COMMONWEALTH OF KENTUCKY

BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION

In the Matter of the Application of Duke Energy Kentucky, Inc. to Implement a Hedging Program to Mitigate Price Volatility in the Procurement of Natural Gas	)))))	Case No. 2015-00025

PETITION OF DUKE ENERGY KENTUCKY, INC. FOR CONFIDENTIAL TREATMENT OF INFORMATION CONTAINED IN ITS NATURAL GAS HEDGING PLAN

Duke Energy Kentucky, Inc. (Duke Energy Kentucky), pursuant to 807 KAR 5:001, Section 13, respectfully requests the Commission to classify and protect as confidential certain information that is contained in its Natural Gas Hedging Plan in this proceeding, which is being filed contemporaneously with this petition. In support thereof, Duke Energy Kentucky states:

1. Duke Energy Kentucky has filed today documents containing sensitive and confidential information relating to the volumes of gas that Duke Energy Kentucky purchased through the use of hedging instruments for its hedging plan and information regarding a new three year hedging plan. Disclosure of this information would damage Duke Energy Kentucky by alerting suppliers as to how much gas Duke Energy Kentucky intends to purchase through hedging instruments at any particular point in time, which could allow suppliers to raise the cost of their hedging instruments to Duke Energy Kentucky, thus making it more costly to Duke Energy Kentucky to acquire hedging instruments for future gas supply.

2. The Kentucky Open Records Act exempts from disclosure certain

commercial information. KRS 61.878 (1)(c). To qualify for this exemption and, therefore, maintain the confidentiality of the information, a party must establish that disclosure of the commercial information would permit an unfair advantage to competitors of that party. Public disclosure of the information identified herein would, in fact, prompt such a result for the reasons set forth below.

3. This information was, and remains, integral to Duke Energy Kentucky's effective execution of business decisions. And such information is generally regarded as confidential or proprietary. Indeed, as the Kentucky Supreme Court has found, "information concerning the inner workings of a corporation is generally accepted as confidential or proprietary." *Hoy v. Kentucky Industrial Revitalization Authority,* 904 S.W.2d 766, 768 (Ky. 1995).

4. The hedging volume information described above contains sensitive commercial information, the disclosure of which would injure Duke Energy Kentucky for the reasons stated above. Duke Energy Kentucky's purchases of hedging instruments are confidential. Public release of this information would allow other suppliers to have access to this information and could enable such suppliers to charge higher prices to Duke Energy Kentucky for hedging instruments.

5. The Commission previously granted confidential treatment to similar information in Case No. 2012-00180 on July 20, 2012.

6. The information for which Duke Energy Kentucky is seeking confidential treatment is not known outside of Duke Energy Kentucky, and it is not disseminated within Duke Energy Kentucky except to those employees with a legitimate business need to know and act upon the information.

7. The public interest will be served by granting this Petition, in that Duke Energy Kentucky's ability to obtain low cost gas supplies will be fostered and the cost of gas to Duke Energy Kentucky's customers will thereby be minimized.

8. Duke Energy Kentucky does not object to limited disclosure of the confidential information described herein, pursuant to an acceptable protective agreement, the Staff or other intervenors with a legitimate interest in reviewing the same for the purpose of participating in this case.

9. In accordance with the provisions of 807 KAR 5:001, Section 13(3), the Company is filing one copy of the Confidential Information separately under seal.

10. Duke Energy Kentucky respectfully requests that the Confidential Information be withheld from public disclosure for a period of ten years. This will assure that the Confidential Information – if disclosed after that time – will no longer be commercially sensitive so as to likely impair the interests of the Company or its customers if publicly disclosed.

11. To the extent the Confidential information becomes generally available to the public, whether through filings required by other agencies or otherwise, Duke Energy Kentucky will notify the Commission and have its confidential status removed, pursuant to 807 KAR 5:001 Section 13(10)(a).

WHEREFORE, Duke Energy Kentucky respectfully requests that the Commission classify and protect as confidential the specific information described herein.

Respectfully submitted,
Duke Energy Kentucky, Inc.

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CERTIFICATE OF SERVICE

I certify that a copy of the foregoing pleading was served on the parties listed below by electronic mail, this 28TH day of January, 2015.

Rocco O. D'Ascenzo

Hon. Jennifer Hans
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DUKE ENERGY KENTUCKY, INC.'S
APPLICATION FOR APPROVAL OF NEW HEDGING PLAN

Pursuant to 807 KAR 5:001, Section 14 and consistent with the Commission's Order dated August 24, 2012 in Case No. 2012-00180, Duke Energy Kentucky, Inc. (Duke Energy Kentucky or Company) respectfully states as follows:

1. 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 Boone, Bracken, Campbell, Gallatin, Grant, Kenton and Pendleton Counties in the Commonwealth of Kentucky.

2. Pursuant to 807 KAR 5:001, Section 14(1), Duke Energy Kentucky states that its business address is 139 East Fourth Street, Cincinnati, Ohio 45202, and that its local office in Kentucky is located at Duke Energy Envision Center, 4580 Olympic Boulevard, Erlanger, Kentucky 41018. The Company further states its electronic mail address for purposes of this matter is KYfilings@duke-energy.com.

3. Pursuant to 807 KAR 5:001, Section 14(2), Duke Energy Kentucky states that is was originally incorporated in the Commonwealth of Kentucky on March 20, 1901, and attests

that it is currently in good standing in said Commonwealth.

4. In an Order dated August 24, 2012 in Case No. 2012-00180, the Commission approved Duke Energy Kentucky's hedging program and required, among other things, periodic reports on the results of the hedging program, and for Duke Energy Kentucky to file for further extension of its natural gas hedging plan no later than February 1, 2015. Duke Energy Kentucky filed its annual report on May 15, 2014. Duke Energy Kentucky is filing its request to continue its hedging plan at this time.

5. Paragraph 2 of the August 24, 2012 Order approved Duke Energy Kentucky's natural gas hedging plan through March 31, 2015, with the ability to hedge through October 31, 2017. Pursuant to such order, Duke Energy Kentucky respectfully requests approval to institute a new three year hedging plan as a regular part of its gas supply planning. A copy of Duke Energy Kentucky's proposed new hedging plan, in redacted form, is at Attachment 1.

6. Duke Energy Kentucky proposes that the Commission approve the new hedging plan to cover hedging activity through March 31, 2017 and allow for hedging of natural gas deliveries through October 31, 2019. The resulting parameters for hedging purchases are similar to the parameters approved by the Commission for Duke Energy Kentucky's previous hedging programs. The new hedging plan utilizes the same types of hedging instruments used for Duke Energy Kentucky's previous hedging programs and sets a limit so that there is not an over reliance on a single type. The new plan also incorporates the same procedural safeguards, consisting of periodic management meetings, written minutes and annual reports to the Commission on the results of the hedging plan. The plan continues to provide for hedging of a portion of Duke Energy Kentucky's summer purchases and to allow Duke Energy Kentucky to

hedge a portion of its gas supply for up to 31 months following the time period covered by the hedging plan. This will provide Duke Energy Kentucky with additional flexibility to stagger its hedging purchases, thus increasing the diversity of cyclical pricing influences. This should better enable Duke Energy Kentucky to mitigate price volatility for its customers.

7. Duke Energy Kentucky's experience with its previous hedging programs demonstrates that hedging has accomplished the goals that Duke Energy Kentucky projected at the outset of its hedging program, that is, hedging would not always result in the lowest gas costs, but hedging does serve a valuable purpose in protecting customers against extreme high prices and hedging also mitigates volatility in price. The new hedging plan incorporates the procedural safeguards, developed in response to the Commission's Orders in Duke Energy Kentucky's previous hedging proceedings, to ensure that hedging decisions are made in a prudent manner. Finally, the parameters of the new hedging plan, the types of hedging instruments provided therein and the annual reports provided by Duke Energy Kentucky give the Commission oversight of the new hedging plan. Duke Energy Kentucky therefore requests that the Commission approve its new hedging plan so that Duke Energy Kentucky can continue to provide for its customers the benefits resulting from hedging of a portion of gas supply purchases, as described above.

WHEREFORE, Duke Energy Kentucky respectfully requests that the Commission approve Duke Energy Kentucky's application for a new hedging plan as described herein and in the accompanying Attachments.

Respectfully submitted,
Duke Energy Kentucky, Inc.

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CERTIFICATE OF SERVICE

I certify that a copy of the foregoing pleading was served on the parties listed below by electronic mail, this 28TH day of January, 2015.

Rocco O. D'Ascenzo

Hon. Jennifer Hans
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DUKE ENERGY KENTUCKY, INC

NATURAL GAS HEDGING PLAN

February 2015

1. Introduction

On July 16, 2001, the Kentucky Public Service Commission (Commission) approved Duke Energy Kentucky, Inc.'s (Duke Energy Kentucky) Pilot Gas Hedging Program. Since that time, Duke Energy Kentucky has sought, and was granted, approval for similar hedging programs in 2002, 2003, 2005, 2008, 2011 and 2012 with the most recent program covering hedging activity through October 31, 2017. As documented in the reports of the actual results, filed in May of each year, the hedging strategy reduced volatility and protected customers against price spikes. Since the hedging plans have achieved their goal of reducing the volatility in purchased gas costs, hedging natural gas prices should become a standard part of Duke Energy Kentucky's gas supply portfolio.

In Case No. 2003-00151, Duke Energy Kentucky proposed that a similar plan to what was adopted for the 2001-2002 and 2002-2003 heating seasons be approved on a continuing basis, with the inclusion of hedging for summer months, as well as winter. This was later revised to be a three-year plan, which ended March of 2006. However, in the Order dated June 19, 2003, the Commission ordered Duke Energy Kentucky to file any continued hedging plan by May 15, 2005. In Case No. 2005-00191, the Commission approved Duke Energy Kentucky's Hedging Plan (HP-2005) for both winter and summer seasons through March 31, 2008 (three years). Although this plan covered hedging activity through March of 2008, the months for which natural gas was purchased extended through October 31, 2010. In Case No. 2008-00175, the Commission approved Duke Energy Kentucky's Hedging Plan (HP-2008) for both winter and summer seasons through March 31, 2011 (three years). Although this plan covered hedging activity through March of 2011, the months for which natural gas was purchased extended through October 31, 2013.

In Case No. 2011-00091, the Commission approved the Hedging Plan (HP-2011) for only a single year to allow for more time to determine whether or not hedging should continue in an era of low and relatively stable prices. Duke Energy Kentucky maintained that hedging continued to be an appropriate tool for purchasing natural gas even though natural gas prices were at a 10 year low.

In Case No. 2012-00180, the Commission approved Duke Energy Kentucky's current Hedging Plan (HP-2012) for both winter and summer seasons through March 31, 2015 (three years). Although this plan covered hedging activity through March of 2015, the months for which natural gas was purchased extended through October 31, 2017.

2. Proposed Plan (HP-2015)

Similar to what was approved by the Commission in previous cases, Duke Energy Kentucky is seeking to institute another natural gas hedging plan with a three year term (HP-2015), to mitigate market volatility. The following Hedging Plan is similar to the previous plan and would cover hedging activity through March of 2018 which would allow purchases for gas delivered through October 31, 2020.

Under HP-2015, Duke Energy Kentucky will hedge between [redacted]% and [redacted]% of its estimated total winter system supply, assuming normal weather and [redacted]% to [redacted]% of its summer system supply, including purchases to refill storage. As in previous years, hedging will be accomplished through the use of fixed price contracts, price caps, or no-cost collars. The Hedging Plan specifies a range for the volumes of gas that Duke Energy Kentucky will acquire each month, up to 36 months into the future. The Hedging Plan strikes a reasonable balance between: (1) providing the Commission with the specific parameters of gas volumes for which Duke Energy Kentucky will receive cost recovery through the GCA; and (2) leaving Duke

Energy Kentucky with adequate management discretion to time the purchases at projected optimal points within the framework pre-approved by the Commission.

The purpose of the hedging plan is to decrease volatility in gas costs rather than to "beat the market" or guarantee the lowest possible cost. Duke Energy Kentucky will target a reduction in the standard deviation of the monthly average commodity cost of gas of at least [redacted]%, when compared to what the standard deviation would have been absent the hedging plan.

Duke Energy Kentucky will make its hedging decisions based on its analysis of gas prices. Duke Energy Kentucky will continue to monitor gas prices on a daily basis, by studying NYMEX futures prices versus historic prices and expected future prices. Duke Energy Kentucky determines expected future gas prices based on a thorough review of various industry publications such as Gas Daily, PIRA Energy Group (PIRA) North American Gas Forecast Monthly, and the Energy Information Administration (EIA) Short-Term Energy Outlook.

During March 2014, Duke Energy Kentucky entered into an agreement with ANR Pipeline for a two year term from April 1, 2014 through March 31, 2016 to provide physical storage for 1,000,000 Dth with withdraw rights of 20,000 Dth/day. These amounts are similar to the storage-like service provided by Tenaska and National Energy & Trade since 2008. Duke Energy Kentucky will continue to evaluate the physical storage option or the storage-like supply services at similar volumes.

3. Amount of Duke Energy Kentucky's Gas Supply Subject to the Hedging Plan

Duke Energy Kentucky will hedge between [redacted]% and [redacted]% of its estimated total system supply for the winter season, assuming normal weather. This range could change based on the level of interstate pipeline storage contracts or supply contracts which mimic storage service that Duke Energy Kentucky maintains in the future. Combined with estimated storage withdrawals

and storage-like service, which currently provides approximately [redacted]% of a normal winter's system supply, the total percentage of system supply that could be insulated from winter season market volatility would be [redacted]% - [redacted]% (See Attachment A). The total percent of winter gas supply at known prices, both hedged and storage, will be limited to a maximum of [redacted]%. Duke Energy Kentucky will hedge between [redacted]% and [redacted]% of its total system supply for the summer season, including purchases to refill storage.

4. Schedule for Purchase of Hedging Instruments

Duke Energy Kentucky will use a seasonal schedule for obtaining price hedges for its system supply (please see charts below). These schedules reflect the continuation of hedging purchases which were made in accordance with previous hedging plans. Target levels of hedging will be accomplished by October 31st for winter system supply and by March 31st for summer system supply. The pattern established by these schedules will continue until cancelled or revised by the company. By including minimum quantities to be hedged, Duke Energy Kentucky will gain the advantages of a mechanistic feature for part of its hedging program, to spread the hedging purchases out over a longer period of time, while preserving management discretion as to the timing of gas supply purchases. No hedging will take place for delivery months further than 36 months from the date of the hedging transaction (strike date).

System Supply Hedged for the Winter Season

October X	Nov X – Mar X+1	Nov X+1 – Mar X+2	Nov X+2 – Mar X+3
Minimum	[redacted]	[redacted]	[redacted]
Maximum	[redacted]	[redacted]	[redacted]

System Supply Hedged for the Summer Season

March X	Apr X – Oct X	Apr X+1 – Oct X+1	Apr X+2 – Oct X+2
Minimum	[redacted]	[redacted]	[redacted]
Maximum	[redacted]	[redacted]	[redacted]

5. Types of Hedging Products

Duke Energy Kentucky's hedging methodology uses a combination of fixed price contracts with cost-averaging, fixed price contracts without cost averaging, price caps and no-cost collars. Duke Energy Kentucky will not purchase futures contracts on the NYMEX or any other financial instruments to effectuate its hedging strategy. Duke Energy Kentucky will utilize the following hedging products to price gas supplies at a fixed, capped or collared price. Duke Energy Kentucky will not hedge more than [redacted]% of its estimated winter season system supply, or [redacted]% of its summer system supply using a single type of hedging product.

A. Fixed Price Contracts

Fixed price contracts are the simplest form of hedging instruments. Perhaps the most widely known fixed price contract for gas purchases is a contract to purchase gas from a supplier at a fixed price, based on the NYMEX. Duke Energy Kentucky will not actually purchase futures contracts on the NYMEX, but rather will enter into a contract with a supplier to obtain physical delivery of gas based on NYMEX prices at the time the hedging agreement is arranged.

Duke Energy Kentucky will take actual physical delivery of the gas into an interstate pipeline in which Duke Energy Kentucky holds Firm Transportation capacity, or will take delivery at Duke Energy Kentucky's city gate. NYMEX prices are based on delivery at the Henry Hub in southern Louisiana. The difference in price between the Henry Hub and the interstate pipeline receipt point, at which the supplier can deliver the gas into the interstate pipeline (referred to as the "basis"), will either be locked-in or will remain open at the discretion of Duke Energy Kentucky.

One set of fixed price hedging products Duke Energy Kentucky utilizes sets the price on an average NYMEX strip price over a period of time. A strip simply means the purchase of a

specified volume of gas for a specified number of months (*i.e.*, November through March). Duke Energy Kentucky may utilize cost-averaging products that price the gas supply for the upcoming winter season at a price set by averaging the actual NYMEX daily closing price for a strip from a start date through the last day that the strip trades on NYMEX or any other mutually agreed time period. Each day during this period, a portion of the price will be established by fixing the price of the proportionate volume for each corresponding month at the NYMEX daily close.

B. Price Caps

A price cap is a form of option contract that establishes a maximum price for gas deliveries during a specified month. Suppliers charge Duke Energy Kentucky for this option, based on the NYMEX price in effect at the time the option is purchased for the month that will be subject to the price cap.

Duke Energy Kentucky and the supplier will agree to whether the cost must be paid when the price cap is purchased or when the gas is delivered. Other than a slight difference due to the time value of money, the end result is the same. The practical result that occurs when price caps are utilized is that, if the market price at the time of delivery is lower than the price cap, then Duke Energy Kentucky pays the market price plus the cost of the price cap. On the other hand, if the market price is higher than the price cap at the time of delivery, then Duke Energy Kentucky pays the cap price plus the cost of the price cap.

C. No-Cost Collars

Collars are a combination of a price cap (ceiling) and a lower price limit (floor). If the cost of the ceiling is equal to the value of the floor, then there is no charge for the collar (no-cost collar). At the time of delivery, the supplier will charge the market price unless it is outside the range set by the collar. The range for a no-cost collar is established by Duke Energy Kentucky

first specifying either a floor or a ceiling price, and then the supplier calculates the other bound for the collar. The supplier also adds in the basis for the interstate pipeline receipt point specified by Duke Energy Kentucky. In a no-cost collar, the ceiling of the range is usually set at a greater distance from the current NYMEX price than the floor. After the supplier determines the remaining bound for the collar, Duke Energy Kentucky decides whether to agree to price the gas subject to the no-cost collar. Duke Energy Kentucky will determine prices from at least two suppliers to verify that the offered price is consistent with the market.

6. Price Ranges for Purchases

A. Fixed Price Contracts

To the extent that Duke Energy Kentucky enters into any fixed price contracts with cost-averaging, Duke Energy Kentucky will enter into such contracts at the NYMEX closing price during the specified period. To the extent that Duke Energy Kentucky enters into any fixed price contracts without cost averaging, Duke Energy Kentucky will enter into such contracts between the highest and lowest price that NYMEX trades on the day that Duke Energy Kentucky and the supplier agree to the fixed price (strike date).

B. Price Caps

To the extent that Duke Energy Kentucky enters into any price cap contracts during any month, Duke Energy Kentucky will enter into such contracts with a ceiling (cap) price not to exceed $[redacted]/dth over the NYMEX open price for the respective months on the day that Duke Energy Kentucky and the supplier agree to the cap (strike date).

C. No-Cost Collars

To the extent that Duke Energy Kentucky enters into any collar contracts during any month, Duke Energy Kentucky will enter into such contracts with a ceiling (cap) price not to

exceed $[redacted]/dth over the NYMEX open price for the respective months on the day that Duke Energy Kentucky and the supplier agree to the collar (strike date).

7. Reduction in Volatility

The purpose of the hedging program is to decrease volatility rather than to "beat the market" or guarantee the lowest possible cost. The hedging program will most likely increase costs during seasons when market prices are relatively low and decrease costs during seasons when market prices are high. Based on a more statistical definition of volatility, the goal of the hedging program is to reduce the standard deviation of the average commodity cost of gas by at least [redacted]%. Attachment B shows an example of the reduction in volatility during the 12 months ended October 31, 2014.

8. Conclusion

HP-2015 will allow Duke Energy Kentucky to hedge up to [redacted]% of its system supply in the winter and [redacted]% of its system supply in the summer, including storage injections. By allowing hedging activity as early as 36 months prior to the month of delivery, the plan can further stabilize prices by taking advantage of favorable market conditions for longer periods of time. In addition, the minimum hedged percentages will assure that hedging transactions will take place gradually over the three years prior to the delivery season, without resorting to a strict mechanistic approach.

Including current projected storage withdrawals, which are fixed at summer prices, the quantity of winter supply at known prices represents [redacted] – [redacted]% of Duke Energy Kentucky total winter supply (assuming normal weather). The total percent of winter gas supply at known prices, both hedged and storage, will be limited to a maximum of [redacted]%. Consequently, Duke Energy Kentucky will be able to obtain a substantial volume of its gas supply at fixed prices.

Duke Energy Kentucky will purchase the majority of its remaining gas supply requirements at either the *Inside FERC First of Month Index* or the *Gas Daily Midpoint*, assuming these indices continue to be published. Attachment A depicts how the Duke Energy Kentucky would obtain its gas supply requirements for a typical winter season utilizing this Hedging Plan.

HP-2015 provides several important benefits. First, the Plan will reduce the impact of price volatility for Duke Energy Kentucky's customers. Second, the Plan allows the Commission to see clear parameters within which Duke Energy Kentucky's management will operate. Third, the Plan provides Duke Energy Kentucky management sufficient flexibility to make purchase decisions within these parameters.

Attachment A
Example of How Duke Energy Kentucky's Base
Supply for Typical Winter Season
Could be Obtained Through Hedging Plan

	Purchased Gas Hedged (1)	Purchased Gas @ Market	Storage Withdrawals (2)	Total Load
Minimum				
November	[redacted]	[redacted]	[redacted]	[redacted]
December	[redacted]	[redacted]	[redacted]	[redacted]
January	[redacted]	[redacted]	[redacted]	[redacted]
February	[redacted]	[redacted]	[redacted]	[redacted]
March	[redacted]	[redacted]	[redacted]	[redacted]
% of Total Winter Supply	[redacted]	[redacted]	[redacted]	
Maximum				
November	[redacted]	[redacted]	[redacted]	[redacted]
December	[redacted]	[redacted]	[redacted]	[redacted]
January	[redacted]	[redacted]	[redacted]	[redacted]
February	[redacted]	[redacted]	[redacted]	[redacted]
March	[redacted]	[redacted]	[redacted]	[redacted]
% of Total Winter Supply	[redacted]	[redacted]	[redacted]	
Maximum with additional storage				
November	[redacted]	[redacted]	[redacted]	[redacted]
December	[redacted]	[redacted]	[redacted]	[redacted]
January	[redacted]	[redacted]	[redacted]	[redacted]
February	[redacted]	[redacted]	[redacted]	[redacted]
March	[redacted]	[redacted]	[redacted]	[redacted]
% of Total Winter Supply	[redacted]	[redacted]	[redacted]	

(1) Fixed price, no-cost collar, or price cap at Duke Energy Kentucky's discretion

(2) Based on [redacted] storage of [redacted] and [redacted] storage of [redacted].

Attachment B
Duke Energy Kentucky
Hedging Plan Reduction in Volatility