale, service or product that is not interruptible for economic reasons.
59	Class Name	✓	NF - Non-firm	A sale for which delivery or receipt of the energy may be interrupted for any reason or no reason, without liability on the part of either the buyer or seller.
59	Class Name	✓	UP - Unit Power Sale	Designates a dedicated sale of energy and capacity from one or more than one specified generation unit(s).
59	Class Name	✓	BA - Billing Adjustment	Designates an incremental material change to one or more transactions due to a change in settlement results. "BA" may be used in a refiling after the next quarter's filing is due to reflect the receipt of new information. It may not be used to correct an inaccurate filing.
59	Class Name	\checkmark	N/A - Not Applicable	To be used only when the other available class names do not apply.
60	Term Name	~	LT - Long Term ST - Short Term N/A - Not Applicable	Power sales transactions with durations of one year or greater are long-term. Transactions with shorter durations are short-term.
61	Increment Name	\checkmark		See increment name definitions below.
61	Increment Name	✓	H - Hourly	Terms of the particular sale set for up to 6 consecutive hours (≤ 6 consecutive hours) Includes LMP based sales in ISO/RTO markets.
61	Increment Name	✓	D - Daily	Terms of the particular sale set for more than 6 and up to 60 consecutive hours (>6 and \leq 60 consecutive hours). Includes sales over a peak or off-peak block during a single day.
61	Increment Name	✓	W - Weekly	Terms of the particular sale set for over 60 consecutive hours and up to 168 consecutive

Field #	Field	Required	Value	Definition
				hours (>60 and \leq 168 consecutive hours). Includes sales for a full week and sales for
				peak and off-peak blocks over a particular week.
<i>c</i> 1	T (N)	✓		Terms of the particular sale set for set for more than 168 consecutive hours up to, but not
61	Increment Name	v	M - Monthly	including, one year (>168 consecutive hours and < 1 year). Includes sales for full month or multi-week sales during a given month.
				Terms of the particular sale set for one year or more (≥ 1 year). Includes all long-term
61	Increment Name	~	Y - Yearly	contracts with defined pricing terms (fixed-price, formula, or index).
61	Increment Name	✓	N/A - Not Applicable	To be used only when other available increment names do not apply.
62	Increment Peaking Name	✓		See definitions for increment peaking below.
62	Increment Peaking Name	✓	FP - Full Period	The product described was sold during Peak and Off-Peak hours.
62	Increment Peaking Name	~	OP - Off-Peak	The product described was sold only during those hours designated as off-peak at the point of delivery.
62	Increment Peaking Name	~	P - Peak	The product described was sold only during those hours designated as on-peak at the point of delivery.
62	Increment Peaking Name	~	N/A - Not Applicable	To be used only when the other available increment peaking names do not apply.
63	Product Name	~	See Product Names Table, Appendix A.	Description of product being offered.
64	Transaction Quantity	~	Number with up to 4 decimals.	The quantity of the product in this transaction record.
65	Price	~	Number with up to 6 decimals.	Actual price charged for the product per unit. The price reported cannot be averaged or otherwise aggregated
66	Rate Units	~	See Rate Units Table, Appendix F	Measure appropriate to the price of the product sold.
67	Standardized Quantity	~	Number with up to 4 decimals.	For product names energy, capacity, and booked out power only. Specify the quantity in MWh if the product is energy or booked out power and specify the quantity in MW-month if the product is capacity or booked out power
68	Standardized Price	~	Number with up to 6 decimals.	For product names energy, capacity, and booked out power only. Specify the price in \$/MWh if the product is energy or booked out power and specify the price in \$/MW-month if the product is capacity or booked out power.
	Total	√	Number with up to 2	
69	Transmission	If no	decimals.	Payments received for transmission services when explicitly identified.
	Charge	transmission		

Field #	Field	Required	Value	Definition
		charge to		
		report, enter		
		zero.		
70	Total Transaction	<u>_</u>	Number with up to 2	Transaction Quantity (Field 64) times Price (Field 65) plus Total Transmission Charge
70	Charge	•	decimals	(Field 69).

EQR Data Dictionary Index Reporting Data

Field #	Field	Required	Value	Definition
71	Filer Unique	✓ If Field 13	FS# (where "#" is an	The "FS" seller number from the ID Data table corresponding to the index reporting
/1	Identifier	is Y	integer)	company.
72	Seller Company Name	✓ If Field 13 is Y	Unrestricted text (100 characters)	The name of the company that is authorized to make sales as indicated in the company's FERC tariff(s) or that is required to file the EQR under section 220 of the Federal Power Act. This name must match the name provided as a Seller's "Company Name" in Field Number 2 of the ID Data (Seller Data).
73	Index Price Publisher(s) To Which Sales Transactions Have Been Reported	✓ If Field 13 is Y	See Index Price Publisher Table, Appendix G.	The index price publisher(s) to which sales transactions have been reported.
74	Transactions	✓ If Field 13	Unrestricted text (100	Description of the types of transactions reported to the index publisher identified in this
, ,	Reported	is Y	characters)	record.

Field #	Field	Required	Value	Definition
75	e-Tag ID	If an e-Tag ID was used to schedule the EQR transaction	Unrestricted text (30 Characters)	The e-Tag ID contains: The Source Balancing Authority where the generation is located; The Purchasing-Selling Balancing Authority Entity Code; the e-Tag Code; and the Sink Balancing Authority.
76	e-Tag Begin Date	If an e-Tag ID was used to schedule the EQR transaction	YYYYMMDD (csv import) MMDDYYYY (manual entry)	The first date the transaction is scheduled using the e-Tag ID reported in Field Number 75. Begin Date must not be before the Transaction Begin Date specified in Field Number 51 and must be reported in the same time zone specified in Field Number 56.
77	e-Tag End Date	If an e-Tag ID was used to schedule the EQR transaction	YYYYMMDD (csv import) MMDDYYYY (manual entry)	The last date the transaction is scheduled using the e-Tag ID reported in Field Number 75. End Date must not be after the Transaction End Date specified in Field Number 52 and must be reported in the same time zone specified in Field Number 56.
78	Transaction Unique Identifier	If an e-Tag ID was used to schedule the EQR transaction	Unrestricted text (24 Characters)	Unique reference number assigned by the seller for each transaction that must be the same as reported in Field Number 50.

**Compliance with e-Tag Data requirement has been delayed. See Electricity Market Transparency Provisions of Section 220 of the Federal Power Act, 142 FERC ¶ 61,105 (2013).

Product Name	Contract Product	Transaction Product	Definition
BLACK START SERVICE	~	4	Service available after a system -wide blackout where a generator participates in system restoration activities without the availability of an outside electric supply (Ancillary Service).
BOOKED OUT POWER		~	Energy or capacity contractually committed bilaterally for delivery but not actually delivered due to some offsetting or countervailing trade (Transaction only).
CAPACITY	✓	✓	A quantity of demand that is charged on a \$/KW or \$/MW basis.
CUSTOMER CHARGE	~	~	Fixed contractual charges assessed on a per customer basis that could include billing service.
DIRECT ASSIGNMENT FACILITIES CHARGE	~		Charges for facilities or portions of facilities that are constructed or used for the sole use/benefit of a particular customer.
EMERGENCY ENERGY	~		Contractual provisions to supply energy or capacity to another entity during critical situations.
ENERGY	✓	✓	A quantity of electricity that is sold or transmitted over a period of time.
ENERGY IMBALANCE	~	4	Service provided when a difference occurs between the scheduled and the actual delivery of energy to a load obligation (Ancillary Service). For Contracts, reported if the contract provides for sale of the product. For Transactions, sales by third-party providers (i.e., non-transmission function) are reported.
EXCHANGE	~	4	Transaction whereby the receiver accepts delivery of energy for a supplier's account and returns energy at times, rates, and in amounts as mutually agreed if the receiver is not an RTO/ISO.
FUEL CHARGE	✓	✓	Charge based on the cost or amount of fuel used for generation.
GENERATOR IMBALANCE	~	✓	Service provided when a difference occurs between the output of a generator located in the Transmission Provider's Control Area and a delivery schedule from that generator to (1) another Control Area or (2) a load within the Transmission Provider's Control Area over a single hour (Ancillary Service). For Contracts, reported if the contract provides for sale of the product. For Transactions, sales by third-party providers (i.e., non-transmission function) are reported.

Appendix A. Product Names

Appendix A. Product Names

Product Name	Contract Product	Transaction Product	Definition
GRANDFATHERED BUNDLED	✓	✓ Services provided for bundled transmission, ancillary services and energy under c effective prior to Order No. 888's OATTs.	
INTERCONNECTION AGREEMENT	~		Contract that provides the terms and conditions for a generator, distribution system owner, transmission owner, transmission provider, or transmission system to physically connect to a transmission system or distribution system.
MEMBERSHIP AGREEMENT	✓		Agreement to participate and be subject to rules of a system operator.
MUST RUN AGREEMENT	✓		An agreement that requires a unit to run.
NEGOTIATED-RATE TRANSMISSION	✓	✓	Transmission performed under a negotiated rate contract (applies only to merchant transmission companies).
NETWORK	✓		Transmission service under contract providing network service.
NETWORK OPERATING AGREEMENT	~		An executed agreement that contains the terms and conditions under which a network customer operates its facilities and the technical and operational matters associated with the implementation of network integration transmission service.
OTHER	✓	✓	Product name not otherwise included.
POINT-TO-POINT AGREEMENT	✓		Transmission service under contract between specified Points of Receipt and Delivery.
REACTIVE SUPPLY & VOLTAGE CONTROL	1	✓	Production or absorption of reactive power to maintain voltage levels on transmission systems (Ancillary Service).
REAL POWER TRANSMISSION LOSS	✓	✓	The loss of energy, resulting from transporting power over a transmission system.
REASSIGNMENT AGREEMENT	✓		Transmission capacity reassignment agreement.
REGULATION & FREQUENCY RESPONSE	~	~	Service providing for continuous balancing of resources (generation and interchange) with load, and for maintaining scheduled interconnection frequency by committing on- line generation where output is raised or lowered and by other non-generation resources capable of providing this service as necessary to follow the moment-by-moment changes in load (Ancillary Service). For Contracts, reported if the contract provides for sale of the product. For Transactions, sales by third-party providers (i.e., non-transmission function) are reported.

Appendix A. Product Names

Product Name	Contract Product	Transaction Product	Definition
REQUIREMENTS SERVICE	~	✓	Firm, load-following power supply necessary to serve a specified share of customer's aggregate load during the term of the agreement. Requirements service may include some or all of the energy, capacity and ancillary service products. (If the components of the requirements service are priced separately, they should be reported separately in the transactions tab.)
SCHEDULE SYSTEM CONTROL & DISPATCH	~	4	Scheduling, confirming and implementing an interchange schedule with other Balancing Authorities, including intermediary Balancing Authorities providing transmission service, and ensuring operational security during the interchange transaction (Ancillary Service).
SPINNING RESERVE	4	4	Unloaded synchronized generating capacity that is immediately responsive to system frequency and that is capable of being loaded in a short time period or non-generation resources capable of providing this service (Ancillary Service). For Contracts, reported if the contract provides for sale of the product. For Transactions, sales by third-party providers (i.e., non-transmission function) are reported.
SUPPLEMENTAL RESERVE	¥	4	Service needed to serve load in the event of a system contingency, available with greater delay than SPINNING RESERVE. This service may be provided by generating units that are on-line but unloaded, by quick-start generation, or by interruptible load or other non-generation resources capable of providing this service (Ancillary Service). For Contracts, reported if the contract provides for sale of the product. For Transactions, sales by third-party providers (i.e., non-transmission function) are reported.
SYSTEM OPERATING AGREEMENTS	~		An executed agreement that contains the terms and conditions under which a system or network customer shall operate its facilities and the technical and operational matters associated with the implementation of network.
TOLLING ENERGY	~	~	Energy sold from a plant whereby the buyer provides fuel to a generator (seller) and receives power in return for pre-established fees.
TRANSMISSION OWNERS AGREEMENT	~		The agreement that establishes the terms and conditions under which a transmission owner transfers operational control over designated transmission facilities.
UPLIFT	✓	✓	A make-whole payment by an RTO/ISO to a utility.

٩I	open	dix	B.	Bala	ncing	Auth	ority*
----	------	-----	----	------	-------	------	--------

Appendix B. Balancing Authority	*	Γ
Balancing Authority	Abbreviation	Outside US*
AEP Service Corp Transmission System	AEP	
AESC, LLC - AEBN	AEBN	
AESC, LLC - Gleason	AEGL	
AESC, LLC - Lincoln Center	AELC	
AESC, LLC - Wheatland CIN	AEWC	
AESC, LLC - Wheatland IPL	AEWI	
Alabama Electric Cooperative, Inc.	AEC	
Alberta Electric System Operator	AESO	✓
Alliant Energy Corporate Services, LLC	ALEX	
Alliant Energy Corporate Services, LLC	ALWX	
Alliant Energy Corporate Services, LLC - East	ALTE	
Alliant Energy Corporate Services, LLC- West	ALTW	
Ameren Transmission	AMRN	
Ameren Transmission-Illinois	AMIL	
Ameren Transmission-Missouri	AMMO	
American Transmission Systems, Inc.	FE	
Aquila Networks - Kansas	WPEK	
Aquila Networks - Missouri Public Service	MPS	
Aquila Networks - West Plains Dispatch	WPEC	
Arizona Public Service Company	AZPS	
Associated Electric Cooperative, Inc.	AECI	
Avista Corp.	AVA	
B.C. Hydro & Power Authority	BCHA	✓
Batesville Balancing Authority	BBA	
Batesville Control Area	BCA	
BC Hydro T & D - Grid Operations	BCHA	✓
Big Rivers Electric Corp.	BREC	
Board of Public Utilities	KACY	
Bonneville Power Administration Transmission	BPAT	
BridgeCo	DSK1	
British Columbia Transmission Corporation	BCTC	✓
California Independent System Operator	CISO	
Carolina Power & Light Company - CPLW	CPLW	
Carolina Power and Light Company - East	CPLE	
Central and Southwest	CSWS	
Central Illinois Light Co	CILC	
Chelan County PUD	CHPD	

Balancing Authority	Abbreviation	Outside US*
Cinergy Corporation	CIN	
City of Homestead	HST	
City of Independence P&L Dept.	INDN	
City of Tallahassee	TAL	
City Water Light & Power	CWLP	
Cleco Power LLC	CLEC	
Columbia Water & Light	CWLD	
Comision Federal de Electricidad	CFE	~
Comision Federal de Electricidad	CFEN	✓
Commonwealth Edison	CE	
Constellation Energy Control and Dispatch	GRIF	
Constellation Energy Control and Dispatch - Arkansas	PUPP	
Constellation Energy Control and Dispatch - City of Benton, Arkansas	BUBA	
Constellation Energy Control and Dispatch - City of Ruston, LA	DERS	
Constellation Energy Control and Dispatch - Conway, Arkansas	CNWY	
Constellation Energy Control and Dispatch - Gila River	GRMA	
Constellation Energy Control and Dispatch - Glacier Wind Energy	GWA	
Constellation Energy Control and Dispatch - Harquehala	HGMA	
Constellation Energy Control and Dispatch - North Little Rock, AK	DENL	
Constellation Energy Control and Dispatch - Osceola Municipal Light an	OMLP	
Constellation Energy Control and Dispatch - Plum Point	PLUM	
Constellation Energy Control and Dispatch - Vermillion	DEVI	
Constellation Energy Control and Dispatch - West Memphis, Arkansas	WMUC	
Dairyland Power Cooperative	DPC	
Dayton Power & Light	DPL	
DECA, LLC	BERC	
DECA, LLC	DEHA	
DECA, LLC	DELO	
DECA, LLC	DEMG	
DECA, LLC	DESM	
DECA, LLC - Arlington Valley	DEAA	
DECA, LLC - Enterprise	DEEM	
DECA, LLC - Lee	DELI	
DECA, LLC - Murray	DEMT	
DECA, LLC - Sandersville	DESG	
DECA, LLC - Washington	DEWO	
Dominion Virginia Power	VAP	
Duke Energy Corporation	DUK	
Duquesne Light	DLCO	

Balancing Authority	Abbreviation	Outside US*
East Kentucky Power Cooperative, Inc.	EKPC	
El Paso Electric	EPE	
Electric Energy, Inc.	EEI	
Empire District Electric Co., The	EDE	
Entergy	EES	
ERCOT ISO	ERCO	
Florida Municipal Power Pool	FMPP	
Florida Power & Light	FPL	
Florida Power Corporation	FPC	
Gainsville Regional Utilities	GVL	
Georgia System Operations Corporation	GSOC	
Georgia Transmission Corporation	GTC	
Grand River Dam Authority	GRDA	
Grant County PUD No.2	GCPD	
Great River Energy	GRE	
Great River Energy	GREC	
Great River Energy	GREN	
Great River Energy	GRES	
GridAmerica	GA	
Hoosier Energy	HE	
Hydro-Quebec, TransEnergie	HQT	✓
Idaho Power Company	IPCO	
Illinois Power Co.	IP	
Illinois Power Co.	IPRV	
Imperial Irrigation District	IID	
Indianapolis Power & Light Company	IPL	
ISO New England Inc.	ISNE	
JEA	JEA	
Kansas City Power & Light, Co	KCPL	
Lafayette Utilities System	LAFA	
LG&E Energy Transmission Services	LGEE	
Lincoln Electric System	LES	
Los Angeles Department of Water and Power	LDWP	
Louisiana Energy & Power Authority	LEPA	
Louisiana Generating, LLC	LAGN	
Louisiana Generating, LLC - City of Conway	CWAY	
Louisiana Generating, LLC - City of West Memphis	WMU	
Louisiana Generating, LLC - North Little Rock	NLR	
Madison Gas and Electric Company	MGE	

Balancing Authority	Abbreviation	Outside US*
MHEB, Transmission Services	MHEB	✓
Michigan Electric Coordinated System	MECS	
Michigan Electric Coordinated System - CONS	CONS	
Michigan Electric Coordinated System - DECO	DECO	
MidAmerican Energy Company	MEC	
Midwest ISO	MISO	
Minnesota Power, Inc.	MP	
Montana-Dakota Utilities Co.	MDU	
Muscatine Power and Water	MPW	
Nebraska Public Power District	NPPD	
Nevada Power Company	NEVP	
New Brunswick Power Corporation	NBPC	\checkmark
New Brunswick System Operator	NBSO	✓
New Horizons Electric Cooperative	NHC1	
New York Independent System Operator	NYIS	
North American Electric Reliability Council	TEST	
Northern Indiana Public Service Company	NIPS	
Northern States Power Company	NSP	
NorthWestern Energy	NWMT	
NRG South Central Generating LLC	MCLN	
Ohio Valley Electric Corporation	OVEC	
Oklahoma Gas and Electric	OKGE	
Ontario - Independent Electricity Market Operator	IMO	✓
Ontario - Independent Electricity System Operator	ONT	\checkmark
OPPD CA/TP	OPPD	
Otter Tail Power Company	OTP	
P.U.D. No. 1 of Douglas County	DOPD	
PacifiCorp-East	PACE	
PacifiCorp-West	PACW	
PJM Interconnection	РЈМ	
Portland General Electric	PGE	
Public Service Company of Colorado	PSCO	
Public Service Company of New Mexico	PNM	
Puget Sound Energy Transmission	PSEI	
Reedy Creek Improvement District	RC	
Sacramento Municipal Utility District	SMUD	
Salt River Project	SRP	
Santee Cooper	SC	
SaskPower Grid Control Centre	SPC	✓

Balancing Authority	Abbreviation	Outside US*
Seattle City Light	SCL	
Seminole Electric Cooperative	SEC	
Sierra Pacific Power Co Transmission	SPPC	
South Carolina Electric & Gas Company	SCEG	
South Mississippi Electric Power Association	SME	
South Mississippi Electric Power Association	SMEE	
Southeastern Power Administration - Hartwell	SEHA	
Southeastern Power Administration - Russell	SERU	
Southeastern Power Administration - Thurmond	SETH	
Southern Company Services, Inc.	SOCO	
Southern Illinois Power Cooperative	SIPC	
Southern Indiana Gas & Electric Co.	SIGE	
Southern Minnesota Municipal Power Agency	SMP	
Southwest Power Pool	SWPP	
Southwestern Power Administration	SPA	
Southwestern Public Service Company	SPS	
Sunflower Electric Power Corporation	SECI	
Tacoma Power	TPWR	
Tampa Electric Company	TEC	
Tennessee Valley Authority ESO	TVA	
Trading Hub	HUB	
TRANSLink Management Company	TLKN	
Tucson Electric Power Company	TEPC	
Turlock Irrigation District	TIDC	
Upper Peninsula Power Co.	UPPC	
Utilities Commission, City of New Smyrna Beach	NSB	
Westar Energy - MoPEP Cities	MOWR	
Western Area Power Administration - Colorado-Missouri	WACM	
Western Area Power Administration - Lower Colorado	WALC	
Western Area Power Administration - Upper Great Plains East	WAUE	
Western Area Power Administration - Upper Great Plains West	WAUW	
Western Farmers Electric Cooperative	WFEC	
Western Resources dba Westar Energy	WR	
Wisconsin Energy Corporation	WEC	
Wisconsin Public Service Corporation	WPS	
Yadkin, Inc.	YAD	

* Balancing Authorities outside the United States may only be used in the contract data section to identify specified receipt/delivery points in jurisdictional transmission contracts.

Appendix C. Hub

HUB	Definition
ADHUB	The aggregated Locational Marginal Price ("LMP") nodes defined by PJM Interconnection, LLC as the AEP/Dayton Hub.
AEPGenHub	The aggregated Locational Marginal Price ("LMP") nodes defined by PJM Interconnection, LLC as the AEPGenHub.
COB	The set of delivery points along the California-Oregon commonly identified as and agreed to by the counterparties to constitute the COB Hub.
Cinergy (into)	The set of delivery points commonly identified as and agreed to by the counterparties to constitute delivery into the Cinergy balancing authority.
Entergy (into)	The set of delivery points commonly identified as and agreed to by the counterparties to constitute delivery into the Entergy balancing authority
FE Hub	The aggregated Elemental Pricing nodes ("Epnodes") defined by the Midwest Independent Transmission System Operator, Inc., as FE Hub (MISO).
Four Corners	The set of delivery points at the Four Corners power plant commonly identified as and agreed to by the counterparties to constitute the Four Corners Hub.
Illinois Hub (MISO)	The aggregated Elemental Pricing nodes ("Epnodes") defined by the Midwest Independent Transmission System Operator, Inc., as Illinois Hub (MISO).
Indiana Hub (MISO)	The aggregated Elemental Pricing nodes ("Epnodes") defined by the Midwest Independent Transmission System Operator, Inc., as Indiana Hub (MISO).
Mead	The set of delivery points at or near Hoover Dam commonly identified as and agreed to by the counterparties to constitute the Mead Hub.
Michigan Hub (MISO)	The aggregated Elemental Pricing nodes ("Epnodes") defined by the Midwest Independent Transmission System Operator, Inc., as Michigan Hub (MISO).
Mid-Columbia (Mid-C)	The set of delivery points along the Columbia River commonly identified as and agreed to by the counterparties to constitute the Mid-Columbia Hub
Minnesota Hub (MISO)	The aggregated Elemental Pricing nodes ("Epnodes") defined by the Midwest IndependentTransmission System Operator, Inc., as Minnesota Hub (MISO).
NEPOOL (Mass Hub)	The aggregated Locational Marginal Price ("LMP") nodes defined by ISO New England Inc., as Mass Hub
NIHUB	The aggregated Locational Marginal Price ("LMP") nodes defined by PJM Interconnection, LLC as the Northern Illinois Hub.
NOB	The set of delivery points along the Nevada-Oregon border commonly identified as and agreed to by the counterparties to constitute the NOB Hub.
NP15	The set of delivery points north of Path 15 on the California transmission grid commonly identified as and agreed to by the counterparties to constitute the NP15 Hub.
NWMT	The set of delivery points commonly identified as and agreed to by the counterparties to constitute delivery into the Northwestern Energy Montana balancing authority.

Appendix C. Hub

HUB	Definition
PJM East Hub	The aggregated Locational Marginal Price nodes ("LMP") defined by PJM Interconnection, LLC as the PJM East Hub.
PJM South Hub	The aggregated Locational Marginal Price ("LMP") nodes defined by PJM Interconnection, LLC as the PJM South Hub.
PJM West Hub	The aggregated Locational Marginal Price ("LMP") nodes defined by PJM Interconnection, LLC as the PJM Western Hub.
Palo Verde	The switch yard at the Palo Verde nuclear power station west of Phoenix in Arizona. Palo Verde Hub includes the
	Hassayampa switchyard 2 miles south of Palo Verde.
SOCO (into)	The set of delivery points commonly identified as and agreed to by the counterparties to constitute delivery into the
	Southern Company balancing authority.
SP15	The set of delivery points south of Path 15 on the California transmission grid commonly identified as and agreed to by the
	counterparties to constitute the SP15 Hub.
TVA (into)	The set of delivery points commonly identified as and agreed to by the counterparties to constitute delivery into the
	Tennessee Valley Authority balancing authority.
ZP26	The set of delivery points associated with Path 26 on the California transmission grid commonly identified as and agreed
	to by the counterparties to constitute the ZP26 Hub.

Appendix D. Time Zone				
Time Zone	Definition			
AD	Atlantic Daylight			
AP	Atlantic Prevailing			
AS	Atlantic Standard			
CD	Central Daylight			
СР	Central Prevailing			
CS	Central Standard			
ED	Eastern Daylight			
EP	Eastern Prevailing			
ES	Eastern Standard			
MD	Mountain Daylight			
MP	Mountain Prevailing			
MS	Mountain Standard			
NA	Not Applicable			
PD	Pacific Daylight			
PP	Pacific Prevailing			
PS	Pacific Standard			
UT	Universal Time			

	Appendix E. Units
Units	Definition
KV	Kilovolt
KVA	Kilovolt Amperes
KVR	Kilovar
KW	Kilowatt
KWH	Kilowatt Hour
KW-DAY	Kilowatt Day
KW-MO	Kilowatt Month
KW-WK	Kilowatt Week
KW-YR	Kilowatt Year
MVAR-YR	Megavar Year
MW	Megawatt
MWH	Megawatt Hour
MW-DAY	Megawatt Day
MW-MO	Megawatt Month
MW-WK	Megawatt Week
MW-YR	Megawatt Year
RKVA	Reactive Kilovolt Amperes
FLAT RATE	Flat Rate

Appendix F. Rate Units

Rate Units	Definition
\$/KV	dollars per kilovolt
\$/KVA	dollars per kilovolt amperes
\$/KVR	dollars per kilovar
\$/KW	dollars per kilowatt
\$/KWH	dollars per kilowatt hour
\$/KW-DAY	dollars per kilowatt day
\$/KW-MO	dollars per kilowatt month
\$/KW-WK	dollars per kilowatt week
\$/KW-YR	dollars per kilowatt year
\$/MW	dollars per megawatt
\$/MWH	dollars per megawatt hour
\$/MW-DAY	dollars per megawatt day
\$/MW-MO	dollars per megawatt month
\$/MW-WK	dollars per megawatt week
\$/MW-YR	dollars per megawatt year
\$/MVAR-YR	dollars per megavar year
\$/RKVA	dollars per reactive kilovar amperes
CENTS	cents
CENTS/KVR	cents per kilovolt amperes
CENTS/KWH	cents per kilowatt hour
FLAT RATE	rate not specified in any other units

Index PricePublisher Abbreviation	Index Price Publisher
AM	Argus Media
EIG	Energy Intelligence Group, Inc.
IP	Intelligence Press
Р	Platts
В	Bloomberg
Pdx	Powerdex
SNL	SNL Energy

Appendix G. Index Price Publisher

EQR Data Dictionary ID Data

Appendix H. Exchange/Broker Services

Exchange/Brokerage	Definition
Service	
BROKER	A broker was used to consummate or effectuate the transaction.
ICE	Intercontinental Exchange
NODAL	Nodal Exchange
NYMEX	New York Mercantile Exchange