



DUKE ENERGY CORPORATION

139 East Fourth Street
1212 Main
Cincinnati, OH 45201-0960
Telephone: (513) 287-4315
Facsimile: (513) 287-4385

Kristen Cocanougher
Sr. Paralegal
E-mail: Kristen.cocanougher@duke-energy.com

VIA OVERNIGHT DELIVERY

March 29, 2012

Mr. Jeff Derouen
Executive Director
Kentucky Public Service Commission
211 Sower Blvd
Frankfort, KY 40601

RECEIVED

MAR 30 2012

PUBLIC SERVICE
COMMISSION

Re: Administrative Case No. 387 – Annual Load/Demand Forecast Report

Dear Mr. Derouen:

Enclosed please find updated redacted responses to Commission data requests filed annually as ordered in Administrative Case No. 387, ¶ 2, dated October 7, 2005. These updated responses are being filed separately from the Annual Reporting of Duke Energy Kentucky upon request.

We have included the unredacted updated responses in a separate envelope to be filed under seal. Also enclosed is a Petition for Confidential Treatment for your consideration in the above referenced matter.

Please date-stamp the two copies of the letter and the filings and return to me in the enclosed envelope.

Sincerely,

Kristen Cocanougher

VERIFICATION

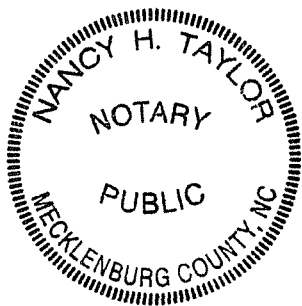
STATE OF NORTH CAROLINA)
) SS:
COUNTY OF MECKLENBURG)

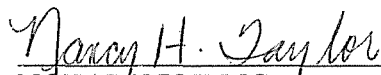
The undersigned, Jose Merino, being duly sworn, deposes and says that he is employed by the Duke Energy Corporation affiliated companies as Director, Load Forecasting for Duke Energy Business Services, LLC; that on behalf of Duke Energy Kentucky, Inc., he has supervised the preparation of the responses to the foregoing information requests; and that the matters set forth in the foregoing responses to information requests are true and accurate to the best of his knowledge, information and belief after reasonable inquiry.



Jose Merino

Subscribed and sworn to before me by Jose Merino on this 23 day of March 2012.





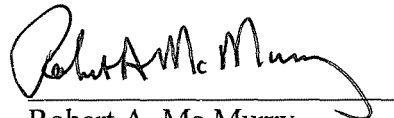
NOTARY PUBLIC

My Commission Expires: January 26, 2017

VERIFICATION

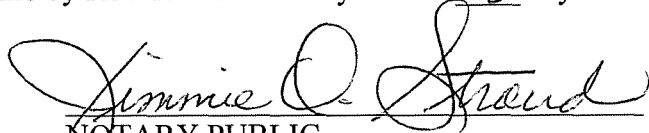
STATE OF NORTH CAROLINA)
)
COUNTY OF MECKLENBURG) SS:

The undersigned, Robert A. Mc Murry, being duly sworn, deposes and says that he is employed by the Duke Energy Corporation affiliated companies as Director of Integrated Resource Planning for Duke Energy Business Services, LLC; that on behalf of Duke Energy Kentucky, Inc., he has supervised the preparation of the responses to the foregoing information requests; and that the matters set forth in the foregoing responses to information requests are true and accurate to the best of his knowledge, information and belief after reasonable inquiry.


Robert A. Mc Murry

Subscribed and sworn to before me by Robert A. Mc Murry on this 23 day of March 2012.



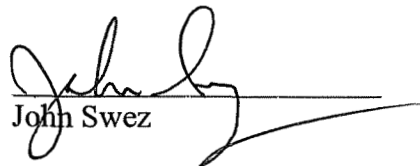

NOTARY PUBLIC

My Commission Expires: October 31, 2013

VERIFICATION

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

The undersigned, John Swez, being duly sworn, deposes and says that he is employed by the Duke Energy Corporation affiliated companies as Director, Generation Dispatch & Operations for Duke Energy Business Services, LLC; that on behalf of Duke Energy Kentucky, Inc., he has supervised the preparation of the responses to the foregoing information requests; and that the matters set forth in the foregoing responses to information requests are true and accurate to the best of his knowledge, information and belief after reasonable inquiry.


John Swez

Subscribed and sworn to before me by John Swez on this 22nd day of March 2012.




NOTARY PUBLIC

My Commission Expires: 6/17/12

TABLE OF CONTENTS

<u>DATA REQUEST</u>	<u>WITNESS</u>	<u>TAB NO.</u>
STAFF-DR-01-003	Jose Merino	3
STAFF -DR-01-004	Jose Merino	4
STAFF -DR-01-006	Jose Merino	6
STAFF -DR-01-007	Robert Mc Murry	7
STAFF -DR-01-008	Robert Mc Murry	8
STAFF -DR-01-011	John Swez.....	11
STAFF -DR-01-012	Robert Mc Murry	12
STAFF -DR-01-013	Jose Merino / Ron Snead	13
STAFF-DR-01-014	Ron Snead	14

**Duke Energy Kentucky
Administrative Case No. 387**

STAFF-DR-01-003

REQUEST:

Actual and weather-normalized monthly coincident peak demands for the just completed calendar year. Demands should be disaggregated into (a) native load demand (firm and non-firm) and (b) off-system demand (firm and non-firm).

RESPONSE:

Actual and weather-normalized monthly coincident peak native load demands for 2011 are provided in the table below. Duke Energy Kentucky does not have any off-system firm demands. The table does provide off-system non-firm demands. Weather normal values for the off-system demands are not available.

2011 Duke Energy Kentucky Electric Energy Demands - MW

	1	2	3=1+2	4	5	6=3+5
	Native Peak	Demand Response at Time of Peak	Internal Peak	Weather Normal Internal Peak	Off-System Non-Firm	Total
January	669	-	669	659	-	669
February	689	-	689	690	-	689
March	586	-	586	594	-	586
April	535	-	535	563	-	535
May	793	10	804	693	-	804
June	818	4	822	875	35	857
July	894	17	910	892	135	1,045
August	862	2	863	873	5	868
September	857	-	857	817	-	857
October	541	-	541	534	-	541
November	580	-	580	690	-	580
December	615	-	615	632	53	668
Max	894	17	910	892	135	1,045

PERSON RESPONSIBLE: Jose Merino

**Duke Energy Kentucky
Administrative Case No. 387**

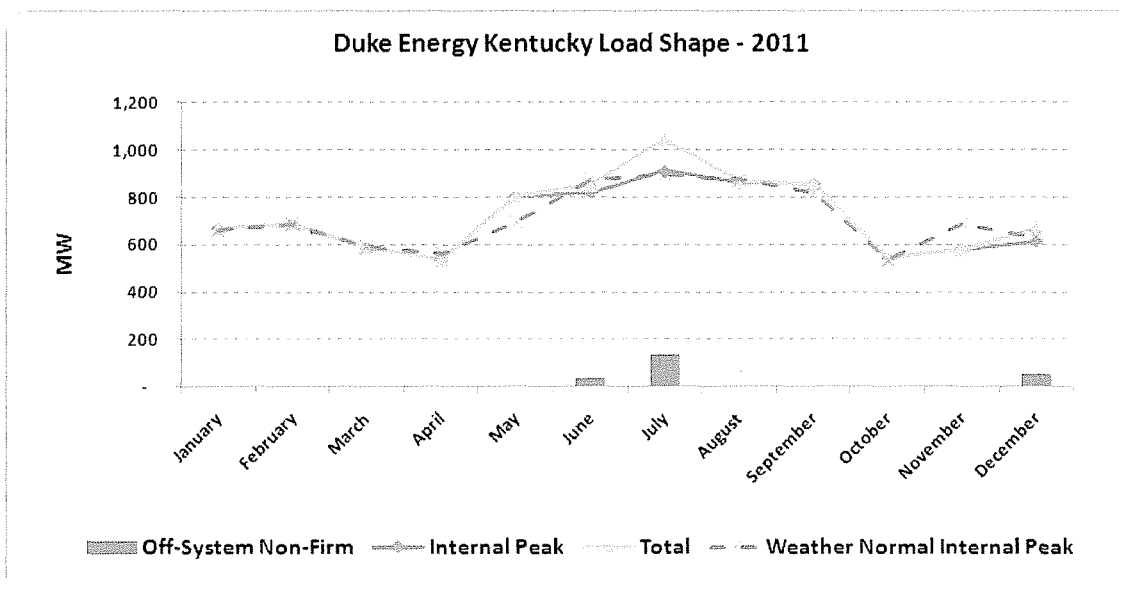
STAFF-DR-01-004

REQUEST:

Load shape curves that show actual peak demands and weather-normalized peak demands (native load demand and total demand) on a monthly basis for the just completed calendar year.

RESPONSE:

Total is the sum of Internal non-weather normal and Off-System non-firm.



PERSON RESPONSIBLE: Jose Merino

REQUEST:

Based on the most recent demand forecast, the base case demand and energy forecasts and high case demand and energy forecasts and high case demand and energy forecasts for the current year and the following four years. The information should be disaggregated into (a) native load (firm and non-firm demand) and (b) off-system load (both firm and non-firm demand).

RESPONSE:

Base case native load demand and energy forecasts and high case native load demand and energy forecasts are provided in the table below. Duke Energy Kentucky does not have any off-system firm energy sales or demands. The second table provides forecasts of off-system non-firm energy. A forecast of off-system non-firm demands is not available.

Duke Energy Kentucky

Native Electric Forecast

	Demand – Mw		Energy – Mwh	
	Base	High	Base	High
2012	888	922	4,224,235	4,388,901
2013	897	934	4,306,980	4,474,871
2014	914	954	4,406,229	4,577,989
2015	924	967	4,468,389	4,642,573
2016	928	973	4,495,516	4,670,756

Duke Energy Kentucky

Off-System Non-Firm Electric Forecast

	Demand – Mw		Energy – Mwh	
	Base	High	Base	High
2012	NA	NA	71,360	NA
2013	NA	NA	52,409	NA
2014	NA	NA	N/A	NA
2015	NA	NA	N/A	NA
2016	NA	NA	N/A	NA

PERSON RESPONSIBLE: Jose Merino

**Duke Energy Kentucky
Administrative Case No. 387**

STAFF-DR-01-007

REQUEST:

The target reserve margin currently used for planning purposes, stated as a percentage of demand. If changed from what was in use in 2001, include a detailed explanation for the change.

RESPONSE:

The planning reserve margin used for the 2011 resource plan is 14.5%. The IRP models utilize the full capacity of the unit ratings to perform dispatch, so the reserve margin needs to be developed on an installed capacity rating. This is calculated using following steps.

1. Calculation of the PJM Forecast Pool Requirement is based on the unforced capacity (UCAP) of the Duke Energy Kentucky system. This utilizes the PJM average effective forced outage rate and the PJM installed reserve margin based on the installed capacity for the DEOK (Duke Energy Ohio Kentucky) Zone. DEOK is the PJM zone applicable to the Duke Energy Kentucky service territory. Based on future years the Forecast Pool Requirement is 8.27%.
2. The Forecast Pool Requirement based on UCAP is then translated to a Duke Energy Kentucky reserve margin by accounting for the load serving entity's effective forced outage rate. The effective forced outage rate for Duke Energy Kentucky based on 2010 tested values is 9.83% and the resulting reserve margin based on installed capacity is 20.1%. This is the reserve margin that would be applied to the Duke Energy Kentucky peak that is coincident with the PJM peak.
3. For 2011, PJM's forecast assumes that the DEOK zone is 95.3% coincident with the PJM peak. Translating the 20.1% reserve margin applied to the Duke Energy Kentucky peak which is based on installed capacity for the coincident PJM peak into a reserve margin used for planning purposes results in a reserve margin of 14.5%.

PERSON RESPONSIBLE: Robert Mc Murry

**Duke Energy Kentucky
Administrative Case No. 387**

STAFF-DR-01-008

REQUEST:

Projected reserve margins stated in megawatts and as a percentage of demand for the current year and the following 4 years. Identify projected deficits and current plans for addressing these. For each year identify the level of firm capacity purchases projected to meet native load demand.

RESPONSE:

The projected reserve margins for Duke Energy Kentucky are shown below:

Year	Projected Reserves (MW)	Projected Reserve Margin (%)
2011	190	22.4
2012	179	20.8
2013	164	18.8
2014	152	17.1
2015	21	2.4

The Duke Energy Kentucky increase in resource requirement in 2015 is driven primarily by the anticipated retirement of Miami Fort Unit 6. The Miami Fort 6 summer Maximum Net Dependable Capacity (MNDC) is 163 MWs and represents approximately 15% of the Duke Energy Kentucky generation resources. In order to meet a 14.5% reserve margin requirement in 2015, firm capacity purchases would be required.

Duke Energy Kentucky is currently evaluating options including energy efficiency and demand response resources, purchase power agreements, new CT or CC generation, or purchase of existing assets to satisfy the 2015 need.

PERSON RESPONSIBLE: Robert Mc Murry

**Duke Energy Kentucky
Administrative Case No. 387**

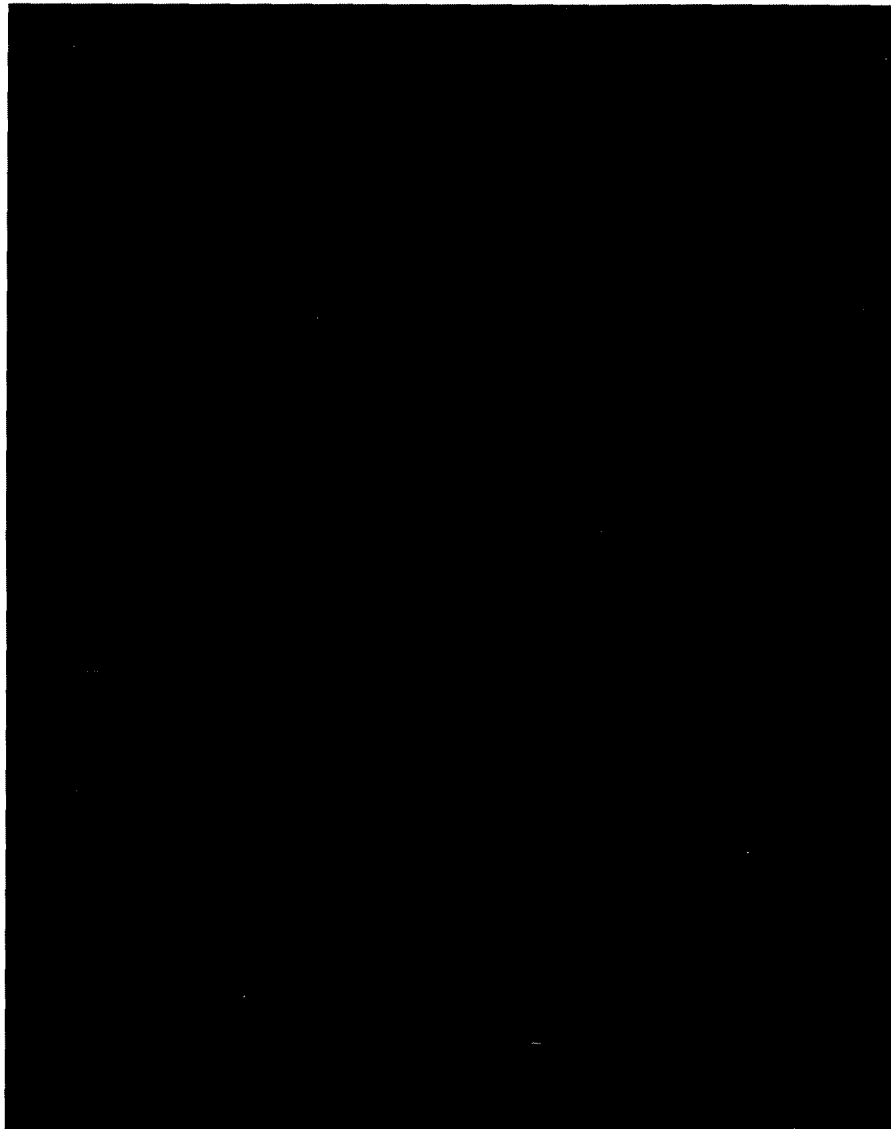
**STAFF-DR-01-011
PUBLIC**

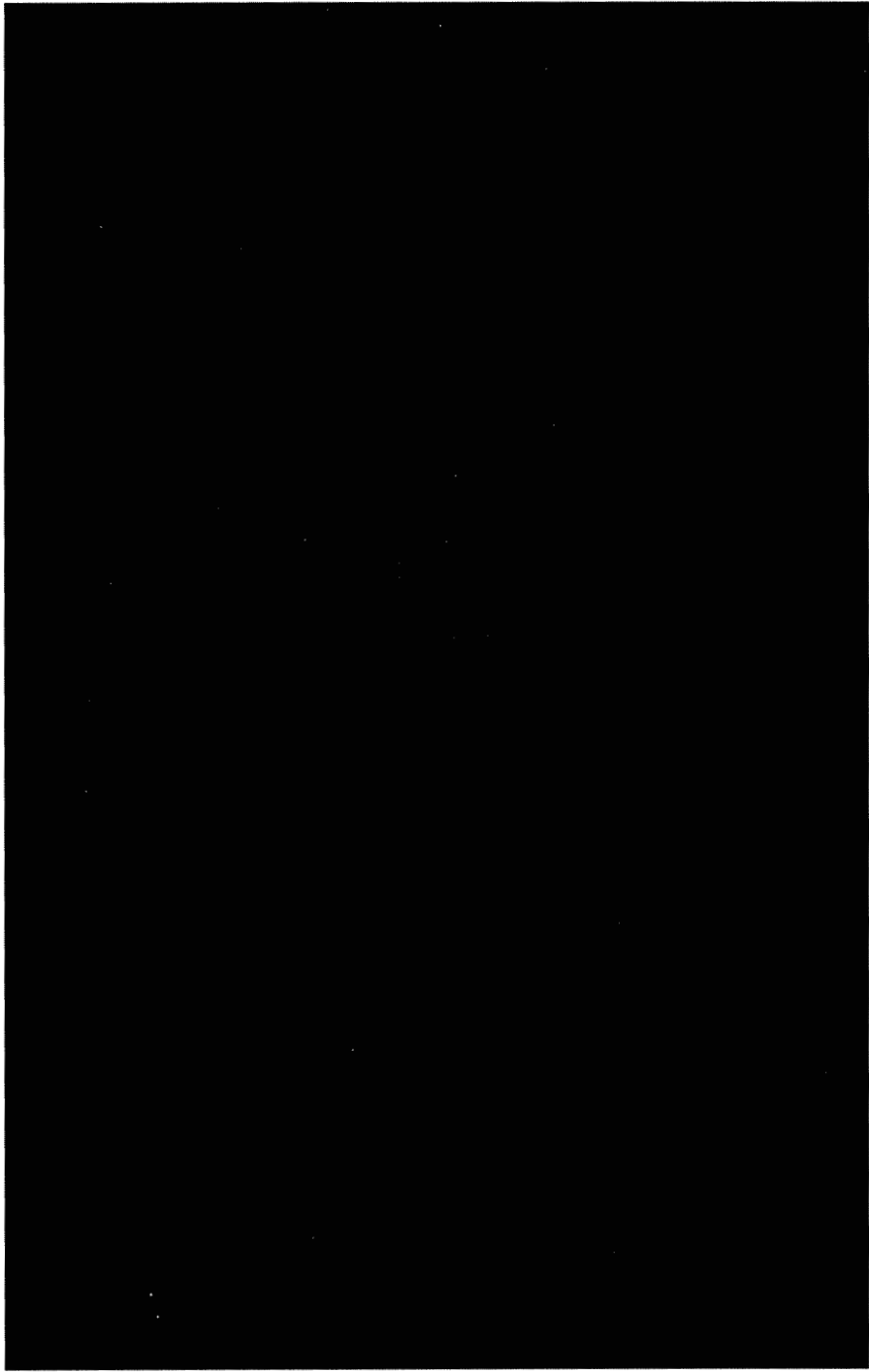
REQUEST:

A list that identifies scheduled outages or retirements of generating capacity during the current year and the following four years.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET





PERSON RESPONSIBLE: John Swez

**Duke Energy Kentucky
Administrative Case No. 387**

STAFF-DR-01-012

REQUEST:

Identify all planned base load or peaking capacity additions to meet native load requirements over the next 10 years. Show the expected in-service date, size and site for all planned additions. Include additions planned by the utility, as well as those by affiliates, if constructed in Kentucky or intended to meet load in Kentucky.

RESPONSE:

The only base load or peaking capacity need for the next 10 years is in 2015 due to the expected retirement of Miami Fort 6. Duke Energy Kentucky is currently evaluating options including energy efficiency and demand response resources, purchase power agreements, new CT or CC generation, or purchase of existing assets to satisfy this need.

The evaluation of these options is ongoing during 2012.

PERSON RESPONSIBLE: Robert Mc Murry

REQUEST:

The following transmission energy data for the just completed calendar year and the forecast for the current year and the following four years:

- a. Total energy received from all interconnections and generation sources connected to the transmission system.
- b. Total energy delivered to all interconnections on the transmission system.
- c. Peak load capacity of the transmission system.
- d. Peak demand for summer and winter seasons on the transmission system.

RESPONSE:

- a. All of the energy requirements of Duke Energy Kentucky are provided through the connections with the Duke Energy Ohio 69 and 138 kV system. See response to Question 6 that relates to the actual and forecasted values for energy.
- b. Since Duke Energy Kentucky does not have any generation connected to its transmission system and since the transmission system is planned, designed and operated to primarily serve the area load, and since the only two interconnections are operated normally open, there is no energy delivered from Duke Energy Kentucky to the interconnections.
- c. Neither Duke Energy Kentucky nor the electric utility industry has defined a term “peak load capacity of the transmission system.” There is no single number that defines the capacity of a transmission system due to the interconnected nature of the electric grid. Duke Energy Kentucky does perform assessments of its transmission system to ensure all firm loads can be served in a reliable manner. This ensures that the transmission system has the “capacity” required to reliably serve the load.
- d. See response to Item 6. Since Duke Energy Kentucky does not have any generation connected to its transmission system, the demand on the transmission system is equal to the Duke Energy Kentucky load requirements.

PERSON RESPONSIBLE:

- a - Jose Merino
- b, c - Ron Snead
- d - Jose Merino

**Duke Energy Kentucky
Administrative Case No. 387**

STAFF-DR-01-014

REQUEST:

Identify all planned transmission capacity additions for the next 10 years. Include the expected in-service date, size and site for all planned additions and identify the transmission need each addition is intended to address.

RESPONSE:

There are no transmission capacity additions planned at this time.

PERSON RESPONSIBLE: Ron Snead