COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In The Matter Of:

AN INVESTIGATION OF DUKE ENERGY KENTUCKY, INC.'S ACCOUNTING SALE OF NATURAL GAS NOT USED IN ITS COMBUSTION TURBINES	)))))	Case No. 2014-00078

REDACTED BRIEF OF DUKE ENERGY KENTUCKY, INC.

Comes now Duke Energy Kentucky, Inc. (Duke Energy Kentucky or the Company), by counsel, and for its brief in the above-captioned case, respectfully states as follows:

I. INTRODUCTION

Duke Energy Kentucky is an investor-owned utility engaged in the business of furnishing natural gas and electric services to various municipalities and unincorporated areas in northern Kentucky. With respect to its retail electric service, the Company serves approximately 138,000 customers in Boone, Campbell, Grant, Kenton, and Pendleton counties. The Company currently owns and operates approximately 1,077 megawatts (MW) of net installed generating capacity at three generating stations: (1) the East Bend Generating Station (East Bend), which consists of a coal-fired, base load generating unit in Rabbit Hash, Boone County, Kentucky (414 MW);[1] (2)

[1] The Company has at present a 69% ownership stake in East Bend, although it is seeking to acquire full ownership of the generating station in another, unrelated case currently pending before the Kentucky Public Service Commission (Commission). *See In The Matter of The Application of Duke Energy Kentucky, Inc. For (1) A Certificate of Public Convenience And Necessity Authorizing the Acquisition of The Dayton Power & Light Company's 31% Interest in The East Bend Generating Station; (2) Approval of Duke Energy Kentucky, Inc.'s Assumption of Certain Liabilities in Connection with the Acquisition; (3) Deferral of Costs Incurred as Part Of the Acquisition; and (4) All Other Necessary Waivers, Approvals, and Relief* (Case No. 2014-00201) (filed June 13, 2014).

the Miami Fort Generating Station, which consists of a coal-fired, base/intermediate load generating unit in North Bend, Hamilton County, Ohio (163 MW); and (3) the Woodsdale Generating Station (Woodsdale), which is a six-unit combustion turbine (CT) generating station located in Trenton, Butler County, Ohio. Woodsdale has a collective net winter capability of 564 MW and a net summer capability of 492 MW (including inlet cooling).[2] Woodsdale is designed for peaking service, and it has dual fuel capability (natural gas and propane)[3] and black start capability.[4] The Company's procurement of natural gas for use as fuel at Woodsdale, and specifically the appropriate accounting treatment for the net cost of natural gas that was purchased for use at Woodsdale but which was unused based upon dispatching instructions from PJM Interconnection, LLC (PJM), and subsequently sold, comprises the subject of this proceeding.

II. BACKGROUND

A. Woodsdale's Interactions within PJM

The Company is a member of PJM, a regional transmission organization that maintains responsibility for reliability of electric energy supply within its footprint. Operationally, PJM coordinates the commitment and dispatch of all its members' generating units in two separate and distinct markets. These markets are referred to as the day-ahead energy market and the real-time energy market, respectively.[5]

---

[2] *See* Direct Testimony of John D. Swez (Swez Testimony), at p. 2 (filed April 2, 2014).

[3] Although Woodsdale's six units may utilize propane as fuel in order to operate, propane is typically more expensive and more difficult to acquire in necessary quantities than natural gas. For these reasons, Woodsdale is almost exclusively operated utilizing natural gas as fuel. *See* Hearing Video Record (HVR) at 11:44:51, 12:12:26 (October 1, 2014).

[4] *See* Swez Testimony, at pp. 2-3.

[5] *Id.*, at p. 3.

In the day-ahead energy market, PJM commits units and makes generation awards (known as day-ahead awards) based on load demand, generation availability, offer pricing, and system transmission topology forecasts. As part of this process, prior to 12:00 Eastern Prevailing Time (EPT) each day, the Company submits generating unit supply offers for the Woodsdale units to PJM for the next operating day based on the current natural gas price, generating unit heat rate (conversion efficiency) and other operational factors.[6] At 16:00 EPT of the same day, PJM notifies the Company if a unit has received a day-ahead award. Day-ahead awards are financially binding on both PJM and Duke Energy Kentucky.[7]

In the real-time energy market, PJM decides which of its members' generating units should actually operate and produce energy based on real-time conditions. Importantly, simply because a generating unit received a day-ahead award does not necessarily mean that the unit will be dispatched in the real-time energy market; instead, and although PJM may choose to dispatch a generating unit consistent with its day-ahead award, it may also choose to dispatch the generating unit at a lower output than what was awarded in the day-ahead energy market or not dispatch the unit at all.[8] Additionally, PJM has the ability to commit generating units in the real-time energy market that did not receive a day-ahead award.[9]

---

[6] Notably, the Company has an obligation under PJM's tariffs to offer its generation into the day-ahead energy market. *See* Swez Testimony, as amended, p. 8 (amendment filed June 20, 2014); *see also* HVR at 10:19:50, 11:35:44.

[7] *See* Swez Testimony, at p. 3.

[8] *See* Direct Testimony of Lisa Steinkuhl (Steinkuhl Testimony), at p. 3 (filed April 2, 2014). PJM's decision to not dispatch in the real-time energy market a generation unit that received a day-ahead award may be underpinned by any number of reasons, including (but not limited to) unanticipated customer demand, congestion issues, outages, and additional generation imports. *See* Duke Energy Kentucky's Response to Commission Staff's First Request for Information, Request No. 8 (filed May 9, 2014).

[9] *See* Swez Testimony, at p. 4.

B. The Procurement of Natural Gas for Use as Fuel at Woodsdale

Woodsdale is connected to natural gas transmission facilities owned by two separate transmission companies, namely Texas Eastern Transmission Company (TETCO) and Texas Gas Transmission Company (TGT).[10] Although TGT facilities are present at Woodsdale, such facilities have not been utilized in several years and the Company's agreements with TGT are in place only for operational maintenance purposes.[11] All natural gas acquired by the Company for its Woodsdale operations is transported by TETCO.

Since Woodsdale, by design as a peaking unit, is dispatched primarily during peak load conditions, the units typically have relatively low capacity factors and the Company does not maintain long-term contracts for delivery of specific volumes of natural gas. Instead, the Company purchases natural gas based on projected needs in the short term, and specifically based on the day-ahead and real-time awards it receives from PJM for the Woodsdale units.[12]

Practically, there are several possible scenarios under which Duke Energy Kentucky may procure natural gas to fuel the Woodsdale units. The methodology of procurement depends upon a number of factors, including natural gas supply/demand and the commitment decisions made by PJM within the day-ahead and real-time energy markets.[13] Under normal circumstances, natural gas may be purchased by the Company: (1) in the day-ahead gas market at the time the Company submits to PJM its generating unit supply offers for the next operating day (*i.e.*, prior

---

[10] *Id.*, at p. 3.

[11] *See* Duke Energy Kentucky's Response to the Attorney General's Initial Data Request, Request No. 8 (filed May 9, 2014); *see also* Duke Energy Kentucky's Supplemental Response to the Attorney General's Initial Data Request, Request No. 8 (filed June 19, 2014). Additionally, the Company has experienced in the past certain issues, including those related to gas pressure, with the TGT pipeline, and certain infrastructure upgrades and testing would be required in order for the TGT pipeline to be operational for generation purposes. *See* HVR at 10:48:24.

[12] *See* Swez Testimony, at p. 4; *see also* HVR at 10:55:28.

[13] *See* Swez Testimony, a p. 4; *see also* HVR at 10:17:55.

to 12:00 EPT); (2) in the day-ahead gas market once PJM confers a day-ahead award for the next operating day (*i.e.*, at or after 16:00 EPT); or (3) in the intra-day gas market once PJM decides to dispatch one or more of the Company's generation units in the real-time energy market. Each of these situations is possible and typically the Company's gas position is managed through the various options available.[14]

As discussed *supra*, it is possible for the Company's Woodsdale units to receive a day-ahead award from PJM but not be dispatched (or be dispatched at a lower output than what was awarded) in the real-time energy market. In such a situation, and assuming that the Company purchased natural gas in the day-ahead gas market in order to fulfill its day-ahead award in the real-time energy market, some or all of the natural gas purchased by the Company and transported by TETCO is not consumed by the Woodsdale units. Thus, the Company has natural gas supply (which it owns but has not used) remaining on TETCO's pipeline. [15] The Company has in place an operational balancing agreement (OBA) with TETCO that addresses this eventuality in order to manage the difference between the volume of gas delivered and the volume of gas consumed at Woodsdale.[16]

The OBA between the Company and TETCO provides for a daily operational imbalance of up to [redacted] dekatherms and a cumulative operational imbalance on any gas day of up to [redacted] dekatherms.[17] Under normal conditions, the Company may increase or decrease the

[14] *See* Swez Testimony, at pp. 4-5; *see also* HVR at 10:44:30.

[15] *See* Steinkuhl Testimony, at p. 3; *see also* Swez Testimony, at pp. 7-8.

[16] *See* Swez Testimony, at p. 4, and attachment JDS-1 thereto.

[17] *See* Swez Testimony, at p. 9, and attachment JDS-1 thereto.

operational imbalance within the stated limits.[18] However, during periods of high/low demand (or potential high/low demand), TETCO is permitted under its tariff to put in place operational flow restrictions and issue what is known as an Imbalance Posting to maintain the operational integrity of the pipeline. Certain types of Imbalance Postings restrict the Company's ability to increase or decrease any balance under the OBA irrespective of the daily/cumulative limits.[19]

When an Imbalance Posting is issued during a period of high demand, the Company must purchase enough natural gas to cover the volume of gas that it anticipates will be consumed on a given day; essentially, the Company is not permitted to draw down a positive operational imbalance or create a negative operational imbalance during a high-demand Imbalance Posting.[20] If natural gas purchased during a high-demand Imbalance Posting is not consumed, it may be added to the Company's operational imbalance, subject to the limits on operational imbalances contained within the OBA.[21] Thus, the Company's operational imbalance may increase, but never decrease, and gas supply receipts must be balanced with plant burns during a high-demand Imbalance Posting. In addition, failing to adhere to an Imbalance Posting will result in additional penalties on days when such violation occurs. And TETCO may, to maintain reliability upon its system reduce a daily gas nomination volume to the amount of gas actually

---

[18] For example, if the Company has a positive operational imbalance or long position on TETCO's pipeline (*i.e.*, it owns natural gas on TETCO's pipeline that it has not yet burned), it may operate the Woodsdale units by burning the previously-purchased natural gas, thereby reducing the operational imbalance. *See* Swez Testimony, at pp. 9-10.

[19] *See* Swez Testimony, at pp. 6-7; *see also* Duke Energy Kentucky's Response to the Attorney General's First Request for Information, Request No. 19 (filed May 9, 2014).

[20] *Id.*; *see also* HVR at 11:29:07. Failure to comply with an Imbalance Posting can result in even more stringent operational restrictions as well as various penalties and charges. *See* Duke Energy Kentucky's Response to the Attorney General's First Request for Information, Request No. 19 (filed May 9, 2014).

[21] *See* Swez Testimony, at pp. 6-7.

burned, effectively reducing or taking away or confiscating the nominated delivery for which the Company has paid.[22]

C. The Events of January through March, 2014

During January through March of 2014, much of the eastern half of the United States experienced prolonged periods of extreme cold and below-normal temperatures. In January and February, temperatures across the Company's service territory averaged 7.1 and 6.2 degrees Fahrenheit (F) below normal, respectively. In addition, temperatures in March averaged between 3 and 6 degrees F below normal through the first half of the month. During the coldest days of January and February 2014, average temperatures were as much as 25 degrees F below normal.[23] These extreme temperatures had a major impact on the entire electric grid managed by PJM, as well as on operations at Woodsdale.

First, the weather during the first quarter of 2014 resulted in high demand for natural gas.[24] Consequently, TETCO issued an Imbalance Posting for much of the months of January, February, and March, thereby placing operational flow restrictions on Duke Energy Kentucky that limited daily actual natural gas burn volumes to the volume specifically nominated and delivered for that day.[25] As discussed, the Company could not draw down a positive operational imbalance during the Imbalance Posting, but instead was required to purchase sufficient natural gas to meet its projected needs.

Of course, during this time period, the Company was required to offer its Woodsdale generation into PJM's day-ahead energy market to fulfill its "must offer" obligations under

---

[22] *See* Swez Testimony, at pp. 10-11; *see also* HVR at 10:52:22.

[23] *See* Swez Testimony, at pp. 5-6.

[24] *See* HVR at 14:29:00.

PJM's tariffs; correspondingly, and in order to satisfy anticipated or actual day-ahead awards, Duke Energy Kentucky secured physical natural gas and caused it to be injected into the TETCO pipeline.[26] Due to the uncertain availability of natural gas supply and diminished liquidity, waiting to procure gas in the intra-day gas market was not a prudent option because offering the Woodsdale units in the day-ahead energy market without confidence as to the ability to secure gas below the offered price (or at all) exposed Duke Energy Kentucky customers to excessive and unacceptable risk.[27] Thus, in order to guarantee that the units had sufficient fuel available to meet their anticipated real-time obligation, and because Duke Energy Kentucky was not permitted to draw down its positive operational imbalance under Duke Energy Kentucky's OBA with TETCO, the Company procured the appropriate volume of natural gas in the day-ahead gas market.[28]

---

[25] *See* Swez Testimony, at pp. 6-7; *see also* Duke Energy Kentucky's Response to the Attorney General's First Request for Information, Response No. 1 (filed May 9, 2014).

[26] *See* Swez Testimony, at p. 8.

[27] The risk faced by Duke Energy Kentucky's customers had the Company chosen to wait to procure natural gas until the Woodsdale units were committed by PJM in the real-time energy market cannot be understated. First, due to the extreme temperatures and resulting high demand for natural gas during this time period, prices in the intra-day gas market were unpredictable and may have significantly exceeded the prices anticipated by the Company when it made its day-ahead offer to PJM. If and when the Woodsdale units were dispatched by PJM in the real-time energy market, the Company and its customers would have borne the increased fuel costs because those costs would have flowed through either Rider PSM or Rider FAC (as those terms are defined *infra*) as costs of fuel consumed to serve non-native or native load. Additionally, there was a very real danger that gas may have been unavailable in the intra-day gas market, meaning the Woodsdale units could not satisfy their day-ahead awards or operate in the real-time energy market. Not only would this scenario raise reliability concerns with respect to the greater energy grid, but the Company would face PJM-imposed penalties and could lose the opportunity to earn certain revenues (such as off-system sales revenues, lost opportunity credits, and ancillary services revenues, as discussed *infra*) that are dependent on the Woodsdale units' ability to actually produce electricity. *See* Duke Energy Kentucky's Response to Commission Staff's First Request for Information, Request No. 7 (filed May 9, 2014).; Duke Energy Kentucky's Response to Commission Staff's Second Request for Information, Request No. 5 (filed Jun 6, 2014); *see also* HVR at 10:36:22, 11:03:00, 11:17:06, 14:40:30, 14:57:57; Swez Testimony, pp. 7-9.

[28] *See* Swez Testimony, at p. 7.

The Company's six Woodsdale generation units received a total of 77 day-ahead awards from PJM during the relevant timeframe.[29] However, as aforementioned, PJM is not required to dispatch a unit consistent with its day-ahead award in the real-time energy market, and instead may choose to dispatch the unit at a lower output than what was awarded in the day-ahead energy market or not dispatch the unit at all. Such was the case for the Woodsdale units through much of January and February of 2014.[30] As a result, much of the natural gas procured by the Company in order to satisfy Woodsdale's anticipated real-time obligations was not consumed; instead, the purchased (but unburned) natural gas was added to the Company's operational imbalance under the OBA with TETCO.[31]

By January 27, 2014, Duke Energy Kentucky's positive operational imbalance on the TETCO pipeline reached approximately 430,000 dekatherms, an amount that far exceeded the cumulative operational imbalance volume provided for under the OBA.[32] On January 28, 2014, Duke Energy Kentucky received official notification from TETCO that the positive operational imbalance could not be increased.[33] At the time of this notification, the Company had 25,000

---

[29] *See* Duke Energy Kentucky's Response to Commission Staff's Post Hearing Requests for Information, Request No. 8 (filed October 15, 2014). All six of the Woodsdale units received a day-ahead award from PJM on January 6-8, January 21-24, January 27-29, February 11, and February 27. On February 2, five of Woodsdale's six units received a day-ahead award. *Id.*

[30] *Id.*; s*ee also* Swez Testimony, at pp. 7-8. Importantly, despite the fact that the Company's Woodsdale units were not always dispatched by PJM in the real-time energy market after receiving day-ahead awards, the units still provided significant financial benefits to the Company and its customers. *See* Section III(D)(1), *infra.* Moreover, in light of the risks associated with attempting to procure fuel in the intra-day gas market during this time period, it would have been imprudent for the Company to not act in anticipation of or reliance on day-ahead awards received from PJM (even though those day-ahead awards did not necessarily translate into real-time operation). *See* n. 27, *supra*, and accompanying text.

[31] Generally, Duke Energy Kentucky does not have the discretion to burn nominated and delivered gas volumes at Woodsdale absent PJM dispatch orders. *See* Swez Testimony, p. 7; *see also* HVR at 10:54:00.

[32] *See* Swez Testimony, at p. 9, and Attachment JDS-2 thereto.

[33] *See* Swez Testimony, pp, 10-11, and Attachment JDS-2 thereto. As mentioned *supra*, if the Company nominates natural gas that it does not consume and that cannot be added to its operational imbalance under the OBA, TETCO has the right to reduce the nominated gas volume to the level of actual burn and thereby effectively confiscate the excess gas for which the Company has already paid. *See* n. 22, *supra*, and accompanying text.

dekatherms of natural gas purchased and scheduled for delivery each day through January 31, 2014.[34] In order to comply with the Imbalance Posting, avoid significant penalties, and ensure that TETCO did not reduce nominated gas volumes to the level of an actual burn, effectively confiscating gas that had been paid for and scheduled to be delivered, Duke Energy Kentucky needed to sell before the end of each gas day the natural gas that it purchased but did not consume.[35] Thus, the Company sold a total of 100,000 dekatherms between January 28-31, 2014, thereby maintaining its positive operational imbalance at approximately 430,000 dekatherms.[36] Two additional sales totaling 10,000 dekatherms of natural gas occurred in February, 2014.[37] In total, the gas sales in January and February, 2014, resulted in a net loss of $534,000.[38]

On March 28, 2014, TETCO lifted the Imbalance Posting.[39] At present, Duke Energy Kentucky has a positive operational imbalance on the TETCO pipeline of approximately 358,000 dekatherms.[40]

D. Procedural History

On January 24, 2014, Duke Energy Kentucky and Commission Staff held a conference call during which the participants discussed the Company's gas procurement and developing

---

[34] *See* Swez Testimony, at p. 11; *see also* HVR at 11:49:50; Duke Energy Kentucky's Response to Commission Staff's Post Hearing Request for Information, Request No. 2 (filed October 15, 2014).

[35] Because the Woodsdale units were only dispatched for approximately one hour in the PJM real-time energy market between January 28-31, 2014, TETCO could have confiscated nearly all of the gas that Duke Energy Kentucky had purchased. *See* Swez Testimony, p. 11; *see also* HVR at 12:19:07.

[36] *See* Steinkuhl Testimony, at p. 8; *see also* HVR at 11:41:04; Duke Energy Kentucky's Response to Commission Staff's Post Hearing Request for Information, Request No. 2 (filed October 15, 2014)

[37] *Id.*

[38] *See* Duke Energy Kentucky's Response to Commission Staff's First Request for Information, Request No. 5(f) (filed May 9, 2014); *see also* HVR at 14:04:46.

[39] *See* Swez Testimony, p. 13, and Attachment JDS-3 thereto.

operational imbalance situation. By letter to the Commission dated January 31, 2014, the Company set forth, *inter alia*, its proposed accounting treatment for the natural gas which was purchased in January 2014, for use as fuel at Woodsdale but which was unused and subsequently sold.[41] By letter dated February 17, 2014, the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention (the AG), acknowledged and responded to the Company's letter and expressed the position that the matter should be addressed through a formal proceeding.[42] By Order entered March 14, 2014, the Commission established this case and made the AG a party to the proceeding.

Duke Energy Kentucky filed direct testimony on April 2, 2014, filed corrected direct testimony on June 20, 2014, and has responded to multiple requests for information from both Commission Staff and the AG. On October 1, 2014, the Commission conducted a public hearing in which the Company, the AG, and Commission Staff participated. With the simultaneous filings of briefs, the case now stands submitted for a decision.

III. DISCUSSION

A. Commission Jurisdiction and Authority

It is well-established that the Commission only possesses such powers as granted by the General Assembly.[43] However, the scope of the powers expressly granted by the General Assembly to the Commission to regulate the "rates" and "service" of utilities is plenary in nature,

---

[40] *See* HVR at 10:41:40, 11:41:18.

[41] *See* Appendix A to the Commission's Order entered in this proceeding on March 14, 2014.

[42] *See* Appendix B to the Commission's Order entered in this proceeding on March 14, 2014.

[43] *See Boone Co. Water and Sewer Dist. v. Public Service Comm'n*, 949 S.W.2d 588, 591 (Ky. 1997); *Simpson Co. Water Dist. v. City of Franklin,* 872 S.W.2d 460, 462 (Ky. 1994); *Com., ex rel. Stumbo v. Kentucky Public Service Comm'n*, 243 S.W.3d 374, 378 (Ky. App. 2007); *Cincinnati Bell Tel. Co. v. Kentucky Public Service Comm'n,* 223 S.W.3d 829, 836 (Ky. App. 2007); *Public Service Comm'n v. Jackson Co. Rural Elec. Co-op., Inc.,* 50 S.W.3d 764, 767 (Ky.App. 2000).

unless otherwise expressly limited or expressed by statute.[44] In the present proceeding, the Commission's authority to determine how the Company's rates should reflect the net cost of natural gas purchased in anticipation of real-time energy market dispatch, but not burned, and subsequently sold, is clear and unmistakable.

Pursuant to KRS 278.030(1), "[e]very utility may demand, collect and receive fair, just and reasonable rates for the services rendered or to be rendered by it to any person." The Commission is afforded significant discretion in determining what rates are "fair, just and reasonable," and may, while exercising its discretion, embrace various considerations, calculations and methodologies to arrive at an end result.[45] Ultimately, the Commission's goal is to reach a reasonable decision that effectively balances the interests of a utility and its ratepayers.[46]

B. Relief Requested by Duke Energy Kentucky

In this proceeding, Duke Energy Kentucky requests that the Commission accept the Company's proposed accounting and rate treatment for the net cost of gas purchased in anticipation of real-time energy market dispatch, but not burned, and subsequently sold. Duke

---

[44] *See* KRS 278.040(2); *Kentucky Public Service Comm'n v. Commonwealth of Kentucky, ex rel. Conway*, 324 S.W.3d 373, 383 (Ky. 2010) ("In sum, we agree with the view that the PSC had the plenary authority to regulate and investigate utilities and to ensure that rates charged are fair, just, and reasonable under KRS 278.030 and KRS 278.040.").

[45] *See National Southwire Aluminum Co. v. Big Rivers Electric Corp.*, 785 S.W.2d 503, 513 (Ky.App. 1990) ("[The Commission] has many appropriate rate-making methodologies available to it, and it must have some discretion in choosing the best one for each situation. Again, we must look more to whether the result is fair, just and reasonable rather than at the particular methodology used to reach the result.") (citation omitted); *see also Kentucky Indus. Utility Customers, Inc. v. Kentucky Utilities Company*, 983 S.W.2d 494, 498 ("[T]he Commission has discretion in working out the balance of interest necessarily involved and that it is not the method, but the result, which must be reasonable.") (*citing Federal Power Comm'n v. Hope Natural Gas*, 320 U.S. 591, 64 (1944)).

[46] *See National Southwire, supra*, at 513 (*quoting Jersey Central Power & Light Co. v. Federal Energy Regulatory Comm'n*, 810 F.2d 1168, 1177 (D.C. Cir. 1987) ("In reviewing a rate order courts must determine whether or not the end result of that order constitutes a reasonable balancing, based on factual findings, of the investor interest in maintaining financial integrity and access to capital markets and the consumer interest in being charged non-exploitative rates…those choices must still add up to a reasonable result.")

Energy Kentucky contends that the cost of natural gas procured for use as generation fuel, netted against the proceeds from the sale of that same gas (positive or negative), should be included as part of the net costs of off-system (non-native) sales shared through the Company's Profit Sharing Mechanism (Rider PSM).[47] The Company's proposal is to account for the difference in price between volumes of gas purchased and subsequently sold during the period of January through February of 2014, as well as the difference of any future sales of unburned fuel that may be necessary or appropriate.

C. Rider PSM and Rider FAC

Rider PSM is the mechanism under which Duke Energy Kentucky shares with its customers the costs and benefits associated with net off-system (non-native) sales from Company-owned generating assets. At its inception, Rider PSM contemplated that the Company's customers would: (1) receive 100% of the net profits from off-system sales, up to $1,000,000; (2) share equally with the Company any net profits from off-system sales that exceeded $1,000,000; and (3) receive 100% of all net profits stemming from the sale of emission allowances.[48] Rider PSM was subsequently amended at Duke Energy Kentucky's initiation to include net proceeds from the ancillary services market when the Company was then a member of the Midcontinent Independent System Operator (f/k/a Midwest Independent System Operator or MISO).[49] Most recently, in 2011, the Commission ordered an amendment to Rider PSM to substantially increase the benefit accruing to customers such that customers receive not only the

---

[47] *See* Steinkuhl Testimony, at p. 4.

[48] *See In the Matter of Application of the Union Light, Heat and Power Company d/b/a Duke Energy Kentucky for an Adjustment of Electric Rates,* Case No. 2006-00172 (December 21, 2006).

[49] *In the Matter of the Application of Duke Energy Kentucky, Inc., to Modify its Profit Sharing Mechanism to Account for Changes in Off-System Sales Due to the Initiation of the Midwest Independent System Operator Ancillary Services Market,* Case No. 2008-00489 (January 30, 2009).

first $1,000,000 in net profits from off-system sales (including net profits from ancillary services), but also the next 75% of any net profits in excess of $1,000,000.[50] These remain Rider PSM's terms at present.[51]

Under Rider PSM, the Company computes the net margins realized by the Company from off-system energy sales, ancillary services, and emission allowance sales.[52] In order to determine net margins, costs attributed to generating off-system sales revenues, such as hedging losses, variable operations and maintenance costs, and consumed-fuel expenses, are netted against revenues related to off-system sales, such as off-system energy sales, ancillary services revenues,[53] and PJM Balancing & Day-Ahead Operating Reserve Credits (to the extent such credits are allocated to non-native load). The Company's monthly net margins from off-system sales are netted together annually and only shared with customers if there is a profit.[54]

Related to, though wholly distinct from, the Company's Rider PSM is its Fuel Adjustment Clause (Rider FAC). While Rider PSM allows the Company to recover, *inter alia*, the cost of fuel consumed or burned to serve non-native load, Rider FAC allows the Company to recover the cost of fuel consumed to serve native load.[55] In order to determine whether a

---

[50] *In the Matter of the Application of Duke Energy Kentucky, Inc. for Approval to Transfer Functional Control of its Transmission Assets from the Midwest Independent Transmission System Operator to the PJM Interconnection Regional Transmission Organization and Request for Expedited Treatment,* Case No. 2010-00203 (December 22, 2010).

[51] *See* Steinkuhl Testimony, at p. 4; *see also* HVR at 14:17:46.

[52] *See* HVR at 14:09:45.

[53] The total monthly ancillary service revenues are netted with the total monthly ancillary service costs and only included in Rider PSM if the monthly result is a net profit.

[54] *See* Duke Energy Kentucky's Response to Commission Staff's Second Request for Information, Request No. 7 (filed June 6, 2014).

[55] *See* Steinkuhl Testimony, at p. 5. Lost opportunity payments, which are a component of the PJM Balancing Operating Reserve, are also run through Rider FAC to the extent such payments are allocated to native load. *See* Duke Energy Kentucky's Response to Commission Staff's First Request for Information, Response No. 3 (filed May 9, 2014).

particular cost (or revenue) is allocated to native load or non-native load, the Company utilizes an after-the-fact generation cost model to economically dispatch on an hourly basis the demand (load) with available supply resources (*i.e.*, generation or purchases), which are economically stacked. The production costs are generally prioritized from lowest cost to highest cost, and the model economically allocates the production costs for servicing native load such that native load is allocated to the lowest cost supply resource. In any event, Duke Energy Kentucky native customers only pay for fuel charges associated with the units that are allocated to native load.[56]

The terms and operation of the Company's Rider FAC are governed by 807 KAR 5:056 (the FAC Regulation), which "prescribes the requirements with respect to the implementation of automatic fuel adjustment clauses by which electric utilities may immediately recover increases in fuel costs subject to later scrutiny by the Public Service Commission."[57] Importantly, the FAC Regulation, among other things, generally contemplates the recovery of costs for fuel "consumed" at a utility's generating stations.[58] If the natural gas which is the subject of this proceeding had been consumed (*i.e.*, burned as fuel) at Woodsdale, rather than sold out of necessity due to TETCO's operational imbalance and Imbalance Posting limitations, the cost of the gas would flow through the appropriate Rider (FAC or PSM) depending on the allocation (native versus non-native) as determined by the after-the-fact generation cost model.[59] The facts

[56] For further discussion of the after-the-fact generation cost model employed by the Company to allocate costs/revenues to native load versus non-native load, please refer to Steinkuhl Testimony, at pp. 6-7; *see also* Duke Energy Kentucky's Response to Commission Staff's First Request for Information, Request No. 4 (filed May 9, 2014).

[57] 807 KAR 5:056.

[58] *See* 807 KAR 5:056 Section 1(3)(a).

[59] *See* Steinkuhl Testimony, at p. 5; *see also* HVR at 13:59:18, 14:25:27.

relevant to this proceeding, however, reveal that no fuel has been "consumed," and thus the FAC Regulation does not provide the best accounting treatment for ratemaking purposes.[60]

D. The Company's Proposed Accounting Treatment is Reasonable

As stated, Duke Energy Kentucky believes that the cost of natural gas procured for use as generation fuel, netted against the proceeds from the sale of that same gas (positive or negative), should be included as part of the net costs of off-system (non-native) sales shared through the Company's Rider PSM. In light of the revenues received by Duke Energy Kentucky's customers as a result of the Company's operations within PJM, as well as the nexus between the costs at issue and the benefits which flow through the Company's Rider PSM, Duke Energy Kentucky respectfully submits that its proposed accounting treatment is fair, just and reasonable.

1. Customers Received a Net Benefit through the Company's Operation in PJM

Duke Energy Kentucky's customers directly benefitted from the Company's participation in the PJM day-ahead and real-time energy markets during the relevant time period.[61] The Company's actions within PJM provided sufficient benefits to outweigh the cost of running the Woodsdale units, including the total cost of fuel and losses attributable to the sale of gas.[62]

Due to the high demand for natural gas that existed during the relevant timeframe, the Company determined that the risks associated with natural gas availability and price volatility

---

[60] The Company believes that recovery of the relevant costs through Rider FAC would, in fact, be reasonable. *See* Steinkuhl Testimony, at p. 5. Indeed, certain of Duke Energy Kentucky's sister utilities do recover such costs through their respective fuel adjustment mechanisms. *See* Duke Energy Kentucky's Response to Commission Staff's First Request for Information, Request No. 1 (filed May 9, 2014); Duke Energy Kentucky's Response to Commission Staff's Second Request for Information, Request No. 1 (filed June 6, 2014). Nonetheless, the Company acknowledges that, absent a Commission Order, Kentucky's FAC Regulation does not contemplate recovery of costs for fuel that was not consumed.

[61] *See* Duke Energy Kentucky's Response to the Attorney General's First Request for Information, Request No. 3 (filed May 9, 2014); Duke Energy Kentucky's Response to the Attorney General's Second Request for Information, Request No. 7 (filed June 6, 2014); *see also* Duke Energy Kentucky's Response to Commission Staff's Post Hearing Request for Information, Request No. 7 (filed October 15, 2014); *see also* HVR at 10:31:50, 13:56:04.

[62] *Id.*

could best be minimized by purchasing fuel in the day-ahead gas market, rather than the intra-day gas market.[63] The Company's receipt of day-ahead awards resulted in payments from PJM and, in some circumstances, resulted in Lost Opportunity Payments.[64] These Lost Opportunity Payments, which flowed through Rider FAC to the extent the credit was allocated to native load or through Rider PSM to the extent allocated to non-native load, amounted to over $600,000 in January and February of 2014.[65]

During the first three months of 2014, Duke Energy Kentucky's customers received a total net profit through off-systems sales of more than $3 million.[66] These benefits included, among other things, PJM Balancing and Day-Ahead Operating Reserve Credits and ancillary services revenues. These benefits were obtainable because the Company made the necessary and appropriate decision to procure natural gas in anticipation of real-time generation obligations.[67] If the Company's proposed accounting treatment is approved, these off-system sales revenues will more than offset the losses which resulted from the sale of unburned natural gas.

---

[63] *See* n. 27, *supra*, and accompanying text.

[64] Steinkuhl Testimony, at pp. 5-6; *see also* HVR 11:01:38.

[65] *See* Duke Energy Kentucky's Response to Commission Staff's First Request for Information, Request No. 3 (filed May 9, 2014) for an explanation of Lost Opportunity Payments; *see also* Duke Energy Kentucky's Response to the Attorney General's Second Request for Information, Request No. 11 (filed June 6, 2014); Duke Energy Kentucky's Response to Commission Staff's Post Hearing Request for Information, Request No. 7 (filed October 15, 2014).

[66] S*ee* Duke Energy Kentucky's Response to Commission Staff's Post Hearing Request for Information, Request No. 7 (filed October 15, 2014). Duke Energy Kentucky's customers have already received these revenues without recognition of the net margins on the sale of unburned natural gas. *See* Commission Staff's Intra-Agency Memorandum detailing the informal conference held in this proceeding on May 27, 2014 (filed June 2, 2014) (wherein the participants agreed that the Company would amend its pending Rider PSM tariff filing to remove references to the natural gas losses at issue in this proceeding).

[67] *See* HVR at 13:57:33; *see also* Duke Energy Kentucky's Response to the Attorney General's Second Request for Information, Request No. 7(c)(i)(1) (filed June 6, 2014).

In sum, Duke Energy Kentucky's customers received a direct and substantial benefit due to the Company's participation in the PJM day-ahead and real-time energy markets.[68] Absent the Company's efforts to prudently navigate the energy and ancillary services markets during a period of extreme weather conditions, procure fuel to make its generation available for dispatch in the real-time energy market, and subsequently sell fuel when necessary, the customers' benefits would have been drastically reduced or eliminated.[69]

2. Rider PSM is the Logical Avenue for Recovery

The Company asserts that Rider PSM is the logical avenue for recovery of the relevant costs. First, and as discussed, if the natural gas that was purchased by the Company had been consumed, the costs associated with its purchase would have flowed either through Rider FAC or Rider PSM, depending on whether the costs were allocated to native or non-native load. Similarly, payments received from PJM related to awards and real-time dispatch, as well as PJM Balancing & Day-Ahead Operation Reserve Credits including Lost Opportunity Payments, also flow through Rider PSM to the extent they are allocated to non-native load.[70] Each of these revenues shares a distinct and reasonable nexus with costs incurred to procure fuel for generation purposes, and there can be no doubt that the cost of fuel should be netted against the payments received on a day-ahead award.[71] In the present situation, because the fuel procured is not coupled with a real-time dispatch, its cost is not included in the fuel consumed amount allocated between native and non-native loads. For this reason, and considering fuel must be "consumed"

---

[68] *See* Duke Energy Kentucky's Response to Commission Staff's Post Hearing Request for Information, Request No. 7 (filed October 15, 2014).

[69] *See* HVR at 13:57:33; *see also* Duke Energy Kentucky's Response to the Attorney General's Second Request for Information, Request No. 7(c)(i)(1) (filed June 6, 2014).

[70] *See* Steinkuhl Testimony, at pp. 9-10.

[71] *Id.*; *see also* Duke Energy Kentucky's Response to Commission Staff's First Request for Information, Request No. 6 (filed May 9, 2014); HVR at 13:57:33.

to be recoverable under Rider FAC, the cost of procuring natural gas that is not consumed should be allocated 100% non-native and, along with the proceeds received from selling that gas, should be included as items netted under Rider PSM.[72]

Finally, it is significant that in the absence of Rider PSM, customers would have missed the benefit of the approximately $3 million in off-system sales profits that flowed through the rider during this period of time. While, absent the PSM, the costs at issue related to the sale of unburned fuel would have likely been expensed and would not be recoverable from customers, the shareholders would have also received 100% of the benefit of off–system sales (approximately $3.8 million) to offset such costs.[73] Moreover, had the subject sales of unburned fuel resulted in gains, rather than losses, the Company's customers would have received no direct benefit if Rider PSM did not exist. This is particularly noteworthy considering that the Company believes additional sales of natural gas in the future may be necessary or desirable;[74] if there were no Rider PSM, or if the margins that result from the sale of unburned fuel do not flow through Rider PSM, any possible profits from future sales cannot and will not inure to the direct benefit of the Company's customers.[75] In light of these facts, the accounting and rate treatment proposed by the Company is logical and appropriate.

3. Future Gas Sales Should be Afforded the Same Accounting Treatment

As mentioned *supra*, the Company presently has a positive operational imbalance of approximately 358,000 dekatherms on the TETCO pipeline. In order to mitigate this substantial

[72] *See* Steinkuhl Testimony, at pp. 9-10.

[73] *See* HVR at 11:42:37, 12:07:55, 13:58:13, and 14:14:50.

[74] *See* Section III(D)(3), *infra*.

[75] Of course, this conclusion presumes that if losses related to sales of unburned natural gas do not flow through Rider PSM, neither will profits that may result from such sales. The Company respectfully submits that it would be inequitable for sales that result in profit to inure to the customers' benefit, yet sales that result in loss to be allocated to the shareholders' detriment.

imbalance, the Company must either draw it down (when an Imbalance Posting is not present) or sell some or all of the excess natural gas.[76] The Company believes it is possible that additional sales of natural gas in the future could occur to reduce the operational imbalance to levels acceptable under the OBA with TETCO.[77]

The Company intends to use the same accounting treatment as discussed above for any future sale of gas, including, but not limited to, limited gas availability for delivered interruptible supply, operational restrictions imposed by interstate pipeline companies on natural gas pipeline capacity, and the discrepancy in unit dispatch between PJM day-ahead awards and the PJM real-time energy market dispatch.[78] Of course, the Company intends to flow through Rider PSM the margins which result from sales of unburned natural gas whether those margins are a net loss or a net profit.

IV. CONCLUSION

Duke Energy Kentucky believes that its proposed accounting treatment is consistent with the current regulations of the Commission and the intent and operation of its Rider PSM. In light of the revenues received by Duke Energy Kentucky's customers as a result of the Company's operations within PJM, as well as the nexus between the costs at issue and the benefits which flow through the Company's Rider PSM, Duke Energy Kentucky respectfully submits that its proposed accounting treatment is fair, just and reasonable and should be approved by the Commission.

---

[76] *See* Steinkuhl Testimony, at p. 8; *see also* Swez Testimony, at pp. 13-14; HVR at 10:42:03.

[77] *Id.*

[78] *See* Steinkuhl Testimony, at p. 10; *see also* Duke Energy Kentucky's Response to the Attorney General's First Request for Information, Request No. 6 (filed May 9, 2014).

WHEREFORE, on the basis of the foregoing, Duke Energy Kentucky respectfully requests that the Commission enter an Order approving of the Company's proposed accounting treatment for natural gas purchased but unburned, and subsequently sold.

Dated this 30th day of October, 2014.

Respectfully submitted,

DUKE ENERGY KENTUCKY, INC.

Rocco O. D'Ascenzo
Associate General Counsel
Amy B. Spiller
Deputy General Counsel
Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, Ohio 45201-0960
Phone: (513) 287-4320
Fax: (513) 287-4385
E-mail: rocco.d'ascenzo@duke-energy.com

CERTIFICATE OF SERVICE

I certify that a copy of the foregoing Brief has been served via overnight mail to the following on this 30th day of October, 2014:

Jennifer Hans
The Office of the Attorney General
Utility Intervention and Rate Division
1024 Capital Center Drive
Frankfort, Kentucky 40601

Rocco O. D'Ascenzo