## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

BACK-UP POWER SUPPLY PLAN OF DUKE ) CASE NO. ENERGY KENTUCKY, INC. ) 2012-00220

## ORDER

On October 2, 2012, Duke Energy Kentucky, Inc. ("Duke Kentucky") submitted an application for approval of a new back-up power supply plan which is designed to ensure that it has sufficient energy to serve its customers during both unscheduled and scheduled outages. Duke Kentucky's existing back-up power supply plan covers the 2010-2012 time period and was approved by the Commission in Case No. 2009-00429. In approving the 2010-2012 plan, the Commission directed Duke Kentucky to file any future back-up power supply plan 90 days prior to its effective date.

As of January 1, 2012, Duke Kentucky became a member of PJM Interconnection LLC ("PJM") and selected the Fixed Resource Requirement ("FRR") plan for meeting PJM's Resource Adequacy Requirement. PJM requires Duke Kentucky to file a FRR capacity plan to satisfy the unforced capacity ("UCAP") obligation for all loads in its service area. Duke Kentucky has adequate UCAP to comply with its FRR obligation during the 2013-2014 timeframe.

<sup>&</sup>lt;sup>1</sup> Case No. 2009-00429, Back-up Power Supply Plan of Duke Energy Kentucky, Inc. (Ky. PSC Dec. 22, 2009).

Duke Kentucky proposes a 2013–2014 back-up supply plan strategy similar to its existing 2010-2012 plan. Duke Kentucky utilized its proprietary Commercial Business Model ("CBM"), along with other screening tools, to analyze its back-up supply alternatives. The CBM utilized current load forecasts, fuel costs, wholesale power prices, weather conditions, statistical modeling, and extensive historical data related to production costs to forecast power needs and costs. The goal of Duke Kentucky's analysis was to identify the two-year back-up power supply option that has the lowest cost while also providing the greatest degree of risk mitigation against future price spikes.

To meet its back-up power supply needs, Duke Kentucky considered supply options available from: (1) PJM daily energy markets; (2) responses to a Request for Proposals issued by Duke Kentucky; and (3) fixed forward contracts purchased through the Intercontinental Exchange ("ICE") and/or the over-the-counter market. These options are similar to the ones analyzed by Duke Kentucky for its 2010-2012 back-up supply plan.

After identifying all of its available options, including 19 bids from six different bidders, Duke Kentucky utilized its CBM to further analyze the seven least costly alternatives, which are listed in its application at page 11 as Plans A through G. Following the CBM analysis, Duke Kentucky selected Plan G, which consists of buying back-up power through the PJM daily energy market during forced outages and using fixed-price financial swaps or forward contracts during scheduled outages. The fixed-price financial swaps or forward contracts will be purchased several months in advance through the liquid over-the-counter or ICE markets to meet scheduled outages. With

fixed prices for back-up power during scheduled outages and availing itself of PJM's mature markets for energy purchases during forced outages, Plan G affords Duke Kentucky the optimal mix for minimizing risk and cost. While Plan F, which consists of purchasing all back-up power requirements from the PJM daily energy markets, has the lowest cost, it presents higher risk due to all back-up power being subject to market price variability.

During this 2013-2014 timeframe, Duke Kentucky asserts that it will continue to review its back-up power plan and make any prudent corrections as a result of market conditions.

The Commission, having considered the evidence of record and being otherwise sufficiently advised, finds that Duke Kentucky's selection of Plan G as its 2013-2014 back-up power supply plan appears to strike the optimal balance between cost and risk mitigation. Consequently, we will approve Plan G as the reasonable back-up power supply plan for years 2013-2014.

## IT IS THEREFORE ORDERED THAT:

- 1. Duke Kentucky's back-up power supply plan as described in its application and in the findings above as Plan G is approved for years 2013-2014.
- 2. Six months prior to the expiration of the 2013-2014 back-up power supply plan approved herein, Duke Kentucky shall inform the Commission of its intentions concerning its back-up power supply plan going forward.
- 3. Duke Kentucky shall submit any future back-up supply plans for review and approval no later than 90 days prior to the effective date of the new plan.

By the Commission

**ENTERED** 

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KENTUCKY PUBLIC SERVICE COMMISSION

ATTES

Executive Director

Kristen Cocanougher Duke Energy Kentucky, Inc. 139 East 4th Street, R. 25 At II P. O. Box 960 Cincinnati, OH 45201

Rocco O D'Ascenzo Duke Energy Kentucky, Inc. 139 East 4th Street, R. 25 At II P. O. Box 960 Cincinnati, OH 45201