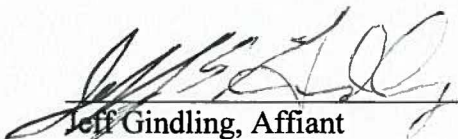


VERIFICATION

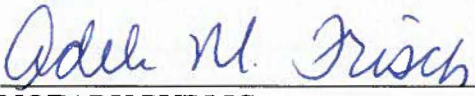
STATE OF OHIO)
) SS:
COUNTY OF HAMILTON)

The undersigned, Jeff Gindling, Principal Engineer, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.



Jeff Gindling, Affiant

Subscribed and sworn to before me by Jeff Gindling on this 20th day of April, 2015.



NOTARY PUBLIC

ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-05-2019

My Commission Expires: 1/5/2019

VERIFICATION

STATE OF OHIO)
) **SS:**
COUNTY OF HAMILTON)

The undersigned, Lisa Steinkuhl, being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of her knowledge, information and belief.

Lisa D Steinkuhl
Lisa Steinkuhl, Affiant

Subscribed and sworn to before me by Lisa Steinkuhl on this 17th day of April, 2015.

Adele M. Frisch
NOTARY PUBLIC

ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-05-2019

My Commission Expires: 1/5/2019

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POST HEARING-DR-01-001

REQUEST:

Provide a line loss calculation for November 1, 2012 through October 31, 2014.

RESPONSE:

Transmission and Distribution Line Loss Study:

Transmission Planning calculates loss studies annually. Post Hearing-DR-01-001 Attachment 1 is the loss study for 2013. The transmission & distribution line losses for Duke Energy Kentucky are 4.51%. The calculation for 2014 is currently being updated.

Changes to the Duke Energy Kentucky transmission and distribution systems are based on meeting planning criteria, which are intended to provide reliable system performance in a cost-effective manner. Loss reduction is a secondary goal, which may be considered, when appropriate, in deciding between various alternatives, which serve the primary purpose of maintaining system performance. The explanation below is how the line loss was calculated.

Loss Study Calculations

Demand Losses, measured in kilowatts (KW):

Using Power Flow software, a system peak load flow case for the study year is modeled. I^2R (I =Current, R =Resistance) losses are obtained for transmission lines, distribution lines and transformers utilizing the Power Flow software. This value is then

added with, transformer core losses, meter losses, and regulator losses to obtain a total system loss at peak.

$$\text{Total Demand Loss} = \text{Transmission Demand Loss} + \text{Distribution Demand Loss}$$

$$\% \text{ Transmission Loss} = \frac{\text{Transmission Demand Loss}}{\text{Yearly Demand}}$$

$$\% \text{ Distribution Loss} = \frac{\text{Distribution Demand Loss}}{\text{Yearly Demand}}$$

$$\text{Monthly Transmission Demand Loss} = \% \text{ Transmission Loss} * \text{Peak Month Demand}$$

$$\text{Monthly Distribution Demand Loss} = \% \text{ Distribution Loss} * \text{Peak Month Demand}$$

Energy Losses, measured in Kilowatt-hours (kWh)

Monthly Transmission Energy Loss

$$= \text{Monthly Loss Factor} * \text{Number of Hours in Month} * \text{Monthly Transmission Demand Loss}$$

Distribution Monthly Energy Loss

$$= \text{Monthly Loss Factor} * \text{Number of Hours in Month} * \text{Monthly Distribution Demand Loss}$$

(loss factors allow the system to be represented as having the same loss rate throughout the entire month as you have during the monthly system peak.)

$$\text{Yearly Transmission System Energy Loss} = \text{Sum of each month's transmission energy loss}$$

$$\text{Yearly Distribution System Energy Loss} = \text{Sum of each month's distribution energy loss}$$

The schedule provided in Staff-DR-01-013(a) calculates unaccounted for energy which is the difference between the known calendar month available sources of energy, either generated or purchased, and the estimated calendar month sales of energy which is determined by actual billed sales and an estimate of unbilled sales for a month. The difference can be driven by a combination of various reasons, such as transmission and distribution losses, metering problems, billing corrections, theft, meter read errors, estimates used, etc.

The Company is submitting an updated attachment to the response to Staff-DR-01-013(a). The original attachment provided in response to Staff-DR-013(a) was based on PJM meter reads 30 days after an expense month. PJM trues-up meter reads several times for an expense month. Post Hearing-DR-01-001 Attachment 2 is a revised calculation of Staff-DR-01-013(a). Consequently, the schedule has been updated to align the final meter reads for an expense month based upon PJM meter reads to the dollar amounts included for an expense month on Schedule 6-RTO Resettlements of the FAC filing. The schedule has also been amended to correct an inadvertent error in the original schedule. As confirmed by the updated attachment, the revised “loss %s” ranges from 5.5% to 7.3%, which is consistent with the historic fluctuation of +/- 2% over a two-year period. The Company believes this is reasonable based upon the use of the calculation. The calculation of unaccounted for energy is used in the FAC filing on Schedule 3-Sales Schedule to determine a kWh to use as a billing determine to calculate the rate for a month. The revenues received from the rate are then trued-up to the actual expenses incurred for the month to determine an over/under collection included in a subsequent FAC filing.

PERSON RESPONSIBLE: Lisa Steinkuhl / Jeff Gindling

2013	System Demand Losses						System Energy Losses					
	Tran % Loss @ Peak	MW Tran Losses	Dist % Loss @ Peak	MW Dist Losses	T&D % Loss @ Peak	MW T&D Losses	Tran Energy Loss %	MWH Tran Energy Losses	Dist Energy Loss %	MWH Dist Energy Losses	T&D Energy Loss %	MWH T&D Energy Losses
DEO	3.22%	138.18	3.51%	150.6	6.74%	288.8	1.99%	450,916	2.17%	491,409	4.17%	942,324
DEK	0.40%	3.43	3.78%	32.4	4.18%	35.8	0.24%	10,596	2.27%	99,948	2.52%	110,544

DEO = Duke Energy Ohio
 DEK = Duke Energy Kentucky

DEO Tran Energy Losses	1.99%
DEK T&D Energy Losses	2.52%
Total DEK T&D Losses	<u>4.51%</u>

Duke Energy Kentucky
 Revised 12 Month Average Line Loss
 November 2012 - October 2014

(1)	(2)	(3)	(4)	(5)	(6)
Month	Total kWh Sources 12 Months Ended Current Month	Total kWh System Losses 12 Months Ended Current Month	12 Months End % Losses	Total kWh Sources Current Month	Current Month Calculates System Losses (kWh)
			(3) / (2)		(4) x (5)
Nov-12	4,237,227,770	233,562,643	5.512160%	322,982,680	17,803,322
Dec-12	4,240,967,280	241,456,419	5.693430%	351,482,290	20,011,398
Jan-13	4,252,338,460	244,689,570	5.754240%	377,966,820	21,749,118
Feb-13	4,264,252,130	248,810,910	5.834810%	339,725,330	19,822,328
Mar-13	4,304,158,030	262,004,661	6.087250%	359,118,290	21,860,428
Apr-13	4,316,294,080	252,563,975	5.851410%	306,468,650	17,932,737
May-13	4,299,394,300	248,474,922	5.779300%	339,721,910	19,633,548
Jun-13	4,290,364,650	270,854,387	6.313090%	373,314,880	23,567,704
Jul-13	4,242,638,900	260,859,254	6.148510%	409,831,420	25,198,526
Aug-13	4,241,962,140	266,639,904	6.285770%	413,377,270	25,983,944
Sep-13	4,264,090,610	269,921,620	6.330110%	356,840,270	22,588,382
Oct-13	4,279,839,550	276,011,040	6.449100%	329,009,740	21,218,167
Nov-13	4,290,141,330	273,702,161	6.379790%	333,284,460	21,262,849
Dec-13	4,314,338,080	281,014,615	6.513500%	375,679,040	24,469,854
Jan-14	4,367,548,140	283,144,874	6.482930%	431,176,880	27,952,895
Feb-14	4,393,558,140	288,503,015	6.566500%	365,735,330	24,016,010
Mar-14	4,392,964,110	307,982,951	7.010820%	358,524,260	25,135,491
Apr-14	4,389,350,610	303,577,921	6.916240%	302,855,150	20,946,189
May-14	4,393,341,420	319,535,404	7.273170%	343,712,720	24,998,810
Jun-14	4,412,379,530	316,181,576	7.165780%	392,352,990	28,115,152
Jul-14	4,388,828,130	303,560,543	6.916670%	386,280,020	26,717,714
Aug-14	4,388,829,020	338,120,008	7.704110%	413,378,160	31,847,108
Sep-14	4,377,937,620	325,356,218	7.431720%	345,948,870	25,709,951
Oct-14	4,363,515,990	316,656,698	7.256920%	314,588,110	22,829,407

**Duke Energy Kentucky
Case No. 2014-00454
Post Hearing Set Data Requests
Date Received: April 8, 2015**

POST HEARING-DR-01-002

REQUEST:

Provide an electronic version of STAFF-DR-01-016 Attachment.

RESPONSE:

Please see Post Hearing-DR-01-002 Attachment for an excel version of the Staff-DR-01-016.

PERSON RESPONSIBLE: Lisa Steinkuhl

**Duke Energy Kentucky
Case No. 2014-00454
Post Hearing Set Data Requests
Date Received: April 8, 2015**

POST HEARING-DR-01-003

REQUEST:

For Woodsdale generating station, provide the following:

- a. How often did Woodsdale generating station self-commit from November 1, 2012 through October 31, 2014? Provide the reasons for each occurrence.
- b. How often was Woodsdale generating station dispatched into PJM? Provide the reasons for each occurrence.

RESPONSE:

Please see Post-Hearing-DR-01-003 Attachment.

PERSON RESPONSIBLE: Brett Phipps/John Swez

Explanation of Wooddale 1-6 CT Dispatch: November 1, 2012 - October 31, 2014

Definitions: PJM Request: PJM Committed Unit as a result of a Day-Ahead Award or Reliability Assessment Commitment
 Company Request: Unit was committed by the Company in Day-Ahead or Real-Time Market for capacity, performance, or environmental testing

	Wooddale 1	Wooddale 2	Wooddale 3	Wooddale 4	Wooddale 5	Wooddale 6
12/11/2012	PJM Request	PJM Request	PJM Request			
1/23/2013	Company Request	Company Request	Company Request	Company Request	Company Request	Company Request
1/24/2013						Company Request
3/22/2013	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request
4/3/2013		PJM Request	PJM Request	PJM Request	PJM Request	PJM Request
5/10/2013	Company Request	Company Request				
5/17/2013			Company Request	Company Request		
5/24/2013					Company Request	Company Request
5/30/2013	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request
7/15/2013	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request
7/17/2013	PJM Request	PJM Request	PJM Request		PJM Request	PJM Request
7/18/2013	PJM Request	PJM Request	PJM Request		PJM Request	PJM Request
7/19/2013	PJM Request	PJM Request	PJM Request		PJM Request	PJM Request
7/23/2013				Company Request		
8/15/2013					Company Request	Company Request
8/16/2013			Company Request	Company Request		
8/19/2013	Company Request	Company Request				
9/10/2013	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request
9/11/2013			PJM Request	PJM Request	PJM Request	
10/8/2013			Company Request			
10/9/2013			Company Request			
10/10/2013			Company Request			
10/15/2013				Company Request		
10/16/2013				Company Request		
10/17/2013	Company Request	Company Request				
11/19/2013				PJM Request		PJM Request
12/16/2013	Company Request	Company Request	Company Request	Company Request		Company Request
1/6/2014	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request
1/7/2014	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request
1/8/2014	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request
1/22/2014	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request
1/24/2014	PJM Request		PJM Request			
1/30/2014	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request
2/10/2014	PJM Request	PJM Request	PJM Request	PJM Request		PJM Request
2/11/2014		PJM Request	PJM Request	PJM Request		PJM Request
2/12/2014	PJM Request		PJM Request			
2/14/2014		Company Request				
2/27/2014				PJM Request		
2/28/2014			Company Request	PJM Request		PJM Request
3/4/2014	PJM Request					
3/10/2014	PJM Request	PJM Request				

Explanation of Woodsdale 1-6 CT Dispatch: November 1, 2012 - October 31, 2014

Definitions: **PJM Request:** PJM Committed Unit as a result of a Day-Ahead Award or Reliability Assessment Commitment
Company Request: Unit was committed by the Company in Day-Ahead or Real-Time Market for capacity, performance, or environmental testing

	Woodsdale 1	Woodsdale 2	Woodsdale 3	Woodsdale 4	Woodsdale 5	Woodsdale 6
3/14/2014			PJM Request	Company Request	PJM Request	
3/17/2014	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request	PJM Request
3/31/2014		PJM Request	PJM Request	PJM Request		PJM Request
5/16/2014	Company Request	Company Request				
5/22/2014			Company Request	Company Request		
5/30/2014					Company Request	Company Request
6/26/2014	PJM Request	PJM Request	PJM Request	PJM Request		PJM Request
7/2/2014		PJM Request			PJM Request	
8/11/2014	PJM Request	PJM Request				
8/12/2014			Company Request	Company Request		
8/14/2014					Company Request	Company Request
8/25/2014		Company Request				Company Request
10/7/2014					Company Request	
10/8/2014					Company Request	Company Request
10/9/2014						Company Request
10/23/2014				PJM Request		PJM Request

**Duke Energy Kentucky
Case No. 2014-00454
Post Hearing Set Data Requests
Date Received: April 8, 2015**

POST HEARING-DR-01-004

REQUEST:

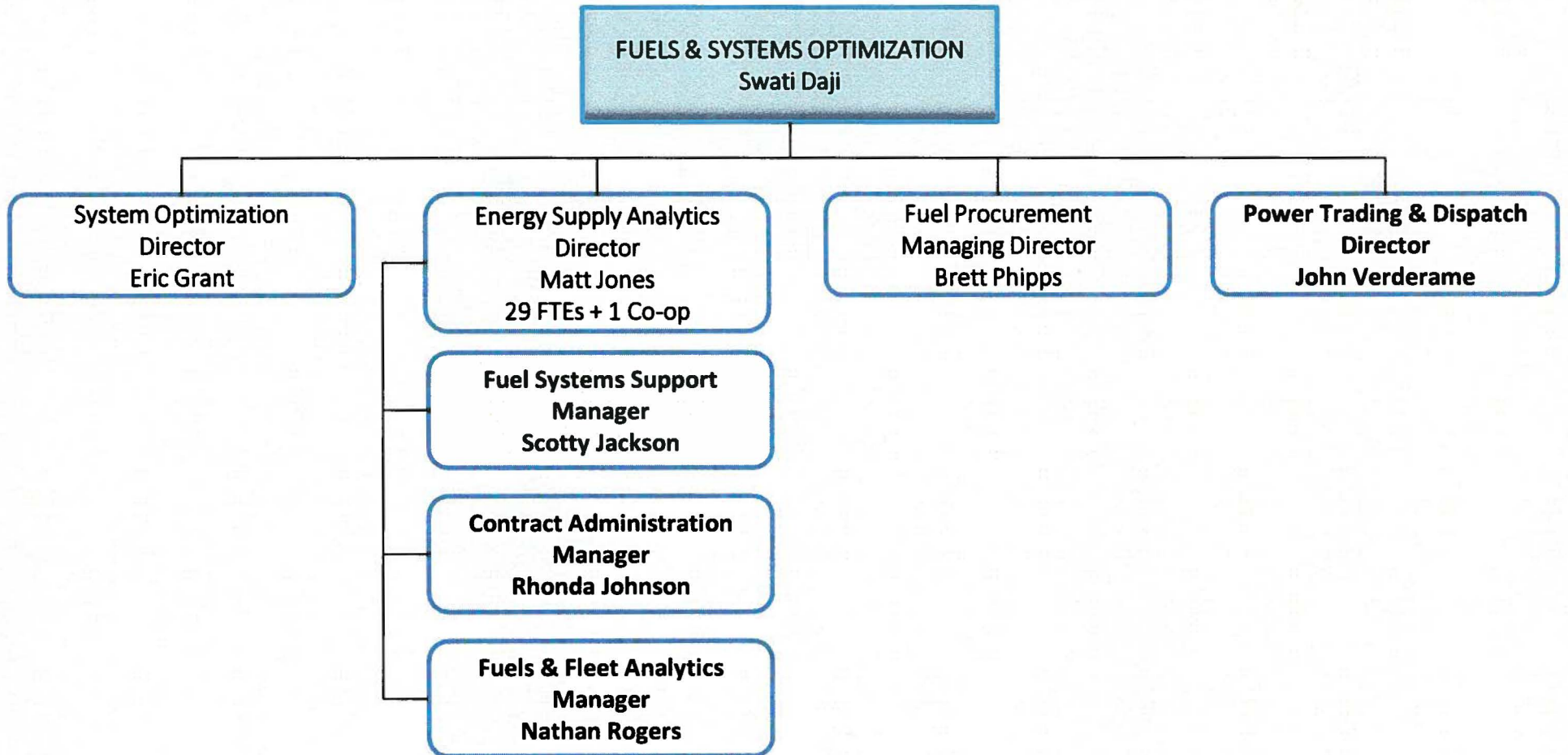
Please reference Staff-DR-01-033 and provide a revised organization chart and the reason for the change in the organizational structure.

RESPONSE:

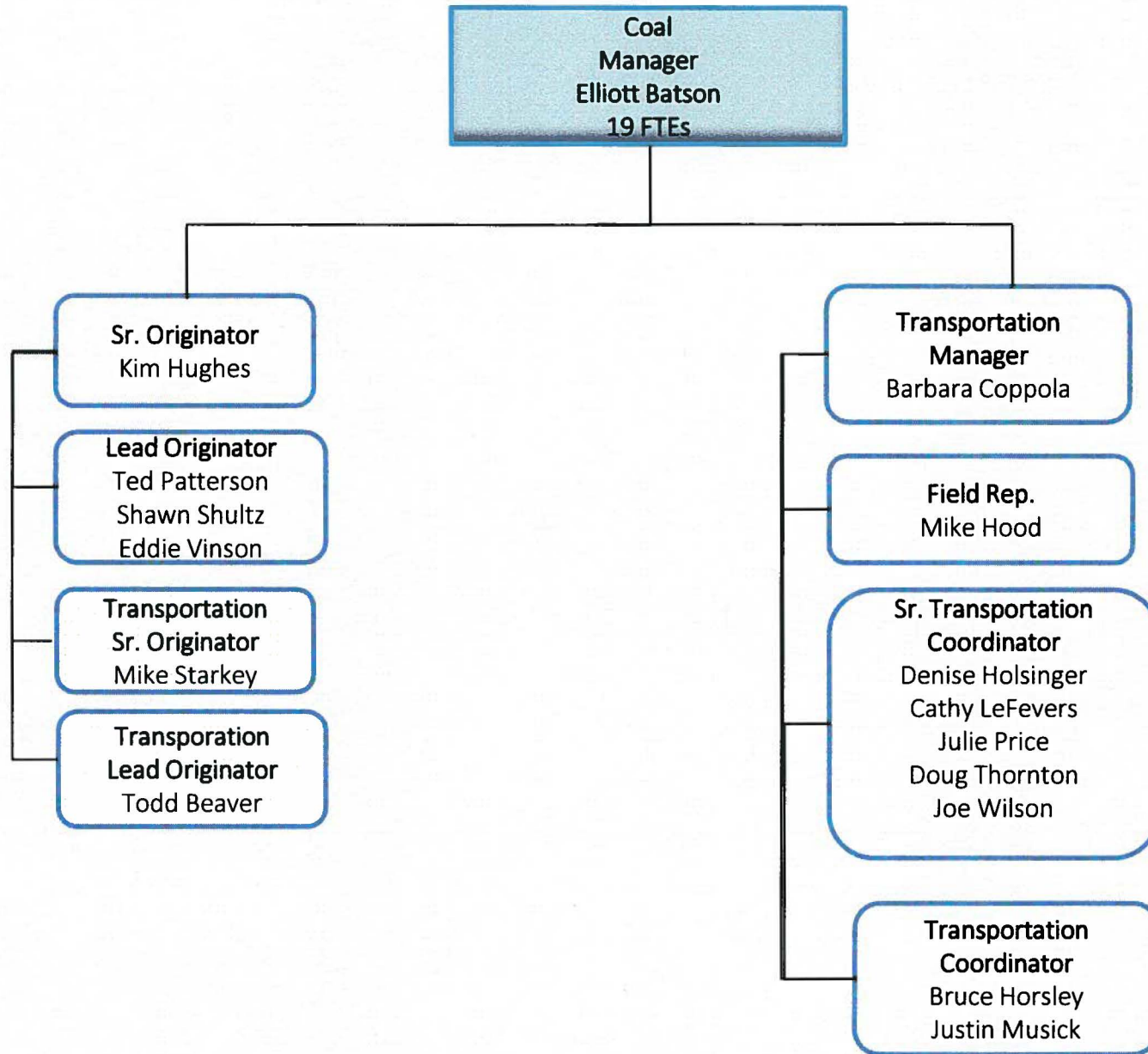
For this review period of May 1, 2014 – October 31, 2014, the Vice President of Fuel and System Optimization, Sasha Weintraub, was promoted to another role within Duke Energy. His replacement is Senior Vice President of Fuel and System Optimization Swati Daji. There were no additional changes in the organizational structure. Please reference Post-Hearing-DR-01-004 Attachment for the revised organization chart.

PERSON RESPONSIBLE: Brett Phipps

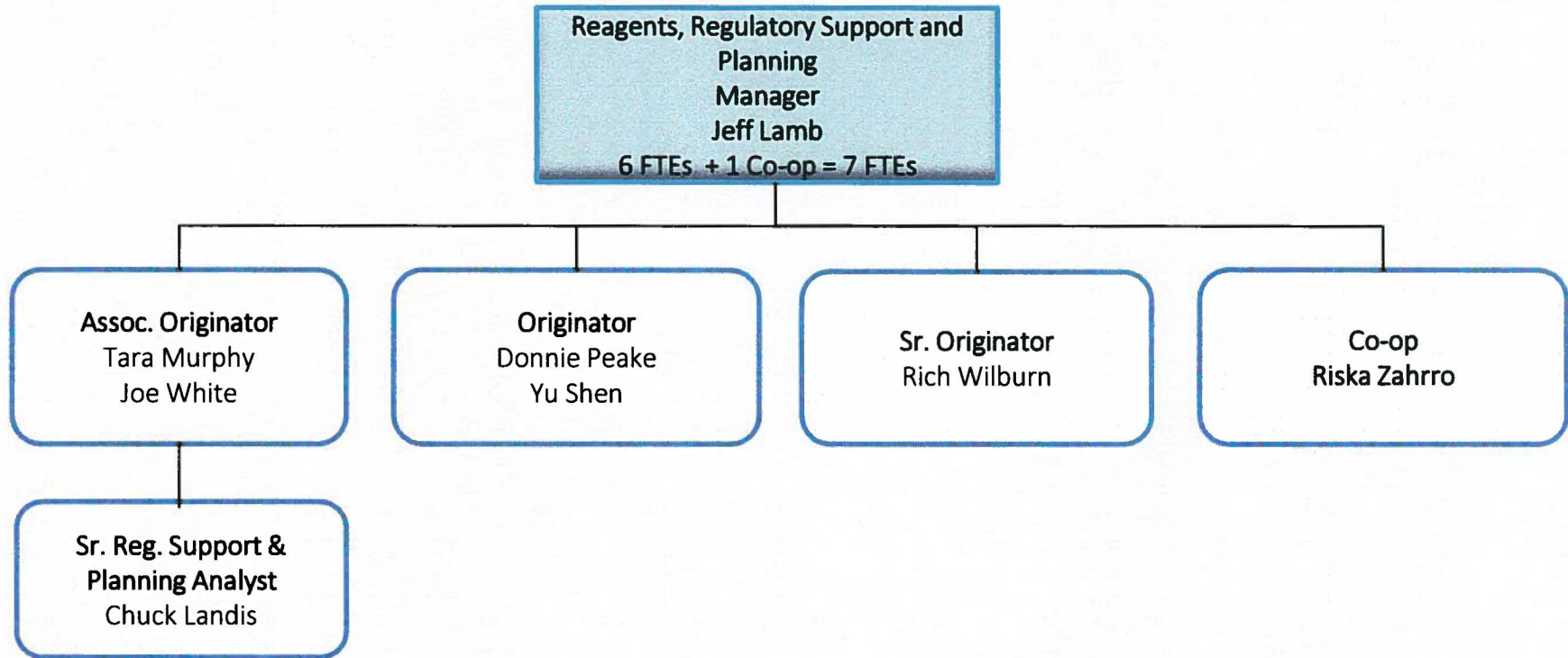
Duke Energy Fuels & Systems Optimization



Fuel Procurement



Fuel Procurement



Fuel Procurement

