

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of an Investigation of Duke)
Energy Kentucky, Inc.'s Accounting Sale of) Case No. 2014-00078
Natural Gas Not Used in its Combustion)
Turbines)

PUBLIC VERSION

DIRECT TESTIMONY OF

LISA STEINKUHL

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC

April 2, 2014

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I. INTRODUCTION AND PURPOSE

1 **Q. STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Lisa Steinkuhl, and my business address is 139 E. Fourth Street,
3 Cincinnati, Ohio 45201.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed as Rates & Regulatory Strategy Manager by Duke Energy Business
6 Services, LLC, a service company subsidiary of Duke Energy Corporation and a
7 non-utility affiliate of Duke Energy Kentucky, Inc. (Duke Energy Kentucky, or
8 Company).

9 **Q. PLEASE DESCRIBE BRIEFLY YOUR EDUCATIONAL AND**
10 **PROFESSIONAL BACKGROUNDS.**

11 A. I received a Bachelor Degree in Mathematics from Western Kentucky University
12 in Bowling Green, Kentucky. After completing my Bachelor Degree, I received a
13 Post Baccalaureate Certificate in Professional Accountancy from the University of
14 Southern Indiana in Evansville, Indiana. I became a Certified Public Accountant
15 (CPA) in the State of Ohio in 1993. After receiving my Post Baccalaureate
16 Certificate in 1988, I was employed by small public accounting firms. I was hired
17 by Cinergy Services, Inc., the predecessor to Duke Energy Business Services,
18 LLC, in 1996 as a tax accountant. I held various positions with Cinergy Services,
19 Inc. including responsibilities in Regulated Business Financial Operations,
20 Commercial Business Asset Management, and Budgets and Forecasts. I joined

1 the Rates Department in April 2006 as a Lead Rates Analyst and have held my
2 current position as Rates & Regulatory Strategy Manager since January 2014.

3 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL AFFILIATIONS.**

4 A. I am a member of the American Institute of Certified Public Accountants and the
5 Ohio Society of Certified Public Accountants.

6 **Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE PUBLIC
7 SERVICE COMMISSION?**

8 A. Yes.

9 **Q. PLEASE SUMMARIZE YOUR DUTIES AS RATES & REGULATORY
10 STRATEGY MANAGER.**

11 A. As Rates & Regulatory Strategy Manager, I am responsible for the preparation of
12 financial and accounting data used in applications for changes in fuel and gas cost
13 adjustment factors and various other rates and recovery mechanisms for Duke
14 Energy Kentucky and Duke Energy Ohio, Inc.

15 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

16 A. The purpose of my testimony is to respond to the Commission's March 14, 2014,
17 Order and address the components of Duke Energy Kentucky's proposed
18 accounting treatment for the cost of gas purchased for Woodsdale Generating
19 Station (Woodsdale), but not burned, and consequently sold.

II. DISCUSSION

20 **Q. PLEASE GENERALLY EXPLAIN THE CIRCUMSTANCES WHICH
21 CAUSED WOODSDALE TO HAVE TO SELL THE UNBURNED GAS.**

1 A. As more fully explained by Duke Energy Kentucky witness Mr. Swez, during
2 January 2014 through March 2014, Duke Energy Kentucky procured natural gas
3 fuel for Woodsdale as it does regularly when the unit is offered into the PJM
4 Interconnection LLC (PJM) energy market and receives an award. Due to the
5 tight gas markets and the operational restrictions in place on Texas Eastern
6 Transmission Corporation (TETCO), the Company procured the gas for
7 Woodsdale at either the time the day-ahead energy market offer was made or
8 when the day-ahead energy market award from PJM was received to ensure
9 Woodsdale had fuel available to support the day-ahead award of the units. On
10 some of these days, Woodsdale cleared the PJM day-ahead energy market and
11 received a day-ahead energy award; however, in PJM, this does not necessarily
12 mean that the unit will actually run. The station will only be dispatched and the
13 gas will only be burned if Woodsdale is then called upon by PJM in its real-time
14 energy market. During the time at issue, PJM chose not to run Woodsdale in the
15 real-time market or ran it at a lower output than was cleared in the day-ahead
16 energy market, causing less gas to be burned than was procured on the day-ahead
17 basis. Therefore, a long natural gas imbalance position was created.

18 Due to a number of factors beyond Duke Energy Kentucky's control,
19 including, but not limited to, limited gas availability for delivered interruptible
20 supply, operational restrictions imposed by TETCO on natural gas pipeline
21 capacity, and the discrepancy in unit dispatch between the PJM day-ahead energy
22 market awards and the PJM real-time energy market dispatch, all caused by the
23 prolonged period of extreme cold, Duke Energy Kentucky was forced to sell the

1 unburned gas. If the Company did not sell the gas that created the imbalance
2 position, TETCO would confiscate the gas without reimbursement to the
3 Company.

4 **Q. PLEASE EXPLAIN DUKE ENERGY KENTUCKY'S PROPOSED**
5 **ACCOUNTING TREATMENT FOR THE COST OF GAS PURCHASED**
6 **AT WOODSDALE AND CONSEQUENTLY SOLD.**

7 A. To account for this sale of gas, Duke Energy Kentucky intends to include the cost
8 of any unburned gas procured for Woodsdale and net it against the sale proceeds
9 of that same gas (positive or negative) as part of the net costs of off-system (non-
10 native) sales shared through the Company's Profit Sharing Mechanism (Rider
11 PSM). These costs and/or credits will be netted against any off-system sales that
12 flow through the quarterly PSM.

13 **Q. PLEASE BRIEFLY DESCRIBE RIDER PSM.**

14 A. Rider PSM is the mechanism under which Duke Energy Kentucky shares the costs
15 and benefits associated with net off-system (non-native) sales of its generation
16 assets in PJM. Under the Rider PSM's current terms, Duke Energy Kentucky's
17 customers receive a credit on their bills for the first \$1 million of any net profits
18 from off-system sales. After that first \$1 million the net profits are shared
19 between customers and the Company under a 75/25 split, respectively.

20 **Q. WHY NOT INCLUDE THE NATURAL GAS PROCURED FOR**
21 **WOODSDALE TO MEET THE DAY-AHEAD AWARD AS PART OF THE**
22 **COST OF FUEL RECOVERED UNDER THE FUEL ADJUSTMENT**
23 **CLAUSE?**

1 A. Simply put, under the Fuel Adjustment Clause (FAC) regulation, the cost of fuel
2 burned for native load is recoverable through the FAC. In this situation, the gas
3 was procured to meet the PJM day-ahead market award, but would not actually be
4 burned until the plant was dispatched in the real-time energy market. Under
5 normal circumstances, the gas would eventually get burned when Woodsdale was
6 dispatched in the real-time energy market. At that time, the gas would then flow
7 through the FAC, if allocated to native, or Rider PSM, if allocated non-native. It
8 was this anomalous situation explained by Mr. Swez, where, because of extreme
9 cold weather resulting in commodity scarcity, the natural gas pipelines were not
10 permitting the Company to carry forward a long position of gas for a future burn
11 and began threatening to confiscate the supply. This situation required Duke
12 Energy Kentucky to proactively address the situation and mitigate the potential
13 loss through a sale of the gas.

14 Passing the cost of unburned gas volumes and crediting the sale proceeds
15 through the FAC is an acceptable method of accounting treatment for Duke
16 Energy Kentucky. However, given the existing regulation, this particular
17 accounting treatment is not possible absent a Commission waiver.

18 **Q. PLEASE GENERALLY EXPLAIN THE PJM TRANSACTIONS THAT**
19 **OCCUR WHEN A UNIT RECIEVES A DAY-AHEAD AWARD, BUT**
20 **THEN IS NOT DISPATCHED IN THE REAL-TIME MARKET.**

21 A. It is my understanding that the Company receives a payment from PJM based on
22 the hourly day-ahead generation award. This payment is based on the awarded
23 Megawatt-hours (MWH) at the generation LMP for that hour. When PJM decides

1 not to run that unit for that hour in the real-time market, the Company has to buy
2 back that amount of generation at the hourly real-time LMP. The Company may
3 also receive a lost opportunity payment which is a component of the PJM
4 Balancing Operating Reserve. Lost opportunity payments may be paid to
5 generators that PJM reduced or suspended in the real-time market for reliability
6 purposes.

7 **Q. PLEASE DISCUSS HOW THOSE PJM TRANSACTIONS, THE COST OF**
8 **FUEL, AND PURCHASED POWER WILL BE ALLOCATED IN THE**
9 **COMPANY'S GENERATION COST ALLOCATION MODEL AND**
10 **INCLUDED IN REGULATORY FILINGS OF THE COMPANY.**

11 **A.** The after-the-fact generation cost model is used to economically dispatch on an
12 hourly basis the demand (load) with available supply resources (*i.e.* generation or
13 purchases) which are economically stacked. The production costs are generally
14 prioritized based on production costs, lowest cost to highest cost. Consequently,
15 the model economically allocates the production costs for servicing native load
16 such that native load is allocated the lowest cost supply resource.

17 The model performs two stacking processes, a day-ahead stacking and
18 then a real-time stacking. The model will stack the hourly day-ahead energy
19 market generation awards from PJM against the day-ahead load cleared by PJM,
20 providing Duke Energy Kentucky native customers first call on the lowest cost
21 generation in the day-ahead market. Generation that clears day-ahead in excess of
22 day-ahead load is committed to day-ahead non-native sales. In the real-time
23 stacking process, if a unit was committed in the day-ahead allocation process as

1 non-native for an hour it remains a non-native unit in the real time. Then,
2 utilizing the actual real-time generation and load, everything is restacked, and
3 Duke Energy Kentucky native customers are assigned the lowest cost generation
4 that did not clear for non-native in the day-ahead market, but was dispatched in
5 the real-time energy market. If Duke Energy Kentucky's real-time native load is
6 greater than the available real-time generation not committed in the day-ahead
7 energy market to non-native, Duke Energy Kentucky will purchase energy in the
8 real-time market from PJM to make-up the difference. If Duke Energy
9 Kentucky's real-time native load is less than the available real-time generation not
10 committed in the day-ahead market to non-native, then any excess generation is
11 considered as a real-time non-native energy market sale. All costs and revenues
12 associated with generators that clear day-ahead for non-native energy market sales
13 or in real-time for non-native energy market sales are assigned to a non-native
14 cost allocation. Duke Energy Kentucky native customers will only pay for fuel
15 charges associated with the units that are assigned to them.

16 The PJM Balancing & Day Ahead Operating Reserve Credit is allocated
17 on a daily basis on how the hourly fuel was allocated for that day. This is on a
18 daily basis because PJM does not provide hourly data for balancing & day-ahead
19 operating reserve credit.

20 **Q. WHAT IS THE IMPACT OF THE PROCUREMENT AND SUBSEQUENT**
21 **SALE OF THE GAS THAT THE COMPANY IS INTENDING TO FLOW**
22 **THROUGH RIDER PSM FOR THE MONTH OF JANUARY 2014 AND**
23 **FEBRUARY 2014?**

1 A. An estimate of the loss on the sale of gas for the months of January and February
 2 2014 is included in the tables below. The final loss amounts will be included in
 3 the Rider PSM tariff filing which will be filed with the Commission on May 2,
 4 2014.

January

Dekatherms	Purchase Price	Sale Price	Gain (Loss) on Sale
█	█	█	█
█	█	█	█
█	█	█	█
█	█	█	█
100,000			█

February

Dekatherms	Purchase Price	Sale Price	Gain (Loss) on Sale
█	█	█	█
█	█	█	█
█			█

5 **Q. WILL THERE BE ANY ADDITIONAL SALES OF UNBURNED GAS**
 6 **RELATED TO THE LONG NATURAL GAS IMBALANCE POSITION**
 7 **CREATED IN JANUARY THROUGH MARCH OF 2014, AND IF SO,**
 8 **HOW WILL THEY BE HANDLED?**

9 A. Based on the testimony of Duke Energy Kentucky witness Mr. Swez, there is a
 10 likelihood of additional sales in the short-term to relieve the current long natural
 11 gas imbalance position. The Company intends to use the same accounting
 12 treatment as discussed above for any additional sale of gas due to the
 13 circumstances discussed in the testimony filed in this case.

1 Q. PLEASE COMMENT GENERALLY ON THE REASONABLENESS OF
2 DUKE ENERGY KENTUCKY'S PROPOSED ACCOUNTING
3 TREATMENT FOR THE COST OF GAS PURCHASED AT
4 WOODSDALE, BUT NOT BURNED.

5 A. The Company believes the proposed accounting treatment for sale of the unburned
6 gas is a logical treatment because of the nexus between the loss incurred on the
7 sale of the unburned gas and the corresponding energy payments received for the
8 day-ahead award, energy buy-back in the real-time, and the lost opportunity credit
9 received for the Woodsdale Units allocated (stacked) to off-system sales (*i.e.* non-
10 native) as part of normal modeling process flows through Rider PSM. Simply
11 put, to the extent the day-ahead award and real-time energy dispatch is allocated
12 to non-native in the stacking/modeling process I described above, then those
13 payments will flow through Rider PSM. The cost of fuel procured to secure the
14 day-ahead energy market award should be netted against the payments received on
15 the award. The situation here is that the fuel procured to secure the day-ahead
16 energy market award is not coupled with a real-time dispatch and not included in
17 the fuel consumed amount allocated between native and non-native customer
18 loads. Therefore, it should be treated as 100% non-native and included as a cost
19 netted under Rider PSM along with the proceeds received from selling that gas.

20 If and when Woodsdale is called upon by PJM in the real-time energy
21 market, the gas will be burned and will flow through either the Company's FAC
22 or Rider PSM based on the allocation of the costs between native and non-native
23 as part of the normal modeling process.

1 Duke Energy Kentucky believes that this proposed accounting treatment is
2 consistent with the current regulations of the Kentucky Public Service
3 Commission and the intent and operation of its Rider PSM.

4 **Q. HOW DOES THE COMPANY PLAN TO HANDLE ANY FUTURE SALE**
5 **OF UNBURNED GAS THAT OCCURS DUE TO THE SAME**
6 **OPERATIONAL CIRCUMSTANCES IN THIS CASE?**

7 A. The Company intends to use the same accounting treatment as discussed above
8 for any future sale of gas, including, but not limited to, limited gas availability for
9 delivered interruptible supply, operational restrictions imposed by interstate
10 pipeline companies on natural gas pipeline capacity, and the discrepancy in unit
11 dispatch between the PJM day-ahead energy market awards and the PJM real-time
12 energy market dispatch.

III. CONCLUSION

13 **Q. DOES THIS CONCLUDE YOUR PREPARED TESTIMONY?**

14 A. Yes, it does.