COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In The Matter Of:

DUKE ENERGY KENTUCKY, INC.'S	)	
ANNUAL COST RECOVERY FILING	)	Case No. 2017-00427
FOR DEMAND-SIDE MANAGEMENT	)	

DUKE ENERGY KENTUCKY, INC.'S
PETITION FOR THE CONFIDENTIAL TREATMENT OF
CERTAIN INFORMATION CONTAINED IN ITS RESPONSES
TO STAFF'S SECOND SET OF DATA REQUESTS

Duke Energy Kentucky, Inc. (Duke Energy Kentucky or Company), pursuant to 807 KAR 5:001, Section 13, respectfully requests the Commission to classify and protect certain information provided by Duke Energy Kentucky filed in response to STAFF-DR-02-001 and STAFF-DR-02-002. The information contained in Confidential Attachment STAFF-DR-02-001 and Confidential Attachment STAFF-DR-02-002 (Attachments), for which Duke Energy Kentucky now seeks confidential treatment (Confidential Information), contains confidential and proprietary information including avoided costs data and calculations.

In support of this Petition, Duke Energy Kentucky states:

1. 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.

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2.   The information submitted and for which the Company is seeking confidential protection are the Attachments which contain Duke Energy Kentucky's avoided costs. More specifically, the Attachments show detailed calculations of avoided costs information by program used by the Company in evaluating its demand side management programs. If made public, this (economically valuable) information would give the Company's vendors and competitors a distinct commercial advantage regarding Duke Energy Kentucky's operations. This information could be used by potential counter parties to undermine the Company's efforts to reduce costs, ultimately harming customers.

3.   The Confidential Information is distributed within Duke Energy Kentucky only to those who must have access for business reasons and is generally recognized as confidential and proprietary in the energy industry.

4.   The Confidential Information for which Duke Energy Kentucky is seeking confidential treatment is not known outside of Duke Energy Corporation.

5.   Duke Energy Kentucky does not object to limited disclosure of the Confidential Information described herein, pursuant to an acceptable protective agreement, with the Attorney General or other intervenors with a legitimate interest in reviewing the same for the purpose of participating in this case.

6.   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).

7.   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, and one copy without the Confidential Information included.
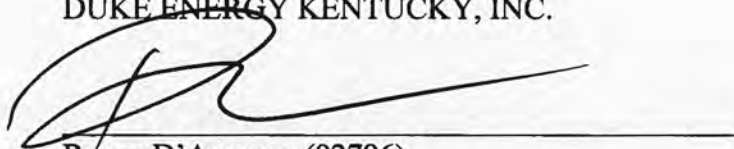
8.   Duke Energy Kentucky respectfully requests that the Confidential Information be withheld from public disclosure for a period of ten years. This will assure that the Confidential Information – if disclosed after that time – will no longer be commercially sensitive so as to likely impair the interests of the Company or its customers if publicly disclosed.

9.   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, Inc., respectfully requests that the Commission classify and protect as confidential the specific information described herein.
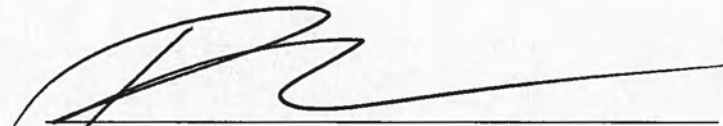
Respectfully submitted,

DUKE ENERGY KENTUCKY, INC.

Rocco D'Ascenzo (92796)
Deputy General Counsel
Duke Energy Kentucky, Inc.
139 East Fourth Street, 1303-Main
Cincinnati, Ohio 45201-0960
(513) 287-4320
(513) 287-4385 (f)
rocco.d'ascenzo@duke-energy.com
Counsel for Duke Energy Kentucky, Inc.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing filing was served on the following via electronic mail, this 5th day of March 2018:

Kent Chandler
The Office of the Attorney General
Utility Intervention and Rate Division
700 Capital Avenue, Suite 20
Frankfort, Kentucky 40601-8204

Rocco O. D'Ascenzo

VERIFICATION

STATE OF NORTH CAROLINA)
) **SS:**
COUNTY OF MECKLENBURG)

The undersigned, Scott Park, being duly sworn, deposes and says that he is the Director of Integrated Resource Planning & Analytics - Midwest, and 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.

_____
Scott Park, Affiant

Subscribed and sworn to before me by Scott Park, on this 27th day of February , 2018.

_____
NOTARY PUBLIC

My Commission Expires: Oct. 20, 2018

VERIFICATION

STATE OF INDIANA   )

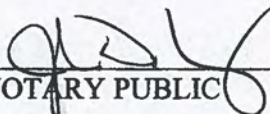   )   **SS:**

COUNTY OF HENDRICKS   )

The undersigned, Andrew Taylor, Sr. Product and Services Manager, 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.

_____

Andrew Taylor, Affiant

Subscribed and sworn to before me by Andrew Taylor on this 27 day of

February_____, 2018.

SEAL
NOTARY PUBLIC INDIANA
JOHN DELOUGHERY
COMMISSION 678735
EXPIRES MARCH 13, 2024
HENDRICKS COUNTY

_____

NOTARY PUBLIC

My Commission Expires: 3/13/24

VERIFICATION

STATE OF OHIO   )
)   SS:
COUNTY OF HAMILTON   )

   The undersigned, Thomas Wiles, Director Analytics, 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.

Thomas Wiles

Thomas Wiles, Affiant

   Subscribed and sworn to before me by Thomas Wiles on this 27TH day of FEBRUARY , 2018.

Adele M. Frisch

NOTARY PUBLIC

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

My Commission Expires: 1/5/2019

VERIFICATION

STATE OF NORTH CAROLINA   )

)   SS:

COUNTY OF MECKLENBURG   )

The undersigned, John A. Verderame, Managing Direct – Power, Trading & Dispatch, 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.

_____

John A. Verderame, Affiant

Subscribed and sworn to before me by John A. Verderame on this _16_ day of

February_____, 2018.

_Mary B Vicknair_____

NOTARY PUBLIC

My Commission Expires: 9/21/2022

> MARY B VICKNAIR
> NOTARY PUBLIC
> Davie County
> North Carolina
> My Commission Expires Sept. 21, 2022

KyPSC Case No. 2017-00427
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REQUEST:

Provide Duke Kentucky's avoided energy cost-effectiveness input on a per-kWh basis and the support for this cost.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment only)

The Avoided Energy cost-effectiveness inputs are included in STAFF-DR-02-001 Confidential Attachment. These inputs are based upon a fundamental forecast of the PJM around-the-clock nominal prices that was provided by a third-party, Wood Mackenzie, on January 1, 2011 as this was the most current data available at the time of the filing for approval of Duke Kentucky's entire DSM portfolio in Case No. 2012-00085, on which the current portfolio is based.

PERSON RESPONSIBLE: Thomas Wiles

STAFF-DR-02-001

CONFIDENTIAL
ATTACHMENT

BEING FILED UNDER SEAL

REQUEST:

Provide Duke Kentucky's avoided capacity cost-effectiveness input on a per kw basis and

the support for this cost.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment only)

Duke Kentucky's avoided capacity cost-effectiveness input is included in STAFF-DR-

02-002 Confidential Attachment. These annual values are based on a starting point cost

of a Combustion Turbine in 2011 of $73.67/KW-year escalated at 2.30% per year. This

data was the most current data available at the time of the filing for approval of Duke

Kentucky's entire DSM portfolio in Case No. 2012-00085, on which the current portfolio

is based.

PERSON RESPONSIBLE: Thomas Wiles

STAFF-DR-02-002

CONFIDENTIAL ATTACHMENT

BEING FILED UNDER SEAL

REQUEST:

Refer to Case No. 2017-00324, Application, page 5.

    a.   Provide a list of the program costs and associated incentives for the Smart Saver Custom programs that were approved by Duke Kentucky during the fiscal year ending June 2017 but are not yet funded.

    b.   Provide a list of program costs and associated incentives for any Smart Saver Custom programs that have been approved by Duke Kentucky during the fiscal year ending June 2018 but are not yet funded.

    c.   For Smart Saver Custom programs that were funded during the fiscal year ending June 2017, provide the maximum, minimum and average incentive paid.

RESPONSE:

Please see STAFF-DR-02-003 Attachment.

PERSON RESPONSIBLE: Andrew Taylor

STAFF-DR-02-003A	Application	Incentive	Impacts (kwh)	Estimated Close Date
	Customer 1	$ 30,737	308,060	17-18 FY* Close
	Customer 2	$ 330,494	3,800,057	18-19 FY** Close
	Customer 3	$ 40,248	428,533	17-18 FY Close
	Customer 4	$ 7,816	56,174	17-18 FY Close
	Customer 5	$ 3,920	52,024	17-18 FY Close
	Customer 6	$ 12,783	77,762	17-18 FY Close
	Customer 7	$ 105,458	993,841	17-18 FY close
		$ 531,456	5,716,450	

	Program Spend		Total (Program Spend + Incentives)
	$	119,229.17	$ 650,685.17

*17-18 FY = Fiscal Year July 2017 - June 2018
**18-19 FY = Fiscal Year July 2018 - June 2019

STAFF-DR-02-003B	Application	Incentive	Impacts (kwh)	Estimated Close Date
	Customer 8	$ 137,825	1,577	18-19 FY Close
	Customer 9	$ 33,072	309,247	17-18 FY Close
	Customer 10	$ 2,622	36,496	17-18 FY Close
	Customer 11	$ 4,012	45,339	17-18 FY Close
	Customer 12	$ 16,632	121,141	18-19 FY close
	Customer 13	$ 31,599	369,734	17-18 FY close
	Customer 14	$ 38,198	482,243	18-19 FY close
		$ 263,960	1,365,777	

	Program Spend		Total (Program Spend + Incentives)
	$	261,237.43	$ 525,197.43

STAFF-DR-02-003C		
	Maximum	$ 148,980
	Minimum	$ 2,014
	Average	$ 29,908

REQUEST:

Provide a schedule showing Duke Kentucky's capacity resources, demand response resources, and retail and wholesale load and reserve margin by year, for the historic period 2013 through 2017 and the forecast period 2018 through 2027, and indicate the date of the forecast underlying the forecast period. Also include Duke Kentucky's Fixed Resource Requirement capacity obligation for each year. The analysis can be presented on either a calendar year or PJM delivery year basis.

RESPONSE:

Please see Attachment Staff DR-02-004 for the requested schedule. This schedule is based upon the Company's fall 2017 forecast data without assumptions for carbon regulation. The information provided in response to Staff DR-01-011 used the Company's Spring 2017 forecast that included assumptions for carbon regulation.

The waterfall chart below illustrates a typical reconciliation between the long term planning parameters utilized in the Integrated Resource Plan, and the more operational short term requirements of the Fixed Resource Requirement (FRR) Plan. The reconciliation is done in MWs as opposed to reserve margin percentages for equivalent comparison purposes. In the example the 2018 IRP portrays a reserve margin of 253.6 MWs; while the actual excess MWs of usable PJM capacity in the Duke Energy

Kentucky portfolio is 21.1 MWs. The variance is attributed to components on both the supply and demand side of the equation. Specifically:

ICAP Assumption

The Company regularly reviews the capacity rating of its generation units for accuracy. Over time unit ratings can either degrade due to normal life cycle effects or can improve following upgrade or maintenance efforts. These updates appear in the IRP typically at filing, while the FRR is updated yearly. Given the different purposes and planning horizons of the two plans, these timing differences are to be expected.

ICAP EFOR Reduction

In the long term planning view of the IRP, there is no specific acknowledgment of unit performance through time on the available capacity side of the equation. The Company sets a target reserve requirement and calculates expected reserve margin by dividing the Company's generation ICAP by Duke Energy peak load. PJM however bases available capacity on specific unit performance over discrete time periods. As an example, absent unit rating changes, the capacity of East Bend 2 always appears as roughly 600 MWs. While in the FRR Plan the actual capacity that Duke Energy Kentucky can apply to its FRR plan changes roughly 6 MWs for every 1% change in the previous year's forced outage rate. This variability can easily be 20 to 60 MWs year to year for East Bend 2 alone.

Energy Efficiency/Demand Response assumption

The Company's EE and DR program and participation rates vary from year to year. There are no good ways in the IRP longer term view to forecast this variability. The FRR plan, which requires estimates of participation as long as three years out, similarly needs to manage customer responsiveness to differing programs as well as potential fatigue during periods of higher utilization. In the short term the Company also needs to manage actual performance rates and potential consequences of underperformance of programs during events. These variables all contribute to differences in DR/EE capacity.

Load Forecast

Duke Energy Kentucky utilizes its own internal load modeling for purposes of IRP planning. PJM assigns a load forecast using its own model assumptions and parameters. Differences are to be expected and planned for.

Additional PJM Load Requirement

As stated above, the IRP does not subtract an explicit term for a required reserve margin, but rather defines an expected target threshold to be planned for in the long term. The FRR Plan, however, is required to provide resources that meet the annually determined PJM system reserve requirement. In addition to the reserve requirement, PJM also has discretion to make other modifications to the Duke Energy Kentucky load obligation that represent unique characteristics of the DEK load in relation to the PJM system load.

2018 DE Kentucky IRP and FRR Reconciliation

Category	Value
IRP Excess Capacity (MW)	253.6
ICAP Difference	14
EFOR Reduction	86.4
EE/DR Difference	4
Load Forecast Difference	4
Addt'l PJM Load Requirement	132.1
FRR Excess Capacity (MW)	21.1
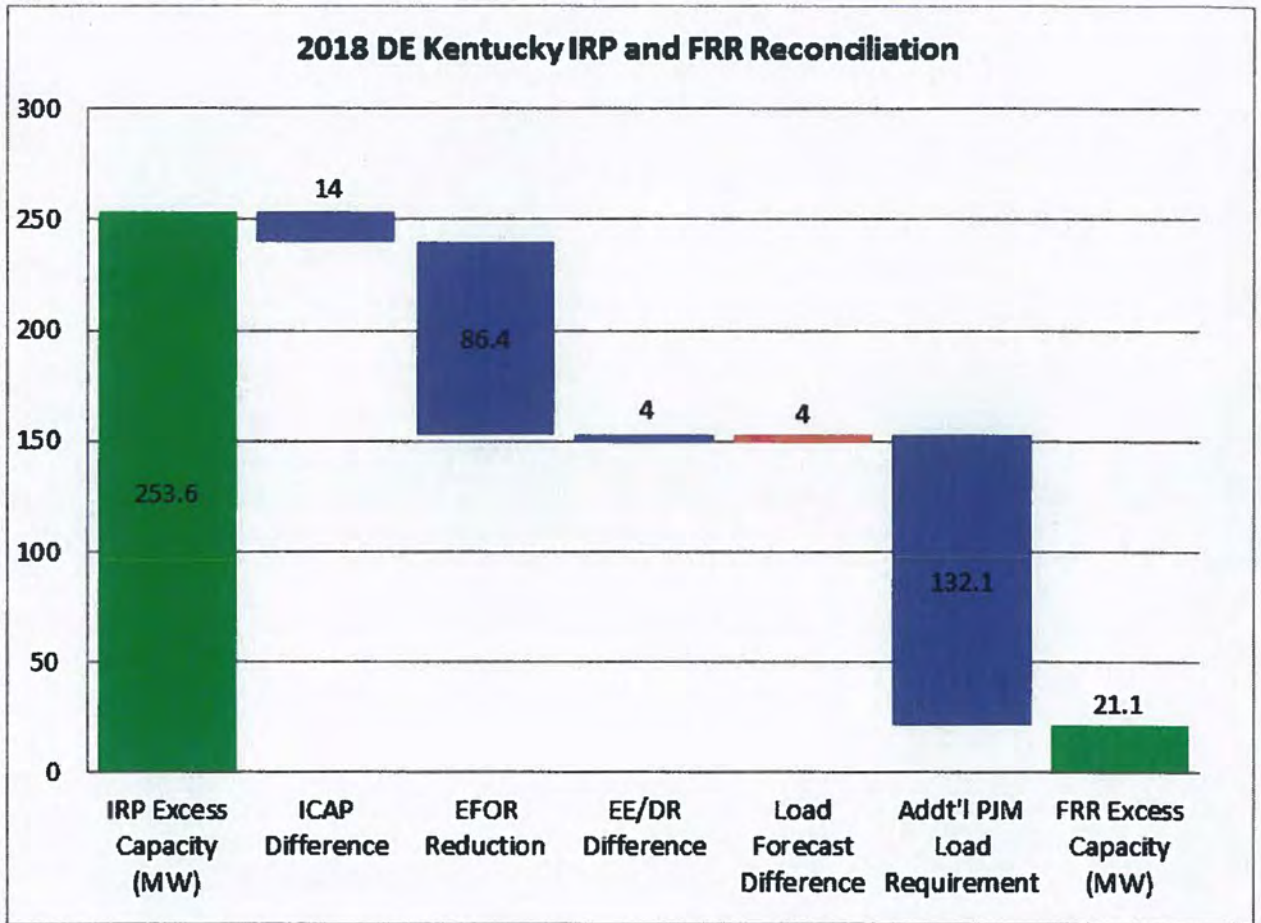
PERSON RESPONSIBLE: John Verderame/ Scott Park

RESPONSE TO STAFF-DR-02-004

Perspective	IRP View					Calendar Convention			Calendar Year							Notes
Capacity Methodology	ICAP MW					Forecast Date			Fall 2017							
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Notes
East Bend 2	414	414	600	600	600	600	600	600	600	600	600	600	600	600	600	
Woodsdale	476	476	476	476	476	476	476	476	476	476	476	476	476	476	476	
Miami Fort 6	163	163	0	0	0	0	0	0	0	0	0	0	0	0	0	
Demand Response	30	33	37	28	29	19	20	8	8	8	8	8	8	8	8	
TOTAL RESOURCES	1083	1086	1113	1104	1105	1095	1096	1084	1084	1084	1084	1084	1084	1084	1084	
Retail Load	858	860	814	877	834	841	839	842	843	844	843	842	841	840	840	Historical Load has been grossed up for realized DR.
Wholesale Load	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL LOAD	858	860	814	877	834	841	839	842	843	844	843	842	841	840	840	
RESERVE MARGIN %	26%	26%	37%	26%	32%	30%	31%	29%	29%	28%	29%	29%	29%	29%	29%	Reserve Margin show DR added to resources and load

Perspective	PJM FRR View					Calendar Convention			Planning Year							Notes
Capacity Methodology	UCAP MW					Forecast Date			N/A							
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	Notes
East Bend 2	382	352.8	506.4	579.2	541.2	557	540.8	540.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	PJM has not posted the data beyond 2020/2021
Woodsdale	404.7	435.5	425.3	444.5	447.2	418.6	425.6	425.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Miami Fort 6	121.4	133.5	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Demand Response	35.4	27	36.2	28.7	27	15	16.3	10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bilateral Sales/Purcha	40	54	3.4	0	-33	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TOTAL RESOURCES	983.5	1002.8	971.3	1052.4	982.4	990.6	982.7	977.3	0	0	0	0	0	0	0	
Retail Load	943.3	972.4	955.7	918.7	970.5	969.5	944.4	974.7								
Wholesale Load	0	0	0	0	0	0	0	0								
TOTAL LOAD	943.3	972.4	955.7	918.7	970.5	969.5	944.4	974.7	0	0	0	0	0	0	0	
RESERVE MARGIN %	4%	3%	2%	15%	1%	2%	4%	0%								