PUBLIC STAFF-DR-02-013

REQUEST:

For the months of January 2014 and August 2014, provide a copy of the PJM invoice/statement which supports the amounts recorded in the fuel adjustment clause for those expense months. If necessary, provide a reconciliation of the amounts in the invoice/statement to the amounts recorded in the FAC.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachments Only)

See Confidential Staff-DR-02-013 Attachment 1 for the January 2014 PJM invoice and Confidential Staff-DR-02-013 Attachment 2 for the August 2014 invoice, filed with the Commission under a Petition for Confidential Treatment.

Reconciliation of the Day-ahead and Balancing Operating Reserve to the amounts reported in the FAC:

1

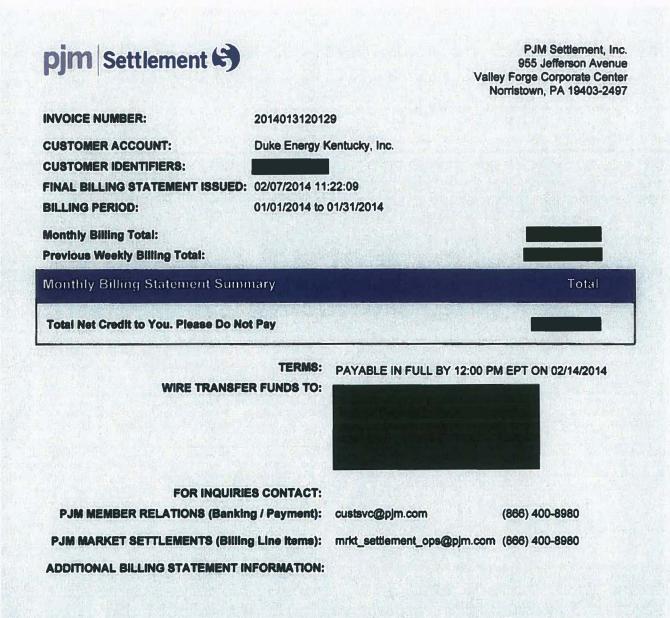
				Ji	anuary	
			Total		FAC	PSM
2370	Day-ahead Operating Reserve		282,917.68		197,673.57	85,244.11
2375	Balancing Operating Reserve		754,789.42		747,469.31	7,320.11
			1,037,707.10	(a)	945,142.88	92,564.22
		Per April 2014 Invoice- adjustment for				
2375	Balancing Operating Reserve	January 2014	1,536.30		0.00	1,536.30
			1,794,032.82	(b)	945,142.88	94,100.52

- (a) Per Schedule 4 filed in March 2014 for April 2014 rates Section A PJM Balancing and Day Ahead Operating Reserve Credit
- (b) Per Schedule 7 filed in August 2014 for September 2014 rates Section A PJM Balancing and Day Ahead Operating Reserve Credit

Please see response to STAFF-DR-02-012(a) for an explanation of the amounts of purchased power included in the FAC and how it relates to the PJM invoice.

PERSON RESPONSIBLE: Lisa Steinkuhl/Scott Burnside

KyPSC Case No. 2014-00454 STAFF-DR-02-013 PUBLIC Attachment 1 Page 1 of 5



This cover page includes PJM Settlement, Inc. banking information that is NOT to be publicly shared. In order to reduce the risk of potential fraud, please redact any PJM Settlement banking information prior to including these billing statements in any public documents.

David Budney Manager, PJM Market Settlement Operations

KyPSC Case No. 2014-00454 STAFF-DR-02-013 PUBLIC Attachment 1 Page 2 of 5



PJM Settlement, Inc. 955 Jefferson Avenue Valley Forge Corporate Center Norristown, PA 19403-2497

CUSTOMER ACCOUNT: CUSTOMER IDENTIFIERS: FINAL BILLING STATEMENT ISSUED: BILLING PERIOD: Duke Energy Kentucky, Inc.

02/07/2014 11:22:09 01/01/2014 to 01/31/2014

CHARGES	ADJ BILLING LINE ITEM NAME	SOURCE BILLING PERIOD START	AMOUNT
1100	Network Integration Transmission Service	Creation of the second second	Control to a factor
1108	Transmission Enhancement		
1130	Firm Point-to-Point Transmission Service		and the second
1140	Non-Firm Point-to-Point Transmission Service		
1200	Day-ahead Spot Market Energy	the state of the late strength of	
1205	Balancing Spot Market Energy		
1210	Day-ahead Transmission Congestion		
1215	Balancing Transmission Congestion	Rendering sectors of Philipping Street	
1220	Day-ahead Transmission Losses		- Mich Little
1225	Balancing Transmission Losses		
1230	inadvertent Interchange		
1242	Day-Ahead Load Response Charge Allocation		
1243	Real-Time Load Response Charge Allocation		
1250	Meter Error Correction		The state of the second
1260	Emergency Energy		A CONTRACTOR OF
1301	PJM Scheduling, System Control and Dispatch		man in the second
	Service - Control Area Administration		and the second
1302	PJM Scheduling, System Control and Dispatch Service - FTR Administration		Alternation (14)
1303	PJM Scheduling, System Control and Dispatch Service - Market Support		
1304	PJM Scheduling, System Control and Dispatch Service - Regulation Market Administration		
1305	PJM Scheduling, System Control and Dispatch Service - Capacity Resource/Obligation Mgmt.		H albadar
1306	PJM Scheduling, System Control and Dispatch Service - Advanced Second Control Center		
1307	PJM Scheduling, System Control and Dispatch Service - Market Support Offset		
1308	PJM Scheduling, System Control and Dispatch Service Refund - Control Area Administration		
1309	PJM Scheduling, System Control and Dispatch Service Refund - FTR Administration		
1310	PJM Scheduling, System Control and Dispatch Service Refund - Market Support		
1311	PJM Scheduling, System Control and Dispatch Service Refund - Regulation Market Administration		
1312	PJM Scheduling, System Control and Dispatch Service Refund - Capacity Resource/Obligation Mgmt.		
1313	PJM Settlement, Inc.		
1314	Market Monitoring Unit (MMU) Funding		
1315	FERC Annual Recovery		
1316	Organization of PJM States, Inc. (OPSI) Funding		
1317	North American Electric Reliability Corporation (NERC)		
1318	Reliability First Corporation (RFC)		

KyPSC Case No. 2014-00454 STAFF-DR-02-013 PUBLIC Attachment 1 Page 3 of 5

pjm Settlement 🕄

PJM Settlement, Inc. 955 Jefferson Avenue Valley Forge Corporate Center Norristown, PA 19403-2497

CUSTOMER ACCOUNT: CUSTOMER IDENTIFIERS: FINAL BILLING STATEMENT ISSUED: BILLING PERIOD:

02/07/2014 11:22:09

Duke Energy Kentucky, Inc.

01/01/2014 to 01/31/2014

1320	1	Transmission Owner Scheduling, System Control and Dispatch Service			
1330		Reactive Supply and Voltage Control from Generation and Other Sources Service			
1340	ALC: NO DES	Regulation and Frequency Response Service			
1360		Synchronized Reserve			
1362	A STATE	Non-Synchronized Reserve			
1365	200 B	Day-ahead Scheduling Reserve			
1370		Day-ahead Operating Reserve	and the second second second second second		
1375	1.975.364	Balancing Operating Reserve	STATES AND A CONTRACTOR		
1376		Balancing Operating Reserve for Load Response			
1377	1.11	Synchronous Condensing	The state of the second se		
1378	De altre	Reactive Services	and the second		
1380	alle and	Black Start Service			
1400	1	Load Reconciliation for Spot Market Energy			
1410	Coppender.	Load Reconciliation for Transmission Congestion			
1420		Load Reconciliation for Transmission Losses			
1430	1.50	Load Reconciliation for Inadvertent Interchange	All states and the second second		
1440		Load Reconcillation for PJM Scheduling, System	States and states where the second		
1.1.10		Control and Dispatch Service			
1441	141 23	Load Reconciliation for PJM Scheduling, System	State of the second second second		
		Control and Dispatch Service Refund			
1442	Callent and	Load Reconciliation for Schedule 9-6 - Advanced	A CONTRACTOR OF THE OWNER OF THE OWNER		
		Second Control Center			
1444		Load Reconciliation for Market Monitoring Unit (MMU) Funding			
1445	In the	Load Reconciliation for FERC Annual Recovery			
1446		Load Reconciliation for Organization of PJM			
		States, Inc. (OPSI) Funding	and the second second		
1447		Load Reconciliation for North American Electric Reliability Corporation (NERC)			
1448		Load Reconciliation for Reliability First Corporation (RFC)			
1450		Load Reconciliation for Transmission Owner	the second s		
1400		Scheduling, System Control and Dispatch Service			
1460		Load Reconciliation for Regulation and Frequency			
4470		Response Service Load Reconciliation for Synchronized Reserve	the subsection of the sub-		
1470		Load Reconciliation for Non-Synchronized Reserve			
1472 1475		Load Reconciliation for Day-ahead Scheduling			
14/0		Reserve			
1478		Load Reconciliation for Balancing Operating Reserve			
1490		Load Reconciliation for Reactive Services			
1500	Bruch	Financial Transmission Rights Auction	and the state of the		
1108	A	Transmission Enhancement	12/01/2013		
1140	A	Non-Firm Point-to-Point Transmission Service	12/01/2013		
1218	A	Planning Period Congestion Uplift	05/01/2012		
1230	A	Inadvertent Interchange	11/01/2013		



PJM Settlement, Inc. 955 Jefferson Avenue Valley Forge Corporate Center Norristown, PA 19403-2497

CUSTOMER ACCOUNT: CUSTOMER IDENTIFIERS: FINAL BILLING STATEMENT ISSUED: BILLING PERIOD:

02/07/2014 11:22:09

Duke Energy Kentucky, Inc.

01/01/2014 to 01/31/2014

1304	A	PJM Scheduling, System Control and Dispatch Service - Regulation Market Administration	08/01/2013
1304	Α	PJM Scheduling, System Control and Dispatch Service - Regulation Market Administration	12/01/2013
1311	A	PJM Scheduling, System Control and Dispatch Service Refund - Regulation Market Administration	12/01/2013
1340	A	Regulation and Frequency Response Service	08/01/2013
1340	A	Regulation and Frequency Response Service	12/01/2013
1360	A	Synchronized Reserve	12/01/2013
1370	A	Day-ahead Operating Reserve	12/01/2013
1375	A	Balancing Operating Reserve	04/01/2013
1375	A	Balancing Operating Reserve	05/01/2013
1375	A	Balancing Operating Reserve	07/01/2013
1375	A	Balancing Operating Reserve	08/01/2013
1375	A	Balancing Operating Reserve	10/01/2013
1375	A	Balancing Operating Reserve	11/01/2013
1375	A	Balancing Operating Reserve	12/01/2013
1376	A	Balancing Operating Reserve for Load Response	12/01/2013
1378	A	Reactive Services	07/01/2013
1378	A	Reactive Services	08/01/2013
1378	A	Reactive Services	12/01/2013
1911	A	Michigan - Ontario Interface Phase Angle Regulators	12/01/2013

Total Charges

pjm Settlement 🕄

PJM Settlement, Inc. 955 Jefferson Avenue Valley Forge Corporate Center Norristown, PA 19403-2497

CUSTOMER ACCOUNT: CUSTOMER IDENTIFIERS: FINAL BILLING STATEMENT ISSUED: BILLING PERIOD:

02/07/2014 11:22:09

Duke Energy Kentucky, Inc.

01/01/2014 to 01/31/2014

CREDITS	ADJ	BILLING LINE ITEM NAME	SOURCE BILLING PERIOD START	AMOUNT
2100	No.	Network Integration Transmission Service		
2130		Firm Point-to-Point Transmission Service		The second second second
2140	North W	Non-Firm Point-to-Point Transmission Service		
2210	10.11.15	Transmission Congestion		
2220	6.5.6	Transmission Losses		
2260	1-1-1-1	Emergency Energy	A STATE OF THE OWNER OF THE OWNER OF	
2320		Transmission Owner Scheduling, System Control and Dispatch Service		
2330		Reactive Supply and Voltage Control from Generation and Other Sources Service		
2340	1 Section	Regulation and Frequency Response Service		
2360		Synchronized Reserve		
2362		Non-Synchronized Reserve		
2365	mit in	Day-ahead Scheduling Reserve		
2370	See.	Day-ahead Operating Reserve		
2375	12011	Balancing Operating Reserve		The mean of the
2380	SUCCES	Black Start Service	and the second se	
2420	Carl States	Load Reconciliation for Transmission Losses		
2500	N. Ball	Financial Transmission Rights Auction		
2510	a sublin	Auction Revenue Rights		
2640	H CLEAR	Incremental Capacity Transfer Rights		
2140	A	Non-Firm Point-to-Point Transmission Service	12/01/2013	
2210	A	Transmission Congestion	01/01/2012	
2210	A	Transmission Congestion	02/01/2012	
2210	A	Transmission Congestion	03/01/2012	
2210	A	Transmission Congestion	04/01/2012	
2210	A	Transmission Congestion	05/01/2012	
2210	A	Transmission Congestion	11/01/2013	
2210	A	Transmission Congestion	12/01/2013	Dal Beach 18 1
2218	A	Planning Period Congestion Uplift	05/01/2012	
2220	A	Transmission Losses	11/01/2013	
2220	A	Transmission Losses	12/01/2013	
2375	A	Balancing Operating Reserve	12/01/2013	
		Total Credits		

KyPSC Case No. 2014-00454 STAFF-DR-02-013 PUBLIC Attachment 2 Page 1 of 5



FOR INQUIRIES CONTACT: PJM MEMBER RELATIONS (Banking / Payment): PJM MARKET SETTLEMENTS (Billing Line Items): ADDITIONAL BILLING STATEMENT INFORMATION:

custsvc@pjm.com

mrkt_settlement_ops@pjm.com (866) 400-8980

(866) 400-8980

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David Budney Manager, PJM Market Settlement Operations

KyPSC Case No. 2014-00454 STAFF-DR-02-013 PUBLIC Attachment 2 Page 2 of 5

pjm Settlement 🕄

PJM Settlement, Inc. 955 Jefferson Avenue Valley Forge Corporate Center Norristown, PA 19403-2497

CUSTOMER ACCOUNT: CUSTOMER IDENTIFIERS: FINAL BILLING STATEMENT ISSUED: BILLING PERIOD:

CHADOES

09/08/2014 08:58:20

Duke Energy Kentucky, Inc.

08/01/2014 to 08/31/2014

CHARGES	ADJ BILLING LINE ITEM NAME	SOURCE BILLING PERIOD START	AMOUNT
1100	Network Integration Transmission Service		
1108	Transmission Enhancement		
1130	Firm Point-to-Point Transmission Service		
1140	Non-Firm Point-to-Point Transmission Service		
1200	Day-ahead Spot Market Energy		
1205	Balancing Spot Market Energy		
1210	Day-ahead Transmission Congestion	and the state of the state of the state	
1215	Balancing Transmission Congestion	and the second second second second	
1220	Day-ahead Transmission Losses	Contraction of the second second	
1225	Balancing Transmission Losses	an a	
1230	Inadvertent Interchange	and the second second second second	The second se
1242	Day-Ahead Load Response Charge Allocation	AND	The shall be the shall
1243	Real-Time Load Response Charge Allocation	and the same barrent the second	
1250	Meter Error Correction		The second has
1301	PJM Scheduling, System Control and Dispatch Service - Control Area Administration		Name and
1302	PJM Scheduling, System Control and Dispatch Service - FTR Administration		C. Park C. F.
1303	PJM Scheduling, System Control and Dispatch Service - Market Support		
1304	PJM Scheduling, System Control and Dispatch Service - Regulation Market Administration		
1305	PJM Scheduling, System Control and Dispatch Service - Capacity Resource/Obligation Mgmt.		
1306	PJM Scheduling, System Control and Dispatch Service - Advanced Second Control Center		TO LES
1307	PJM Scheduling, System Control and Dispatch Service - Market Support Offset		
1308	PJM Scheduling, System Control and Dispatch Service Refund - Control Area Administration		
1309	PJM Scheduling, System Control and Dispatch Service Refund - FTR Administration		
1310	PJM Scheduling, System Control and Dispatch Service Refund - Market Support		
1311	PJM Scheduling, System Control and Dispatch Service Refund - Regulation Market Administration		
1312	PJM Scheduling, System Control and Dispatch Service Refund - Capacity Resource/Obligation Mgmt.		
1313	PJM Settlement, Inc.		The first of the
1314	Market Monitoring Unit (MMU) Funding		
1315	FERC Annual Recovery		
1316	Organization of PJM States, Inc. (OPSI) Funding	and the second second second	
1317	North American Electric Reliability Corporation (NERC)		
1318	Reliability First Corporation (RFC)		
			A CONTRACT AS A DESCRIPTION OF A DESCRIP

KyPSC Case No. 2014-00454 STAFF-DR-02-013 PUBLIC Attachment 2 Page 3 of 5

PJM Settlement, Inc.

955 Jefferson Avenue Valley Forge Corporate Center Norristown, PA 19403-2497

pjm Settlement 🕄

Duke Energy Kentucky, Inc.

CUSTOMER IDENTIFIERS:

CUSTOMER ACCOUNT:

FINAL BILLING STATEMENT ISSUED: BILLING PERIOD: 09/08/2014 08:58:20 08/01/2014 to 08/31/2014

1320	Transmission Owner Scheduling, System Control and Dispatch Service	
1330	Reactive Supply and Voltage Control from	A DESCRIPTION OF THE PARTY OF T
	Generation and Other Sources Service	
1340	Regulation and Frequency Response Service	Charles and the second second second
1360	Synchronized Reserve	
1362	Non-Synchronized Reserve	and a state of the
1365	Day-ahead Scheduling Reserve	in the second
1370	Day-ahead Operating Reserve	the set of
1375	Balancing Operating Reserve	CARL MALL CARD
1376	Balancing Operating Reserve for Load Response	and the state of the state of the state of the
1380	Black Start Service	
1400	Load Reconciliation for Spot Market Energy	
1410	Load Reconciliation for Transmission Congestion	
1420	Load Reconciliation for Transmission Losses	
1430	Load Reconciliation for Inadvertent Interchange	The second s
1440	Load Reconciliation for PJM Scheduling, System	
1440	Control and Dispatch Service	
4444	Load Reconciliation for PJM Scheduling, System	A REAL PROPERTY OF A REAL PROPER
1441	Control and Dispatch Service Refund	
	Load Reconciliation for Schedule 9-6 - Advanced	
1442	Second Control Center	121
1444	Load Reconciliation for Market Monitoring Unit (MMU) Funding	
1445	Load Reconciliation for FERC Annual Recovery	and the state of the second state of the secon
1446	Load Reconciliation for Organization of PJM States, Inc. (OPSI) Funding	Hard the second s
1447	Load Reconciliation for North American Electric Reliability Corporation (NERC)	的历史的名称是一次
1448	Load Reconciliation for Reliability First Corporation (REC)	A State
1450	Load Reconciliation for Transmission Owner Scheduling, System Control and Dispatch Service	
1460	Load Reconciliation for Regulation and Frequency	
4470	Response Service	
1470	Load Reconciliation for Synchronized Reserve	
1472	Load Reconciliation for Non-Synchronized Reserve	the there is the state of the state
1475	Load Reconciliation for Day-ahead Scheduling Reserve	
1478	Load Reconciliation for Balancing Operating Reserve	
1490	Load Reconciliation for Reactive Services	The second second second
1500	Financial Transmission Rights Auction	and the second
and the second se	Non-Firm Point-to-Point Transmission Service	07/01/2014
in and spint printing to be 17 and to the second second second second	Planning Period Congestion Uplift	05/01/2014
and the second se	PJM Scheduling, System Control and Dispatch Service - Regulation Market Administration	07/01/2014
1330		06/01/2013

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pjm Settlement 🕄

PJM Settlement, Inc. 955 Jefferson Avenue Valley Forge Corporate Center Norristown, PA 19403-2497

CUSTOMER ACCOUNT: CUSTOMER IDENTIFIERS: FINAL BILLING STATEMENT ISSUED: BILLING PERIOD: Duke Energy Kentucky, Inc.

09/08/2014 08:58:20 08/01/2014 to 08/31/2014

1340	A	Regulation and Frequency Response Service	07/01/2014
1360	A	Synchronized Reserve	07/01/2014
1375	A	Balancing Operating Reserve	07/01/2013
1375	A	Balancing Operating Reserve	12/01/2013
1375	A	Balancing Operating Reserve	01/01/2014
1375	A	Balancing Operating Reserve	05/01/2014
1375	A	Balancing Operating Reserve	07/01/2014
1911	A	Michigan - Ontario Interface Phase Angle Regulators	07/01/2014
	and the	Total Charges	

KyPSC Case No. 2014-00454 STAFF-DR-02-013 PUBLIC Attachment 2 Page 5 of 5

pjm Settlement 🕄

PJM Settlement, Inc. 955 Jefferson Avenue Valley Forge Corporate Center Norristown, PA 19403-2497

CUSTOMER ACCOUNT: CUSTOMER IDENTIFIERS: FINAL BILLING STATEMENT ISSUED: BILLING PERIOD: Duke Energy Kentucky, Inc.

09/08/2014 08:58:20 08/01/2014 to 08/31/2014

CREDITS	AD.J	BILLING LINE ITEM NAME	SOURCE BILLING PERIOD START	AMOUNT
2100		Network Integration Transmission Service	Cherry Company	
2130		Firm Point-to-Point Transmission Service		
2140		Non-Firm Point-to-Point Transmission Service		
2210		Transmission Congestion		
2220	Said	Transmission Losses	A STATE OF A	
2320	L-Sale-	Transmission Owner Scheduling, System Control and Dispatch Service		
2330		Reactive Supply and Voltage Control from Generation and Other Sources Service		
2340	The second	Regulation and Frequency Response Service		
2360	And the state	Synchronized Reserve		
2362	A TAK	Non-Synchronized Reserve		
2365		Day-ahead Scheduling Reserve		
2370	and and	Day-ahead Operating Reserve		
2375	Sec. No.	Balancing Operating Reserve		
2380		Black Start Service		- Para and
2420	intro Const	Load Reconciliation for Transmission Losses		
2500	and the second	Financial Transmission Rights Auction		
2510		Auction Revenue Rights	in the second second second second	I the state of the
2140	A	Non-Firm Point-to-Point Transmission Service	07/01/2014	
2210	A	Transmission Congestion	03/01/2014	
2210	A	Transmission Congestion	06/01/2014	
2210	A	Transmission Congestion	07/01/2014	
2218	A	Planning Period Congestion Uplift	05/01/2014	the section of the section of the
2220	A	Transmission Losses	07/01/2014	
2640	A	Incremental Capacity Transfer Rights	02/01/2014	
2665	A	Peak-Hour Period Availability	08/01/2014	
		Total Credits		

STAFF-DR-02-014

REQUEST:

Refer to the response to Item 39 of the February 5, 2015 Request. State whether Duke Kentucky is compensated by PJM if PJM dispatches any of its units out of economic dispatch order. If so, explain whether this compensation is fuel-related and credited to customers through the FAC. If fuel-related compensation is received and not credited through the FAC, explain why it is not credited.

RESPONSE:

When using the term "out of economic dispatch order," there are different scenarios that this description could be used to describe. For example, this characterization could be used to describe when a generating unit is dispatched by PJM, but the revenues received from PJM are less than the unit's costs as stated in the offer. In this situation, the unit would receive a credit from PJM, the aforementioned Day-Ahead or Balancing Operating Reserves credits, and this credit would be allocated to the customer in the fuel adjustment clause (See Staff-DR-02-005) if the unit was allocated to serve native load.

In the context of the response to the aforementioned Item 39, using the term "out of economic dispatch order" is being used to describe the fact that in the security constrained PJM energy and ancillary services market, generating units are not necessarily operated in a pure instantaneous variable production cost order but are instead committed and dispatched to minimize total system production costs over a period of several days. Note that this process is still economic dispatch and in fact incorporates more components than just looking at Duke Energy Kentucky's generating unit's production costs to serve only Duke Energy Kentucky's load. In this process, the congestion and loss component of LMP are considered in the commitment and dispatch process in addition to traditional operating parameters such as ramp rate, minimum down time and start-up time. Thus, the LMP at the Duke Energy Kentucky generating stations and the load zone are typically different and vary by the amount of congestion and losses present at each point. It should be noted that congestion and losses existed prior to Duke Energy Kentucky participating in the PJM market. For example, congestion was previously managed through the manual redispatch of a generating unit to relieve congestion or through the North American Electric Reliability Corporation's (NERC) Transmission Loading Relief (TLR) procedure.

Thus, when a unit is dispatched or committed in the PJM market, it is not done so purely on the units individual production cost and operating parameters, but instead consideration of the unit's location and therefore congestion and losses present is included. This may mean that when examining only the production cost component of a generating unit, there may be times when a unit with a higher production cost is increased in output (i.e. dispatched up) and a unit with a lower production cost is decreased in output (i.e. dispatched down). However, in this example, the amount of revenue that each individual generation unit is receiving from the PJM market will reflect the impact of the congestion and loss differences between units; thus, the unit with the lower production cost that was dispatched down is paid a lower LMP and the unit with a higher production cost that was dispatched up is paid a higher LMP. Fuel-related compensation could be received from PJM depending on the day-ahead award and the actual generation from the unit. In general, the generating unit is compensated by following its dispatch instruction.

Due to the manner in which the Company is allocating purchase power, the impact of this LMP revenue difference to the generating units is not allocated to the native load customer through the FAC. However, to the extent that the dispatch of generating units affects the amount of purchase power or changes the allocation of generating units allocated to serve native load, the native load customer is affected.

PERSON RESPONSIBLE: John Swez/Scott Burnside

STAFF-DR-02-015

REQUEST:

State whether there are times when PJM does not dispatch one or more of Duke Kentucky's generating units, but, in order to meet load, Duke Kentucky has to purchase power at a higher cost from PJM than if it had operated its unit(s). If so, state the number of times this occurred by month during the period under review and whether Duke Kentucky received any type of compensation from PJM.

RESPONSE:

To understand this situation, it must first be recognized that in PJM, Duke Energy Kentucky offers in all of its available generation into both the day-ahead and real-time energy markets on the one hand, and on the other, must purchase all energy from PJM to satisfy its load. The net difference in terms of MWs of the two basic transaction concepts determines whether or not Duke Energy Kentucky is a net purchaser or seller. PJM's security constrained economic dispatch process is the mechanism under which generation is committed in either the day-ahead or real time markets, having determined which generating units are best suited at any given moment to satisfy load and reliability requirements in the most economically efficient manner across the entire footprint, not just one utility's service territory.

That said, there are various situations where the above described situation could occur. For some utilities, this situation could occur as a result of the unit commitment

process, in that there are times when a unit is not started due to the fact that the overall production costs for a time period would dictate that that unit is not economic to start, but if a single hour is examined on a stand-alone after-the-fact basis, it would appear that the unit would have been economic to run. Due to the fact that Duke Energy Kentucky's two coal fired generating units have a very low production cost and are always committed when available, this situation does not typically happen in the case of Duke Energy Kentucky's coal fleet. However, the Company has experienced this with respect to its Woodsdale station. There may be times that PJM does not call upon Woodsdale due to congestion, LMP volatility, a commitment decision, or other grid reliability reasons where PJM determines that it is more economically efficient under a security constrained dispatch analysis across the entire PJM footprint to call upon another unit, even though that unit may have a higher production cost. Woodsdale from a forward-looking basis may not be called upon and committed by PJM, but after-the-fact, locational marginal prices may have risen above the production cost of Woodsdale.

There is another situation that is likely to occur for Duke Energy Kentucky, specifically with the Woodsdale generating units. In the event that a Woodsdale generating unit clears the day-ahead market and is not run in the real-time market, the generating is eligible for a lost opportunity payment from PJM. Specifically, the unit would be paid a lost opportunity payment in the case where the unit clears the day-ahead market and then PJM instructs the unit not to run in the real-time market and the unit experiences a loss in day-ahead unit margin. This has occurred at various times and a listing is included below.

oodsdal	e L	ost Opporti	uni	ty Paymen	ts
		FAC		PSM	Dates
Nov-12	\$		\$		
Dec-12	\$	100 - 10 - ³⁴ 0	\$		
Jan-13	\$	-	\$		
Feb-13	\$		\$		
Mar-13	\$		\$	-	
Apr-13	\$	-	\$		
May-13	\$		\$	Point-1	
Jun-13	\$		\$	ind the - tok	
Jul-13	\$:	163,062.00	\$	80,162.87	7/15, 7/16, 7/17, 7/18, 7/19
Aug-13	\$		\$		
Sep-13	\$	4,317.09	\$		9/10
Oct-13	\$		\$		
Nov-13	\$		\$		
Dec-13	\$		\$		
Jan-14	\$5	547,211.55	\$	7,320.11	1/6, 1/22, 1/23, 1/24
Feb-14	\$	24,532.98	\$!	54,468.38	2/11, 2/12, 2/27
Mar-14	\$	- 1999 - <mark>-</mark> 1960	\$		
Apr-14	\$		\$		
May-14	\$		\$	-	
Jun-14	\$	40,671.40	\$		6/18
Jul-14	\$		\$		
Aug-14	\$		\$		
Sep-14	\$		\$		
Oct-14	\$		\$		

These lost opportunity payments are part of the balancing operating reserve credit and allocated on a daily basis proportional to the native/non-native allocation of day-ahead energy.

PERSON RESPONSIBLE: John Swez/Scott Burnside

STAFF-DR-02-016

REQUEST:

Refer to the response to Item 40 of the February 5, 2015 Request.

- a. Explain in detail why the \$ per MWh fuel cost for native load was higher than the
 \$ per MWh for off-system sales in more than half of the months in the 24 month
 review period.
- b. Explain in detail why the \$ per MWh fuel cost for native load was significantly higher than the \$ per MWh for off-system sales in the months of April 2013, July 2013, March 2014, and June 2014. Include in the response details of Duke Kentucky's fuel cost allocation methodology that produces these results.

RESPONSE:

a. \$ per MWh fuel cost for native load as defined by 807 KAR 5:056, column K of STAFF-DR-01-040 Attachment was higher than the \$ per MWh for off-system sales in column N of STAFF-DR-01-040 in more than half of the months because column K includes the purchased power and the disallowance for forced outages for the native load. Duke Energy Kentucky does not purchase power or disallow any expenses due to forced outages for off-system sales. Additionally, Duke Energy Kentucky utilizes an *hourly* average cost stacking model to calculate off-system sales cost. Comparison of monthly native and non-native average fuel cost ignores the unique market and operating conditions of each hour.

 b. For the months in questions, the \$ per MWh, Column K versus Column N, are significantly higher because of the purchased power and forced outage disallowance.

PERSON RESPONSIBLE: Lisa Steinkuhl/Scott Burnside

STAFF-DR-02-017

REQUEST:

In its most recent two-year FAC review case, Case No. 2012-00554,¹ Duke Kentucky indicated its preference that any change in base rates be approved on a "bills rendered" basis rather than on a "service rendered" basis. If the current FAC review results in changes to its base rates, state whether Duke Kentucky continues to prefer the same "bills rendered" basis as authorized in the previous two-year case.

RESPONSE:

Duke Energy Kentucky prefers the "bills rendered" basis.

PERSON RESPONSIBLE: Lisa Steinkuhl

¹ Case No. 2012-00554, An Examination of the Application of the Fuel Adjustment Clause of Duke Energy Kentucky, Inc. from November 1, 2010 through October 31, 2012, Duke Energy's Response to the Commission's February 13, 2013 Order, Appendix B, Item 40, filed March 1, 2013.