



Mailing Address:
139 East Fourth Street
1212 Main / P.O. Box 960
Cincinnati, Ohio 45202
o: 513-287-4315
f: 513-287-4386

VIA HAND DELIVERY

June 13, 2014

Mr. Jeff Derouen
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard, P.O. Box 615
Frankfort, Kentucky 40602-0615

RECEIVED

JUN 13 2014

PUBLIC SERVICE
COMMISSION

Re: ***Case No. 2014-_____***
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.

Dear Mr. Derouen:

Enclosed please find an original and twelve copies 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* for filing in the above referenced matter. The Petition for Confidential Treatment and one set of the confidential Application is being filed under seal in the enclosed white envelope.

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

Sincerely,



Kristen Ryan

Senior Paralegal

kristen.ryan@duke-energy.com

cc: Hon. Jennifer Hans

COMMONWEALTH OF KENTUCKY

BEFORE THE

KENTUCKY PUBLIC SERVICE COMMISSION

RECEIVED

JUN 13 2014

PUBLIC SERVICE
COMMISSION

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-_____

MOTION FOR CONFIDENTIAL TREATMENT

Comes now Duke Energy Kentucky, Inc. (Duke Energy Kentucky or Company), by and through counsel, pursuant to KRS 61.878, 807 KAR 5:001, Section 13 and other applicable law, and for its Motion requesting that the Kentucky Public Service Commission (Commission) afford confidential treatment to certain portions of direct testimony and related attachments filed in conjunction with Duke Energy Kentucky's Application in the above-captioned proceeding, respectfully states as follows:

1. Duke Energy Kentucky's Application requests the Commission to issue a Certificate of Public Convenience and Necessity (CPCN) for the acquisition of the 31% interest in the East Bend Unit 2 Generating Station (East Bend) currently owned by The Dayton Power & Light Company (DP&L). The purchase of DP&L's 31% interest in East Bend (the East Bend Purchase) produces numerous benefits to Duke Energy Kentucky's customers, including, *inter*

alia, favorable costs, operational flexibility, additional value, and greater efficiency. The Application also requests that the Commission approve Duke Energy Kentucky's assumption of certain liabilities in connection with the East Bend Purchase, deferral of costs incurred as part of the acquisition, a sharing of the anticipated capacity revenues, net of costs to acquire capacity to comply with PJM Interconnection, L.L.C. (PJM, L.L.C.) requirements for fixed resource requirement (FRR) entities, and all necessary waivers, approvals, adjustments and relief necessary to effectuate the transaction.

2. In support of its requests, Duke Energy Kentucky filed as Exhibits E and H to its Application the direct testimonies of James S. Northrup and John A. Verderame, respectively. Mr. Northrup serves as Director, Wholesale and Renewables Analytics, for Duke Energy Business Services LLC. Mr. Verderame serves as Director, Power Trading and Dispatch, for Duke Energy Progress, Inc., an affiliate of Duke Energy Kentucky. In Mr. Northrup's direct testimony, he describes the Company's capacity request for proposal (RFP) and the subsequent analysis of bids conducted during 2013 to ultimately arrive at the decision to pursue the East Bend Purchase. In Mr. Verderame's direct testimony, he provides an overview of Duke Energy Kentucky's participation in PJM, how it manages its capacity position as an FRR entity, and how its generation resources are dispatched in PJM. Mr. Verderame also discusses how Duke Energy Kentucky will meet its PJM reliability obligations upon effectuation of the East Bend Purchase.

3. Certain information provided by Mr. Northrup and Mr. Verderame is confidential. Specifically, within attachments to Mr. Northrup's testimony, Mr. Northrup provides details of the various bids, including resources, costs and prices that were submitted and that Duke Energy Kentucky evaluated in response to the RFP. This RFP was conducted by an independent third party and the information submitted by the various counterparties was and is considered

confidential. Within Mr. Verderame's testimony and in an attachment thereto, Mr. Verderame provides details regarding Duke Energy Kentucky's most recent FRR Plan and describes actions taken by Duke Energy Kentucky in order to meet its FRR Plan capacity resource obligation. Information relayed by Mr. Verderame includes Duke Energy Kentucky's capacity positions, equivalent forced outage rates, and load obligations.

4. The above-described information (the "Confidential Information") is proprietary and commercially sensitive information that is retained by Duke Energy Kentucky on a "need-to-know" basis and that is not publicly available. If disclosed, the Confidential Information would give competitors and potential business partners a tremendous advantage in the course of negotiations to fulfill the balance of anticipated future capacity needs. Disclosure would also give participants in the broader energy market a material, unfair advantage in commercial relations with Duke Energy Kentucky, as well as the various counterparties identified in response to the RFP, as a result of knowing the business strategies being implemented by Duke Energy Kentucky and the activities undertaken by Duke Energy Kentucky related to its FRR Plan capacity resource obligation. These market advantages would very likely translate into higher costs for Duke Energy Kentucky and, by extension, detrimentally higher rates for Duke Energy Kentucky's customers.

5. The Kentucky Open Records Act exempts the Confidential Information from public disclosure. *See* KRS 61.878(1)(c). As set forth above, disclosure of the Confidential Information would permit an unfair advantage to third parties. Moreover, the Kentucky Supreme Court has stated, "information concerning the inner workings of a corporation is 'generally accepted as confidential or proprietary.'" *Hoy v. Kentucky Industrial Revitalization Authority*, 907 S.W.2d 766, 768 (Ky. 1995). Because the Confidential Information is critical to Duke

Energy Kentucky's effective execution of business decisions and strategy, it satisfies both the statutory and common law standards for affording confidential treatment.

6. Duke Energy Kentucky does not object to limited disclosure of the Confidential Information described herein, pursuant to an acceptable confidentiality and nondisclosure agreement, to intervenors with a legitimate interest in reviewing the same for the sole purpose of participating in this case.

7. In accordance with the provisions of 807 KAR 5:001, Section 13(2), Duke Energy Kentucky is filing one (1) copy of the unredacted attachments to the direct testimony of Mr. Northrup and one (1) copy of the unredacted direct testimony of Mr. Verderame (including attachments) separately under seal with the Confidential Information highlighted. Redacted copies of the foregoing material are attached to the Application.

8. In accordance with the provisions of 807 KAR 5:001, Section 13(2), Duke Energy Kentucky respectfully requests that the Confidential Information be withheld from public disclosure for a period of ten (10) 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 Duke Energy Kentucky if publicly disclosed.

WHEREFORE, on the basis of the foregoing, Duke Energy Kentucky respectfully requests the Commission to enter an Order granting this Motion for Confidential Treatment and to so afford such protection from public disclosure to the Confidential Information, which is filed herewith under seal, for a period of ten (10) years from the date of entry of such an Order.

This 13th day of June, 2014.

Respectfully submitted,



Rocco O. D'Ascenzo (92796)
Associate General Counsel
Amy B. Spiller (85309)
Deputy General Counsel
Duke Energy Business Services, LLC
139 East Fourth Street, 1313 Main
Cincinnati, Ohio 45201-0960
Phone: (513) 287-4320
Fax: (513) 287-4385
e-mail:rocco.d'ascenzo@duke-energy.com
e-mail:amy.spiller@duke-energy.com

and

Mark David Goss
David S. Samford
Goss Samford, PLLC
2365 Harrodsburg Road, Suite B325
Lexington, KY 40504
(859) 368-7740
e-mail:mdgoss@gosssamfordlaw.com
e-mail:david@gosssamfordlaw.com

CERTIFICATE OF SERVICE

This is to certify that a copy of the foregoing Motion for Confidential Treatment of Duke Energy Kentucky, Inc. has been served via overnight mail to the following party on this 13th day of June, 2014.

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



Rocco O. D'Ascenzo

COMMONWEALTH OF KENTUCKY

BEFORE THE

KENTUCKY PUBLIC SERVICE COMMISSION

RECEIVED

In the Matter of:

JUN 13 2014

PUBLIC SERVICE
COMMISSION

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-_____

VERIFIED APPLICATION

Now comes Duke Energy Kentucky, Inc. (Duke Energy Kentucky or the Company), pursuant to KRS 278.020 and 807 KAR 5:001 Section 15, and hereby respectfully requests from the Kentucky Public Service Commission (Commission) an Order granting a Certificate of Public Convenience and Necessity (CPCN) for the acquisition of the 31% interest in the East Bend Unit 2 Generating Station (East Bend) currently owned by The Dayton Power & Light Company (DP&L) at a purchase price of \$12.4 million (Purchase Price), subject to adjustment as provided herein (East Bend Purchase).¹ Duke Energy Kentucky further requests that, pursuant to KRS 278.300, the Commission approve Duke Energy Kentucky's assumption of certain liabilities in

¹ See paragraph 19, *infra*, for a discussion of the adjustments.

connection with the acquisition of DP&L's current 31% interest in East Bend; deferral of costs incurred as part of the acquisition; a sharing of the anticipated capacity revenues, net of costs to acquire capacity to comply with PJM Interconnection, L.L.C., (PJM) requirements for fixed resource requirement (FRR) entities; and all necessary waivers, approvals, adjustments, and relief necessary to effectuate the transaction.

Such Order and approvals are necessary in order to close on the transaction and meet the terms and conditions of The Purchase and Sale Agreement Between Duke Energy Kentucky, Inc., and The Dayton Power and Light Company (Purchase Agreement) attached hereto as Exhibit A. The Purchase Agreement expires on December 31, 2014,² and thus Duke Energy Kentucky respectfully requests that the Commission issue its Order approving this Application as soon as practicable, but not later than November 1, 2014.

In support of this Application, Duke Energy Kentucky respectfully states as follows:

Introduction

1. Pursuant to 807 KAR 5:001, Section 14(2), Duke Energy Kentucky is a Kentucky corporation that was originally incorporated on March 20, 1901, is in good standing and, as a public utility as that term is defined in KRS 278.010(3), is subject to the Commission's jurisdiction. Duke Energy Kentucky is 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 Exhibit A, Purchase Agreement, Article IX, 9.1(c).

2. Duke Energy Kentucky's business address is 139 East Fourth Street, Cincinnati, Ohio 45202. The Company's local office in Kentucky is Duke Energy Envision Center, 4580 Olympic Boulevard Erlanger, Kentucky 41018.

Background

3. On or about December 5, 2003, in Case No. 2003-00252, the Commission approved Duke Energy Kentucky's acquisition of three generating stations from Duke Energy Ohio, Inc. (Duke Energy Ohio): the Woodsdale Generating Station (Woodsdale), Miami Fort Unit 6 (MF6), and East Bend.³ Effective as of January 1, 2006, Duke Energy Kentucky completed the acquisition of these three generating stations.

4. Woodsdale is a six-unit, 492 MW (net installed capacity,⁴ summer rating with inlet cooling) combustion turbine station located in Butler County, Ohio. Five of the units were commissioned in 1992, with the sixth in 1993. Woodsdale has dual fuel capability (natural gas and propane) and black start capability. Woodsdale is interconnected to two interstate natural gas pipelines – Texas Eastern Transmission Company and Texas Gas Transmission Company. The station's output is connected to the Duke Energy Ohio 345 kV transmission system.

5. MF6 is a 163 MW (net installed capacity) coal-fired, base load or intermediate load plant located in Hamilton County, Ohio. MF6 was commissioned in 1960 and is one of three coal-fired units currently operating at the Miami Fort Station.

³ *In the Matter of the Application of The Union Light, Heat, and Power Company for a Certificate of Public Convenience and Necessity to Acquire Certain Generation Resources and Related Property, for Approval of Certain Accounting Treatment, and for Approval of Deviation from Requirements of KRS 278.2207 and 278.2213(6)*, Case No. 2003-00252, Order (December 5, 2003). The asset acquisition was completed January 25, 2006.

⁴ Net installed capacity is the capacity available after allowing for power used to operate the plant machinery.

Duke Energy Kentucky is the sole owner of MF6, while Duke Energy Commercial Asset Management and DP&L co-own the remaining two coal-fired units at Miami Fort, known as Units 7 and 8.⁵ MF6 is designed to burn low-to-medium sulfur eastern bituminous coal. It is equipped with second generation low NO_x burners. MF6 has a 5.0 lbs/MMBTU SO₂ emission limit. MF6 shares coal handling and fuel oil storage systems, as well as other equipment, with Units 7 and 8. When the Commission approved Duke Energy Kentucky's acquisition of the three generating stations in 2003, MF6 was estimated as having a remaining useful life of approximately seventeen years, estimated to be through 2020.⁶

6. East Bend is a 600 MW (net installed capacity) base load, coal-fired station located in Rabbit Hash, Boone County, Kentucky. East Bend was commissioned in 1981 and is designed to burn low-to-high sulfur eastern bituminous coal. It is equipped with a lime-based flue gas desulfurization system (FGD)⁷ along with a selective catalytic reduction (SCR) control system, which is designed to reduce NO_x emissions by 85%. East Bend has a 1.2 lbs/MMBTU SO₂ emission limit. East Bend's output is directly connected to the 345 kV transmission system operated by Duke Energy Ohio.

7. East Bend is jointly owned by Duke Energy Kentucky (69% or approximately 414 MW of net installed capacity) and DP&L (31% or approximately 186

⁵ Duke Energy Ohio is under a regulatory obligation to transfer its ownership interest in its legacy generating assets to a non-regulated affiliate by December 31, 2014. Duke Energy Ohio transferred its interest in the Miami Fort Station effective May 1, 2014, to a separate LLC owned by Duke Energy Commercial Asset Management.

⁶ *In the Matter of the Application of The Union Light, Heat, and Power Company for a Certificate of Public Convenience and Necessity to Acquire Certain Generation Resources and Related Property, for Approval of Certain Accounting Treatment, and for Approval of Deviation from Requirements of KRS 278.2207 and 278.2213(6)*, Case No. 2003-00252, Order, Appendix A (December 5, 2003).

⁷ East Bend is a scrubbed generating station.

MW of net installed capacity). As the majority owner, Duke Energy Kentucky staffs, controls, maintains, and operates the unit pursuant to the terms of The East Bend Unit 2 Operation Agreement Between The Cincinnati Gas & Electric Company and The Dayton Power and Light Company (Operation Agreement).⁸ The Operation Agreement was entered into when East Bend went into full commercial operation in 1981 and provides that Duke Energy Kentucky and DP&L share proportionally in the costs and output of East Bend.

8. The Operation Agreement had an initial term of 33 years through March 24, 2014. The Company and DP&L were not successful in negotiating a new agreement prior to the expiration of the Operation Agreement.⁹ DP&L has indicated its intentions to no longer participate in the joint ownership of East Bend and further, to transfer or sell its ownership interest in East Bend to an affiliate merchant generator or an unaffiliated third party.¹⁰ Pursuant to a directive from the Public Utilities Commission of Ohio (PUCO) upon approval of DP&L's most recent electric security plan for a standard service offer of competitive retail electric service, DP&L is in the process of transferring or selling all of its generating fleet and must complete its divestiture by January 1, 2017.¹¹ DP&L currently has an asset transfer application pending before the PUCO.¹² As a result, Duke

⁸ The Operation Agreement was assigned to Duke Energy Kentucky (f/k/a Union Light Heat & Power Company) as part of the acquisition of East Bend, Woodsdale, and MF6 in Case No. 2003-00252.

⁹ Article VII of the Purchase Agreement governs terms of the operation of East Bend while the East Bend Purchase is pending.

¹⁰ *In the Matter of the Application of the Dayton Power and Light Company for Authority to Transfer or Sell Its Generation Assets*, Case No. 13-2420-EL-UNC, Application (December 30, 2013); Supplemental Application (February 25, 2014); Amended Supplemental Application (May 25, 2014).

¹¹ *In the Matter of the Application of Dayton Power & Light Company for an Electric Security Plan*, Case No. 12-426-EL-SSO, *et al.*, Fourth Entry on Rehearing, at pp 5-6 (June 4, 2014).

¹² *See, In the Matter of the Application of the Dayton Power and Light Company for Authority to Transfer or Sell Its Generation Assets*, Case No. 13-2420-EL-UNC, Application (December 30, 2013), Supplemental Application (February 25, 2014); Amended Supplemental Application (May 25, 2014).

Energy Kentucky has the opportunity to acquire the remaining 31% interest in East Bend from DP&L. Otherwise, DP&L may sell its interest to an unknown third party.

9. Duke Energy Kentucky has previously indicated to this Commission that the Company was evaluating the feasibility and cost of compliance with new federal environmental compliance regulations, particularly the United States Environmental Protection Agency (EPA) Utility Maximum Achievable Control Technology (MACT) standard that has now been finalized as the Mercury and Air Toxics Standards (MATS) rule, of the Company's current portfolio of generating assets.¹³ East Bend is well positioned to meet this new regulation.¹⁴

10. In the Company's 2011 Integrated Resource Plan (IRP), Duke Energy Kentucky indicated that complying with these new federal environmental compliance regulations, particularly the MATS rule, may necessitate the early retirement of MF6.¹⁵ As a result, Duke Energy Kentucky has been evaluating the cost of continued operation of MF6 and its costs to meet MATS.

11. MATS compliance for MF6 would require significant capital expenditures for scrubbing technologies, such as sorbent injection, because the unit does not have a FGD. MATS compliance would also add additional and incremental operations and maintenance expense (O&M) at the unit. The retrofit would require fuel switching to a different fuel basin that will substantially increase delivered coal costs, necessitate dry ash handling conversions and landfill expansions, and cause operational impacts and

¹³ *In the Matter of Duke Energy Kentucky's 2011 Integrated Resource Plan*, Case No. 2011-00235, (July 1, 2011).

¹⁴ The Woodsdale Generating Station is not affected by MATS.

¹⁵ *In the Matter of Duke Energy Kentucky's 2011 Integrated Resource Plan*, Case No. 2011-00235, (July 1, 2011).

additional costs to other units at the Miami Fort station. Lastly, the compliance plan considered would have required a system averaging with the other units at the Miami Fort station and made MF6 dependent upon the continued operation of Units 7 and 8 to meet MATS thresholds. With Duke Energy Ohio transferring its ownership of all generating stations to a non-regulated affiliate as ordered by the PUCO, and further Duke Energy Corporation seeking the sale of its non-regulated generation fleet to a third party, it is unknown whether Duke Energy Kentucky could depend upon Units 7 and 8 for site averaging in the future or at what cost. It is anticipated that Units 7 and 8 will be owned by an unaffiliated third party and this third party may be unwilling to assist Duke Energy Kentucky without compensation. In such a circumstance, MF6 would likely need to stand on its own. Further, if a MATS compliance path were selected for MF6, the Company's evaluation in this regard would only permit the MF6 station to run no longer than 2020, when it would need to be retired and replaced due to both age and the onset of other environmental regulations. In other words, retrofitting MF6 does not provide a meaningful long-term capacity solution and is not as cost effective as the East Bend Purchase in the long-term.

12. Given the aforementioned costs of MATS compliance, if Duke Energy Kentucky is able to procure a lower cost alternative to MF6 MATS compliance, the potential MF6 retirement may occur at any time prior to June 1, 2015.¹⁶

13. If MF6 is retired, the Company will have to replace the lost MWs because

¹⁶ At the time of the filing of Duke Energy Kentucky's IRP in 2011, the MATS regulation was assumed to be effective January 1, 2015. Now, the MATS regulation is currently scheduled to become effective April 15, 2015. On or about December 12, 2013, Duke Energy Kentucky obtained a 45-day extension of compliance to align with the planning year cycle of PJM. As such, for MATS compliance purposes, MF6 must either retire or comply with MATS by June 1, 2015.

it does not have existing excess base/intermediate generation capacity to such an extent that it could simply cover any deficiency with those remaining generating resources and satisfy its FRR obligation and meet customer load obligations.

14. To assist the Company in evaluating how and when to replace such lost MWs, on or about June 3, 2013, Duke Energy Kentucky issued a long-term Request for Proposal (RFP) for supply-side capacity resource options that included, but were not limited to, the acquisition of generating capacity necessary to satisfy the Company's load obligations in the Commonwealth of Kentucky and the self-supply capacity requirements in PJM as a FRR entity.¹⁷ Duke Energy Kentucky received responses from bidders that included nearly 30 resource options. From this list, Duke Energy Kentucky narrowed the proposals down to a "short list" of seven possible capacity solutions using a base case predicated upon the estimated cost of compliance for continued operation of MF6 into 2020, at which point the unit would be retired and replaced with a new combined cycle of comparable size. Of this short list, it was determined that the option of purchasing the 31% interest of East Bend from DP&L for the Purchase Price was the reasonable least cost and best option for Duke Energy Kentucky and its customers.

15. The East Bend Purchase produces many benefits to Duke Energy Kentucky's customers, including:

- a. Favorable Costs. The East Bend Purchase translates to the addition of 186 MW of net installed capacity for \$12.4 million. It is the least cost supply

¹⁷ Duke Energy Kentucky operates as an FRR entity as directed by the Commission in Case No. 2010-00203. As an FRR entity, Duke Energy Kentucky's load and generation needs are not satisfied through the PJM auction construct, but rather Duke Energy Kentucky must submit an FRR capacity plan that identifies specific generating resources that provide the Company with capacity to meet its reliability obligations. This plan is submitted annually for a period three delivery years into the future. Duke Energy Kentucky currently uses its owned generating resources to satisfy its FRR plan.

option for the Company's future generation needs, equaling an upfront investment that is significantly below the next best option bid in response to the Company's independently administered RFP.

b. Operational Flexibility. The East Bend Purchase replaces approximately 163 MW of installed capacity at MF6 that may be economically retired by June 1, 2015, due to the MATS rule, or otherwise as early as approximately 2020 due to a suite of other pending federal environmental regulations and station age.¹⁸ Consequently, the East Bend Purchase allows the Company greater flexibility to decide to retire MF6 and, in turn, avoid the costs of MATS compliance that would otherwise ultimately be borne by Kentucky ratepayers.¹⁹

c. Additional Value to Customers (Energy). The East Bend Purchase is slightly larger in terms of net installed capacity to that of MF6 and will thus provide additional cushion to meet load obligations and reserves, as well as, enhancing the customer's hedge against real-time energy price exposure. The energy derived from the East Bend Purchase will provide value to customers both in terms of serving native customer load and to the extent the Company is able to achieve off-system sales in either the PJM Day-Ahead or Real-Time energy markets. Such off-system energy sales, (allocated as "non-native") will be

¹⁸ *In the Matter of Duke Energy Kentucky's 2011 Integrated Resource Plan*, Case No. 2011-00235 (July 1, 2011).

¹⁹ Although it is possible that the East Bend Purchase could result in the Company having some excess generation capacity following the closing of the transaction and prior to the retirement of MF6, this period would likely only be a matter of a few months. The operational flexibility afforded by the East Bend Purchase more than justifies the overlapping period where the DP&L portion of East Bend and MF6 would both be available as generation resources.

included as part of the net off-system sales calculation shared through the Company's Profit Sharing Mechanism (Rider PSM).

Further, during any interim period where energy from both the East Bend Purchase and MF6 is available, the proceeds, if any, resulting from the Company's ability to sell any excess energy in either the day-ahead or real-time energy markets would flow through Rider PSM and be considered as part of the calculation for net off-system sales for which customers receive the majority of the benefits.²⁰

d. Additional Value to Customers (Capacity). With respect to the approximately 186 MWs of net installed capacity attributed to the East Bend Purchase, DP&L has already committed its interest in East Bend to PJM's base residual auction (BRA) through May 31, 2018.²¹ Upon closing of the transaction, Duke Energy Kentucky will begin receiving the PJM capacity revenues associated with DP&L's PJM capacity commitment. Duke Energy Kentucky will net those PJM capacity revenues against any costs the Company must incur to acquire unit-specific capacity to satisfy the Company's FRR obligations, such as replacing the MF6 capacity that will no longer be available if and when the unit is retired.

As explained further below, the Company is proposing that the difference between capacity revenues and the costs the Company incurs to satisfy its FRR obligation to provide unit specific capacity to meet customer demand, positive or

²⁰ Under the terms of Rider PSM, customers receive the first \$1 million of net off-system sales for energy and ancillary services, after which customers receive 75% of the net proceeds.

²¹ See Paragraphs 23-34, *infra*. DP&L, while a member of PJM, participates in the BRA and is not an FRR entity. The actual number of MWs committed in the BRA can vary per delivery year and can change due to factors such as forced outage ratings.

negative, will flow through and be shared under the Company's Rider PSM. To the extent the PJM capacity revenues exceed the costs to satisfy any FRR plan deficiencies in any given year, customers will receive a direct benefit through a sharing of the net capacity revenues. To the extent the costs of satisfying the FRR obligations exceed the PJM capacity revenues, customers could see a charge through Rider PSM. This treatment of capacity revenues and the ability to have a solution to satisfy customer load through the FRR plan will allow customers to benefit immediately from the capacity acquired from the East Bend Purchase, and if the capacity revenues ultimately exceed costs, even see a direct credit.

e. Greater Efficiency. The East Bend Purchase will allow Duke Energy Kentucky to be the sole owner of the East Bend station and no longer be subject to a joint operation obligation. Because of recent developments in Ohio's regulatory structure, DP&L is committed to transferring its interests in all generating stations out of the utility.²² In a recent regulatory filing in Ohio, DP&L indicated that it may sell those interests to a third party.²³ As a result, purchasing DP&L's 31% interest in the East Bend station provides clarity to Duke Energy Kentucky and will allow the Company to avoid being forced into entering into a new joint-ownership arrangement with an unknown third party in the future that may have a more merchant generation operational strategy for the station as

²² *In the Matter of the Application of Dayton Power & Light Company for an Electric Security Plan*, Case No. 12-426-EL-SSO, *et al.*, Second Entry on Rehearing at pp 17-18 (March 19, 2014); and *In the Matter of the Application of the Dayton Power and Light Company for Authority to Transfer or Sell Its Generation Assets*, Case No. 13-2420-EL-UNC, Application (December 30, 2013); Supplemental Application (February 25, 2014); Amended Supplemental Application (May 25, 2014).

²³ *Id.*

opposed to Duke Energy Kentucky's philosophy, which is that of a regulated utility.

f. Environmental Benefits. The East Bend Purchase, once consummated, will provide the Company with a comparable number of MWs of capacity to replace MF6 once it is retired. The East Bend Purchase, coupled with the eventual retirement of MF6, results in a reduction in Duke Energy Kentucky's overall environmental footprint in that the Company will eventually be replacing the unscrubbed MF6 coal-combustion station with an interest in a scrubbed coal-fired asset that is currently owned and operated by the Company, already situated in Kentucky, and at least in part, burns Kentucky coal.

g. Avoided Litigation/Uncertainty. Duke Energy Kentucky and DP&L have not been able to come to terms on a replacement Operation Agreement and disagree regarding East Bend's future and operations and each party's ongoing responsibilities as co-owners. The East Bend Purchase will allow the Company to avoid what would likely be protracted litigation regarding the rights and obligations of the joint owners with respect to the station, the outcome of which brings unwelcome uncertainty to both the Company and its customers in terms of capacity availability and overall costs.

h. Lower Fuel Cost. Historically, the fuel expense for East Bend has been lower than that of MF6, primarily because East Bend is able to burn a less expensive, higher sulfur content eastern bituminous coal as compared to MF6.

i. Commitment to the Commonwealth. Duke Energy Kentucky's purchase of the remaining 31% of East Bend represents a furthering of the

Company's commitment to its operations within the Commonwealth of Kentucky. East Bend is physically located in Boone County, Kentucky, provides full time employment for 92 employees, and is fueled, at least in part, by Kentucky coal. The other RFP responses that were evaluated were not physically located within Kentucky.

Summary of the East Bend Purchase Terms and Conditions

16. As the 69% majority owner and sole operator, Duke Energy Kentucky is currently responsible for the majority of all costs and liabilities for East Bend. Duke Energy Kentucky intends to purchase the remaining 31% interest in East Bend for the agreed-upon price of \$12.4 million pursuant to the terms of the attached Purchase Agreement.²⁴ As part of the terms contemplated in this purchase, Duke Energy Kentucky will become the sole owner of East Bend and will acquire all of DP&L's right, title, and interest in and to all the assets primarily related to East Bend as set forth in the Purchase Agreement and will assume all of DP&L's liabilities, including any and all environmental liabilities, to the extent arising from, or related to, the purchased assets or the operation or retirement of East Bend.²⁵

17. Upon consummation of the transaction, the Company will be solely responsible for any and all past, present, and future environmental liabilities. This assumption of liabilities is a key provision to the East Bend Purchase and, as such, is reflected in the Purchase Price agreed upon by the parties. As Duke Energy Kentucky is already the majority owner and sole operator of East Bend, the Company is presently

²⁴ Exhibit A, Purchase Agreement, Article III.

²⁵ The Purchase Agreement identifies certain liabilities that will be retained by DP&L, principally certain taxes and the indebtedness that is secured by a lien on its interest in East Bend. Exhibit A, Purchase Agreement, Article II.

responsible for the majority of costs and liabilities associated with East Bend, including any necessary future remediation or retrofit that may be required in compliance with applicable federal, state, or local environmental regulations.

18. Upon consummation of the East Bend Purchase, Duke Energy Kentucky would be solely responsible for all costs of operation and maintenance of East Bend.

19. The Purchase Agreement allows Duke Energy Kentucky to make a financial adjustment for the unreimbursed outage costs associated with DP&L's share in East Bend that the Company will have to cover against the purchase price paid to DP&L. There will also be a financial adjustment with respect to certain pre-paid items, including but not limited to, fuel inventories and post-employment pension and benefits, and taxes for which DP&L has already paid for but will no longer have any interest. The final adjustment of amounts owed to DP&L will be determined within 90 days after closing. The final purchase price for valuing the asset for purposes of rates will be \$12.4 million.

20. Under the terms of the East Bend Purchase, once consummated, Duke Energy Kentucky will receive the PJM revenues associated with DP&L's share of East Bend capacity that DP&L previously committed in the BRA through May 2018.²⁶ Assuming the transaction closes before the end of the PJM 2014/2015 delivery year, Duke Energy Kentucky will receive the pro-rata portion of the monthly PJM capacity revenues attributed to the 31% interest in East Bend for the 2014/2015 delivery year. Duke Energy Kentucky then also receive all of the capacity revenues for the 2015/2016, 2016/2017 and 2017/2018 delivery years.

²⁶ Exhibit A, Purchase Agreement, Article II, 2.1(c). DP&L, like Duke Energy Kentucky, is a member of PJM. However, unlike Duke Energy Kentucky, DP&L is not an FRR entity, but rather participates in the PJM BRA construct. See discussion *infra* at paragraphs 23-33.

21. The Purchase Agreement is subject to Duke Energy Kentucky receiving all necessary approvals, including, but not limited to, Commission approval to assume all of the liabilities associated with the purchase and the financing and accounting treatment for operation of DP&L's share of East Bend and is further conditioned upon terms and conditions acceptable to Duke Energy Kentucky. DP&L has similar conditions with respect to its regulatory approvals for the sale of East Bend.

22. The term of the Purchase Agreement is through December 31, 2014, after which time either party may terminate the transaction. This date is important for two reasons. First, as previously stated, DP&L is obligated to transfer its interests in all of its generating stations and exit the generation ownership business by a date certain. DP&L thus needs confirmation of whether it will fulfill this obligation, in part, through the sale of its interest in East Bend to Duke Energy Kentucky or transfer that interest to another entity. Second, Duke Energy Kentucky must decide whether to proceed with the expense of bringing MF6 into MATS compliance by June 1, 2015, or to retire the unit. Because of PJM's requirements related to the submission of FRR plans and notice of an asset retirement, the Company must address the retirement/compliance decision in early first quarter 2015. If the retirement strategy is pursued, the Company must replace any capacity in its FRR plan that is specifically attributed to MF6 for delivery years including and after the retirement date, with other unit-specific capacity.²⁷ As such, Duke Energy Kentucky respectfully requests that the Commission issue its Order approving this Application as soon as practicable, but no later than November 1, 2014, so that the

²⁷ In developing its FRR plan, Duke Energy Kentucky must identify the specific generation resources it owns or has contracted for, that meet its capacity obligation under the FRR Plan.

transaction can be completed and subsequent decisions regarding unit retirement and capacity dedication may be made.

The East Bend Purchase Capacity and Request for Accounting Treatment

23. For the PJM delivery years beginning on and after June 1, 2018, Duke Energy Kentucky will be able to use the capacity resulting from the East Bend Purchase as unit-specific capacity to satisfy its FRR plan obligations. The need for unit-specific capacity is a function of the Company's participation in PJM as an FRR entity as directed by the Commission in Case No. 2010-00203.²⁸ As an FRR entity, Duke Energy Kentucky's load and generation needs are satisfied through an FRR capacity plan that identifies the specific generating resources that provide the Company with capacity to meet its reliability obligations, as opposed to Duke Energy Kentucky purchasing all capacity through the BRA. This FRR capacity plan is filed annually and encompasses a delivery three years into the future.

24. Duke Energy Kentucky currently uses its own generating resources to satisfy its FRR plan. If a unit that is currently in that plan is retired, then the Company is no longer able to count the associated MWs as part of the FRR plan. To the extent the FRR plan has a deficiency, those MWs must be replaced or else the plan is non-compliant and the Company is subject to penalties. In replacing capacity for its FRR plan, Duke Energy Kentucky cannot simply purchase additional capacity through the PJM incremental auctions as the products offered in such auctions are generic, not unit-specific capacity. Rather, to meet its FRR obligations, the Company must either engage

²⁸ *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 System Operator to the PJM Interconnection Regional Transmission Organization*, Case No. 2010-00203, Order at 18 (December 22, 2010).

in a bilateral capacity purchase directly with a PJM member that has capacity that is not already committed in the BRA or negotiate a swap transaction with a PJM member whose capacity obligation is not limited to unit specific generation. Swap transactions allow the Company to take advantage of the liquidity of the PJM's Reliability Pricing Model (RPM) auction process. While the Company can manage risk in the auction process through price sensitive bidding strategies, the certainty of a unit-specific bilateral capacity purchase can be a viable option as well.²⁹

25. DP&L, like Duke Energy Kentucky, is a member of PJM. However, unlike Duke Energy Kentucky, DP&L is not an FRR entity, but rather participates in the PJM BRA construct. DP&L has thus already committed its 31% share of East Bend's capacity (East Bend Purchase Capacity) in PJM BRA auctions through the delivery year ending May 31, 2018. In order for Duke Energy Kentucky to include the East Bend Purchase Capacity in the Company's FRR plan before June 1, 2018, the Company must first de-commit the East Bend Purchase Capacity from the BRA and replace or "swap" it with other capacity. This will be accomplished through a series of financial capacity swap transactions where the Company will purchase needed MWs of non-specific capacity through the PJM incremental auction(s) for the associated delivery year and then "swap" it with the corresponding number of MWs for unit-specific East Bend Purchase Capacity. This process will then allow the Company to financially de-commit the East Bend Purchase capacity from the BRA and use the East Bend Purchase Capacity to

²⁹ While the Company is active in the bilateral capacity market as an alternative to purchasing generic capacity in the PJM auction process, the Company's experience has been that PJM unit-specific capacity that is not otherwise committed in the BRA is rare. The availability of unit specific capacity in PJM is generally because it either did not clear the auctions due to cost, or is capacity owned by another FRR entity that has excess capacity.

immediately satisfy any of the Company's FRR plan deficiencies that occur in any delivery year prior to May 31, 2018.

26. Assuming the Commission grants the requested relief, the Company will make its decision to retire MF6 before June 1, 2015. If retired, the MF6 capacity cannot continue to be used as part of the Company's FRR plan and Duke Energy Kentucky will need to replace the MF6 capacity currently in its FRR plan with other unit-specific capacity to satisfy its FRR obligation. The Company can use the East Bend Purchase Capacity to fill any deficiencies including, but not limited to, those created through the early MF6 retirement.

27. To account for the costs of any unit-specific capacity acquisitions necessary to satisfy its FRR plan obligations through May 31, 2018, including, but not limited to, bilateral unit specific capacity purchases and any swap(s) necessary to utilize the capacity resulting from the East Bend Purchase Capacity, Duke Energy Kentucky proposes the following:

a. Upon closing, Duke Energy Kentucky will use the PJM capacity revenue for the East Bend Purchase Capacity to offset the cost of acquiring unit-specific capacity, including but not limited to any replacement capacity necessary to fund the capacity swap transactions. This will allow Duke Energy Kentucky to meet any FRR plan needs and financially de-commit East Bend Purchase Capacity from the BRA for the Company to then use. PJM's capacity clearing prices for the BRAs have been determined through the 2017/2018 delivery year,

but the clearing prices for the incremental auctions have not.³⁰

b. Duke Energy Kentucky will net the costs for fulfilling the FRR plan obligations with unit-specific capacity for each delivery year through May 31, 2018, including any unit-specific capacity purchases or any swaps that must occur to use the East Bend Purchase Capacity, against the PJM revenues derived from DP&L's previous commitment of the East Bend Purchase Capacity into the PJM BRA. The difference, positive or negative, will flow through Rider PSM.

c. The Company respectfully states that, given the limited duration of these capacity revenues, the fact that the sales in the BRA were already made by DP&L, and there is a need to engage in the capacity swaps or direct purchases to replace MF6 capacity once it can no longer be used to satisfy the Company's FRR plan, good cause exists to give the capacity transactions described herein special and different accounting treatment than other net off-system sales that are included under the PSM. The Company therefore requests as follows:

- i. The Company requests that through the PJM delivery year ending May 31, 2018, any net revenue be accounted for independently from the other off-system sales such that it is not subject to the \$1 million threshold before allocation between customers and the Company.
- ii. The Company proposes to account for the sharing of net revenues or costs under the same ratio as other off-system sales whereby

³⁰ The Company will receive a pro-rated share of the capacity payments for the 2014/2105 delivery year upon closing of the transaction and based upon the timing of such closing in reference to the delivery year.

customers receive 75% of the revenues net of costs and the Company receives 25%. This sharing provides the Company with adequate incentive to diligently manage the capacity position to attempt to maximize the benefits for both the Company and its customers. The only exceptions to the existing sharing mechanism being proposed are that the Rider PSM can be a net charge if the cost of obtaining unit-specific capacity to satisfy the FRR plan exceeds the proceeds received from the East Bend Purchase Capacity and that the East Bend Purchase Capacity proceeds will not count against the \$1 million threshold in the Rider PSM formula.

- iii. The Company further requests that in any given delivery year where the costs to satisfy FRR obligations, including to replace any MF6 capacity, through the use of the East Bend Purchase Capacity might exceed the revenues received from PJM, the PSM could function as a charge. Under this limited situation, Duke Energy Kentucky will share in the net costs under the same 75/25% allocation as otherwise applicable under Rider PSM.

28. The treatment of capacity revenues proposed herein allows customers to benefit immediately from the East Bend Purchase Capacity to meet customer load requirements and, to the extent these PJM revenues exceed the costs to accomplish the FRR plan compliance, will result in an immediate benefit through a credit of net off-system sales.

29. Duke Energy Kentucky does not know the incremental auction clearing prices for future delivery years. Similarly, the Company does not know exactly how many MWs it will need to replace in its FRR plan, as the replacement will be driven by changes in the Duke Energy Kentucky load obligation or generation resource capacity credit or should the Company decide to retire MF6. As such, Duke Energy Kentucky cannot guarantee that these revenues will exceed costs associated with purchasing replacement capacity. Historically, the incremental auctions have generally resulted in clearing prices that were much lower than the corresponding delivery year's BRA. Although it is possible that the gross revenues received from the PJM auctions do not completely offset the replacement capacity costs, as explained above, customers will have the added benefit of energy market revenues during the entire period.³¹ The proposed capacity purchase and replacement plan, while potentially resulting in a charge through Rider PSM, guarantees a cost effective alternative to potential deficiency charges if Duke Energy Kentucky were unable to secure resources to meet its FRR obligation.

30. Upon approval of the Application and its decision regarding retirement of MF6, Duke Energy Kentucky will act diligently to replace the capacity at the first opportunity to lock in any benefits and costs for the future delivery years through May 2018.

31. Duke Energy Kentucky regularly examines the cost effectiveness of various strategies such as reliability exchanges, insurance policies, and market mitigation options that may be available to provide a back-up power supply in the event of forced outages at its generating stations. The Company respectfully submits that this is done

³¹ See Paragraph 15c, *supra*.

through a back-up power supply plan (Back-up Plan) that it periodically files with this Commission for approval.³² Today, this plan includes managing this risk through the PJM day-ahead and real-time energy markets, which provide a robust and reasonably priced resource pool. Duke Energy Kentucky intends to continue this Back-up Plan process and continually evaluate reliability strategies for ensuring there is a back-up power supply available to adequately meet the Company's customers' needs.

Request for Certificate of Public Convenience and Necessity and Waivers

32. To accomplish the East Bend Purchase, Duke Energy Kentucky respectfully requests this Commission grant a CPCN in accordance with KRS 278.020, along with appropriate filing deviations.

33. Duke Energy Kentucky respectfully states that there is a need for this project in that the Company must either bring MF6 into MATS compliance by June 1, 2015, or retire the unit. Because of PJM requirements regarding station retirements coupled with when the Company must submit its FRR plan to PJM, the decision to either retire or comply must occur no later than the early part of the first quarter of 2015. The Company does not have excess generation capacity and energy such that it could simply choose to retire MF6 and not replace its MWs. Duke Energy Kentucky needs sufficient capacity to serve its load and meet its reserve requirements and, because of its status as an FRR entity, the capacity must be unit-specific. Based upon the results of the RFP process undertaken to evaluate this decision, the East Bend Purchase is the least cost long-term solution for Duke Energy Kentucky's customers.

³² *In the Matter of the Back-Up Power Supply Plan of Duke Energy Kentucky*, Case No. 2012-00180, Order (April 24, 2012).

34. Further, Duke Energy Kentucky respectfully states that the East Bend Purchase will not result in a wasteful duplication of facilities. The East Bend Purchase is a financial transaction whereby the Company is acquiring an interest in a station, currently situated in Kentucky, currently serving Kentucky customers, and for which the Company already owns the majority interest. The employees at the station are Duke Energy Kentucky employees. The Company is merely acquiring an interest in 186 MWs of net installed capacity at what the Company believes is a reasonable price that will be used to replace the MF6 capacity when that unit is eventually retired. No new construction is required to complete the East Bend Purchase.

35. 807 KAR 5:001, Section 15(2) sets forth the requirements to receive a CPCN for a new construction or extension.

a. In accordance with Section 15(2)(a), the Application herein describes the facts relied upon to show the East Bend Purchase is required by public convenience or necessity in that the East Bend Purchase will allow Duke Energy Kentucky to continue to provide safe, reliable, and reasonably priced retail electric service to customers by acquiring capacity to provide service to the Company's customers and fulfill PJM reliability obligations.

b. In accordance with Section 15(2)(b), the Company has previously filed with the Commission the applicable franchises from the proper public authorities. Additionally, since the East Bend Purchase is a financial transaction and does not require any new construction, no additional permits are necessary. As such, good cause exists for the Commission to grant Duke Energy Kentucky a waiver from this filing requirement pursuant to 807 KAR 5:001, Section 22.

c. In accordance with Section 15(2)(c), Duke Energy Kentucky respectfully states that the East Bend Purchase is a financial transaction that will not involve any construction, nor will it compete with any public utilities, corporations, or persons. As such, good cause exists for the Commission to grant Duke Energy Kentucky a waiver from this filing requirement pursuant to 807 KAR 5:001, Section 22.

d. In accordance with Section 15(2)(d)(1), Exhibit B includes a map depicting the East Bend site. Duke Energy Kentucky respectfully requests a waiver of the filing requirement set forth in Section 15(2)(d)(2) requiring plans and specifications and drawings of the proposed plant, equipment, and facilities. The East Bend Purchase is a financial transaction of an asset already owned in part by Duke Energy Kentucky and operated by the Company and it does not involve any new construction. As such, good cause exists for the Commission to grant Duke Energy Kentucky a waiver from this filing requirement pursuant to 807 KAR 5:001, Section 22.

e. In accordance with Section 15(2)(e), the Company states that it proposes to finance the East Bend Purchase through continuing operations and debt instruments, as necessary. In addition, the Company will eventually seek to include the East Bend Purchase in base rates through a subsequent rate case filing. A final decision in regard to the timing of such a filing has not yet been reached and may depend upon the potential retirement of MF6.

f. In accordance with Section 15(2)(f), Duke Energy Kentucky already owns the majority interest in the East Bend facility, staffs and operates the

facility, and as such, is responsible for 69% of the total cost of operating East Bend. Duke Energy Kentucky's costs of owning and operating 69% of East Bend were established in the Company's last electric base rate proceeding in Case No. 2006-00172 and thus are currently in rates.³³ The fuel expense for East Bend is regularly reviewed by the Commission and reported to the Commission through the Company's fuel adjustment clause. The East Bend Purchase will result in Duke Energy Kentucky being responsible for the remaining 31% of such costs. The average estimated annual cost of operation (incremental non-fuel O&M) associated with operating DP&L's 31% interest in East Bend, based upon FERC Form 1 data over the last three years, is approximately \$12.2 million. The Purchase Price is significantly below the next best alternative received in response to the RFP.

g. Consistent with the Commission's Order in Case No. 2008-00408, the Company continuously evaluates opportunities for energy efficiency and demand side management (DSM) to meet its resource needs.³⁴ Currently, the Company offers thirteen discrete programs with dozens of separate measures, including demand response opportunities for its customers. The Company makes regular and annual DSM filings to both update existing measures and to propose new and cost-effective measures for its customers.³⁵ The East Bend Purchase, however, is intended to satisfy a long-term firm need for a significant number of

³³ *In the Matter of the Application of the Union Light Heat and Power Company D/B/A Duke Energy Kentucky for an Adjustment of Electric Rate*, Case No. 2006-00172, Order (December 21, 2006).

³⁴ *In the Matter of the Consideration of the New Federal Standards of the Energy Independence and Security Act*, Case No. 2008-00408, Order at p.18 (July 24, 2012).

³⁵ See e.g. *In the Matter of Annual Cost Recovery Filing for Demand Side Management by Duke Energy Kentucky, Inc.*, Case No. 2013-00395, Application (November 15, 2013).

MWs of capacity that must be specifically identified and tied to a specific resource so to replace existing MWs of capacity that could then be retired due to MATS. To the extent that current and specific demand response opportunities exist through the Company's DSM programs, they are already included in the Company's FRR plan.

Request for Approval of Other Accounting Treatment and Assumption of Certain Liabilities Pursuant to KRS 278.300 and Other Applicable Law.

36. To effectuate the East Bend Purchase, Duke Energy Kentucky respectfully requests the Commission authorize the full Purchase Price be recorded as the new value of the 31% interest in East Bend for future rate making. The Company further requests the Commission authorize the Company to assume substantially all of the pre-closing and future liabilities associated with DP&L's remaining 31% interest in East Bend as set forth in the Purchase Agreement, including any and all environmental liabilities.³⁶ The Purchase Price is significantly below the historical cost of DP&L's 31% interest in the station. Although DP&L did take a \$76 million impairment related to its interest in East Bend as reflected in its 2013 FERC Form 1, such impairment is not reflective of the asset's true value to Duke Energy Kentucky. And based upon similar acquisitions, the Company believes that the Purchase Price does not require an acquisition adjustment according to the FERC uniform system of accounts (USOA). Duke Energy Kentucky does not agree that DP&L's share of East Bend is or should be recorded as zero once sold to Duke Energy Kentucky. The Company believes the full Purchase Price represents an investment that should be considered as the value of the new plant in service for future

³⁶ The Purchase Agreement identifies certain liabilities that will be retained by DP&L, principally certain taxes and indebtedness that is secured by a lien on its interest in East Bend.

rate making in that it reflects an investment made by the Company on behalf of its customers in physical capacity at East Bend. Duke Energy Kentucky understands that DP&L decided to impair its interest in East Bend some time during the RFP process, but after it had submitted its bid. At the time of the impairment, it was apparent that DP&L would no longer continue to own and use the asset in the future given the Ohio regulatory obligations and had entered into good faith negotiations with the Company for a potential purchase of its interest. The circumstances for Duke Energy Kentucky were and are quite different as the Company has no intention to divest its interest in East Bend and fully anticipates holding this asset for use and future utility service. The Purchase Price for DP&L's share of East Bend includes DP&L's share of land surrounding the East Bend site as well as rights to capacity revenues to be received by PJM that are directly attributable to DP&L's 31% interest.³⁷ The incremental interest will provide additional energy as well as capacity value to Duke Energy Kentucky's customers over the long-term ownership of the interest.

37. Assuming, *arguendo*, that the Purchase Price would result in an acquisition adjustment, Duke Energy Kentucky submits that the circumstances of this transaction warrant the treatment of the Purchase Price as the new book value of the incremental 31% interest in East Bend in accordance with prior Commission precedent.³⁸

³⁷ The total area of land surrounding the East Bend site and that will be eventually transferred to Duke Energy Kentucky is approximately 940 acres. DP&L has a 31% interest with Duke Energy Ohio owning the remaining 69% interest. The balance of land is owned solely by Duke Energy Kentucky's affiliate Tri-State Improvement. Duke Energy Ohio and Tristate Improvement will transfer their interests to Duke Energy Kentucky through a separate transaction.

³⁸ See e.g. *In the Matter of the Application of Delta Natural Gas Company, Inc. for an Order Authorizing the Purchase of Assets of Mount Olive Natural Gas Company*, Case No. 1998-00613, Order (September 7, 1999) ("plant acquisition adjustments should not be denied as a matter of rigid rate making policy but that each instance should be evaluated on its own merits."); see also, *In the Matter of An Adjustment of Rates of Delta Natural Gas, Inc.*, Case No. 9059, Order at p. 3 (September 11, 1985).

a. The Purchase Price was established through an arms-length negotiation where multiple issues were discussed and addressed in the Purchase Agreement.

b. The overall operations and financial condition of Duke Energy Kentucky benefit from the acquisition. The Purchase Price is substantially less than the other options evaluated under the RFP as well as the cost of MATS compliance for MF6. The East Bend Purchase will allow Duke Energy Kentucky to be the sole owner and decision maker with respect to the ongoing operation of East Bend and avoids the possibility of Duke Energy Kentucky finding itself in a joint ownership relationship with an unknown third party that acquires DP&L's interest.

c. The initial investment, along with the ongoing operational costs, will not adversely impact the overall costs and rates of Duke Energy Kentucky's current or future customers. Duke Energy Kentucky currently owns the majority interest in East Bend. Also this acquisition of the remaining 31% will allow the Company to avoid additional costs and incremental O&M related to MF6 MATS compliance. Once retired, costs attributed to MF6 will be greatly reduced, if not eliminated, thus offsetting or at least mitigating any incremental costs for owning and operating 100% of East Bend.

d. Operational economies can be achieved through the acquisition. Duke Energy Kentucky will be acquiring 186 MWs of net installed capacity of scrubbed coal-fired generation that will be dedicated to Kentucky customers and eventually replace 163 MWs of unscrubbed coal-fired capacity. The East Bend

acquisition will allow the Company to own all of East Bend and be the sole decision maker with respect to ongoing maintenance and operations. The East Bend Purchase is the least cost option as compared to the next best resource alternatives evaluated under the RFP, and gives the Company sole control over a Kentucky-sited generating asset.

e. The Purchase Price for the 31% interest is clearly identified as it represents the Company's investment in and acquisition of the remaining interest in East Bend, the surrounding land, and the rights, benefits, and associated liabilities with DP&L's interest.

f. The purchase will result in overall benefits in the financial and service aspects of Duke Energy Kentucky's utility operations. The East Bend Purchase represents a further commitment to the Company's investment in coal-fired generation physically located in Boone County Kentucky. The Purchase Price is significantly lower than the historical cost for 31% interest, which was \$76 million prior to December 31, 2013.³⁹ The 186 MWs of net installed capacity could replace the 163 MWs of MF6 net installed capacity that will eventually be retired. Consistent with the sharing provisions of the current Rider PSM, customers will receive the benefits from any incremental off-system sales of energy. Similarly, Rider PSM will be used as a mechanism to share potential gains or losses associated with the capacity transactions required through May 31, 2018, to satisfy the Company's FRR unit-specific capacity obligations. The East

³⁹ The net book value of DP&L's share of East Bend as of March 31, 2014 is actually \$2.5 million due to investments made after December 31, 2013 and will likely continue to change due to normal capital spend until final closing of the transaction. The purchase price will remain \$12.4 million.

Bend Purchase, at the Purchase Price, is the least cost option for meeting the generation needs of the Company's customers and PJM reliability requirements, and is a longer term and more economical solution than bringing MF6 into MATS compliance.

38. KRS 278.300(1) provides in relevant part that “[n]o utility shall issue any securities or evidences of indebtedness, or assume any obligation or liability in respect to the securities or evidences of indebtedness of any other person until it has been authorized so to do by order of the commission.”

39. Duke Energy Kentucky respectfully submits that, in accordance with KRS 278.300(3), the assumption of liabilities is for a lawful object within the corporate purposes of Duke Energy Kentucky, is necessary or appropriate for or consistent with the proper performance by Duke Energy Kentucky of its service to the public, will not impair its ability to perform that service, and is reasonably necessary and appropriate for such purpose.

40. Duke Energy Kentucky is the majority owner and sole operator of East Bend and as such, has maintained East Bend in accordance with good utility practice and in compliance with all current local, state, and federal environmental regulations. East Bend is in full compliance with existing environmental regulations and well positioned to comply with known pending environmental regulations set to come into effect in the near future, such as MATS.

41. The purchase of the remaining 31% of East Bend provides an additional 186 MWs of net installed generating capacity and the associated energy production for the Company's Kentucky customers at what the Company believes is a very reasonable

price. The Purchase Price reflects a price negotiated in contemplation of Duke Energy Kentucky's purchase of DP&L's interest in the asset and the land surrounding the asset, as well as the assumption of the environmental and other liabilities for East Bend. The assumption of these liabilities was a key point of negotiation regarding the Purchase Price agreed upon between Duke Energy Kentucky and DP&L, which is divesting itself of all generating assets and exiting the business of generating electricity. East Bend was constructed by, and since East Bend's commercial operation date of 1981, has been solely operated by Duke Energy Kentucky or an affiliated company. Duke Energy Kentucky's analysis as part of its RFP, based upon known environmental regulations at this time, shows that the East Bend Purchase results in the least cost resource alternative for the Company's customers compared to the other proposals under the RFP or compared to continued investment in MF6, which absent MATS, is scheduled to retire by 2020 due to age and other emerging environmental regulations.

Request for Deferrals

42. The East Bend Purchase transaction provides many benefits to the Company's customers through the acquisition of a reliable source of capacity to meet their needs. However, the incremental value in terms of rate base growth to the Company is negligible especially compared to the other resource alternatives in response to the RFP. As such, it is essential that, as part of this transaction, the Company receive reasonable regulatory assurance of future rate recovery and treatment of costs as described in this Application through the accounting, financing and deferral treatments requested herein.

43. To effectuate the East Bend Purchase, Duke Energy Kentucky respectfully requests the Commission authorize the Company to accumulate and defer for review and recovery in its next electric base rate case proceeding: 1) the additional incremental O&M, above amounts currently reflected in base rates that is associated with the Company's purchase of DP&L's 31% interest in East Bend; 2) to the extent necessary, any and all retirement costs associated with the normal retirement of MF6 as a result of MATS; 3) carrying costs based upon the Company's cost of debt; and 4) any other incremental costs related to the assumed liabilities or otherwise necessary to effectuate the purchase.

44. Duke Energy Kentucky will assume the costs associated with the operation of DP&L's share of East Bend immediately upon closing. This means that the Company, upon closing, will be immediately responsible for an additional 31% of the capital and O&M associated with running East Bend. Duke Energy Kentucky's current base electric rates went into effect in 2007 and were based upon a 2007 forecasted test year. As such, the current base electric rates include costs associated with the Company's operation of its current fleet, prior to the East Bend Purchase. As such, the Company respectfully requests deferral authority for the incremental O&M expense associated with the operation of the newly acquired 31% interest estimated to be approximately \$12.1 million per year, based upon FERC Form 1 data, until such time as Duke Energy Kentucky files its next base rate case. At that time, the Company will include the costs of operating 100% of East Bend as part of the test year operating expense and propose an amortization of the prudently incurred incremental O&M expense for the additional portion of East Bend incurred prior to the test year.

45. FASB Codification 980-340-25-1 provides for the creation under prescribed circumstances of a regulatory asset such as Duke Energy Kentucky proposes herein. FASB Codification 980-340-25-1 states in pertinent part:

Rate actions of a regulator can provide reasonable assurance of the existence of an asset. An enterprise shall capitalize all or part of an incurred cost that would otherwise be charged to expense if both of the following criteria are met:

- a. It is probable (as defined in Topic 450) that future revenue in an amount at least equal to the capitalized cost will result from the inclusion of that cost in the allowable costs for ratemaking purposes.
- b. Based upon the available evidence, the future revenue will be provided to permit recovery of the previously incurred cost rather than to provide for expected levels of similar future costs...

46. Pursuant to KRS 278.220, the Commission is authorized to prescribe accounting to be kept by utilities subject to its jurisdiction. By Order dated January 31, 2002, in Case No. 2001-00092, the Commission required Duke Energy Kentucky to obtain Commission approval to establish any new regulatory assets.

47. In Case No. 2008-00440, the Commission made the following policy statement regarding expenses that it customarily allows as regulatory assets:

(1) An extraordinary, nonrecurring expense which could not have reasonably been anticipated in the utility's planning; (2) an expense resulting from a statutory or administrative directive; (3) an expense in relation to an approved industry initiative; or (4) an extraordinary or nonrecurring expense that over time will result in a saving that fully offsets the cost.⁴⁰

⁴⁰ *Request of Kentucky-American Water Company for Approval to Defer Certain Expenses as Regulatory Assets*, Case No. 2008-00440, Order (December 23, 2008).

48. Once the East Bend purchase is closed and it is determined that MF6 is to be retired on or before June 1, 2015, versus its estimated end of life in 2020, the MF6 retirement would, for accounting purposes, be considered a normal retirement. Under a normal retirement, depreciation expense ceases and the remaining net book value of the retired asset is charged against accumulated depreciation and any cost of removal not incurred related to MF6 would remain in accumulated depreciation assigned to the remaining group of assets in steam production.

49. The normal retirement designation is based upon three primary reasons:

a. The difference in the actual retirement date, assuming a June 1, 2015, retirement, as compared to the date currently being used for depreciation purposes of June 2020, would be five years. Consistent with Duke Energy Corp's Capitalization Guidelines if the remaining useful life is equal to or less than five years, the retirement would be considered normal.⁴¹

b. At the time of the retirement on or before June 1, 2015, the asset was already used for approximately 92% of its useful life (55 years out of a 60 year estimated useful life).

c. Lastly, based on the current level of annual depreciation on MF6, the plant assets will be substantially depreciated at June 1, 2015, or 90.5%, while the undepreciated plant value of MF6 represents approximately 3.6% of the remaining group assets net book value (excluding cost of removal) in steam production plant.

⁴¹ The Company's implemented depreciation study was filed as part of the Company's last base electric rate case. See, *In the Matter of the Application of the Union Light Heat and Power Company D/B/A Duke Energy Kentucky for an Adjustment of Electric Rate*, Case No. 2006-172, Order (December 21, 2006).

50. The estimated remaining net book value of MF6 on June 1, 2015, is \$7.5 million based upon effective depreciation rates approved as part of the Company's last electric rate case. At the time of the potential retirement, on or before June 1, 2015, MF6 will be used for approximately 92% of its useful life (55 years out of a 60 year estimated useful life). Based on the current level of annual depreciation on MF6, the plant assets will be substantially depreciated by June 1, 2015, or 90.5%, while the undepreciated plant value of MF6 represents approximately 3.6% of the remaining group assets net book value (excluding cost of removal) in steam production plant.

51. Based upon the forecasted data used for the test year revenue requirement in the Company's last rate case in 2006, the Company estimates that the non-fuel O&M reflected in the Company's current base rates for MF6 operation is approximately \$4.4 million. Since the Company's last rate increase in 2007, and as reflected in regularly filed FERC Form 1 data, the non-fuel O&M expense has increased at MF6 over what is reflected in base rates. Upon retirement of MF6, some portion (most, if not all) of this non-fuel O&M should go away. As such, the Company will offset the incremental O&M associated with the additional 31% interest from the East Bend Purchase with the actual reduction in non-fuel O&M attributable to MF6 as measured against what was reflected in the Company's 2007 test year so that the Company will only defer the actual incremental costs above what is being collected in base rates. These costs will be subject to review by the Commission for amortization and future recovery as part of the Company's next base rate case.

52. As explained below, Duke Energy Kentucky respectfully submits that the East Bend Purchase and incremental O&M for operations, along with carrying costs,

qualify for deferral treatment under the Commission's previous policy statements in that these costs constitute both expenses from a statutory or administrative directive and a nonrecurring expense that overtime will result in a savings that fully offset the cost. Similarly, the decision to retire or bring MF6 into MATS compliance will result in costs that are derived from a statutory or administrative directive, namely the US EPA's MATS rule. Duke Energy Kentucky's need to acquire additional generation capacity is necessary for the Company to fulfill its statutory obligation under KRS 278.030(2) to furnish adequate, efficient, and reasonable service and in compliance with this Commission's Order in Case No. 2010-00203 that Duke Energy Kentucky function as an FRR entity in PJM until such time as the Company receives Commission approval to participate in the PJM's RPM capacity market.⁴² Further, the Company's decision to pursue the East Bend Purchase is driven by the need to comply with the MATS rule and the significant expense customers will bear to bring MF6 into compliance, including the incremental ongoing O&M that will result, just so it could run until 2020.

53. The East Bend Purchase affords Duke Energy Kentucky the ability to comply with these statutory and administrative directives in the least cost manner and, if approved, to decide to retire MF6.

54. The East Bend Purchase Price is a one-time expenditure that over time will result in savings that fully offset the costs. The Purchase Price will eventually be amortized in the Company's rates and is lower in cost than other supply-side resource options considered, including retrofitting MF6 for compliance with the forthcoming

⁴² *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 System Operator to the PJM Interconnection Regional Transmission Organization*, Case No. 2010-00203, Order at pg. 18 (December 22, 2010).

MATS rule and ongoing incremental O&M followed by its eventual retirement and replacement in 2020. These alternative compliance options are more costly alternatives than that being proposed herein. Also, failing to provide adequate capacity to meet Duke Energy Kentucky's FRR capacity obligation in PJM will result in the assessment of significant financial penalties through the FRR Commitment Insufficiency Charge that is equal to two times the net cost of new entry for each MW of shortage.

55. Over a reasonable period of time, the cost of the East Bend Purchase will be offset through the ability of the Company to meet PJM reliability obligations described above, comply with forthcoming environmental compliance regulations, and the avoidance of financial penalties.

56. Upon approval of Duke Energy Kentucky's requested regulatory asset treatment of its above-described expenses, Duke Energy Kentucky will begin to record the deferred O&M by debiting the 182 Reg Asset account and crediting cash or accounts payable.

Other Necessary Approvals

57. To the extent necessary, Duke Energy Kentucky respectfully requests the Commission permit its Rider PSM to include as part of the net off-system sales calculation both the PJM capacity revenues from the East Bend Purchase Capacity and any necessary costs to provide unit-specific capacity to satisfy any FRR Plan deficiencies, especially those that may occur due to the decision to retire MF6 on or before June 1, 2015. The Company requests that the capacity revenues not be subject to the \$1 million threshold for allocation between customers and the Company. To the extent the PJM capacity revenues from the East Bend Purchase exceed the costs to

acquire unit specific capacity to satisfy the FRR plan reliability obligations in any given delivery year, customers will receive a credit in accordance with the sharing ratio set forth in the PSM. To the extent the PJM capacity revenues do not fully cover the costs of the provision of unit-specific capacity necessary to meet its FRR plan obligations, in any given delivery year, Rider PSM will operate as a charge under that same ratio. The net proceeds or costs will be shared between customers and the Company under a 75%/25% split respectively.

Testimony and Exhibits:

58. Additional facts supporting this Application are set forth in the following Direct Testimony attached to this Application as Exhibits C through I:

a. James P. Henning, President of Duke Energy Kentucky, discusses the Company's operations, the need for the project, and the terms and conditions of the East Bend Purchase;

b. William Don Wathen Jr., Director Rates and Regulatory Strategy Ohio/Kentucky, discusses the likely rate impact of the East Bend purchase, the deferrals necessary, and the future sharing of net proceeds from off-systems sales for the East Bend Purchase under Rider PSM;

c. James Northrup, Director Wholesale & Renewables Analytics, discusses Duke Energy Kentucky's RFP process, analysis, and conclusion that the East Bend Purchase is in the public interest;

d. Steven Immel, Vice President of Midwest Regulated Operations, discusses the Company's operation of the East Bend Station and the costs associated with taking over of the remaining 31% ownership in East Bend.

e. J. Michael Geers, Manager of Duke Energy Corp.'s Environmental Services Air Programs and Air Compliance Groups, discusses the environmental regulations impacting Duke Energy Kentucky's coal-fired generation and more specifically East Bend and its compliance with those current and anticipated environmental regulations;

f. John A. Verderame, Director Power Trading & Dispatch, discusses Duke Energy Kentucky's dispatch of East Bend in PJM and how the Company will meet its PJM reliability obligations upon effectuation of the East Bend Purchase.

g. Will A. Garrett, Director of Accounting Research, discusses the financial and accounting impacts of the potential early retirement of MF6 as a result of MATS and the Company's request for accounting deferrals.

59. Additional facts describing the transaction are also set forth in the following documents:

- a. Exhibit A - Purchase Agreement;
- b. Exhibit B - East Bend Map.

WHEREFORE, Duke Energy Kentucky respectfully requests that the Commission expeditiously issue an Order approving this Application, granting the necessary CPCN, and all waivers of certain filing requirements not applicable to this purchase. In addition, Duke Energy Kentucky requests approval of all necessary deferrals, assumption of liabilities, accounting and tariff treatment, and all other necessary approvals and waivers to complete the transaction. Duke Energy Kentucky respectfully requests that the Commission issue its order as soon as practicable, but no

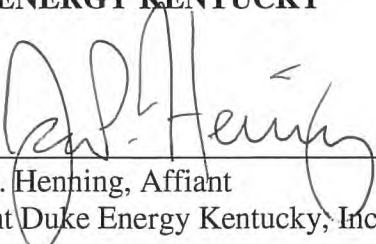
later than November 1, 2014, so that the transaction may close prior to the expiration of the Purchase Agreement on December 31, 2014.

VERIFICATION

STATE OF OHIO)
) SS:
COUNTY OF HAMILTON)

The undersigned, James P. Henning, being duly sworn, deposes and says that he is the President of Duke Energy Kentucky, Inc., that he has personal knowledge of the matters set forth in the foregoing, and that the information contained therein is true and correct to the best of his knowledge, information and belief.

DUKE ENERGY KENTUCKY

By: 
James P. Henning, Affiant
President Duke Energy Kentucky, Inc.

Subscribed and sworn to before me by James P. Henning, President of Duke Energy Kentucky, Inc., on this 12TH day of June 2014.

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


NOTARY PUBLIC

My Commission Expires: 1/5/2019

Its Attorneys,



Rocco O. D'Ascenzo (92796)
Associate General Counsel
Amy B. Spiller (85309)
Deputy General Counsel
Duke Energy Business Services, LLC
139 East Fourth Street, 1313 Main
Cincinnati, Ohio 45201-0960
Phone: (513) 287-4320
Fax: (513) 287-4385
e-mail:rocco.d'ascenzo@duke-energy.com
e-mail:amy.spiller@duke-energy.com

and

Mark David Goss
David S. Samford
Goss Samford, PLLC
2365 Harrodsburg Road, Suite B325
Lexington, KY 40504
(859) 368-7740
e-mail:mdgoss@gosssamfordlaw.com
e-mail:david@gosssamfordlaw.com

CERTIFICATE OF SERVICE

This is to certify that a copy of the foregoing Application of Duke Energy Kentucky, Inc. has been served via overnight mail to the following party on this 13th day of June 2014.

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



Rocco O. D'Ascenzo

EXHIBITS

EXHIBIT A - The Purchase and Sale Agreement Between Duke Energy Kentucky, Inc. and The Dayton Power and Light Company

EXHIBIT B - East Bend Site Map

EXHIBIT C - Direct Testimony of James P. Henning

EXHIBIT D - Direct Testimony of William Don Wathen Jr.

EXHIBIT E - Direct Testimony of James S. Northrup

EXHIBIT F - Direct Testimony of Steve Immel

EXHIBIT G - Direct Testimony of J. Michael Geers

EXHIBIT H - Direct Testimony of John A. Verderame

EXHIBIT I - Direct Testimony of Will A. Garrett



PURCHASE AND SALE AGREEMENT

between

DUKE ENERGY KENTUCKY, INC.

and

THE DAYTON POWER AND LIGHT COMPANY

Dated May 15, 2014



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EXHIBITS

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Exhibit 4.2(a)(ii)	Form of Assignment and Assumption Agreement
Exhibit 4.2(a)(iii)	Form of Corporate Special Warranty Deed
Exhibit 4.2(a)(ix)	Form of Seller's Affidavit of Title
Exhibit 4.2(c)	Form of Termination and Release Agreement

PURCHASE AND SALE AGREEMENT

This **PURCHASE AND SALE AGREEMENT**, dated as of May 15, 2014 is by and between **DUKE ENERGY KENTUCKY, INC.**, a Kentucky corporation ("**DEK**"), and **THE DAYTON POWER AND LIGHT COMPANY**, an Ohio corporation ("**DP&L**"). DEK and DP&L are at times referred to, collectively, as the "**Parties**" and, individually, as a "**Party**".

RECITALS:

A. DP&L and DEK are the co-owners of the coal-fired generating facility commonly referred to as East Bend Unit 2, including the associated real property, fixtures, vehicles, equipment and inventory (the "**Plant**"), with DP&L owning an undivided thirty-one percent (31%) interest, and DEK owning an undivided sixty-nine percent (69%) interest, in the Plant.

B. The Parties entered into that certain East Bend Unit 2 Operation Agreement, dated March 24, 1981 (the "**Operation Agreement**"), which addresses, *inter alia*, the Parties' respective rights and duties with respect to the operation and use of the Plant for the generation of electricity.

C. DP&L desires to sell to DEK, and DEK desires to purchase from DP&L, the Purchased Assets (as defined herein) and to assume the Assumed Liabilities (as defined herein), in each case upon the terms and subject to the conditions set forth in this Agreement.

D. DEK has scheduled a planned outage for the Plant that commenced on March 7, 2014 and is expected to be completed by May 31, 2014 (the "**2014 Spring Outage**").

E. There exist disputes between the Parties regarding the 2014 Spring Outage and the Operation Agreement and the Parties desire to proceed with the transactions contemplated herein without prejudice to their respective positions regarding such disputes, as contemplated by Section 9.2 hereof.

NOW, THEREFORE, for and in consideration of the premises and of the mutual covenants and agreements contained in this Agreement, the Parties hereby agree as follows:

ARTICLE I

DEFINITIONS

1.1 **General.** For all purposes of this Agreement, except as otherwise expressly provided or unless the context otherwise requires:

(a) the terms defined in this Article I have the meanings assigned to them in this Article I and include the plural as well as the singular,

(b) all accounting terms not otherwise defined herein have the meanings assigned under GAAP,

(c) all references in this Agreement to designated “Articles”, “Sections” and other subdivisions are to the designated Articles, Sections and other subdivisions of the body of this Agreement, unless otherwise noted,

(d) pronouns of either gender or neuter shall include, as appropriate, the other pronoun forms,

(e) the word “or” has the inclusive meaning represented by the phrase “and/or”.

(f) the words “herein,” “hereof” and “hereunder” and other words of similar import refer to this Agreement as a whole and not to any particular Article, Section or other subdivision, unless otherwise specified by reference to a particular Article, Section or other subdivision,

(g) the enumeration of one or more items following the term “including” shall not be interpreted as excluding any items not so enumerated, and the terms “include”, “includes”, and “including” shall be deemed to be followed by “without limitation”, and

(h) DP&L may, at its option, include in the Seller Disclosure Letter items that are not material, and any such inclusion, or any references to dollar amounts, shall not be deemed to be an acknowledgment or representation that such items are material or would cause a Material Adverse Effect, to establish any standard of materiality or to define further the meaning of such terms for purposes of this Agreement.

1.2 Definitions. As used in this Agreement, and the Exhibits and Schedules delivered pursuant to this Agreement, the following definitions shall apply:

“2014 Spring Outage” has the meaning set forth in the recitals to this Agreement.

“Adjustment Amount Statement” has the meaning set forth in Section 3.2(a).

“Adjustment Methodology” has the meaning set forth in Section 3.2(a).

“Affiliate” has the meaning set forth in Rule 12b-2 of the regulations promulgated under the Securities Exchange Act of 1934, as amended.

“Agreement” means this Purchase and Sale Agreement, as it may hereafter be amended, supplemented, changed or otherwise modified in accordance with its terms, including the Exhibits and Schedules hereto including the Seller Disclosure Letter.

“Allocation Schedule” has the meaning set forth in Section 3.3.

“Arbiter” has the meaning set forth in Section 3.2(d).

“Assignment and Assumption Agreement” has the meaning set forth in Section 4.2(a)(ii).

“Assumed Contracts” has the meaning set forth in Section 5.10.

“Assumed Liabilities” has the meaning set forth in Section 2.3.

“Bill of Sale” has the meaning set forth in Section 4.2(a)(i).

“Business Day” means a day other than a Saturday, Sunday or other day on which commercial banks in North Carolina or Ohio are generally closed for business.

“CERCLA” means the Comprehensive Environmental Response, Compensation and Liability Act, as amended.

“Claims” means any and all actions, attorneys’ fees, causes of action, Losses, Contracts, contract rights, costs, demands, obligations, promises, representations and warranties, of every kind and nature whatsoever, at Law or in equity, in contract or in tort, whether the facts upon which the same may be based are now known or unknown, which either the DEK Related Parties or the DP&L Related Parties ever had, now have, or may in the future have, against the other for, on account of, or by reason of, any action, transaction, occurrence, series of occurrences, omission, relationship, matter, cause or thing whatsoever, to the extent arising out of or otherwise related to the Plant, the Operation Agreement or the 2014 Spring Outage; provided, however, that Claims shall not include any actions, Losses or other claims arising under this Agreement or any Related Agreements.

“Closing” has the meaning set forth in Section 4.1.

“Closing Date” has the meaning set forth in Section 4.1.

“Closing Cash Consideration” has the meaning set forth in Section 3.1(b).

“Confidentiality Agreement” means that certain Nondisclosure Agreement by and among the Parties dated August 13, 2013.

“Code” means the Internal Revenue Code of 1986, as amended, and the Regulations promulgated thereunder.

“Contract” means any legally binding agreement, contract, commitment or undertaking (whether oral or written and whether express or implied).

“Consent” means, with respect to any Person, any consent, approval, exemption, waiver or authorization from, or any filing or registration or any notification to, such Person.

“Deductible” has the meaning set forth in Section 10.2(b).

“Deed” has the meaning set forth in Section 4.2(a)(iii).

“DEK” has the meaning set forth in the preamble.

“DEK Caps” has the meaning set forth in Section 10.2(b).

“DEK Related Parties” means DEK, each of its Affiliates, and each of their respective directors, officers, managers, employees, agents and representatives and successors and assigns.

“DP&L” has the meaning set forth in the preamble.

“DP&L Caps” has the meaning set forth in Section 10.3(b).

“DP&L Related Parties” means DP&L, each of its Affiliates, and each of their respective directors, officers, managers, employees, agents and representatives and successors and assigns.

“Enforceability Limitations” means limitations on enforcement and other remedies imposed by or arising under or in connection with applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other similar Laws relating to or affecting creditors’ rights generally from time to time in effect or general principles of equity (including concepts of materiality, good faith and fair dealing with respect to those jurisdictions that recognize such concepts).

“Environmental Law” means any and all Laws or Permits relating to pollution or occupational health or safety or protection of human health or the environment (including ambient air, surface water, groundwater, land surface or subsurface strata), including those relating to emissions, releases or threatened releases into or impacting the environment, or otherwise relating to the management, possession, presence, manufacture, generation, processing, distribution, use, treatment, recycling, storage, disposal, transport, sale, offer for sale, distribution or handling of Hazardous Substances. For the avoidance of doubt, “Environmental Law” includes CERCLA, the Emergency Planning and Community Right-to-Know Act, as amended, the Resource Conservation and Recovery Act, as amended, the Occupational Safety and Health Act as amended, the Clean Air Act, as amended, the Clean Water Act, as amended, the Superfund Amendments and Reauthorization Act, as amended, the Oil Pollution Act, the Safe Drinking Water Act, the Federal Insecticide, Fungicide and Rodenticide Act, and the Toxic Substances Control Act, as amended, and the state and local Laws related to, analogous to or implementing such acts.

“Environmental Liabilities” has the meaning set forth in Section 10.2(c).

“Estimated Adjustment Amount” has the meaning set forth in Section 3.1(b).

“Excluded Assets” has the meaning set forth in Section 2.2.

“FERC” means the Federal Energy Regulatory Commission.

“Final Adjustment Amount” means the aggregate amount calculated and set forth in the Adjustment Amount Statement, which can be either a positive or a negative number, equal to (i) the Pre-Paid Amount, *minus* (ii) the Outstanding Outage Costs, and *minus* (iii) the Outstanding Non-Outage Costs. The Pre-Paid Amount, the Outstanding Outage Costs and the Outstanding Non-Outage Costs shall exclude any duplication of charges, expenses, Liabilities, obligations or other amounts so that each charge, expense, Liability, obligation or other amount shall be factored only once in the calculation of the Final Adjustment Amount.

“Forbearance Period” means the period beginning as of the execution date of this Agreement and continuing through and until the earlier to occur of (i) the Closing or (ii) the date this Agreement is terminated pursuant to Section 9.1.

“FPA” means the Federal Power Act of 1935, as amended, together with its implementing regulations.

“Fuel Costs” means those costs associated with the ownership and operation of the Plant that have historically been included on the monthly “Fuel Bill” invoices developed by DEK and presented to DP&L consistent with past practices.

“GAAP” means United States generally accepted accounting principles.

“Governmental Authority” means any federal, state, local or foreign government or subdivision thereof, or any entity, body or authority exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to any federal, state, local or foreign government, including any court, tribunal or arbitrator (public or private).

“Hazardous Substance” means those substances or materials, whether waste materials, raw materials, finished products, co-products, byproducts or any other materials or articles or constituents thereof which (from generation, use, handling, processing, storage, transportation, emission, disposal, spill, release or any other activity or for any other reason) are regulated by, form the basis of liability under, or are defined as a contaminant, pollutant, designated or controlled substance, solid or hazardous waste, hazardous substance, hazardous material or as dangerous, hazardous, toxic, corrosive, flammable, explosive, infectious, radioactive or carcinogenic under any Environmental Law.

“Indebtedness” means, with respect to any specified Person, as of any specified date: (i) all outstanding indebtedness for borrowed money owed to third parties, (ii) accrued but unpaid interest payable with respect to indebtedness referred to in clause (i), (iii) all obligations for the deferred purchase price of property or services (including any potential future earn-out, purchase price adjustment, releases of “holdbacks” or similar payments), (iv) all obligations evidenced by notes, bonds, debentures or other similar instruments (whether or not convertible) or arising under indentures, (v) all obligations arising out of any financial hedging, swap or similar arrangements, (vi) all obligations as lessee that would be required to be capitalized in accordance with GAAP, (vii) obligations in connection with any letter of credit, banker’s acceptance, guarantee, surety, performance or appeal bond, or similar credit transaction, and (viii) the aggregate amount of all prepayment premiums, penalties, breakage costs, “make whole amounts”, costs, expenses and other payment obligations of such Person that would arise (whether or not then due and payable) if all such items under clauses (i) through (vii) were prepaid, extinguished, unwound and settled in full as of such specified date.

“Indemnified Party” has the meaning set forth in Section 10.4.

“Indemnifying Party” has the meaning set forth in Section 10.4.

“Knowledge” means, with respect to any specified Person, such Person’s actual awareness of a particular fact or other matter; provided that (i) with respect to DP&L, “Knowledge” shall mean the actual awareness of a particular fact or other matter of those individuals set forth on Schedule 1.2-1(i), and (ii) with respect to DEK, “Knowledge” shall mean the actual awareness of a particular fact or other matter of those individuals set forth on Schedule 1.2-1(ii).

“Law” means all applicable laws, statutes, ordinances, constitutions, rules, regulations, judgments, rulings, codes, orders, decrees, and ordinances of Governmental Authorities.

“Liability” means any and all debts, liabilities, claims, costs, charges and obligations, whether accrued or fixed, direct or indirect, absolute or contingent, matured or unmatured or determined or determinable, including those arising under any Law, Proceeding or Order and those arising under any Contract.

“Lien” means any mortgage, deed of trust, deed to secure Indebtedness, claim, lien, security interest, pledge, charge, option, right of way, easement, covenant, defect in title, encroachment, lease, right of first option, right of first refusal or other restriction or encumbrance of any kind or character whatsoever.

“Losses” has the meaning set forth in Section 10.2(a).

“Material Adverse Effect” means any result, occurrence, fact, change, circumstance, event or effect that, individually or in the aggregate, has, or could reasonably be expected to have, a material adverse effect on (a) the Purchased Assets or the Assumed Liabilities, in each case taken as a whole, or the condition (financial or otherwise) or operation of the Plant; (b) the ability of DEK to perform its obligations, taken as a whole, under this Agreement or the Related Agreements or to consummate the transactions contemplated hereby or thereby; or (c) the ability of DP&L to perform its obligations, taken as a whole, under this Agreement or the Related Agreements or to consummate the transactions contemplated hereby or thereby; provided, however, that any such effect shall be disregarded in determining whether a "Material Adverse Effect" has occurred or would reasonably be expected to occur to the extent resulting from (i) changes in economic or financial conditions generally or in the industry in which Parties operate (including the electric generating, transmission or distribution industries), whether national, regional or local, (ii) changes in international, national, regional, state or local wholesale or retail markets for electric power or fuel supply or transportation or related products, including those due to actions by competitors, (iii) changes in general regulatory or political conditions, including any acts of war or terrorist activities, (iv) changes in the North American, national, regional, state or local electric transmission or distribution systems, (v) strikes, work stoppages or other labor disturbances, (vi) increases in the costs of commodities or supplies, including fuel, (vii) any change of Law, or any Orders or regulatory policy that apply generally to all similarly situated Persons in the region in which the Plant is located, (viii) the execution or delivery of this Agreement or the consummation of the transactions contemplated hereby or the announcement of any of the matters set forth in this clause (viii), (ix) any adverse change or effect attributable to the announcement, pendency or consummation of the transactions contemplated by this Agreement (including but not limited to any decrease in customer demand, any reduction in revenues, any disruption in supplier, partner, or similar relationships, or any loss of employees) and (x) any actions required to be taken by any DP&L Related Party or DEK Related Party pursuant to this Agreement or taken with the prior written consent of the other Party; provided further, however, that any such change, event or action pursuant to clauses (i), (ii), (iii), (iv), (v), (vi) or (vii) does not affect the Purchased Assets and the Assumed Liabilities, taken as a whole, or the condition (financial or otherwise) or operation of the Plant in a substantially disproportionate manner relative to the effects on other coal-fired generation stations in the

Eastern United States. Without limiting the foregoing, the Parties acknowledge and agree that the 2014 Spring Outage shall not be a Material Adverse Effect for purposes of this Agreement.

"Net Settlement Amount" has the meaning set forth in Section 3.1(a).

"Non-Outage Capital Costs" means costs associated with the ownership and operation of the Plant that have historically been included on the monthly "Capital Bill" invoices developed by DEK and presented to DP&L consistent with past practices, excluding Outage Costs.

"O&M Costs" means costs associated with the ownership and operation of the Plant that have historically been included on the monthly "Statement of Amount Due for Electric Production and Related Overheads" invoices developed by DEK and presented to DP&L consistent with past practices.

"Operation Agreement" has the meaning set forth in the recitals to this Agreement.

"Order" means any order, writ, judgment, injunction, decree, stipulation, determination, ruling or award entered by or with any Governmental Authority.

"Outage Costs" means all capital costs incurred by DEK in connection with the capital projects identified by the project numbers on Schedule 1.2-2.

"Outstanding Non-Outage Costs" means an aggregate amount, which will be set forth on the Adjustment Amount Statement, equal to (i) DP&L's ownership share (determined consistent with past invoicing practices) of (A) Fuel Costs for which DP&L has not remitted payment to DEK pursuant to Section 7.1(a) as of the Closing, plus (B) Non-Outage Capital Costs for which DP&L has not remitted payment to DEK pursuant to Section 7.1(a) as of the Closing; provided that the amount of any such Non-Outage Capital Costs incurred on or after March 1, 2014 which are in excess of One Hundred Twenty-Five Thousand Dollars (\$125,000) during any calendar month period (with such amount to be prorated on a calendar day basis for any partial month) shall be excluded for purposes of this calculation, and plus (C) O&M Costs for which DP&L has not remitted payment to DEK pursuant to Section 7.1(a) as of the Closing; provided that the amount of any such O&M Costs incurred on or after March 1, 2014 which are in excess of One Million Two Hundred Thousand Dollars (\$1,200,000) during any calendar month period (with such amount to be prorated on a calendar day basis for any partial month) shall be, for purposes of this calculation, (1) excluded, if incurred on or after May 1, 2014 and (2) included, if incurred prior to May 1, 2014, and plus (ii) DP&L's prorated ownership share (determined as provided in Schedule 3.2(a)) of any ad valorem property Taxes associated with the operation of the Plant or the Purchased Assets attributable to Pre-Closing Periods.

"Outstanding Outage Costs" means the lesser of (i) DP&L's ownership share (determined consistent with past invoicing practices) of the aggregate Outage Costs incurred prior to the Closing and for which DP&L has not remitted payment to DEK as of the Closing, and (ii) \$9,500,000.

"Party" and "Parties" have the respective meanings set forth in the preamble to this Agreement.

"Permit" means any permit, license, approval or other authorization required or granted by any Governmental Authority.

"Permitted Liens" means (a) Liens, if any, for Taxes, assessments or governmental charges imposed by any Governmental Authority not yet delinquent; (b) Liens of vendors, suppliers, carriers, warehousemen, mechanics, materialmen and repairmen (i) that are not material in nature and (ii) as to which there is no default on the part of DP&L, provided that, as to (b), such Liens are discharged in connection with the Closing; (c) Liens created in favor of any DEK Related Party; and (d) and, as to Real Property, Permitted Real Property Liens.

"Permitted Real Property Liens" means (a) any Liens to which DEK's undivided interest in the Real Property is equally subject and which were not imposed as a result of any unilateral action or failure to act of DP&L, (b) other Liens which do not have a material adverse effect on the value of the Real Property or DEK's ability to use the Real Property after the Closing as it is currently used or, in the case of unimproved Real Property, for activities consistent with integrated utility operations; and (c) any Lien listed on Schedule 1.2-3.

"Person" means an individual, partnership, corporation, business trust, limited liability company, limited liability partnership, joint stock company, trust, unincorporated association, joint venture or other entity or a Governmental Authority.

"Plant" has the meaning set forth in the recitals to this Agreement.

"Pre-Closing Period" means any period ending before the Closing Date, and, with respect to any period that has not ended prior to the Closing Date, the portion of such period through and including the day immediately prior to the Closing Date.

"Pre-Paid Amount" means an amount equal to (i) DP&L's ownership share (determined as provided in Schedule 3.2(a)) of the value at Closing of the following inventories associated with the Plant: coal, fuel oil, lime, ammonia, trona, and materials and supplies, *plus* (ii) DP&L's ownership share (determined as provided in Schedule 3.2(a)) of the pre-paid pension assets associated with the Plant, *minus* (iii) DP&L's ownership share (determined as provided in Schedule 3.2(a)) of the underfunded other post-employment benefits (OPEB) associated with the Plant, *plus or minus* (iv) DP&L's ownership share (determined as provided in Schedule 3.2(a)) of a prorated pre-paid or prorated unpaid property insurance premium for any insurance policies maintained with respect to the Plant, *plus* (v) \$1,667,530.32, representing 100% of the amounts paid by DP&L to DEK prior to execution of this Agreement with respect to Outage Costs.

"Proceeding" means any action, arbitration, audit, hearing, investigation, litigation or suit (whether civil, commercial, labor, criminal, administrative, investigative or informal) commenced, brought, conducted, or heard by or before, or otherwise involving, any Governmental Authority or arbitrator.

"PUCO" has the meaning set forth in Section 7.5(b).

"Purchase Price" has the meaning set forth in Section 3.1(a).

"Purchased Assets" has the meaning set forth in Section 2.1.

“Real Property” has the meaning set forth in Section 2.1(b).

“Realized Liabilities” has the meaning set forth in Section 3.3.

“Regulations” means the final and temporary regulations promulgated by the Treasury Department under Title 26 of the Code of Federal Regulations.

“Related Agreements” means the Bill of Sale, the Assignment and Assumption Agreement, the Deed and the Termination Agreement.

“Retained Liabilities” has the meaning set forth in Section 2.4.

“Seller Disclosure Letter” has the meaning set forth in the introduction to Article V.

“Solvent”, when used with respect to any Person, means that, as of any date of determination, (a) the amount of the “fair saleable value” of the assets of such Person will, as of such date, exceed the sum of (i) the value of all liabilities of such Person as of such date, as such quoted terms are generally determined in accordance with applicable Laws governing determinations of the insolvency of debtors, and (ii) the amount that will be required to pay the probable liabilities of such Person, as of such date, on its existing debts as such debts become absolute and mature, (b) such Person will not have, as of such date, an unreasonably small amount of capital for the operation of the businesses in which it is engaged or proposed to be engaged following such date and (c) such Person will be able to pay its liabilities as they mature.

“Tax(es)” means any federal, state, local, or foreign income, gross receipts, license, payroll, employment, excise, severance, stamp, occupation, premium, windfall profits, environmental, (including Taxes under Section 59A of the Code), customs duties, capital stock, franchise, profits, withholding, social security (or similar), unemployment, disability, real property, personal property, sales, use, transfer, registration, valued added, alternative or add-on minimum, estimated, or other Tax of any kind whatsoever, including any interest, penalty, or addition thereto, whether disputed or not and including any obligations to indemnify or otherwise assume or succeed to the Tax liability of any other Person.

“Tax Return” means any return, declaration, report, claim for refund, or information return or statement relating to Taxes, including any schedule or attachment thereto, and including any amendment thereof, filed with or submitted to, or required to be filed with or submitted to, any Governmental Authority with respect to Taxes.

“Termination Agreement” has the meaning set forth in Section 4.2(c).

“Title Company” means a title insurance company reasonably acceptable to DEK.

ARTICLE II

SALE OF PURCHASED ASSETS; ASSUMPTION OF LIABILITIES

2.1 Sale of Purchased Assets. On the terms and subject to the conditions set forth in this Agreement, at the Closing, DP&L shall sell, assign, transfer, convey, and deliver to DEK,

and DEK shall purchase and acquire from DP&L, free and clear of any and all Liens, except Permitted Liens, all of DP&L's right, title and interest in and to all property and assets, real, personal and mixed, tangible and intangible, of every kind and description primarily related to the Plant whether or not reflected on the books and records of DP&L or the books and records of the Plant, excluding the Excluded Assets, but including:

(a) all tangible assets located at the Plant or primarily used in the operation of the Plant, including equipment, motor vehicles, tools, parts and fuel and other inventory;

(b) all real property, buildings, improvements, fixtures, and leasehold interests relating to or constituting a part of the Plant, or sharing a boundary with the Plant, or used or to be used primarily in connection with the operation of the Plant, including, the real property identified on Schedule 2.1(b) hereto (the "Real Property");

(c) any and all rights or interests in the electricity generated at the Plant following the Closing, including any and all PJM RPM capacity revenues with respect to such generation;

(d) all emission allowances on Schedule 2.1(d), which sets forth all such emission allowances that have been allocated to DP&L's interest in the Plant for the 2014 vintage year and any future vintage years (i) that are held by DEK as of Closing (ii) that have been transferred by DEK to DP&L, or (iii) that have been transferred directly by the Environmental Protection Agency to DP&L, with any such 2014 vintage year emission allowances to be prorated between DEK and DP&L as of the Closing Date;

(e) any rights in, to or under, any Contracts which are primarily related to the ownership and operation of the Plant, including the Assumed Contracts;

(f) all insurance benefits, including rights and proceeds, primarily associated with the Plant;

(g) all technology and other intellectual property primarily utilized in the ownership and operation of the Plant;

(h) all deposits and prepaid items or expenses relating to the Plant, claims for refunds relating to the Plant (other than with respect to Taxes) and rights of offset related thereto;

(i) all Permits held by or in the name of DP&L used in the operation of the Plant;

(j) any books and records located at the Plant related to the Purchased Assets or the Plant; and

(k) all rights to causes of action, Proceedings, judgments, claims, demands, deposits, prepayments, refunds and rights of recovery, set off or recoupment of any kind, including warranties and indemnification rights, that DP&L may have against any Person to the extent primarily related to the Purchased Assets or the Plant.

All of the property, interests, rights, and assets to be sold, assigned, transferred, conveyed, and delivered to DEK set forth in this Section 2.1 are collectively referred to as the "Purchased Assets".

2.2 Excluded Assets. The Purchased Assets shall not include, and DEK shall not purchase from DP&L, any of the following property, interests, rights and assets of DP&L:

- (a) cash and cash equivalents;
- (b) rights in electricity generated at the Plant prior to the Closing, including any and all PJM RPM capacity revenues with respect to such generation;
- (c) rights of action that DP&L may have against any Governmental Authority for refund or credit with respect to Taxes related to the ownership, operation or use of the Plant prior to Closing;
- (d) all rights to causes of action, Proceedings, judgments, claims, demands, deposits, prepayments, refunds and rights of recovery, set off or recoupment of any kind that DP&L may have against any Person to the extent related to any Excluded Asset or Retained Liability;
- (e) all documents and records located within DP&L's offices;
- (f) all proprietary information and know-how located within DP&L's offices or held by DP&L or its affiliates' employees;
- (g) all tangible assets located at any DP&L facility or office other than the Plant; and
- (h) the property, interests, rights and assets set forth on Schedule 2.2(h).

All such property, interest, rights and assets are collectively referred to as the "Excluded Assets".

2.3 Assumption of Liabilities. On the terms and subject to the conditions of this Agreement, at the Closing DP&L shall assign to DEK, and DEK shall assume, and shall be responsible for satisfying when due, all past, present and future Liabilities, including Environmental Liabilities, of DP&L to the extent arising from, or related to, the Purchased Assets or the operation or retirement of the Plant, including such Liabilities related to Pre-Closing Periods; provided, that DEK shall not assume, and DP&L shall retain and remain responsible for satisfying and discharging when due, the Retained Liabilities. The Liabilities to be assigned to and assumed by DEK pursuant to Section 2.3 are collectively referred to as the "Assumed Liabilities".

2.4 Retained Liabilities. DEK shall not assume, and DP&L shall retain and remain responsible for satisfying and discharging when due, the following Liabilities:

(a) any Indebtedness incurred by any DP&L Related Party or for which it has Liability, excluding any Indebtedness for which the DP&L Related Party has Liability solely as a result of the actions of any DEK Related Party;

(b) any Liabilities of DP&L under any Contracts to which any DP&L Related Party is a party or by which it has Liability, other than the Assumed Contracts, excluding any Contract for which the DP&L Related Party has Liability solely as a result of the actions of any DEK Related Party;

(c) any Liabilities of DP&L for Taxes, including the matters set forth on Schedule 5.7, except for ad valorem Taxes related to the Purchased Assets for the fiscal period including the Closing Date;

(d) any Liabilities of DP&L resulting from a breach by DP&L of any Assumed Contract; and

(e) any Liabilities of DP&L related to any Excluded Assets.

All such Liabilities are collectively referred to herein as the "Retained Liabilities".

ARTICLE III

PURCHASE PRICE; ADJUSTMENT

3.1 Purchase Price.

(a) Upon the terms and subject to the conditions set forth in this Agreement, in addition to the assumption by DEK of the Assumed Liabilities, as full consideration for DEK's purchase of the Purchased Assets, DEK shall pay to DP&L an aggregate amount equal to Twelve Million Four Hundred Thousand Dollars (\$12,400,000) (the "Purchase Price"), *plus* the Final Adjustment Amount, if the Final Adjustment Amount is a positive number, or *minus* the absolute value of the Final Adjustment Amount, if the Final Adjustment Amount is a negative number (such total, the "Net Settlement Amount"), calculated and payable as provided in this Article III and Schedule 3.2(a).

(b) Not later than five (5) Business Days prior to the Closing Date, DEK shall prepare and deliver to DP&L an estimated Adjustment Amount Statement, which shall set forth DEK's good faith estimate of the Final Adjustment Amount (the "Estimated Adjustment Amount") and each of its components and which shall be prepared in accordance with the Adjustment Methodology applicable to the Adjustment Amount Statement. The Purchase Price *plus* the Estimated Adjustment Amount, if the Estimated Adjustment Amount is a positive number, or *minus* the absolute value of the Estimated Adjustment Amount, if the Estimated Adjustment Amount is a negative number, is referred to herein as the "Closing Cash Consideration".

(c) At the Closing, if the Closing Cash Consideration is a positive number, DEK shall pay or cause to be paid to DP&L, by wire transfer in immediately available funds to

an account identified by DP&L in writing at least three (3) Business Days prior to the Closing Date, the Closing Cash Consideration. At the Closing, if the Closing Cash Consideration is a negative number, DP&L shall pay or cause to be paid to DEK, by wire transfer in immediately available funds to an account identified by DEK in writing at least three (3) Business Days prior to the Closing Date, the Closing Cash Consideration (in such case expressed as an absolute value).

3.2 Post-Closing Adjustment.

(a) Within ninety (90) days after the Closing, DEK will prepare (or cause to be prepared), issue and deliver to DP&L a statement of DEK's proposed calculations of the Final Adjustment Amount, including the Pre-Paid Amount, the Outstanding Outage Costs and the Outstanding Non-Outage Costs (as finalized in the accordance with Section 3.2(e), the "Adjustment Amount Statement"). The Adjustment Amount Statement shall be prepared in accordance with the accounting, valuation, pro-ratio and other methods, practices and policies set forth in Schedule 3.2(a), and calculated consistent with the illustrative Adjustment Amount Statement based on a hypothetical Closing Date of February 28, 2014, also set forth in Schedule 3.2(a) (collectively, the "Adjustment Methodology").

(b) Following DEK's delivery of its proposed Adjustment Amount Statement, representatives of DP&L shall be provided copies of, or permitted access at all reasonable times to, any records reasonably requested by DP&L to confirm or verify DEK's proposed Adjustment Amount Statement, and DEK shall make reasonably available to DP&L the individuals employed by DEK that were responsible for the preparation of DEK's proposed Adjustment Amount Statement in order to respond to the inquiries of DP&L related thereto. Within the forty-five (45) day period following DEK's delivery of its proposed Adjustment Amount Statement, DP&L shall, in a written notice to DEK, either accept DEK's proposed Adjustment Amount Statement or, in the event that DP&L believes that the Adjustment Amount Statement contains mathematical errors, was not prepared in accordance with the Adjustment Methodology, or contains charges that are not properly chargeable to DP&L under the Operation Agreement or this Agreement, dispute the Adjustment Amount Statement, describing in reasonable detail any proposed adjustments to DEK's proposed Adjustment Amount Statement which DP&L believes should be made and the basis therefor. If DEK has not received such notice of proposed adjustments within such forty-five (45) day period, DP&L shall be deemed to have accepted DEK's proposed Adjustment Amount Statement and such statement shall be final, binding, conclusive and non-appealable.

(c) If DP&L disputes DEK's proposed Adjustment Statement, then following DP&L's delivery of its proposed adjustments, representatives of DEK shall be provided copies of, or permitted access at all reasonable times to, any records reasonably requested by DEK to confirm or verify DP&L's proposed adjustments, and DP&L shall make reasonably available to DEK the individuals employed by DP&L that were responsible for the preparation of DP&L's proposed adjustments in order to respond to the inquiries of DEK related thereto. Within the thirty (30) day period following DP&L's delivery of its proposed adjustments, DEK shall, in a written notice to DP&L, either accept DP&L's proposed adjustments or, in the event that DEK believes that the Adjustment Amount Statement contains mathematical errors, was not prepared in accordance with the Adjustment Methodology, or excludes charges that are properly

chargeable to DP&L under the Operation Agreement or this Agreement, dispute the proposed adjustments, describing in reasonable detail the reasons for DEK's dispute. If DP&L has not received such notice of DEK's dispute within such thirty (30) day period, DEK shall be deemed to have accepted DP&L's proposed adjustments and the DEK proposed Adjustment Amount Statement as adjusted by DP&L shall be final, binding, conclusive and non-appealable.

(d) DEK and DP&L shall negotiate in good faith to resolve any dispute over DP&L's proposed adjustments to DEK's proposed Adjustment Amount Statement, provided that if any such dispute is not fully resolved within fifteen (15) days following receipt by DP&L of DEK's reasons for disputing DP&L's proposed adjustments, then at the request of either DP&L or DEK, such dispute shall be submitted to Grant Thornton LLP or another independent public accounting firm mutually acceptable to DP&L and DEK (the "Arbiter") to resolve any remaining dispute over DP&L's proposed adjustments in accordance with the Adjustment Methodology, which resolution shall be final, binding, conclusive and non-appealable. The Arbiter shall be instructed to deliver its written determination not later than the thirtieth (30th) day after the dispute is referred to the Arbiter. The Arbiter's determination shall be based solely on written submissions by DP&L and DEK and their respective representatives and not by independent review. The Arbiter shall address only those items in dispute and may not assign a value greater than the greatest value for such item claimed by either Party or smaller than the smallest value claimed for such item by either Party. All fees and expenses relating to the work to be performed by the Arbiter pursuant to this Section 3.2(c) shall be split on a "loser-pays" basis such that DEK, on the one hand, and DP&L, on the other hand, pay in inverse proportion to the percentage of the disputed amount ultimately awarded to such Party by the Arbiter. Except as provided in the immediately preceding sentence, all other costs and expenses incurred by the Parties in connection with resolving any disputes over the Adjustment Amount Statement before the Arbiter shall be borne by the Party incurring such cost or expense.

(e) The Adjustment Amount Statement shall become final and binding on all Parties on the earliest to occur of: (i) DP&L's delivery of written notice to DEK of its acceptance of DEK's proposals thereof, (ii) DP&L's failure to deliver to DEK written notice of its proposed adjustments to DEK's proposals thereof within the forty-five (45) day period specified in Section 3.2(b), (iii) DEK's failure to deliver to DP&L written notice of its reasons for disputing DP&L's proposed adjustments within the thirty (30) day period specified in Section 3.2(c); (iv) the mutual written agreement of DP&L and DEK with respect to a revised Adjustment Amount Statement, or (v) the Arbiter's determination in respect of any disputes over DP&L's proposed adjustments, assuming all other items in the Adjustment Amount Statement are final as of such time.

(f) Promptly, but no later than five (5) Business Days, following the final determination of the Adjustment Amount Statement pursuant to Section 3.2(e) above:

(i) to the extent that the Net Settlement Amount is a greater number than the Closing Cash Consideration, then DEK will pay to DP&L an amount equal to the absolute value of such difference, or

(ii) to the extent that the Closing Cash Consideration is a greater number than the Net Settlement Amount, then DP&L will pay to DEK an amount equal to the absolute value of such difference.

3.3 Allocation of Net Settlement Amount. At least thirty (30) days prior to Closing, DP&L shall notify DEK of the amount and description of any Assumed Liabilities that are required to be included in the amount realized by DP&L for U.S. federal income Tax purposes under Section 1001 of the Code and the related Regulations (the "Realized Liabilities"). Within ninety (90) days of the final determination of the Net Settlement Amount, DEK will provide DP&L with a schedule of the allocation of the Net Settlement Amount plus the amount of any Realized Liabilities among the Purchased Assets (the "Allocation Schedule") for U.S. federal income Tax purposes. If DP&L does not object to the Allocation Schedule within thirty (30) days of the DP&L's receipt of the Allocation Schedule, then DP&L and DEK agree to allocate the Net Settlement Amount plus the amount of any Realized Liabilities as set forth on the Allocation Schedule. If DP&L objects in writing to the Allocation Schedule within thirty (30) days of DP&L's receipt of the Allocation Schedule, then DEK and DP&L will attempt to agree on the Allocation Schedule; provided, however, if DEK and DP&L fail to agree on the Allocation Schedule within thirty (30) days of DEK's receipt of DP&L's written objection(s), then each of DEK and DP&L may allocate the Net Settlement Amount plus the amount of any Realized Liabilities among the Purchased Assets for U.S. federal income Tax purposes according to its own determination. Any adjustments to the Net Settlement Amount pursuant to this Agreement will be allocated in a manner consistent with the Allocation Schedule.

3.4 Real Estate Transfer Taxes. DP&L shall be responsible for filing and paying any real estate transfer Taxes that may apply as a result of Closing.

ARTICLE IV

CLOSING

4.1 Closing. The consummation of the transactions contemplated herein (the "Closing") shall take place at the offices of Parker Poe Adams & Bernstein LLP, 401 S. Tryon Street, Suite 3000, Charlotte, NC 28202. Unless this Agreement shall have been previously terminated pursuant to Article IX, the Closing shall occur on the last day of the calendar month during which satisfaction or waiver of all of the conditions to Closing set forth in Article VIII (other than those conditions that by their nature are to be satisfied at the Closing, but subject to the satisfaction or waiver of those conditions) has occurred, or at such other time or date as DEK and DP&L may mutually agree; provided that in the event that such date is not a Business Day, the Closing shall occur on the next succeeding Business Day (the date on which the Closing occurs, the "Closing Date"). Unless otherwise agreed, the Closing shall be effective for economic and accounting purposes as of 12:01 a.m. on the first day of the month that is nearest in time to the Closing Date and all actions scheduled in this Agreement for the Closing shall be deemed to have occurred simultaneously at such time.

4.2 Closing Deliveries. At the Closing:

(a) DP&L shall deliver, or cause to be delivered, to DEK the following:

(i) a bill of sale in substantially the form of Exhibit 4.2(a)(i) attached hereto and dated as of the Closing Date (the "Bill of Sale"), duly executed by DP&L;

(ii) an assignment and assumption agreement substantially in the form of Exhibit 4.2(a)(ii) attached hereto and dated as of the Closing Date (the "Assignment and Assumption Agreement"), duly executed by DP&L;

(iii) a special warranty deed substantially in the form of Exhibit 4.2(a)(iii) attached hereto and dated as of the Closing Date (the "Deed"), duly executed and acknowledged in recordable form by DP&L, conveying indefeasible fee simple title to DP&L's undivided interest in the Real Property to DEK, subject only to the Permitted Liens, and insurable by the Title Company mutually agreed upon by DP&L and DEK at then current standard rates under the standard form of ALTA owner's policy of title insurance (ALTA Form 2006) with all endorsements required by DEK in its reasonable discretion and which are commercially available in the jurisdiction for the type of property insured, with the standard or printed exceptions deleted and without exception other than for the Permitted Liens;

(iv) written evidence of the receipt or satisfaction of the Consents described in Sections 5.4 and 8.1(b);

(v) the certificates referred to in Sections 8.2(a) and 8.2(b), dated as of the Closing Date, duly executed by DP&L;

(vi) a certificate from the Secretary of State of the State of Ohio as of a date within ten (10) Business Days prior to the Closing Date to the effect that DP&L is duly incorporated and in good standing in the State of Ohio;

(vii) a certificate from a corporate officer of DP&L certifying as to the authority, incumbency and signatures of the Persons acting on behalf of DP&L in connection with the execution of this Agreement and any other documents executed by DP&L in connection with this Agreement;

(viii) a certificate, duly executed by DP&L, pursuant to Regulations Section 1.1445-2(b) certifying that DP&L is not a foreign person within the meaning of Section 1445 of the Code;

(ix) a customary affidavit and indemnity agreement duly executed by DP&L substantially in the form of Exhibit 4.2(a)(ix) attached hereto and dated as of the Closing Date regarding contractor's and materialmen's liens on the Real Property, and tenants in possession of the Real Property, and any broker's Lien on the Real Property, in each case to the extent contracted for by DP&L;

(x) all other documentation and instruments as are required pursuant to this Agreement or as may reasonably be requested by DEK to effect the consummation of the transactions contemplated by this Agreement.

- (b) DEK shall deliver, or cause to be delivered, to DP&L the following:
- (i) the Bill of Sale dated as of the Closing Date, duly executed by DEK;
 - (ii) the Assignment and Assumption Agreement dated as of the Closing Date, duly executed by DEK;
 - (iii) written evidence of the receipt or satisfaction of the Consents described in Sections 6.4 and 8.1(b);
 - (iv) the certificates referred to in Sections 8.3(a) and 8.3(b), dated as of the Closing Date, duly executed by DEK;
 - (v) a certificate from the Secretary of State of the Commonwealth of Kentucky as of a date within ten (10) Business Days prior to the Closing Date to the effect that DEK is duly incorporated and in good standing in the Commonwealth of Kentucky;
 - (vi) a certificate from a corporate officer of DEK certifying as to the authority, incumbency and signatures of the Persons acting on behalf of DEK in connection with the execution of this Agreement and any other documents executed by DEK in connection with this Agreement; and
 - (vii) all other documentation and instruments as are required pursuant to this Agreement or as may reasonably be requested by DP&L to effect the consummation of the transactions contemplated by this Agreement.
- (c) Each Party shall execute a termination and release agreement (the "Termination Agreement") in substantially the form set forth in Exhibit 4.2(c) attached hereto, which agreement shall terminate the agreements set forth therein and release each Party from future claims of the other with respect to rights, duties and obligations under the Operation Agreement. As of the date of execution of this Agreement, the list of agreements that would be terminated pursuant to the Termination Agreement would include: the Operation Agreement; Memorandum of Construction dated March 24, 1981; those portions of the Recommendation and Agreement dated June 5, 1981 that relate to East Bend; the Recommendation and Agreement dated January 30, 1980; the Recommendation and Agreement East Bend Transmission Facilities dated November 28, 1977; and Agreement of Representation (relating to certain environmental trading programs) dated September 26, 2006. This list may be supplemented by mutual agreement of the Parties prior to the Closing.

ARTICLE V

REPRESENTATIONS AND WARRANTIES BY DP&L

Except as set forth in the disclosure letter delivered by DP&L to DEK on the date hereof (the "Seller Disclosure Letter"), DP&L hereby represents and warrants to DEK, as of the date hereof and, for purposes of Section 8.2(a) and Section 10.3, as of the Closing Date, as follows:

5.1 Organization; Good Standing. DP&L is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Ohio and has all requisite corporate power and authority to own, operate and lease its assets and properties and to conduct its business as presently conducted. DP&L is duly qualified to do business and in good standing to do business as a foreign corporation in each of the jurisdictions in which the character or location of the assets owned or leased by DP&L or the nature of its business requires licensing or qualification, except to the extent any failure of the foregoing to be true and correct would not have a Material Adverse Effect.

5.2 Authority; Enforceability. DP&L has all requisite corporate power and authority to execute, deliver and perform this Agreement and each of the Related Agreements to which it is a party, to perform its obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby. The execution, delivery and performance by DP&L of this Agreement and each of the Related Agreements to which it is a party and the consummation by DP&L of the transactions contemplated hereby and thereby have been duly and validly authorized by all necessary corporate action on the part of DP&L. DP&L has duly and validly executed this Agreement and, at or prior to the Closing, DP&L will have duly and validly executed each of the Related Agreements to which it is a party. Assuming the due authorization, execution and delivery by DEK of this Agreement and by each other party to the Related Agreements, this Agreement constitutes, and upon their execution and delivery, each of the Related Agreements to which DP&L is a party will constitute, a legal, valid and binding agreement of DP&L, enforceable against DP&L in accordance with its terms, subject to the Enforceability Limitations.

5.3 Non-Contravention. Except as set forth in Schedule 5.3 of the Seller Disclosure Letter, the execution, delivery and performance by DP&L of this Agreement and the Related Agreements to which it is a party and the consummation of the transactions contemplated hereby and thereby will not: (a) conflict with or violate any provision of DP&L's articles of incorporation or bylaws, (b) provided that the Consents contemplated by Section 5.4 have been obtained or made, conflict with or violate any Law applicable to DP&L or by which any of the Purchased Assets are bound, (c) provided that the Consents contemplated by Section 5.4 have been obtained or made, result in any breach or violation of, or constitute a default (or an event which with notice or lapse of time or both would become a default) or result in the loss of a benefit under, give rise to any right of termination, cancellation, amendment or acceleration of, any Contract to which DP&L is a party or by which any of the Purchased Assets are bound, or (d) result in the creation of any Lien (other than any Permitted Liens) upon any of the Purchased Assets, except, in the case of clauses (c) and (d), as would not have a Material Adverse Effect.

5.4 Consents. Schedule 5.4 of the Seller Disclosure Letter lists all Consents of any Person required to be obtained by DP&L in connection with its execution, delivery and performance of this Agreement and its Related Agreements and the consummation of the transactions contemplated hereby and thereby, except for such Consents with respect to which the failure to obtain would not have a Material Adverse Effect.

5.5 Title to Purchased Assets; Liens. Except as disclosed on Schedule 5.5 of the Seller Disclosure Letter, DP&L has good and valid title to all of the Purchased Assets other than the Real Property, free and clear of all Liens, other than the Permitted Liens. All of such

Purchased Assets will be transferred to DEK at the Closing free and clear of all Liens other than Permitted Liens. Without intending to limit the foregoing, (a) except as set forth in the Assumed Contracts or in this Agreement, DP&L has no legal obligation, absolute or contingent, to any other Person to sell any of the Purchased Assets, including pursuant to any bilateral contract or other arrangement to sell its share of the Plant's post-Closing electric generation capacity outside of the PJM Interconnection wholesale energy market, and (b) all of its share of the Plant's electric generation capacity will be a PJM qualifying capacity resource through May 31, 2018.

5.6 Real Property. Except as disclosed on Schedule 5.6 of the Seller Disclosure Letter, DP&L has not received any written notice, and DP&L does not have any Knowledge, that (a) the Real Property (or any portion of it) is in violation of any applicable zoning, flood, building or other Law, or any other legal requirement or private restriction; (b) any portion of the Real Property is subject to any designation or preliminary determination of any Governmental Authority as an archeological site, as an historical site, or under the Endangered Species Act; (c) the Real Property is, or has been, subject to any exemption from ad valorem Taxes that will result in the imposition of any Tax or penalty upon the transfer of title at Closing or any change in use of the Real Property; or (d) there are any pending, threatened or contemplated condemnation actions involving all or any portion of the Real Property, or any existing or contemplated plans to modify any public rights-of-way adjacent to the Real Property or to modify the Real Property's zoning classification or property Tax valuation. Other than Permitted Liens, there are no commitments to or agreements with any Governmental Authority to which DP&L is a party affecting the use or ownership of the Real Property. Except as disclosed on Schedule 5.6 of the Seller Disclosure Letter, DP&L has good, valid and marketable fee simple title to its undivided interest in the Real Property, free and clear of all Liens other than Permitted Liens.

5.7 Taxes. Except for matters that would not have a Material Adverse Effect or are set forth on Schedule 5.7, (i) DP&L has filed, or will file when due, all Tax Returns that are required to be filed by it on or before the Closing Date with respect to the Purchased Assets, the sale of power generated by the Purchased Assets and DP&L's interest in the Plant, and DP&L has paid, or will pay in full, all Taxes required to be paid with respect to Pre-Closing Periods with respect to the Purchased Assets, the sale of power generated by the Purchased Assets and DP&L's interest in the Plant; (ii) such Tax Returns were prepared or will be prepared in the manner required by applicable Laws, are complete and accurate and disclose all Taxes required to be paid; (iii) no event has occurred which could impose on DEK any successor or transferee liability for any Taxes in respect of DP&L; (iv) DP&L has not received any notice that any Taxes relating to any period prior to the Closing are owing by it that have not been paid on or before the Closing with respect to the Purchased Assets, the sale of power generated by the Purchased Assets or DP&L's interest in the Plant; (v) DP&L has not extended or waived the application of any statute of limitations of any jurisdiction regarding the assessment or collection of any Tax of DP&L with respect to the Purchased Assets, the sale of power generated by the Purchased Assets or its interest in the Plant; (vi) all Taxes that DP&L is required by Law to withhold or collect, including, without limitation, any sales and use Taxes and amounts required to be withheld or collected in connection with any amount paid or owing to any employee, independent contractor, creditor, member, or other Person, have been duly withheld or collected, and either paid to the respective taxing authorities, set aside in accounts for such purpose, or accrued, reserved against and entered upon the books of DP&L; (vii) no examination or audit of

any Tax Return with respect to the Purchased Assets, power generated by the Purchased Assets or DP&L's interest in the Plant is currently in progress and no Governmental Authority has asserted to DP&L in writing or, to the Knowledge of DP&L, threatened to assert or expected to assert against DP&L any deficiency, proposed deficiency or claim for additional Taxes or any adjustment thereof with respect to any period for which a Tax Return has been filed, for which Tax Returns have not yet been filed or for which Taxes are not yet due and payable; and (viii) no claim has ever been asserted in writing to DP&L by a Governmental Authority in a jurisdiction where DP&L does not file a Tax Return that it is or may be subject to taxation by that jurisdiction with respect to the Purchased Assets, the sale of power generated by the Purchased Assets or DP&L's interest in the Plant.

5.8 Proceedings; Orders. Except as disclosed on Schedule 5.8 of the Seller Disclosure Letter, there are no Proceedings or Orders pending or, to DP&L's Knowledge, threatened (a) against DP&L, its Affiliates or any of their respective directors, officers or employees with respect to the Purchased Assets or its ownership interest in the Plant which would have a Material Adverse Effect, or (b) which seek to prohibit, restrict or delay consummation of any of the transactions contemplated by this Agreement.

5.9 Compliance with Laws and Orders. Assuming the representations and warranties of DEK in Section 6.8 are true and correct, except as disclosed on Schedule 5.9 of the Seller Disclosure Letter or as would not have a Material Adverse Effect, (a) to DP&L's Knowledge, DP&L is and has since January 1, 2013 been in compliance with all applicable Laws and Orders applicable to it with respect to its ownership of the Purchased Assets, (b) DP&L has not received from any Person any written notice of violation or other claim of noncompliance with Laws regarding the operation of the Plant or any of the Purchased Assets, and (c) to DP&L's Knowledge, the Plant is and has since January 1, 2013 been operated in compliance with all applicable Laws (including all Environmental Laws) and Orders.

5.10 Contracts. Except for (i) the Operation Agreement and (ii) the Contracts listed on Schedule 5.10 of the Seller Disclosure Letter (the "Assumed Contracts"), there are no material Contracts to which DP&L is a party or by which any of the Purchased Assets are bound and a DP&L Related Party is a party relating to the development, design, construction, ownership, operation, maintenance or use of the Purchased Assets or the Plant, or the electricity generated by the Plant. DP&L has delivered to DEK true, correct and complete copies in all material respects of the Assumed Contracts to which DEK is not a party (including any amendments, supplements, modifications, annexes or schedules thereto). The Assumed Contracts constitute lawful, valid and legally binding obligations of DP&L and, to the Knowledge of DP&L, the other parties thereto, and are enforceable by DP&L, in accordance with their terms. Each Assumed Contract is in full force and effect and constitutes the entire agreement by and between the parties thereto with respect to the subject matter thereof. No fact, event or circumstance has occurred that constitutes, or could reasonably be expected to constitute, a default under any Assumed Contract by DP&L or, to the Knowledge of DP&L, any other party thereto. Except as set forth on Schedule 5.10 of the Seller Disclosure Letter, no Assumed Contract requires the consent of, or issuance of notice to, any Person to the assignment of such Assumed Contract to, and assumption thereof, by DEK, and the transactions contemplated herein will not result in or give rise to a right of termination in any Person with respect to any Assumed Contract.

5.11 Permits. Schedule 5.11 of the Seller Disclosure Letter sets forth all material Permits acquired or held by or in the name of DP&L in connection with the ownership, operation, maintenance or use of the Purchased Assets. DP&L is in compliance, in all material respects, with each such Permit and has not received any written notice of violation or noncompliance of any such Permit from any Governmental Authority or any other Person.

5.12 Environmental Matters. Assuming the representations and warranties of DEK in Section 6.9 are true and correct and except as would not have a Material Adverse Effect, to DP&L's Knowledge there are no claims, Proceedings or investigations under any Environmental Law pending or threatened against DP&L or the Purchased Assets relating to any of the Purchased Assets. DP&L has not received from any Governmental Authority any written notice of violation or other written claim of material noncompliance with Environmental Laws regarding the operation of the Plant or any of the Purchased Assets or any written notice that DP&L has been named, identified or alleged to be a responsible party or potentially responsible party under CERCLA or any state Law based on, or analogous to, CERCLA as the result of DEK's operation of the Plant. The representations and warranties contained in this Section 5.12 constitute the sole and exclusive representations and warranties of DP&L in this Agreement related to environmental matters.

5.13 Brokers. No DP&L Related Party has incurred any Liability for brokerage or finders' fees or agents' commissions or other similar payments in connection with the transactions contemplated hereby for which any DEK Related Party could be liable.

5.14 Solvency. DP&L is, as of the date hereof, and will be, as of immediately following the Closing, Solvent.

ARTICLE VI

REPRESENTATIONS AND WARRANTIES BY DEK

DEK hereby represents and warrants to DP&L, as of the date hereof and, for purposes of Section 8.3(a) and Section 10.2, as of the Closing Date, as follows:

6.1 Organization; Good Standing. DEK is a corporation duly incorporated, validly existing and in good standing under the laws of the Commonwealth of Kentucky.

6.2 Authority; Enforceability. DEK has all requisite corporate power and authority to execute, deliver and perform this Agreement and each of the Related Agreements to which it is a party, to perform its obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby. The execution, delivery and performance by DEK of this Agreement and each of the Related Agreements to which it is a party and the consummation by DEK of the transactions contemplated hereby and thereby have been duly and validly authorized by all necessary corporate action on the part of DEK. DEK has duly and validly executed this Agreement and, at or prior to the Closing, DEK will have duly and validly executed each of the Related Agreements to which it is a party. Assuming the due authorization, execution and delivery by DP&L of this Agreement and by each other party to the Related Agreements, this Agreement constitutes, and upon their execution and delivery, each of the Related Agreements to

which DEK is a party will constitute, a legal, valid and binding agreement of DEK, enforceable against DEK in accordance with its terms, subject to the Enforceability Limitations.

6.3 Non-Contravention. Except as set forth in Schedule 6.3 hereto, the execution, delivery and performance by DEK of this Agreement and each of the Related Agreements to which it is a party and the consummation of the transactions contemplated hereby and thereby will not: (a) conflict with or violate any provision of DEK's articles of incorporation or bylaws, or (b) provided that the Consents contemplated by Section 6.4 have been obtained or made and all filings described in Section 6.5 have been made, conflict with or violate any Law applicable to DEK.

6.4 Consents. Schedule 6.4 hereto lists all Consents of any Person required to be obtained by DEK in connection with its execution, delivery and performance of this Agreement and its Related Agreements and the consummation of the transactions contemplated hereby and thereby, except for such Consents with respect to which the failure to obtain would not have a Material Adverse Effect.

6.5 Proceedings; Orders. Except as disclosed on Schedule 6.5 hereto, there are no Proceedings or Orders pending or, to DEK's Knowledge, threatened which seek to prohibit, restrict or delay consummation of any of the transactions contemplated by this Agreement or any of the conditions to consummation of such transactions.

6.6 Brokers. No DEK Related Party has incurred any Liability for brokerage or finders' fees or agents' commissions or other similar payments in connection with the transactions contemplated hereby for which any DP&L Related Party could be liable.

6.7 Sufficiency of Funds. DEK has, as of the date hereof, and will have, as of the Closing, sufficient cash on hand or other sources of immediately available funds to enable it to make payment of the Closing Cash Consideration and to consummate the transactions contemplated by this Agreement.

6.8 Compliance with Laws and Orders. To DEK's Knowledge and except as disclosed on Schedule 6.8 hereto or as would not have a Material Adverse Effect, (a) DEK is and has since January 1, 2013 been in compliance with all applicable Laws and Orders applicable to it with respect to its ownership or operation of the Plant, (b) DEK has not received from any Person any written notice of violation or other claim of noncompliance with Laws regarding the operation of the Plant or any of the Purchased Assets, and (c) the Plant is and has been since January 1, 2013 operated in compliance with all applicable Laws (including all Environmental Laws) and Orders.

6.9 Environmental Matters. To DEK's Knowledge and except as would not have a Material Adverse Effect, there are no claims, Proceedings or investigations under any Environmental Law pending or threatened against DEK or the Plant. DEK has not received from any Governmental Authority any written notice of violation or other written claim of noncompliance with Environmental Laws regarding the operation of the Plant or any written notice that DEK has been named, identified or alleged to be a responsible party or potentially responsible party under CERCLA or any state Law based on, or analogous to, CERCLA as the

result of DEK's operation of the Plant. The representations and warranties contained in this Section 6.9 constitute the sole and exclusive representations and warranties of DEK in this Agreement related to environmental matters.

ARTICLE VII

COVENANTS

7.1 Operation Agreement.

(a) During the Forbearance Period and except as otherwise expressly provided in this Agreement and subject to the provisions of Article IX: (i) DEK shall continue to operate the Plant and to calculate all costs and expenses related to the operation of the Plant, and DP&L's share thereof, consistent with the terms of the Operation Agreement and past practices, (ii) DEK shall not make any material changes in its accounting systems, policies, principles or practices related to the Plant or DP&L's ownership share of the Plant, other than changes required by Law or changes which would not alter its methodology for valuing the assets comprising the Prepaid Amount or for calculating Plant-related costs and DP&L's share thereof, (iii) DP&L's cost responsibilities, rights and duties shall be defined by the Operation Agreement, and (iv) any stated expiration date in the Operation Agreement shall be treated as if it were extended.

(b) Consistent with past practices, DEK shall continue to provide monthly invoices with respect to DP&L's ownership share (determined consistent with past invoicing practices) of the Fuel Costs, Non-Outage Capital Costs, Outage Costs and O&M Costs.

(c) Notwithstanding anything in the Operation Agreement or Section 7.1(a) to the contrary, the Parties hereby acknowledge and agree that, during the Forbearance Period, DP&L shall have the right to withhold payment without penalty for (i) any Outage Costs; (ii) the portion of any Non-Outage Capital Costs incurred on or after March 1, 2014, which are in excess of One Hundred Twenty-Five Thousand Dollars (\$125,000) during any calendar month period; and (iii) the portion of any O&M Costs incurred on or after March 1, 2014, which are in excess of One Million Two Hundred Thousand Dollars (\$1,200,000) during any calendar month period.

(d) In the event of any inconsistency between the provisions of this Agreement and the provisions of the Operation Agreement, the provisions of this Agreement shall control.

7.2 Preservation of Purchased Assets. During the Forbearance Period, except as set forth on Schedule 7.2, as specifically contemplated by this Agreement or unless DEK shall otherwise agree in writing, DP&L shall continue to preserve, maintain and use the Purchased Assets in the ordinary course of business consistent with past practice. Without limiting the generality of the foregoing, prior to the Closing, DP&L shall not:

(a) except in the ordinary course of business, sell, transfer, lease, abandon or otherwise dispose of, or mortgage or encumber (other than Permitted Liens), any of the Purchased Assets, other than any required sale of future electric generation capacity through the PJM Interconnection wholesale energy market;

- (b) cancel or waive any of its material rights regarding the Purchased Assets;
- (c) take any action or fail to take any action that would have a Material Adverse Effect; or
- (d) enter into any Contract to do any of the foregoing.

7.3 Access to Information. Upon the terms and subject to the conditions of the Confidentiality Agreement, during the Forbearance Period, each Party shall afford to the other Party, its accountants, counsel and other representatives reasonable access for any reasonable purpose related to the transactions contemplated hereby, at the requesting Party's expense and upon reasonable notice during normal business hours, to the other Party's key personnel, and to contracts, records, documents associated with the Plant and the Purchased Assets, including title insurance, deeds, surveys, Tax and other records related to the Real Property.

7.4 Post-Closing Access to Information. From and after the Closing, each Party will make or cause to be made available to the other Party for any reasonable purpose all books, records and documents of such Party relating to the Plant or the Purchased Assets (and the assistance of employees responsible for such books, records and documents) during regular business hours; provided, however, that access to such books, records, documents and employees will not interfere with the normal operations of such Party.

7.5 Commercially Reasonable Efforts.

(a) Subject to the terms and conditions of this Agreement and applicable Law, each of DEK and DP&L shall use commercially reasonable efforts to take, or cause to be taken, all actions, and to do, or cause to be done, all things reasonably necessary, proper or advisable under applicable Laws or otherwise to consummate and make effective the transactions contemplated by this Agreement as soon as practicable, including such actions or things as the other Party may reasonably request in order to cause any of the conditions to such other Party's obligation to consummate such transactions to be fully satisfied. Without limiting the generality of the foregoing, each of the Parties shall (and shall use their commercially reasonable efforts to cause its Affiliates, directors, officers employees, agents, attorneys, accountants and representatives to) consult and fully cooperate with, provide reasonable assistance to each other in, and keep each other reasonably informed in connection with (i) obtaining all necessary Consents or other permission or action by, and giving all necessary notices to and making all necessary filings with and applications and submissions to, any Governmental Authority or other Person, (ii) the defending of any Proceedings challenging this Agreement or the consummation of the transactions contemplated hereby, including seeking to have vacated or reversed any Order that could restrain, prevent or delay the Closing, (iii) the prompt compliance with all legal requirements that may be imposed on such Party or any of its Affiliates with respect to the transactions contemplated hereby, and (iv) the execution and delivery of any additional instruments necessary to consummate the transactions contemplated hereby and to fully carry out the purposes of this Agreement; provided, however, that in order to obtain any Consent (including FERC Approval), except as provided in this Agreement, no Party shall be required to pay any consideration, to divest itself of any of, or otherwise rearrange the composition of, its

assets or to agree to any conditions or requirements which in any such case, individually or in the aggregate, would reasonably be expected to have a material and adverse effect on such Party.

(b) Without limiting the foregoing, within fifteen (15) Business Days of the execution date of this Agreement, DP&L shall file a revision to its Application in Public Utilities Commission of Ohio Case (“PUCO”) No. 13-2420-EL-UNC and request PUCO approval, on an expedited basis, to transfer DP&L’s share of the Plant to DEK in accordance with the terms of this Agreement. Alternatively, within fifteen (15) Business Days of the execution of this Agreement, DP&L shall file with PUCO a separate application for approval, on an expedited basis, to transfer its interest in the Plant in accordance with the terms of this Agreement.

(c) DEK shall file within fifteen (15) Business Days of the execution date of this Agreement an application before the Kentucky Public Service Commission seeking all necessary approvals for the purchase of DP&L’s interest in the Plant, including approvals under the CPCN and financing authority statutes for the acquisition by DEK of the Purchased Assets and the assumption by DEK of the Assumed Liabilities, including the Environmental Liabilities, in accordance with the terms of this Agreement, and the associated retirement of DEK’s Miami Fort 6 facility.

(d) DEK shall prepare within fifteen (15) Business Days of the execution date of this Agreement an application before the FERC seeking all necessary approvals for the acquisition by DEK of the Purchased Assets and the assumption by DEK of the Assumed Liabilities consistent with the terms of this Agreement. To the extent that DP&L is required to be a co-applicant, DEK will share drafts of such application and DP&L will use commercially reasonable efforts to review, approve and be a signatory to such Application. The Parties shall work towards a filing date no more than twenty-five (25) days after the execution date of this Agreement.

(e) Notwithstanding the foregoing or any other provision of this Agreement to the contrary, nothing in this Section 7.5 shall limit a Party’s right to terminate this Agreement pursuant to Section 9.1(c) so long as such Party is at the time in compliance in all material respects with its obligations under this Section 7.5.

7.6 Exclusivity. During the period from the date of this Agreement through the Closing Date, or the earlier termination of this Agreement pursuant to Article IX, DP&L shall not, and shall cause its Affiliates and representatives not to, directly or indirectly, take any action to encourage, initiate, or engage in discussions or negotiations with, or disclose any nonpublic information to, any Person (other than DEK and its Affiliates and representatives) in furtherance of the direct or indirect disposition, whether by sale, merger or otherwise, of all or any material portion of the Purchased Assets. Without limiting the generality of the foregoing, immediately after the execution of this Agreement, DP&L shall cause all of the Purchased Assets to be removed from the confidential sales process relating to a portfolio of assets initiated by DP&L’s parent company, AES Corporation, and discontinue any discussions or negotiations with, any Person (other than DEK and its Affiliates and representatives) concerning the Plant and the Purchased Assets.

7.7 Property Taxes. Following the Closing, upon DP&L's receipt of any bills for any ad valorem property Taxes which relate to the operation of the Plant or the Purchased Assets for any Tax periods which began before the Closing Date and ends after the Closing Date, DP&L shall promptly forward copies of such Tax bills to DEK, and DEK shall be required to satisfy any Taxes reflected in such Tax bills in a timely fashion.

7.8 Seller's Title Insurance. Prior to the Closing, DEK shall use commercially reasonable efforts to cause the title insurance company issuing title insurance to DEK to also prepare a seller's title insurance policy, endorsement, or rider in an amount up to Twenty-Five Million Dollars (\$25,000,000) and quote a price as a firm offer for such coverage to DP&L. DP&L has sole discretion as to whether or not to accept such offer and shall be responsible for all premiums and other expenses with respect to the policy or such coverage.

ARTICLE VIII

CONDITIONS TO CLOSING

8.1 Conditions to Obligations of DEK and DP&L. The respective obligations of each Party to consummate the transactions contemplated by this Agreement are subject to the satisfaction or waiver at or prior to the Closing of each of the following conditions precedent:

(a) No Adverse Order. (i) No Orders prohibiting the consummation of the Closing, or permitting such consummation only subject to material conditions or restrictions which would reasonably be expected to have a Material Adverse Effect shall have come into effect after the date of this Agreement and continue to be in effect and (ii) no Governmental Authority shall have enacted, issued, promulgated or enforced any Law that is then in force and has the effect of making illegal or otherwise preventing or prohibiting the consummation of the transactions contemplated by this Agreement.

(b) FPA Matters. The Consent of FERC under Section 203 of the FPA, required to consummate the transactions contemplated hereby shall have been obtained, and such Consent does not contain any material conditions which are unacceptable to DEK in its sole reasonable judgment.

8.2 Conditions to Obligations of DEK. DEK's obligations to consummate the transactions contemplated by this Agreement shall be subject to the satisfaction or waiver at or prior to the Closing of each of the following conditions precedent.

(a) Accuracy of DP&L's Representations and Warranties. The representations and warranties of DP&L contained in this Agreement shall be true and correct, in each case on and as of the Closing Date (except, in either case, for such representations and warranties which by their express provisions are made only as of an earlier date, in which case they shall be true and correct as of such date), determined without regard to any Material Adverse Effect or similar terms relating to materiality as set forth therein except where the failure of such representations and warranties to be true and correct as so made, individually or in the aggregate, would not have a Material Adverse Effect; and DEK shall have received a certificate signed by a duly authorized officer of DP&L, dated the Closing Date, to such effect.

(b) Agreements and Obligations of DP&L. The agreements or obligations, taken as a whole, required by this Agreement to be performed or complied with by DP&L at or prior to the Closing shall have been duly performed or complied with in all material respects, and DEK shall have received a certificate signed by a duly authorized officer of DP&L, dated the Closing Date, to such effect.

(c) Consents. All of the Consents identified on Schedule 8.2(c) shall have been obtained on terms and conditions satisfactory to DEK in its sole reasonable judgment.

(d) Material Adverse Effect. Since the date of this Agreement, no Material Adverse Effect shall have occurred, excluding any Material Adverse Effect that was caused during the Forbearance Period by the negligence of DEK.

8.3 Conditions to Obligations of DP&L. DP&L's obligations to consummate the transactions contemplated by this Agreement shall be subject to the satisfaction or waiver at or prior to the Closing of each of the following conditions precedent:

(a) Accuracy of DEK's Representations and Warranties. The representations and warranties of DEK contained in this Agreement shall be true and correct in each case on and as of the Closing Date (except, in either case, for such representations and warranties which by their express provisions are made only as of an earlier date, in which case they shall be true and correct as of such date), determined without regard to any Material Adverse Effect or similar terms relating to materiality as set forth therein except where the failure of such representations and warranties to be true and correct as so made, individually or in the aggregate, would not have a Material Adverse Effect; and DP&L shall have received a certificate signed by a duly authorized officer of DEK, dated the Closing Date, to such effect.

(b) Agreements and Obligations of DEK. The agreements or obligations, taken as a whole, required by this Agreement to be performed or complied with by DEK at or prior to the Closing shall have been duly performed or complied with in all material respects, and DP&L shall have received a certificate signed by a duly authorized officer of DEK, dated the Closing Date, to such effect.

(c) Consents. All of the Consents identified on Schedule 8.3(c) shall have been obtained on terms and conditions satisfactory to DP&L in its sole reasonable judgment.

ARTICLE IX

TERMINATION

9.1 Termination Events. This Agreement may be terminated and the transactions contemplated hereby may be abandoned at any time prior to the Closing:

(a) by mutual written consent of DEK and DP&L;

(b) at any time by either DEK, on the one hand, or DP&L, on the other hand, by giving notice to the other Party if (i) there has been a material breach by the other Party of such Party's representations, warranties or covenants set forth in this Agreement, which breach

cannot be cured or has not been cured within ten (10) days after receipt of written notice of such breach from the terminating Party, or (ii) events have occurred which have made it impossible to satisfy a condition to Closing as set forth in Article VIII, unless such terminating Party's breach of this Agreement has caused the impossibility; or

(c) at any time by either Party, by giving notice to the other Party, if the Closing shall not have occurred by December 31, 2014, unless extended by written agreement by the Parties; provided that the right to terminate this Agreement pursuant to this Section 9.1(c) shall not be available to any Party whose breach of this Agreement has prevented the consummation of the transactions contemplated hereby at or prior to such time.

9.2 Effect of Termination.

(a) Each Party's right of termination under Section 9.1 is in addition to any other rights it may have under this Agreement, and the exercise of such right of termination will not be an election of remedies under this Agreement. If this Agreement is terminated pursuant to Section 9.1, all obligations of the Parties under this Agreement will terminate, except that the obligations of the Parties in this Section 9.2, the last sentence of Section 9.3(a), Section 9.3(c) and Article XI will remain in full force and effect; provided, however, that, if this Agreement is terminated because of a breach of this Agreement by the non-terminating Party or because one or more of the conditions to the terminating Party's obligations under this Agreement is not satisfied as a result of the Party's failure to comply with its obligations under this Agreement, the terminating Party's right to pursue all legal remedies will survive such termination unimpaired. A terminating Party's remedies resulting from a breach shall include the right to seek specific performance and the right to recover reasonable attorneys' fees and expenses incurred by such Party in enforcing its rights.

(b) Upon termination of this Agreement, the provisions of Section 7.1 shall be null and void and shall be treated in any future dispute among the Parties as if the extension and modification of certain payment obligations under the Operation Agreement contemplated hereby had never occurred. The purpose of this provision is to restore the Parties to the status quo ante prior to execution of this Agreement and permit each Party, in its sole discretion, to advance its interests with respect to the Claims and to pursue any Claims without regard to this Agreement. Without intending to limit the generality of the foregoing, upon termination of this Agreement (i) as regarding costs incurred, invoices billed and payments made under the Operation Agreement, (A) DEK reserves all rights to seek recovery of the full amounts to which it believes DP&L should be obligated to pay, including Outage Costs, and (B) DP&L reserves all rights to defend against any such Claims by DEK and to seek recovery of any amounts previously paid that are associated with the 2014 Spring Outage and other amounts that are paid pursuant to the Operation Agreement; (ii) any extension of the Operation Agreement pursuant to this Agreement shall not be deemed to have altered any of DP&L's or DEK's rights that would have existed in the absence of such extension, including each of DP&L's and DEK's rights in connection with the Claims, nor shall such extension be construed as any evidence of, or any obligations for, a course of dealing beyond the expiration of the Operation Agreement, or in any way prejudice or constitute a waiver of either Party's positions with respect to any Claims; and (iii) any extension of the Operation Agreement pursuant to this Agreement will not alter the

Parties' rights and obligations regarding the Plant beyond the Forbearance Period, nor shall it be construed as a continuing course of dealing.

9.3 Forbearance and Release; Reservation of Rights.

(a) During the Forbearance Period, each of DEK (on behalf of itself and on behalf of the other DEK Related Parties) and DP&L (on behalf of itself and on behalf of the other DP&L Related Parties) hereby agrees to forbear from asserting, and not to bring any Proceeding, against any of the DEK Related Parties or the DP&L Related Parties, as applicable, with respect to any Claims. During the Forbearance Period, any statute of limitations, statute of repose, laches, or other defense related to the passage of time shall be tolled with respect to the Claims.

(b) Provided that the Closing occurs, then: (i) DEK (on behalf of itself and on behalf of the other DEK Related Parties), hereby releases and forever discharges DP&L and the other DP&L Related Parties from any Liability regarding, and covenants not to bring any Proceeding against any of the DP&L Related Parties, arising out of or otherwise related to, the Claims; and (ii) DP&L (on behalf of itself and on behalf of the other DP&L Related Parties), hereby releases and forever discharges DEK and the other DEK Related Parties from any Liability regarding, and covenants not to bring any Proceeding against any of the DEK Related Parties arising out of or otherwise related to, the Claims.

(c) In the event that the Closing does not occur and this Agreement is terminated pursuant to Section 9.1, then, in addition to any rights or remedies available to the Parties under this Agreement, except with respect to the tolling during the Forbearance Period set forth in Section 9.3(a), the Parties shall have reserved all of their rights and defenses against each other with respect to the Claims, and such rights and defenses shall not in any way be altered as a result of the Parties having entered into this Agreement.

ARTICLE X

INDEMNIFICATION

10.1 Survival of Representations and Warranties. Notwithstanding any otherwise applicable statute of limitations:

(a) The representations and warranties by DEK in Article VI of this Agreement shall survive for a period of 18 months after the Closing Date, except that (i) the representations and warranties contained in Sections 6.1, 6.2, 6.3 and 6.4 shall survive until the third (3rd) anniversary of the Closing Date, and (ii) if a claim or notice is given under Section 10.2 with respect to a breach of any representation or warranty prior to the applicable expiration date, such representation or warranty shall, with respect to such alleged breach, continue indefinitely until such claim is finally resolved. This Section 10.1(a) shall not limit any covenant or agreement of DEK contained herein, which shall survive until performed in accordance with its respective terms.

(b) The representations and warranties by DP&L in Article V of this Agreement shall survive for a period of 18 months after the Closing Date, except that (i) the

representations and warranties contained in Section 5.7 shall expire sixty (60) days after the expiration of the relevant statute of limitations, including all extensions and waivers thereof, (ii) the representations and warranties contained in Sections 5.1, 5.2, 5.3, 5.4, 5.5. and 5.6 shall survive until the third (3rd) anniversary of the Closing Date, and (iii) if a written claim is asserted with specificity under Section 10.3 with respect to a breach of any representation or warranty prior to the applicable expiration date, such claim shall not thereafter be barred on the basis of the applicable expiration date. This Section 10.1(b) shall not limit any covenant or agreement of DP&L contained herein, which shall survive until performed in accordance with its respective terms.

10.2 Indemnification by DEK.

(a) Subject to the limitations set forth in Section 10.2(b), from and after the Closing, DEK hereby agrees to indemnify, defend and hold harmless each of the DP&L Related Parties from and against any and all Liabilities, claims, damages, Taxes, costs or expenses, including attorneys' fees (collectively, "Losses") that may be sustained, suffered, or incurred by such DP&L Related Party arising out of or resulting from (i) any inaccuracy or breach of any of the representations and warranties made by DEK in this Agreement or any of its Related Agreements, (ii) any breach or nonperformance of any covenants or agreements made by DEK in this Agreement or any of its Related Agreements, or (iii) the Assumed Liabilities.

(b) DEK shall not be required to indemnify the DP&L Related Parties under Sections 10.2(a)(i) until the aggregate amount of all Losses incurred by the DP&L Related Parties exceeds Two Hundred Thousand Dollars (\$200,000) (the "Deductible"), in which event DEK shall be responsible only for such Losses exceeding the Deductible. Further, DEK's aggregate obligation to indemnify the DP&L Related Parties under Sections 10.2(a)(i) shall not exceed (i) with respect to any claims arising out of or relating to any inaccuracy in or breach of any of the representations and warranties of DEK in Sections 6.1, 6.2, 6.3 or 6.4, Nine Million Five Hundred Thousand Dollars (\$9,500,000), and (ii) with respect to all other claims under Section 10.2(a)(i), One Million Dollars (\$1,000,000) (such applicable maximum amounts, the "DEK Caps"). Notwithstanding the foregoing, in no event shall either the Deductible or the DEK Caps be applicable with respect to any claims based upon fraud, intentional misrepresentation or criminal activity.

(c) For the avoidance of doubt and in furtherance and not in limitation of the provisions of Section 10.2(a), the indemnity set forth in Section 10.2(a)(iii) shall apply with respect to any Losses related to claims made under any Environmental Law with respect to the Plant, irrespective of whether the claims or violations are alleged to have occurred prior to or subsequent to Closing ("Environmental Liabilities") and neither the Deductible nor the DEK Caps shall operate to limit DEK's indemnification of DP&L Related Parties with respect to any such Environmental Liabilities. The foregoing shall also apply with respect to any claims made by employees or contractors of DEK made under Workman's Compensation or otherwise alleging damage from environmental exposure.

(d) For the avoidance of doubt and in furtherance and not in limitation of the provisions of Section 10.2(a) the indemnity set forth in Section 10.2(a)(iii) shall apply with respect to any Losses related to claims made by any third party in contract, tort, or otherwise that

are related to actions or inactions by DEK before or after Closing with respect to the Purchased Assets or the Plant, and neither the Deductible nor the DEK Caps shall operate to limit DEK's indemnification of DP&L Related Parties with respect to Losses covered under this Section 10.2(d).

(e) For the avoidance of doubt and in furtherance and not in limitation of the provisions of Section 10.2(a), the indemnity set forth in Section 10.2(a)(iii) shall become effective as of Closing and shall remain in effect indefinitely.

10.3 Indemnification by DP&L.

(a) Subject to the limitations set forth in Section 10.3(b), from and after the Closing, DP&L hereby agrees to indemnify, defend and hold harmless each of the DEK Related Parties from and against any and all Losses that may be sustained, suffered, or incurred by such DEK Related Party arising out of or resulting from (i) any inaccuracy or breach of any of the representations and warranties made by DP&L in this Agreement or any of its Related Agreements, (ii) any breach or nonperformance of any covenants or agreements made by DP&L in this Agreement or any of its Related Agreements, or (iii) the Retained Liabilities or any Excluded Assets which are related to the Plant.

(b) DP&L shall not be required to indemnify the DEK Related Parties under Section 10.3(a)(i) until the aggregate amount of all Losses incurred by the DEK Related Parties exceeds the Deductible, in which event DP&L shall be responsible only for such Losses exceeding the Deductible. Further, DP&L's aggregate obligation to indemnify the DEK Related Parties under Section 10.3(a)(i) shall not exceed (i) with respect to any claims arising out of or relating to any inaccuracy in or breach of any of the representations and warranties of DP&L contained in Sections 5.1, 5.2, 5.3, or 5.4, Nine Million Five Hundred Thousand Dollars (\$9,500,000); (ii) with respect to any claims arising out of or relating to any inaccuracy in or breach of any of the representations and warranties of DP&L contained in Sections 5.5, 5.6, or 5.7, (A) Twenty-Five Million Dollars (\$25,000,000), if the notice required by Section 10.4 with respect to such claim is delivered on or prior to the first anniversary of the Closing Date, (B) Twenty Million Dollars (\$20,000,000), if such notice is delivered after the first anniversary of the Closing Date and on or prior to the second anniversary of the Closing Date, and (C) Fifteen Million Dollars (\$15,000,000), if such notice is delivered after the second anniversary of the Closing Date; and (iii) with respect to all other claims under Section 10.3(a)(i), One Million Dollars (\$1,000,000) (such applicable maximum amounts, the "DP&L Caps"). Notwithstanding the foregoing, in no event shall either the Deductible or the DP&L Caps be applicable with respect to any claims based upon fraud, intentional misrepresentation or criminal activity.

10.4 Notice of Claims. As promptly as is reasonably practicable after becoming aware of the basis of a claim for indemnification pursuant to Section 10.2(a) or Section 10.3(a), the Person seeking indemnification hereunder (the "Indemnified Party") shall deliver written notice to the Party required to provide indemnification hereunder (the "Indemnifying Party"), setting forth in reasonable detail the nature of such claim (including copies of any documents and written correspondence related thereto), the representations, warranties, covenants or obligations alleged to have been breached and, if known, the amount that the Indemnified Party seeks hereunder from the Indemnifying Party; provided, however, that failure to provide such notice

promptly shall not relieve the Indemnifying Party of its obligations hereunder except to the extent the Indemnified Party shall have been materially prejudiced by such failure.

10.5 Indemnification Procedures Regarding Third-Party Claims. The procedures to be followed by the Parties with respect to indemnification hereunder regarding claims by third-Persons which could give rise to an indemnification obligation hereunder shall be as follows:

(a) The Indemnifying Party shall be entitled, at its own expense, to participate in the defense of any such Proceeding or claim, and, if (i) the Proceeding or claim involved seeks (and continues to seek) solely monetary damages, and (ii) the Indemnifying Party confirms, in writing, its obligation hereunder to indemnify and hold harmless the Indemnified Party with respect to such damages in their entirety pursuant to Section 10.2(a) or Section 10.3(a), as the case may be, then the Indemnifying Party shall be entitled to assume and control such defense with counsel chosen by the Indemnifying Party, and reasonably acceptable to the Indemnified Party, which approval shall not be unreasonably withheld, conditioned or delayed. The Indemnified Party shall be entitled to participate therein after such assumption, the costs of such participation following such assumption to be at its own expense. Upon assuming such defense, the Indemnifying Party shall have full rights to enter into any monetary compromise or settlement which is dispositive of the matters involved; provided, that such settlement is paid in full by the Indemnifying Party and will not have any continuing material adverse effect upon the Indemnified Party. Notwithstanding the foregoing, the Indemnified Party shall have the right to pay, settle or compromise any such Proceeding or claim, provided that in such event the Indemnified Party shall waive any right to indemnity therefor hereunder unless the Indemnified Party shall have sought the approval of the Indemnifying Party to such payment, settlement or compromise and such approval was unreasonably withheld, conditioned or delayed, in which event no claim for indemnity therefor hereunder shall be waived.

(b) With respect to any Proceeding or claim as to which the Indemnifying Party shall not have assumed the defense, the Indemnified Party shall assume and control the defense of and contest such Proceeding or claim with counsel chosen by it and reasonably acceptable to the Indemnifying Party, which approval shall not be unreasonably withheld, conditioned or delayed. The Indemnifying Party shall be entitled to participate in the defense of such Proceeding or claim, the cost of such participation to be at its own expense. The Indemnifying Party shall be obligated to pay the reasonable attorneys' fees and expenses of the Indemnified Party to the extent that such fees and expenses relate to claims as to which indemnification is due under Section 10.2(a) or Section 10.3(a), as the case may be. The Indemnified Party shall have full rights to dispose of such Proceeding or claim and enter into any monetary compromise or settlement; provided, however, in the event that the Indemnified Party shall settle or compromise any action, proceeding or claim for which indemnification is due under Section 10.2(a) or Section 10.3(a), as the case may be, it shall act reasonably and in good faith in doing so.

(c) Both the Indemnifying Party and the Indemnified Party shall cooperate fully with one another in connection with the defense, compromise or settlement of any such Proceeding or claim, including, by making available to the other all pertinent information and witnesses within its control.

10.6 Mitigation of Damages.

(a) Each Indemnified Party shall use commercially reasonable efforts to mitigate any Losses; provided, that any failure to mitigate pursuant to this Section 10.6 shall only relieve the Indemnifying Party to the extent of any Loss caused by or arising out of such failure to mitigate.

(b) In the event that (i) DEK incurs indemnifiable Losses arising from a breach of Section 5.6, and (ii) any owners title insurance policy it acquires with respect to the Real Property provides coverage for all or a portion of such Losses, then DEK will use its commercially reasonable efforts to file and pursue a claim under the policy with respect to such Losses; provided, that DP&L's obligations under Section 10.3 regarding such Losses shall not be conditioned upon, delayed by or otherwise subject to DEK's pursuit of such claim; and provided further, that if DP&L has fully satisfied its obligations with respect to such Losses, it shall be reimbursed by DEK from any amounts DEK is paid regarding its claim under the policy, net of any deductible or out of pocket costs incurred by DEK in connection with the claim, and up to the amount of such Losses paid to DEK by DP&L.

10.7 Limitations.

(a) The Parties have negotiated the limitations set forth in Sections 10.2(b) and 10.3(b) in part to avoid disputes concerning the meaning of materiality qualifiers such as "Material Adverse Effect", "material", "materially", "in all material respects", and other similar qualifiers. Accordingly, for purposes of this Article X, any such materiality qualifier contained in any representation or warranty shall be ignored in determining whether there has been a breach of or inaccuracy in a representation or warranty and in measuring the corresponding damages.

(b) An Indemnifying Party shall not have any Liability following the Closing pursuant to this Article X for any consequential, remote, speculative or punitive damages, except to the extent of consequential damages that are the natural, probable and foreseeable consequence of the underlying breach; provided, however, that the foregoing shall in no way limit an Indemnifying Party's obligations in the event that any such damages are recovered by third parties in connection with Losses indemnified hereunder.

10.8 Indemnification as Exclusive Remedy. Notwithstanding anything in this Agreement or any Related Agreement to the contrary or any right or remedy available under any Law, except in the case of fraud, intentional misrepresentation or criminal activity, following the Closing the indemnification provided in this Article X shall be the sole and exclusive remedy available to any Party for any breach of any representation, warranty, covenant or obligation by any Party pursuant to this Agreement or otherwise in connection with the transactions contemplated hereunder, and no Indemnified Person shall pursue or seek to pursue any other remedy. Except as specifically set forth in or arising under this Article X, from and after the Closing, each Party hereby irrevocably waives any rights and claims that it may have against any other Party, whether at Law or in equity, arising pursuant to this Agreement or otherwise in connection with the transactions contemplated by this Agreement, including claims for breach of contract, breach of representation or warranty, negligent misrepresentation and all claims for

breach of duty; provided, however, that either Party may seek injunctive or other equitable relief to enforce any of the covenants hereunder.

ARTICLE XI

MISCELLANEOUS

11.1 Parties in Interest. Nothing in this Agreement, whether express or implied, shall be construed to give any Person, other than the Parties or their respective successors and permitted assigns, any legal or equitable right, remedy, claim or benefit under or in respect of this Agreement, except for the rights of any Indemnified Party under Article X.

11.2 Assignment. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. Neither Party may assign either this Agreement or any of its rights, interests, or obligations hereunder without the express prior written consent of the other Party, and any attempted assignment, without such consent, shall be null and void.

11.3 Notices. All notices and other communications required or permitted to be given by any provision of this Agreement shall be in writing and mailed (certified or registered mail, postage prepaid, return receipt requested) or sent by hand or overnight courier, or by facsimile transmission (with acknowledgment received), charges prepaid and addressed to the intended recipient as follows, or to such other addresses or numbers as may be specified by either Party from time to time by like notice to the other Party:

If to DP&L:	The Dayton Power and Light Company 1065 Woodman Drive Dayton, Ohio 45432 Attn: Philip R. Herrington Email: phil.herrington@aes.com Facsimile: (937) 259-7386
with a copy to:	Legal Department The Dayton Power and Light Company 1065 Woodman Drive Dayton, Ohio 45432 Attn: Randall V. Griffin, Esq. Email: Randall.griffin@aes.com Facsimile: (937) 259-7813
If to DEK:	Duke Energy Kentucky, Inc. 139 E. 4 th Street Cincinnati, Ohio 45202 Attn: President Email: jim.henning@duke-energy.com Facsimile: (513) 287-2435

with a copy to:

Duke Energy Corporation
550 South Tryon Street, DEC
Charlotte, North Carolina 28202
Attention: Greer Mendelow, Esq.
Email: greer.mendelow@duke-energy.com
Facsimile: (980) 373-8534

and

Parker Poe Adams & Bernstein LLP
401 S. Tryon Street, Suite 3000
Charlotte, North Carolina 28202
Attention: Roy L. Smart, III
Email: skipsmart@parkerpoe.com
Facsimile: (704) 334-4706

All notices and other communications given in accordance with the provisions of this Agreement shall be deemed to have been given and received: (i) when delivered, if delivered by hand or transmitted by facsimile (with acknowledgment received); (ii) three (3) Business Days after the same are sent by certified or registered mail, postage prepaid, return receipt requested; or (iii) one (1) Business Day after the same are sent by a reliable overnight courier service, with acknowledgment of receipt.

11.4 Amendments and Waivers. This Agreement may not be amended, supplemented or otherwise modified except in a written instrument executed by each Party. No waiver by any of the Parties of any default, misrepresentation, or breach of warranty or covenant hereunder, whether intentional or not, shall be deemed to extend to any prior or subsequent default, misrepresentation, or breach of warranty or covenant hereunder or affect in any way any rights arising by virtue of any prior or subsequent occurrence. No waiver by any of the Parties of any of the provisions hereof shall be effective unless explicitly set forth in writing and executed by the Party sought to be charged with such waiver.

11.5 Headings. The table of contents and Section headings contained in this Agreement are for reference purposes only and shall not be deemed a part of this Agreement or affect in any way the meaning or interpretation of this Agreement.

11.6 Construction. The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement.

11.7 Entire Agreement. This Agreement (including the Schedules and the Exhibits hereto), the Related Agreements and the Confidentiality Agreement constitute the entire agreement among the Parties with respect to the subject matter hereof and thereof and supersede any prior understandings, negotiations, agreements, or representations among the Parties of any

nature, whether written or oral, to the extent they relate in any way to the subject matter hereof or thereof.

11.8 Severability. If any provision of this Agreement or the application of any such provision to any Person or circumstance shall be declared by any court of competent jurisdiction to be invalid, illegal, void or unenforceable in any respect, all other provisions of this Agreement, or the application of such provision to Persons or circumstances other than those as to which it has been held invalid, illegal, void or unenforceable, shall nevertheless remain in full force and effect and will in no way be affected, impaired or invalidated thereby. Upon such determination that any provision, or the application of any such provision, is invalid, illegal, void or unenforceable, the Parties shall negotiate in good faith to modify this Agreement so as to effect the original intent of the Parties as closely as possible to the fullest extent permitted by applicable Law in an acceptable manner to the end that the transactions contemplated hereby are fulfilled to the greatest extent possible.

11.9 Expenses. Unless otherwise provided herein, each Party agrees to pay, without right of reimbursement from the other, all costs and expenses incurred by it (or any of its Affiliates) incident to the performance of its (or its Affiliates) obligations hereunder, including, without limitation, the fees and disbursements of counsel, accountants, financial advisors, experts and consultants employed by each Party in connection with the transactions contemplated hereby, whether or not the transactions contemplated by this Agreement are consummated.

11.10 Governing Law. This Agreement and all claims arising out of or relating to this Agreement and the transactions contemplated hereby shall be governed by the Laws of the State of Ohio, without regard to the conflicts of law principles that would result in the application of any Law other than the Law of the State of Ohio.

11.11 Consent to Jurisdiction: Waiver of Jury Trial.

(a) Each of the Parties irrevocably submits to the exclusive jurisdiction of (i) state courts of the State of Ohio and (ii) the United States District Court for the Southern District of Ohio for the purposes of any Proceeding arising out of or relating to this Agreement or any transaction contemplated hereby (and agrees not to commence any Action, suit or proceeding relating hereto except in such courts). Each of the Parties further agrees that service of any process, summons, notice or document hand delivered or sent by U.S. registered mail to such Party's respective address set forth in Section 11.3 will be effective service of process for any Proceeding in Ohio with respect to any matters to which it has submitted to jurisdiction as set forth in the immediately preceding sentence. Each of the Parties irrevocably and unconditionally waives any objection to the laying of venue of any Proceeding arising out of or relating to this Agreement or the transactions contemplated hereby in (i) state courts of the State of Ohio or (ii) the United States District Court for the Southern District of Ohio, and hereby further irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such Proceeding brought in any such court has been brought in an inconvenient forum. Notwithstanding the foregoing, each Party agrees that a final judgment in any Proceeding so brought shall be conclusive and may be enforced by suit on the judgment in any jurisdiction or in any other manner provided at Law or in equity. This Section 11.11(a) shall survive Closing, but

if this Agreement terminates prior to Closing, this Section 11.11(a) shall not have any force or effect other than with respect to Proceedings involving a claim for breach of this Agreement.

(b) EACH OF THE PARTIES IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT OR THE ACTIONS OF THE PARTIES IN THE NEGOTIATION, ADMINISTRATION, PERFORMANCE OR ENFORCEMENT HEREOF.

11.12 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original but all of which together will constitute one and the same instrument.

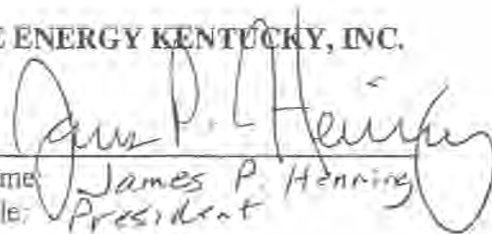
11.13 Dispute Resolution. In the event any dispute arises under this Agreement, such dispute shall be referred by DEK and DP&L to a senior officer designated by DEK and a senior officer designated by DP&L for resolution upon ten (10) days written notice from either such Party. The senior officers shall attempt to resolve all such disputes promptly and in a good faith manner; provided, however, that any dispute that cannot be resolved by such senior officers within thirty (30) days following submission to such senior officers may, in a Party's sole discretion, be (i) upon mutual agreement of the senior officers, submitted to binding arbitration for resolution in accordance with mutually agreed upon procedures or (ii) submitted to a court of competent jurisdiction for resolution.

11.14 Publicity. Prior to the Closing, no public announcement or other publicity regarding the existence of this Agreement or its contents or the transactions contemplated hereby shall be made by any Party or any of their respective Affiliates, officers, managers, directors, employees or representatives, without the prior written agreement of the other Party as to form, content, timing and manner of distribution or publication. Following the Closing, each Party shall maintain as confidential the terms and provisions of this Agreement and the terms of the transactions contemplated hereby. Notwithstanding the foregoing, nothing in this Section 11.14 shall prevent any Party or its Affiliates from (a) making any public announcement or other disclosure required by Law (including filings before regulatory bodies with jurisdiction that are required to approve or consent to the transactions) or the rules of any stock exchange, (b) disclosing this Agreement or its contents or the transactions contemplated hereby to current officers, directors, employees, or representatives of such Party and its Affiliates, or (c) enforcing its rights hereunder.

[signatures on following page]

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

DUKE ENERGY KENTUCKY, INC.

By: 
Name: James P. Henning
Title: President

THE DAYTON POWER AND LIGHT
COMPANY

By: _____
Name:
Title:

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

DUKE ENERGY KENTUCKY, INC.

By: _____
Name:
Title:

**THE DAYTON POWER AND LIGHT
COMPANY**

By: 
Name: Derek A. Rinker
Title: President and Chief Executive Officer

OK
T.H. Rinker
5/15/14
OK
DSE GRUCE
5/15/14

CRH

Schedule 1.2-1(i)
Knowledge of DP&L

Timothy G. Rice, Corporate Secretary
David J. Crusey, Vice President Commercial Operations
Daniel W. Sweeney, Director, CCD Liaison
Randall V. Griffin, Chief Regulatory Counsel, Legal Department
Miranda L. Goubeaux, Director Commercial Performance

Schedule 1.2-1(ii)
Knowledge of DEK

Steve Immel, VP – Midwest Regulated Operations
Jenny Bulach, GM II – Regulated Stations
Keith Pike, Principal Engineer
Michael Geers, Manager, EHS

Schedule 1.2-2
Outage Costs

1. EB021332 RHO Pendant Replacement – Addition
2. EB021332 RHO Pendant Replacement – Retirement
3. EB021423 RHO Precipitator Upgrade 2014 – Addition
4. EB021423 RHO Precipitator Upgrade 2014 – Retirement
5. EB021370 Install Stack Lining – Addition
6. EB021370 Install Stack Lining – Retirement
7. EB021438 Replace IP Turbine Blades – Addition
8. EB021438 Replace IP Turbine Blades – Retirement
9. EB021448 SSHO Partial Pendants – Addition
10. EB021448 SSHO Partial Pendants – Retirement

Schedule 1.2-3
Permitted Real Property Liens

1. Right of way and easement for general utility purposes to the Cincinnati Gas & Electric Company, from Tri-State Improvement Company, dated July 18, 1979, filed for record August 9, 1979, of record in Easement Book 6, Page 295, Boone County, Kentucky Clerk's Office.
2. Right of way and easement for telephone line purposes to Consolidated Telephone Company, from Thaddeus Ryle, dated April 7, 1959, filed for record in Miscellaneous Book 13, Page 136, Boone County, Kentucky Clerk's Office.
3. Terms, conditions and easement as set forth in right of way deed from Thaddeus Ryle and Ada Ryle to Boone County, Kentucky, dated December 8, 1961, filed for record March 12, 1962, of record in Deed Book 5, Page 219, Clerk's Office, Boone County, Kentucky.
4. Right of way and easement for general utility purposes to the Cincinnati Gas & Electric Company, from Tri-State Improvement Company, dated March 6, 1984, filed for record March 16, 1984, of record in Easement Book 12, Page 50, Boone County, Kentucky Clerk's Office.
5. Right of way and easement for general telephone purposes to Consolidated Telephone Company, of record in Miscellaneous Book 8, Page 5, Clerk's Office, Boone County, Kentucky.
6. Right of way and easement for telephone line purposes to Consolidated Telephone Company, of record in Miscellaneous Book 13, Page 87, Clerk's Office, Boone County, Kentucky.
7. Right of way and easement for telephone line purposes to Consolidated Telephone Company, of record in Miscellaneous Book 13, Page 102, Clerk's Office, Boone County, Kentucky.
8. Right of way and easement for telephone line purposes to Consolidated Telephone Company, of record in Miscellaneous Book 13, Page 116, Clerk's Office, Boone County, Kentucky.
9. Right of way and easement for telephone line purposes to Consolidated Telephone Company, of record in Miscellaneous Book 13, Page 118, Clerk's Office, Boone County, Kentucky.
10. Right of way and easement for telephone line purposes to Consolidated Telephone Company, of record in Miscellaneous Book 13, Page 136, Clerk's Office, Boone County, Kentucky.
11. Right of way and easement for telephone line purposes to Consolidated Telephone Company, of record in Miscellaneous Book 20, Page 140, Clerk's Office, Boone County, Kentucky.

12. Right of way and easement for highway purposes to Boone County, Kentucky, of record in Highway Book 5, Page 204, Clerk's Office, Boone County, Kentucky.
13. Right of way and easement for highway purposes to Boone County, Kentucky, of record in Highway Book 5, Page 213, Clerk's Office, Boone County, Kentucky.
14. Right of way and easement for highway purposes to Boone County, Kentucky, of record in Highway Book 5, Page 215, Clerk's Office, Boone County, Kentucky.
15. Right of way and easement for highway purposes to Boone County, Kentucky, of record in Highway Book 5, Page 219, Clerk's Office, Boone County, Kentucky.
16. Right of way and easement for highway purposes to Boone County, Kentucky, of record in Highway Book 7, Page 13, Clerk's Office, Boone County, Kentucky.
17. Flowage easement to the United States of America as set forth in Deed Book 142, Page 203, Clerk's Office, Boone County, Kentucky.
18. Flowage easement to the United States of America as set forth in Deed Book 143, Page 235, Clerk's Office, Boone County, Kentucky.
19. Flowage easement to the United States of America as set forth in Deed Book 143, Page 273, Clerk's Office, Boone County, Kentucky.
20. Flowage easement to the United States of America as set forth in Deed Book 145, Page 388, Clerk's Office, Boone County, Kentucky.
21. Flowage easement to the United States of America as set forth in Deed Book 148, Page 181, Clerk's Office, Boone County, Kentucky.
22. Flowage easement to the United States of America as set forth in Deed Book 149, Page 283, Clerk's Office, Boone County, Kentucky.
23. Flowage easement to the United States of America as set forth in Deed Book 150, Page 47, Clerk's Office, Boone County, Kentucky.
24. Terms, conditions and easement for ingress and egress as set forth in easement agreement recorded in Easement Book 70, Page 135, Clerk's Office, Boone County, Kentucky.
25. Terms and conditions as set forth in agreements between the Cincinnati Gas & Electric Company and the Dayton Power and Light Company, recorded in Deed Book 229, Page 166, Deed Book 229, Page 172, Deed Book 229, Page 179, Deed Book 229, Page 186, Deed Book 229, Page 195, Deed Book 229, Page 201, Deed Book 229, Page 209, Deed Book 229, Page 216, Deed Book 229, Page 225, Deed Book 237, Page 317 and Deed Book 303, Page 253, all in the Clerk's Office, Boone County, Kentucky.
26. Rights of upper and lower and abutting riparian owners and the public generally in and to the waters of the Ohio River and/or Lick Creek and to the uninterrupted natural flow

thereof, free of pollution from insured premises, and subject to the possibility of avulsion, and to the possibilities of accretion, erosion, reliction and submergence which might change boundaries established by said Ohio River and/or Lick Creek.

27. Declaration of restrictive covenants by Duke Energy Kentucky dated April 7, 2010 and recorded in Miscellaneous Book 1166, Page 425, Clerk's Office, Boone County, Kentucky.
28. Grants of easements to the Cincinnati Gas & Electric Company, as set forth in Clerk's Office, Boone, County, Kentucky, as follows:
 - Easement Book 4, Page 39;
 - Easement Book 4, Page 41;
 - Easement Book 4, Page 43;
 - Easement Book 4, Page 64;
 - Easement Book 4, Page 66;
 - Easement Book 4, Page 72;
 - Easement Book 4, Page 130;
 - Easement Book 4, Page 137;
 - Easement Book 4, Page 326;

Said easements were assigned to Tri-State Improvement Company by assignment of easement of record in Miscellaneous Book 182, Page 122, Clerk's Office, Boone County, Kentucky.

Schedule 2.1(b)
Real Property

Tax Parcel List

Parcel ID #'s

004.00-00-002.00
004.00-00-007.00
005.00-00-001.00
005.00-00-002.00
012.00-00-026.00
012.00-00-062.00
012.00-00-063.00
013.00-00-001.00

Legal Description

From vesting deed recorded in Book 303, Page 253 on May 19, 1983, from The Dayton Power and Light Company to The Cincinnati Gas & Electric Company nka Duke Energy Ohio, Inc. by amendment.

PARCEL I

Being a tract of land lying generally south of Kentucky State Route 338 and Rabbit Hash-Big Bone Road in Boone County, Commonwealth of Kentucky, the boundaries of which are delineated and shown on a series of four (4) drawings, prepared by The Cincinnati Gas & Electric Company, numbered 56000S0900; 56000S0901; 56000S0902; and 56000S0931. Copies of such drawings are attached hereto and made a part hereof.

The corner points between the courses embracing the tract of land, as shown on the drawings are numbered for reference, convenience and clarity of describing said parcel. Such points are tied to the State Plane Coordinate Grid System, Kentucky North Zone. The coordinate values of each point and the bearing and distance of each course between the points are shown and documented on a tabular form on the drawings.

The parcel of land is more particularly described as follows:

Beginning at Point 42 as shown on the attached drawings, said point marks the intersection of the southerly right of way line of Kentucky State Route 338, as now improved, with the westerly boundary line of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 225, Boone County Clerk's Office; thence, along the right of way line of Kentucky State Route 338, the following sixty-eight (68) courses:

1) along the arc of a curve deflecting to the left, 137.63 feet to Point 43 (said curve has radius of 2895.00 feet and is subtended by a chord which bears SOUTH 62° 08' 40" EAST, for a distance of 137.62 feet); 2) SOUTH 63° 30' 07" EAST, 42.14 feet to Point 44; 3) SOUTH 26° 29' 17" WEST, 10.00 feet to Point 45; 4) SOUTH 63° 30' 43" EAST, 90.00 feet to Point 46; 5) NORTH

26° 29' 17" EAST, 10.00 feet to Point 47; 6) SOUTH 63° 30' 22" EAST, 255.82 feet to Point 48; 7) along the arc of a curve deflecting to the left, 197.23 feet to Point 49 (said curve has a radius of 1940.00 feet and is subtended by a chord which bears SOUTH 66° 25' 04" EAST, for a distance of 197.14 feet); 8) SOUTH 20° 39' 32" WEST, 15.00 feet to Point 50; 9) along the arc of a curve deflecting to the left, 153.53 feet to Point 51 (said curve has a radius of 1955.00 feet and is subtended by a chord which bears SOUTH 71° 34' 49" EAST, for a distance of 153.49 feet); 10) NORTH 16° 12' 19" EAST, 10.00 feet to Point 52; 11) along the arc of a curve deflecting to the left, 87.45 feet to Point 53 (said curve has a radius of 1945.00 feet and is subtended by a chord which bears SOUTH 75° 07' 23" EAST for a distance of 87.45 feet); 12) SOUTH 76° 24' 26" EAST, 252.32 feet to Point 54; 13) along the arc of a curve deflecting to the right, 59.92 feet to Point 55 (said curve has a radius of 1111.00 feet and is subtended by a chord which bears SOUTH 74° 51' 59" EAST, for a distance of 59.91 feet); 14) SOUTH 16° 37' 21" WEST, 5.00 feet to Point 56; 15) along the arc of a curve deflecting to the right, 264.84 feet to Point 57 (said curve has a radius of 1106.00 feet and is subtended by a chord which bears SOUTH 66° 27' 20" EAST, for a distance of 264.20 feet); 16) SOUTH 59° 35' 55" EAST, 275.58 feet to Point 58; 17) NORTH 30° 24' 48" EAST, 5.00 feet to Point 59; 18) SOUTH 59° 36' 08" EAST, 23.62 feet to Point 60; 19) along the arc of a curve deflecting to the left, 493.28 feet to Point 62 (said curve has a radius of 1181.00 feet and is subtended by a chord which bears SOUTH 71° 34' 04" EAST, for a distance of 489.70 feet); 20) SOUTH 83° 32' 01" EAST, 257.59 feet to Point 63; 21) NORTH 6° 25' 43" EAST, 5.00 feet to Point 64; 22) SOUTH 83° 31' 53" EAST, 131.99 feet to Point 65; 23) along the arc of curve deflecting to the left, 277.34 feet to Point 66 (said curve has a radius of 603.00 feet and is subtended by a chord which bears NORTH 83° 18' 18" EAST, for a distance of 274.90 feet); 24) NORTH 70° 06' 58" EAST, 17.26 feet to Point 67; 25) along the arc of a curve deflecting to the right, 91.85 feet to Point 68 (said curve has a radius of 490.90 feet and is subtended by a chord which bears NORTH 75° 30' 11" EAST, for a distance of 91.72 feet); 26) SOUTH 9° 07' 46" EAST, 15.00 feet to Point 69; 27) along the arc of a curve deflecting to the right, 411.23 feet to Point 70 (said curve has a radius of 475.90 feet and is subtended by a chord which bears SOUTH 74° 23' 24" EAST, for a distance of 398.55 feet); 28) SOUTH 40° 20' 02" WEST, 10.00 feet to Point 71; 29) along the arc of a curve deflecting to the right, 39.34 feet to Point 72 (said curve has a radius of 465.90 feet and is subtended by a chord which bears SOUTH 47° 13' 55" EAST, for a distance of 39.33 feet); 30) SOUTH 44° 48' 56" EAST, 224.18 feet to Point 73; 31) SOUTH 44° 49' 08" EAST, 131.94 feet to Point 74; 32) NORTH 45° 12' 10" EAST, 10.00 feet to Point 75; 33) SOUTH 44° 49' 04" EAST, 300.01 feet to Point 76; 34) SOUTH 45° 11' 21" WEST, 30.00 feet to Point 77; 35) SOUTH 44° 49' 04" EAST, 144.13 feet to Point 78; 36) along the arc of a curve deflecting to the left, 6.64 feet to Point 79 (said curve has a radius of 648.00 feet and is subtended by a chord which bears SOUTH 45° 03' 40" EAST, for a distance of 6.64 feet); 37) NORTH 44° 35' 41" EAST, 30.00 feet to Point 80; 38) along the arc of a curve deflecting to the left, 161.78 feet to Point 81 (said curve has a radius of 618.00 feet and is subtended by a chord which bears SOUTH 52° 54' 13" EAST, for a distance of 161.32 feet); 39) SOUTH 29° 36' 10" WEST, 20.00 feet to Point 82; 40) along the arc of a curve deflecting to the left, 44.80 feet to Point 83 (said curve has a radius of 638.00 feet and is subtended by a chord which bears SOUTH 62° 25' 21" EAST, for a distance of 44.79 feet); 41) SOUTH 64° 25' 33" EAST, 289.82 feet to Point 85; 42) NORTH 25° 33' 56" EAST, 20.00 feet to Point 86; 43) SOUTH 64° 25' 43" EAST, 91.28 feet to Point 87; 44) along the arc of a curve deflecting to the right, 192.33 feet to Point 88; (said curve has a radius of 528.00 feet and is subtended by a chord which bears SOUTH 53° 59' 26"

EAST, for a distance of 191.27 feet); 45) SOUTH 46° 27' 38" WEST, 5.00 feet to Point 89; 46) along the arc of a curve deflecting to the right, 107.75 feet to Point 90 (said curve has a radius of 523.00 feet and is subtended by a chord which bears SOUTH 37° 38' 59" EAST, for a distance of 107.56 feet); 47) SOUTH 31° 45' 13" EAST, 81.99 feet to Point 91; 48) NORTH 58° 14' 59" EAST, 5.00 feet to Point 92; 49) SOUTH 31° 45' 13" EAST, 187.87 feet to Point 93; 50) along the arc of a curve deflecting to the left, 235.41 feet to Point 94 (said curve has a radius of 454.31 feet and is subtended by a chord which bears SOUTH 46° 35' 40" EAST, for a distance of 232.79 feet); 51) NORTH 28° 32' 14" EAST, 10.00 feet to Point 95; 52) along the arc of a curve deflecting to the left, 249.67 feet to Point 96 (said curve has a radius of 444.31 feet and is subtended by a chord which bears SOUTH 77° 32' 17" EAST, for a distance of 246.40 feet); 53) SOUTH 3° 38' 26" EAST, 20.00 feet to Point 97; 54) along the arc of a curve deflecting to the left, 142.96 feet to Point 98 (said curve has a radius of 464.31 feet and is subtended by a chord which bears NORTH 77° 32' 34" EAST, for a distance of 142.40 feet); 55) NORTH 68° 43' 18" EAST, 143.95 feet to Point 99; 56) NORTH 21° 16' 49" WEST, 20.00 feet to Point 100; 57) NORTH 68° 43' 18" EAST, 159.74 feet to Point 101; 58) along the arc of a curve deflecting to the right, 201.96 feet to Point 102 (said curve has a radius of 537.92 feet and is subtended by a chord which bears NORTH 79° 28' 35" EAST, for a distance of 200.78 feet); 59) NORTH 1° 08' 45" EAST, 5.00 feet to Point 103; 60) along the arc of a curve deflecting to the right, 116.45 feet to Point 104 (said curve has a radius of 542.92 feet and is subtended by a chord which bears SOUTH 83° 37' 34" EAST, for a distance of 116.22 feet); 61) SOUTH 77° 28' 11" EAST, 39.13 feet to Point 105; 62) SOUTH 12° 28' 27" WEST, 25.00 feet to Point 106; 63) SOUTH 77° 29' 36" EAST, 300.02 feet to Point 107; 64) NORTH 12° 28' 27" EAST, 25.00 feet to Point 108; 65) SOUTH 77° 29' 54" EAST, 213.56 feet to Point 109; 66) along the arc of a curve deflecting to the right, 186.70 feet to Point 110 (said curve has a radius of 788.32 feet and is subtended by a chord which bears SOUTH 70° 42' 25" EAST, for a distance of 186.26 feet); 67) SOUTH 26° 06' 14" WEST, 15.00 feet to Point 111; 68) along the arc of a curve deflecting to the right, 305.00 feet to Point 112 at the northeast corner of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 186, said clerk's office (said curve has a radius of 773.30 feet and is subtended by a chord which bears SOUTH 52° 37' 24" EAST, for a distance of 303.03 feet);

thence, along boundary lines of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 186, said clerk's office, the following three (3) courses.

1) SOUTH 46° 30' 42" WEST, 203.44 feet to Point 113; 2) SOUTH 15° 46' 10" EAST, 110.02 feet to Point 114 in Lick Creek; 3) generally with the thread of Lick Creek as the same meanders southwardly, to Point 244 in the northerly, normal low water line of the Ohio River (the straight line course between the above described Points 114 and 244 bears SOUTH 15° 36' 35" WEST, for a distance of 3291.78 feet);

thence, along the normal low water line of the Ohio River (Normal Pool Elevation is 455.00, more or less, National Geodetic Survey Data), the following ten (10) courses:

1) NORTH 88° 36' 04" WEST, 2815.00 feet to Point 243; 2) SOUTH 85° 05' 08" WEST, 2588.50 feet to Point 242; 3) NORTH 84° 59' 44" WEST, 2249.15 feet to Point 241; 4) NORTH 80° 00' 28" WEST, 1631.09 feet to Point 240; 5) NORTH 63° 46' 47" WEST, 1170.11 feet to Point 239; 6) NORTH 46° 14' 06" WEST, 1065.00 feet to Point 238; 7) NORTH 36° 04' 06"

WEST, 1340.00 feet to Point 237; 8) NORTH 28° 39' 06" WEST, 1550.00 feet to Point 236; 9) NORTH 8° 14' 07" WEST, 1164.31 feet to Point 235; 10) NORTH 16° 09' 31" EAST, 2341.83 feet to Point 234 at the intersection of the normal low water line of the Ohio River with a northerly boundary line of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 201, said clerk's office;

thence, along boundary lines of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 201, the following two (2) courses:

1) SOUTH 76° 28' 06" EAST, 2415.18 feet to Point 13; 2) NORTH 16° 27' 04" EAST, 1077.20 feet to Point 14 in Rabbit Hash-Big Bone Road;

thence in Rabbit Hash-Big Bone Road, the following five (5) courses:

1) SOUTH 77° 12' 32" EAST, 84.60 feet to Point 290; 2) SOUTH 74° 33' 37" EAST, 87.15 feet to Point 291; 3) SOUTH 71° 25' 52" EAST, 71.66 feet to Point 292; 4) SOUTH 66° 05' 21" EAST, 72.24 feet to Point 293; 5) SOUTH 63° 25' 06" EAST, 139.76 feet to Point 297 in an easterly boundary line of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 201, said clerk's office;

thence, along boundary lines of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 201, said clerk's office, the following three (3) courses:

1) SOUTH 22° 35' 44" WEST, 215.00 feet to Point 298; 2) SOUTH 66° 46' 14" EAST, 202.99 feet to Point 299; 3) NORTH 22° 35' 44" EAST, 215.00 feet to Point 295 in Rabbit Hash-Big Bone Road;

thence in Rabbit Hash-Big Bone Road, the following two (2) courses:

1) SOUTH 85° 49' 18" EAST, 133.41 feet to Point 296; 2) NORTH 89° 54' 36" EAST, 146.51 feet to Point 135 in an easterly boundary line of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 201, said clerk's office;

thence, along boundary lines of the property conveyed to CINCINNATI and DAYTON by deeds recorded in Deed Book 229, Page 201, said clerk's office, the following two (2) courses:

1) SOUTH 16° 16' 54" WEST, 1900.08 feet to Point 136; 2) SOUTH 73° 37' 16" WEST, 1145.44 feet to Point 137 at a northeast corner of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 209, said clerk's office;

thence, along boundary lines of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 209, said clerk's office, the following two (2) courses:

1) SOUTH 15° 39' 02" EAST, 439.27 feet to Point 138; 2) NORTH 73° 34' 17" EAST, 1297.43 feet to Point 139 at a northeast corner of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 209, said clerk's office, and a northwest corner of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 216, said clerk's office;

thence, along boundary lines of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 216; the following four (4) courses:

1) SOUTH 77° 37' 24" EAST, 637.13 feet to Point 140; 2) NORTH 18° 39' 31" EAST, 1306.30 feet to Point 141; 3) NORTH 76° 24' 41" WEST, 442.61 feet to Point 142; 4) NORTH 14° 11' 12" EAST, 424.21 feet to Point 143 in Rabbit Hash-Big Bone Road;

thence in Rabbit Hash-Big Bone Road the following five (5) courses:

1) South 25° 47' 56" EAST, 73.92 feet to Point 144; 2) SOUTH 28° 16' 45" EAST, 161.47 feet to Point 145; 3) SOUTH 47° 00' 30" EAST, 82.93 feet to Point 146; 4) NORTH 85° 46' 31" EAST, 249.23 feet to Point 147; 5) NORTH 87° 23' 05" EAST, 527.73 feet to Point 33 in an easterly boundary line of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 216, said clerk's office;

thence, along boundary lines of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 216, said clerk's office, the following ten (10) courses:

1) SOUTH 18° 24' 28" WEST, 26.54 feet to Point 34; 2) SOUTH 23° 47' 57" WEST, 239.49 feet to Point 35; 3) SOUTH 23° 27' 59" WEST, 143.87 feet to Point 36; 4) SOUTH 18° 08' 52" WEST, 182.43 feet to Point 37; 5) SOUTH 25° 35' 20" WEST, 344.12 feet to Point 38; 6) SOUTH 23° 53' 16" WEST, 440.62 feet to Point 39; 7) SOUTH 17° 10' 26" WEST, 208.93 feet to Point 40; 8) SOUTH 17° 10' 34" WEST, 190.72 feet to Point 40A; 9) SOUTH 17° 16' 22" WEST, 809.31 feet to Point 40B; 10) SOUTH 73° 13' 28" EAST, 1647.22 feet to Point 40C on the dividing line between the properties conveyed to CINCINNATI and DAYTON by deeds recorded in Deed Book 229, Page 216, and in Deed Book 229, Page 225, both in said clerk's office;

thence, along boundary lines of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 225, said clerk's office, the following two (2) courses:

1) NORTH 16° 24' 21" EAST, 1000.00 feet to Point 41; 2) NORTH 16° 24' 22" EAST, 1236.64 feet to Point 42, the place of beginning.

Containing **1509.062 acres** of land, more or less, according to a Survey made by KZF, Environmental Design Consultants.

Excepting from the above described real estate the **2.10 acre** parcel of real estate, designated as East Bend Generating Station Substation, conveyed to CINCINNATI by DAYTON by deed recorded in D307-15 and further conveyed to The Union Light, Heat and Power Company, nka Duke Energy Kentucky, Inc. by deed recorded in D911-524; and

Excepting from the above described real estate the **710.190 acre** parcel conveyed in D911-524; and

Excepting from the above described real estate the **1.5588 acre** parcel of real estate conveyed in 746-107 to East Bend Cemetery.

Subject to easements and restrictions of record.

Being the same real estate conveyed to CINCINNATI and DAYTON as follows: 1) by deed recorded in Deed Book 229, Page 166, Boone County Clerk's Office, and corrected by a deed recorded in Deed Book 229, Page 172, said clerk's office; 2) by deed recorded in Deed Book 229, Page 179, said clerk's office; 3) by deed recorded in Deed Book 229, Page 186, said clerk's office; 4) by deed recorded in Deed Book 229, Page 195, said clerk's office; 5) by deed recorded in Deed Book 229, Page 209, said clerk's office; and 6) by deed recorded in Deed Book 237, Page 317, said clerk's office.

And also **being** part of the same real estate conveyed to CINCINNATI and DAYTON as follows:

1) by deed recorded in Deed Book 229, Page 201, said clerk's office; 2) by deed recorded in Deed Book 229, Page 216, said clerk's office; and 3) by deed recorded in Deed Book 229, Page 225, said clerk's office.

PARCEL II

Being a parcel of land lying generally north of Kentucky State Route 338 and Rabbit Hash-Big Bone Road in Boone County, the boundaries of which are delineated and shown on a series of 4 drawings, prepared by The Cincinnati Gas & Electric Company, numbered 56000S0900; 56000S0901; 56000S0902; and 56000S0931, attached.

The corner points between the courses embracing the tract of land, as shown on the drawings are numbered for reference, convenience and clarity of describing said parcel. Such points are tied to the State Plan Coordinate Grid System, Kentucky North Zone. The coordinate values of each point and the bearing and distance of each course between the points are shown and documented on a tabular form on the drawings.

Such parcel of land is more particularly described as follows:

Beginning at Point 15 shown on the attached drawings, said point marks the intersection of the center line of Rabbit Hash-Big Bone Road with the most westerly boundary line of that part of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 201, said clerk's office, which lies north of Rabbit Hash-Big Bone Road; thence, along the boundary lines of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 201, said clerk's office, the following eight (8) courses:

- 1) NORTH 7° 46' 52" EAST, 323.95 feet to Point 16;
- 2) NORTH 70° 13' 33" EAST, 131.39 feet to Point 17;
- 3) SOUTH 61° 24' 42" EAST, 551.77 feet to Point 18;
- 4) NORTH 31° 43' 42" EAST, 801.27 feet to Point 19;
- 5) NORTH 25° 28' 43" EAST, 997.55 feet to Point 20;
- 6) NORTH 23° 41' 52" EAST, 1092.01 feet to Point 21;
- 7) SOUTH 77° 12' 53" EAST, 253.64 feet to Point 22;

- 8) SOUTH 72° 46' 06" EAST, 996.36 feet to Point 23;

thence, along boundary lines of the property conveyed to CINCINNATI and DAYTON by deed recorded in Book 229, Page 216, said clerk's office, the following ten (10) courses:

- 1) SOUTH 73° 52' 27" EAST, 405.87 feet to Point 24;
- 2) SOUTH 45° 38' 33" EAST, 752.99 feet to Point 25;
- 3) SOUTH 53° 55' 46" EAST, 149.24 feet to Point 26;
- 4) SOUTH 51° 46' 27" WEST, 458.64 feet to Point 27;
- 5) SOUTH 48° 39' 23" WEST, 817.93 feet to Point 28;
- 6) SOUTH 29° 11' 22" WEST, 305.41 feet to Point 29;
- 7) SOUTH 24° 23' 59" WEST, 462.31 feet to Point 30;
- 8) SOUTH 12° 27' 32" WEST, 342.86 feet to Point 31;
- 9) SOUTH 27° 05' 38" WEST, 876.38 feet to Point 32;
- 10) SOUTH 18° 25' 00" WEST, 29.72 feet to Point 33 in Rabbit Hash-Big Bone Road, thence in Rabbit Hash-Big Bone Road SOUTH 87° 23' 05" WEST, 527.73 feet to Point 147 in a westerly boundary line of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 216, said clerk's office;

thence, along boundary lines of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 216, said clerk's office, the following four (4) courses:

- 1) NORTH 13° 54' 03" EAST, 1013.11 feet to Point 148;
- 2) NORTH 2° 33' 22" EAST, 252.71 feet to Point 149;
- 3) NORTH 3° 08' 11" EAST, 320.22 feet to Point 150;
- 4) NORTH 8° 21' 56" EAST, 320.64 feet to Point 126 on the dividing line between the properties conveyed to CINCINNATI and DAYTON by deeds recorded in Deed Book 229, Page 201, and in Deed Book 229, Page 216, both in said clerk's office;

thence, along boundary lines of the property conveyed to CINCINNATI and DAYTON by deed recorded in Deed Book 229, Page 201, said clerk's office, the following eight (8) courses:

- 1) NORTH 46° 42' 52" WEST, 127.62 feet to Point 127;
- 2) SOUTH 46° 49' 01" WEST, 236.61 feet to Point 128;
- 3) SOUTH 44° 52' 24" WEST, 182.51 feet to Point 129;
- 4) SOUTH 16° 40' 35" WEST, 146.85 feet to Point 130;
- 5) SOUTH 16° 02' 59" WEST, 220.06 feet to Point 131;
- 6) SOUTH 51° 59' 55" WEST, 499.50 feet to Point 132;
- 7) SOUTH 63° 14' 04" WEST, 185.24 feet to Point 133;
- 8) SOUTH 3° 13' 31" WEST, 121.57 feet to Point 134 in Rabbit-Hash Big Bone Road;

thence, in Rabbit Hash-Big Bone Road, the following eleven (11) courses:

- 1) SOUTH 89° 54' 33" WEST, 126.33 feet to Point 135;
- 2) SOUTH 89° 54' 36" WEST, 146.51 feet to Point 296;
- 3) NORTH 85° 49' 18" WEST, 133.41 feet to Point 295;
- 4) NORTH 69° 18' 07" WEST, 115.80 feet to Point 294;

- 5) NORTH 63° 25' 03" WEST, 87.44 feet to Point 297;
- 6) NORTH 63° 25' 06" WEST, 139.76 feet to Point 293;
- 7) NORTH 66° 05' 21" WEST, 72.24 feet to Point 292;
- 8) NORTH 71° 25' 52" WEST, 71.66 feet to Point 291;
- 9) NORTH 74° 33' 37" WEST, 87.15 feet to Point 290;
- 10) NORTH 77° 12' 32" WEST, 84.60 feet to Point 14;
- 11) NORTH 77° 12' 49" WEST, 105.87 feet to Point 15, the place of beginning.

Containing **142.490 acres** of land, more or less, according to a survey by KZF, Environmental Design Consultants.

Subject to easements and restrictions of record.

Being part of the same real estate conveyed to CINCINNATI and DAYTON by deeds recorded respectively in Deed Book 229, at Pages 201 and 216, both in the office of the Boone County Clerk.

Plant Legal Description from vesting deed recorded in D911, Page 524, recorded February 22, 2006 from The Cincinnati Gas & Electric Company to The Union Light, Heat and Power Company (nka Duke Energy Kentucky, Inc.) a 69% interest in 708.086 acres; and 100% interest in 2.104 acres.

Parcel ID #013.00-00-001.00

A tract of land being part of Parcel 1 recorded in Deed Book 303, Page 253, and being a 1509.062 acre tract of land lying generally south of Kentucky State Route 338 and Rabbit Hash-Big Bone Road in Boone County, Commonwealth of Kentucky.

The corner points between the courses embracing the tract of land are numbered for reference, convenience and clarity of describing said parcel. The coordinate values of said points are based on the State Plane Coordinate Grid System, Kentucky North Zone. The coordinate values of each point and the bearing and distance of each course between the points are shown in a tabular form on sheet 2 of the plat of survey.

The parcel of land is more particularly described as follows:

Commencing at Point 42 as shown on the plat of survey, said point marks the intersection of the southerly right of way line of Kentucky State Route 338, as now improved, with the westerly boundary line of the property conveyed to The Cincinnati Gas & Electric Company and The Dayton Power and Light Company by deed recorded in Deed Book 229, Page 225, Boone County Clerk's Office; thence along the southerly right-of-way line of Kentucky State Route 338, the following eleven (11) courses: 1) along the arc of a curve deflecting to the left 137.63 feet to Point 43 (said curve has a radius of 2,895.00 feet and is subtended by a chord which bears South 62°08'40" East for a distance of 137.62 feet); 2) South 63°30'07" East 42.14 feet to Point 44; 3) South 26°29'17" West 10.00 feet to Point 45; 4) South 63°30'43" East 90.00 feet to Point 46; 5) North 26°29'17" East 10.00 feet to Point 47; 6) South 63°30'22" East 255.82 feet to Point 48; 7) along the arc of a curve deflecting to the left 197.23 feet to Point 49 (said curve has a radius of 1,940.00 feet and is subtended by a chord which bears South 66°25'04" East for a distance of 197.14 feet); 8) South 20°39'32" West 15.00 feet to Point 50; 9) along the arc of a curve deflecting to the left 153.53 feet to Point 51 (said curve has a radius of 1,955.00 feet and is subtended by a chord which bears South 71°34'49" East for a distance of 153.49 feet); 10) North 16°12'19" East 10.00 feet to Point 52; and 11) along the arc of a curve deflecting to the left 79.08 feet to Point 5023, a set concrete monument, the **Real Point of Beginning** of this description (said curve has a radius of 1,945.00 feet and is subtended by a chord which bears South 74°59'43" East for a distance of 79.08 feet);

Thence continuing along the southerly right-of-way line of Kentucky State Route 338, as now improved, the following fifty eight (58) courses: 1) along the arc of a curve deflecting to the left 8.36 feet to Point 53 (said curve has a radius of 1,945.00 feet and is subtended by a chord which bears South 76°19'57" East for a distance of 8.36 feet); 2) South 76°24'26" East 252.32 feet to Point 54; 3) along the arc of a curve deflecting to the right 59.92 feet to Point 55 (said curve has a radius of 1,111.00 feet and is subtended by a chord which bears South 74°51'59" East 59.91 feet); 4) South 16°37'21" West 5.00 feet to Point 56; 5) along the arc of a curve deflecting to the right 264.84 feet to Point 57 (said curve has a radius of 1,106.00 feet and is subtended by a chord

which bears South 66°27'20" East for a distance of 264.20 feet); 6) South 59°35'55" East 275.58 feet to Point 58; 7) North 30°24'48" East 5.00 feet to Point 59; 8) South 59°36'08" East 23.62 feet to Point 60; 9) along the arc of a curve deflecting to the left 493.28 feet to Point 62 (said curve has a radius of 1,181.00 feet and is subtended by a chord which bears South 71°34'04" East for a distance of 489.70 feet); 10) South 80°32'01" East 257.59 feet to Point 63; 11) North 06°25'43" East 5.00 feet to Point 64; 12) South 83°31'53" East 131.99 feet to Point 65; 13) along the arc of a curve deflecting to the left 277.34 feet to Point 66 (said curve has a radius of 603.00 feet and is subtended by a chord which bears North 83°18'18" East for a distance of 274.90 feet); 14) North 70°06'58" East 17.26 feet to Point 67; 15) along the arc of a curve deflecting to the right 91.85 feet to Point 68 (said curve has a radius of 490.90 feet and is subtended by a chord which bears North 75°30'11" East for a distance of 91.72 feet); 16) South 09°07'46" East 15.00 feet to Point 69; 17) along the arc of curve deflecting to the right 411.23 feet to Point 70 (said curve has a radius of 475.90 feet and is subtended by a chord which bears South 74°23'24" East for a distance of 398.55 feet); 18) South 40°20'02" West 10.00 feet to Point 71; 19) along the arc of a curve deflecting to the right 39.34 feet to Point 72 (said curve has a radius of 465.90 feet and is subtended by a chord which bears South 47°13'55" East for a distance of 39.33 feet); 20) South 44°48'56" East 224.18 feet to Point 73; 21) South 44°49'08" East 131.94 feet to Point 74; 22) North 45°12'10" East 10.00 feet to Point 75; 23) South 44°49'04" East 300.01 feet to Point 76; 24) South 45°11'21" West 30.00 feet to Point 77; 25) South 44°49'04" East 144.13 feet to Point 78; 26) along the arc of a curve deflecting to the left 6.64 feet to Point 79 (said curve has a radius of 648.00 feet and is subtended by a chord which bears South 45°03'40" East for a distance of 6.64 feet); 27) North 44°35'41" East 30.00 feet to Point 80; 28) along the arc of a curve to the left 161.78 feet to Point 81 (said curve has a radius of 618.00 feet and is subtended by a chord which bears South 52°54'13" East for a distance of 161.32 feet); 29) South 29°36'10" West 20.00 feet to Point 82; 30) along the arc of a curve deflecting to the left 44.80 feet to Point 83 (said curve has a radius of 638.00 feet and is subtended by a chord which bears South 62°25'21" East for a distance of 44.79 feet); 31) South 64°25'33" East 289.82 feet to Point 85; 32) North 25°33'56" East 20.00 feet to Point 86; 33) South 64°25'43" East 91.28 feet to Point 87; 34) along the arc of a curve deflecting to the right 192.33 feet to Point 88 (said curve has a radius of 528.00 feet and is subtended by a chord which bears South 53°59'26" East for a distance of 191.27 feet); 35) South 46°27'38" West 5.00 feet to Point 89; 36) along the arc of a curve deflecting to the right 107.75 feet to Point 90 (said curve has a radius of 523.00 feet and is subtended by a chord which bears South 37°38'59" East for a distance of 107.56 feet); 37) South 31°45'13" East 81.99 feet to Point 91; 38) North 58°14'59" East 5.00 feet to Point 92; 39) South 31°45'13" East 187.87 feet to Point 93; 40) along the arc of a curve deflecting to the left 235.41 feet to Point 94 (said curve has a radius of 454.31 feet and is subtended by a chord which bears South 46°35'40" East for a distance of 232.79 feet); 41) North 28°32'14" East 10.00 feet to Point 95; 42) along the arc of a curve deflecting to the left 249.67 feet to Point 96 (said curve has a radius of 444.31 feet and is subtended by a chord which bears South 77°32'17" East for a distance of 246.40 feet); 43) South 03°38'26" East 20.00 feet to Point 97; 44) along the arc of a curve deflecting to the left 142.96 feet to Point 98 (said curve has a radius of 464.31 feet and is subtended by a chord which bears North 77°32'34" East for a distance of 142.40 feet); 45) North 68°43'18" East 143.95 feet to Point 99; 46) North 21°16'49" West 20.00 feet to Point 100; 47) North 68°43'18" East 159.74 feet to Point 101; 48) along the arc of a curve deflecting to the right 201.96 feet to Point 102 (said curve has a radius of 537.92 feet and is subtended by a chord which bears North 79°28'35" East for a distance of 200.78 feet);

49) North $01^{\circ}08'45''$ East 5.00 feet to Point 103; 50) along the arc of a curve deflecting to the right 116.45 feet to Point 104 (said curve has a radius of 542.92 feet and is subtended by a chord which bears South $83^{\circ}37'34''$ East for a distance of 116.22 feet); 51) South $77^{\circ}28'11''$ East 39.13 feet to Point 105; 52) South $12^{\circ}28'27''$ West 25.00 feet to Point 106; 53) South $77^{\circ}29'36''$ East 300.02 feet to Point 107; 54) North $12^{\circ}28'27''$ East 25.00 feet to Point 108; 55) South $77^{\circ}29'54''$ East 213.56 feet to Point 109; 56) along a curve deflecting to the right 186.70 feet to Point 110 (said curve has a radius of 788.32 feet and is subtended by a chord which bears South $70^{\circ}42'25''$ East for a distance of 186.26 feet); 57) South $26^{\circ}06'14''$ West 15.00 feet to Point 111; and 58) along the arc of a curve deflecting to the right 305.00 feet to Point 112 at the northeast corner of the property conveyed to The Cincinnati Gas & Electric Company and The Dayton Power and Light Company by deed recorded in Deed Book 229, Page 186, said clerk's office (said curve has a radius of 773.30 feet and is subtended by a chord which bears South $52^{\circ}37'24''$ East for a distance of 303.03 feet);

Thence along boundary lines of the property conveyed to The Cincinnati Gas & Electric Company and The Dayton Power and Light Company by deed recorded in Deed Book 229, Page 186, said clerk's office, the following two (2) courses: 1) South $46^{\circ}30'42''$ West 203.44 feet to Point 113; and 2) South $15^{\circ}46'10''$ East 110.02 feet to Point 114 in Lick Creek;

Thence along the meanders of Lick Creek the following twenty four (24) courses: 1) South $37^{\circ}18'24''$ East 118.00 feet to Point 9023; 2) South $12^{\circ}12'46''$ East 184.00 feet to Point 9022; 3) South $10^{\circ}00'00''$ West 173.00 feet to Point 9021; 4) South $01^{\circ}58'00''$ East 290.00 feet to Point 9020; 5) South $64^{\circ}22'00''$ West 139.00 feet to Point 9019; 6) South $78^{\circ}17'00''$ East 202.00 feet to Point 9018; 7) South $69^{\circ}00'00''$ West 115.00 feet to Point 9017; 8) South $18^{\circ}48'00''$ West 248.00 feet to Point 9016; 9) South $18^{\circ}06'00''$ West 204.00 feet to Point 9015; 10) South $42^{\circ}15'00''$ West 144.00 feet to Point 9014; 11) South $19^{\circ}06'00''$ West 138.00 feet to Point 9013; 12) South $13^{\circ}27'00''$ West 132.00 feet to Point 9012; 13) South $25^{\circ}14'00''$ East 133.00 feet to Point 9011; 14) South $29^{\circ}45'00''$ West 254.00 feet to Point 9010; 15) South $06^{\circ}53'00''$ West 292.00 feet to Point 9009; 16) South $30^{\circ}06'00''$ East 138.00 feet to Point 9008; 17) South $82^{\circ}10'00''$ East 299.00 to Point 9007; 18) South $56^{\circ}58'00''$ East 70.30 feet to Point 9006; 19) South $21^{\circ}14'00''$ East 44.98 feet to Point 9005; 20) South $26^{\circ}34'00''$ West 123.00 feet to Point 9004; 21) South $50^{\circ}06'00''$ West 259.00 feet to Point 9003; 22) South $34^{\circ}44'00''$ West 248.00 feet to Point 9002; 23) South $27^{\circ}47'00''$ West 182.00 feet to Point 9001; and 24) South $50^{\circ}54'00''$ West 111.00 feet to Point 244 in the northerly, normal low water line of the Ohio River;

Thence along the normal low water line of the Ohio River (Normal Pool Elevation is 455.00, more or less, National Geodetic Survey Data), the following four (4) courses: 1) North $88^{\circ}36'04''$ West 2,815.00 feet to Point 243; 2) South $85^{\circ}05'08''$ West 2,588.50 feet to Point 242; 3) North $84^{\circ}59'44''$ West 2,249.15 feet to Point 241; and 4) North $80^{\circ}00'28''$ West 31.86 feet to Point 5002 at the intersection of the normal low water line of the Ohio River and a new division line;

Thence with new division lines the following eighteen (18) courses: 1) North $38^{\circ}11'59''$ East 353.59 feet to a set concrete monument, Point 5003; 2) South $72^{\circ}51'39''$ East 319.65 feet to a set concrete monument, Point 5020; 3) North $68^{\circ}28'19''$ East 648.00 feet to a set concrete monument, Point 5019; 4) North $37^{\circ}18'31''$ East 317.73 feet to a set concrete monument, Point

5018; 5) North 00°00'00" West 963.02 feet to a set iron pin and cap, Point 5017; 6) North 90°00'00" West 116.49 feet to a set iron pin and cap, Point 5016; 7) North 00°00'00" West 147.45 feet to a set iron pin and cap, Point 5015; 8) North 90°00'00" East 116.55 feet to a set iron pin and cap, Point 5014; 9) North 00°00'00" West 275.55 feet to a set railroad spike, Point 5013; 10) North 90°00'00" West 314.57 feet to a set railroad spike, Point 5012; 11) North 00°00'00" West 358.41 feet to a set concrete monument, Point 5011; 12) North 90°00'00" West 54.58 feet to a set concrete monument, Point 5010; 13) North 00°00'00" East 471.31 feet to a set concrete monument, Point 5009; 14) North 90°00'00" East 609.48 feet to a point of curve, a set iron pin and cap, Point 5008; 15) along a curve to the left 886.29 feet to a point of tangency, a set iron pin, Point 5007, said curve has a radius of 725.25 feet and subtended by a chord length of 832.16 feet bearing North 54°59'27" East; 16) North 19°58'53" East 1,862.36 feet to a set concrete monument, Point 5005, passing a set concrete monument @ 93.00 feet, Point 5006; 17) North 29°43'18" West 474.17 feet to a set concrete monument, Point 5004; and 18) North 11°59'07" East 154.59 feet to Point 5023, the Point of Beginning, containing 710.190 acres, more or less, and subject to all legal easements of record.

Further, included within the above described Real Estate is the 2.104 acre parcel of real estate, designated as the East Bend Generating Station Substation, conveyed by deed recorded in Deed Book 307, Page 15, Parcel "B," Boone County Clerk's Office.

Being the same real estate conveyed to The Cincinnati Gas & Electric Company and The Dayton Power and Light Company as follows: 1) by deed recorded in Deed Book 229, Page 16, Boone County Clerk's Office, and corrected by a deed recorded in Deed Book 229, Page 172, said clerk's office; 2) by deed recorded in Deed Book 229, Page 179, said clerk's office; 3) by deed recorded in Deed Book 229, Page 186, said clerk's office; 4) by deed recorded in Deed Book 229, Page 195, said clerk's office; 5) by deed recorded in Deed Book 229, Page 209, said clerk's office; and 6) by deed recorded in Deed Book 237, Page 317, said clerk's office.

And also being part of the same real estate conveyed to The Cincinnati Gas & Electric Company and The Dayton Power and Light Company as follows: 1) by deed recorded in Deed Book 229, Page 201, said clerk's office; 2) by deed recorded in Deed Book 229, Page 225, said clerk's office; and 3) by deed recorded in Deed Book 229, Page 225, said clerk's office.

The above description is the result of a field survey performed in 2004 under the direct supervision of Edward J. Schwegman, Licensed Land Surveyor No. 2759, Commonwealth of Kentucky.

Without limiting the foregoing, the transfers and conveyances contemplated by this Agreement shall include all right, title and interest of The Dayton Power and Light Company and/or its affiliates in all real estate, improvements, appurtenances, easements, rights of way, other rights, and/or fixtures that are contiguous or appurtenant to the land and/or rights described above and/or used or useful in connection with the maintenance and/or operation of the Plant or the Real Property including any unimproved land contiguous to the Real Property and/or the Plant land. The Plant land and the Real Property shall in any event include all real estate, improvements, appurtenances, easements, rights of way, other rights and/or fixtures which are (or may be) in any way necessary, useful or convenient to DEK in connection with its

maintenance and/or operation of an electric generating facility known as the East Bend Generating Station.

Schedule 2.1(d)
Emission Allowances

SO₂ (Acid Rain) Allowances

1. Vintage 2015-2043 Allowances of 5,438 per year shall be transferred to DEK.
2. If DP&L receives Vintage 2044 or later Allowances relating to the Plant from the Environmental Protection Agency (the "EPA"), those allowances shall also be transferred to DEK.
3. With respect to Vintage 2014 Allowances: the 5,438 allowances shall be apportioned pro-rata based on number of days in calendar year 2014 before Closing and the number of days in calendar year 2014 on and after Closing. The number apportioned to the period on and after Closing shall be transferred to DEK. The number apportioned to the period prior to Closing shall be retained at Closing by DP&L, provided, however, that prior to the compliance date for submitting allowances to the EPA for calendar year 2014, DP&L will transfer to DEK the level of allowances necessary to cover its share of emissions for the period prior to Closing.

NO_x (Annual) Allowances

1. If DP&L receives Vintage 2015 or later Allowances relating to the Plant from the EPA, those allowances shall be transferred to DEK.
2. With respect to Vintage 2014 Allowances: the 1,087 allowances held by DP&L with respect to the Plant shall be apportioned pro-rata based on number of days in calendar year 2014 before Closing and the number of days in calendar year 2014 on and after Closing. The number apportioned to the period on and after Closing shall be transferred to DEK. The number apportioned to the period prior to Closing shall be retained at Closing by DP&L, provided, however, that prior to the compliance date for submitting allowances to the EPA for calendar year 2014, DP&L will transfer to DEK the level of allowances necessary to cover its share of emissions for the period prior to Closing.

NO_x (Seasonal or Ozone) Allowances

1. If DP&L receives Vintage 2015 or later Allowances relating to the Plant from the EPA, those allowances shall also be transferred to DEK.
2. With respect to Vintage 2014 Allowances: the 442 allowances held by DP&L with respect to the Plant shall be apportioned pro-rata based on number of days from May 1, 2014 to the date before Closing and the number of days on and after Closing through September 30, 2014. The number apportioned to the period on and after Closing shall be transferred to DEK. The number apportioned to the

period prior to Closing shall be retained at Closing by DP&L, provided, however, that prior to the compliance date for submitting allowances to the EPA for the seasonal period May-September 2014, DP&L will transfer to DEK the level of allowances necessary to cover its share of emissions for the period prior to Closing.

To facilitate the foregoing transfers, within 30 days of closing, DP&L will direct the EPA in writing to allocate any future year allowances directly to DEK that it would otherwise have received for its former share of the Plant.

Schedule 2.2(h)
Excluded Assets

With respect to property, interests, rights, and assets primarily associated with the Plant:

None excluded.

Schedule 3.2(d)
Reconciling Adjustment Amount Statement Based on a Hypothetical Closing Date of February 28, 2014

Pre-Paid Amount		Unit Value		Net DP&L Value		Comments	
Pre-Paid Inventory #4	Quantity	Unit Value	Total Value	DP&L Ownership Share	Net DP&L Value		
Cash Inventory	321,097	\$51.79	\$16,641,313.93	31%	\$5,078,912.52	Months-end quantity * unit value ⁽¹⁾ as reflected in latest monthly "Top Bill" Invoice	
Time Inventory	318,923	\$1.30	\$414,600.00	31%	\$130,536.03	Months-end quantity * unit value ⁽²⁾ as reflected in latest monthly "Top Bill" Invoice	
Time Inventory	89,077	\$93.87	\$8,364,677.71	31%	\$2,593,923.37	Months-end quantity * unit value ⁽²⁾ as reflected in latest monthly "Top Bill" Invoice	
MSR/MSB & Support	57,008	\$6.00	\$342,048.00	31%	\$106,235.04	Months-end quantity * unit value as per the "Top Bill" Invoice	
Accounts	77,851	\$215	\$16,726,816.50	31%	\$5,185,319.16	Months-end quantity (as physical reading) * unit value as per the "Top Bill" Invoice	
Total			\$32,414,846.14		\$9,964,226.12		
Other Pre-Paid Assets (all figures represent DP&L Ownership Share)							
Property Insurance	Premium	DP&L Annual % of, remain at	Less Unpaid Premium		Net DP&L Value		
	\$50,320.00	81%	\$41,259.20	(\$9,060.80)	\$41,259.20	DP&L Annual Premium amount represents DP&L's 21% allocation of the premium for the Part from Blood Insurance (Duke's Capital Insurance Company), consistent with past practice	
Pension & OPEB Asset Liability	Adjustment				Net DP&L Value ⁽⁴⁾		
Retirement Assets	\$7,800,109.22	(51.57%)	(\$4,015,726.36)		\$3,784,382.86	Agrees per DP&L/DP&L discussion on 5/2/14. Consistent with past practice, the 2013 Adjustment to be paid within 30 days of determination	
DP&F (100% cash)	\$41,583.30				\$41,583.30	Agrees per DP&L/DP&L discussion on 5/2/14. Consistent with past practice, the 2013 Adjustment to be paid within 30 days of determination	
Total					\$7,827,348.42		
Total Pre-Paid Assets					\$16,791,574.54		
Plus: Reimbursement of DP&L Pre-Paid Spine Charge (Billed Capital)							
Total Pre-Paid Amount					\$16,808,382.98		
Outstanding Charge Costs							
Outstanding Charge Costs for Pre-Closing Periods	Invoice/Project Number	Net DP&L Value					
	3 (TRD)	\$0.00			\$0.00	Per Purchase Agreement obligation of "Pre-Paid Amount"	
Total Outstanding Charge Costs for Pre-Closing Periods		\$0.00			\$0.00		
Outstanding Non-Closure Costs							
Outstanding Non-Closure Costs	Invoice/Project Number	Net DP&L Value					
Outstanding O&M Costs	89101031	\$1,700,103.00			\$1,700,103.00		
Outstanding O&M Costs	08101031	\$1,331,007.72			\$1,331,007.72		
Less Non-Closure Capital Costs	08101031	\$519,330.70			\$519,330.70		
Less O&M Costs	08101031	\$0.00			\$0.00		
Total Outstanding Non-Closure Costs		\$1,511,779.02			\$1,511,779.02		
Total Outstanding Estimated Property Taxes (to be determined using 2013 Property Taxes as proxy if 2014 Invoice is not available)		\$	\$21,000.35		\$21,000.35	See calculation on next tab	
Total Outstanding Non-Closure Costs			\$1,532,779.37		\$1,532,779.37		
Unrealized Price					\$12,266,603.61		
Total Adjustment Amount (Total Pre-Paid Amount in this Table) Outstanding Charge Costs (minus Total Outstanding Non-Closure Costs)					\$6,233,604.24		
Net Settlement Amount					\$15,032,999.37		

(1) Quantity of Cash Inventory, Time Inventory, and Support Assets is based on the latest monthly invoice received from the respective vendor. The quantity of Accounts receivable is based on the latest monthly "Top Bill" Invoice.

(2) Physical quantity as indicated on the "Top Bill" Invoice. Quantity of Accounts receivable is based on the latest monthly "Top Bill" Invoice.

(3) For the period January 2014 through the closing, the DP&L/DP&L will be adjusted by monthly amounts for all DP&L/DP&L invoices not yet received.

(4) Represents the net DP&L/DP&L amount, derived from the 2014 Adjustment to the DP&L/DP&L (see DP&L/DP&L).

East Bend Generating Station - 2013 pay 2014 Estimate

Boone County

Type of Property	Value @ 12-31-2012	State Tax Rate	Estimated State Tax	Local Tax Rate	Local Taxes	Total Estimated Taxes
Real Estate	25,043,633	1.22000%	305,508	0.0019	48,581	354,089
Mfg. Machinery	88,766,480	0.15000%	103,150	-	-	103,150
Business Inventory	17,553,214	0.05000%	8,777	-	-	8,777
Tangible	162,340,418	0.45000%	730,532	0.0026	420,462	1,150,994
Total	273,701,745		1,147,968		469,042	\$ 1,617,009

Est Tax Liability

DPL Ownership	31%	\$ 726,482
DEX Ownership	89%	\$ 1,617,009
Total Ownership	100%	\$ 2,343,491

DPL Ownership Period for 2014

16.7% assumes Feb 28 closing for original Schedule 3.2(a) upon signing

DPL Responsible Amount for 2014

\$ 121,080.35 amount to be included in Schedule 3.2(a) as a reduction to "Estimated Adjustment Amount" in calculating "Closing Cash Consideration"

Schedule 5.3
Non-Contravention

None.

Schedule 5.4
Consents

1. Release from the Bank of New York Mellon as Trustee of the First and Refunding Mortgage dated October 1, 1935
2. Approval from PUCO
3. Approval from FERC

Schedule 5.5
Title to Purchased Assets; Liens.

First and Refunding Mortgage, dated October 1, 1935 in favor of Bank of New York Mellon as Trustee

Schedule 5.6
Real Property

First and Refunding Mortgage, dated October 1, 1935 in favor of Bank of New York Mellon as Trustee

Schedule 5.7
Taxes

DP&L has appealed property Tax assessments for the years 2006 through 2013 and has not paid the entire assessment for such years. Such appeals have the effect of extending the otherwise applicable statute of limitations and the applicable taxing authority has and continues to claim that DP&L is deficient in its Tax payments.

Schedule 5.8
Proceedings; Orders

None.

Schedule 5.9
Compliance with Laws and Orders

None.

Schedule 5.10
Assumed Contracts

DP&L's share of the Plant has been bid into and "cleared" through PJM's Reliability Pricing Model ("RPM") capacity auctions for the current year and through the PJM year 2016-2017. The rights and obligations associated with being a cleared "capacity resource" are set forth in various PJM agreements and tariffs to which DEK is and will be subject.

In May 2014, DP&L will be bidding its share of the Plant into the PJM RPM auction for PJM year 2017-2018 and, if it clears, the rights and obligations associated with being a cleared capacity resource will extend through that period as well.

Schedule 5.11
Permits

None.

Schedule 6.3
Non-Contravention (DEK)

None.

Schedule 6.4
Consents (DEK)

1. See Schedule 8.2(c).
2. Approval from FERC.

Schedule 6.5
Proceedings; Orders (DEK)

None.

Schedule 6.8
Compliance with Laws and Orders (DEK)

None.

Schedule 7.2
Preservation of Purchased Assets

None.

Schedule 8.2(c)
Consents (DEK)

DEK shall receive from the Kentucky Public Service Commission, on terms and conditions satisfactory to DEK, in DEK's sole reasonable judgment, all necessary approvals for the purchase of DP&L's interest in the Plant, including approvals under the CPCN and financing authority statutes for its acquisition of the Purchased Assets and its assumption of the Assumed Liabilities, including the Environmental Liabilities, in accordance with the terms of this Agreement, and the associated retirement of DEK's Miami Fort 6 facility.

Schedule 8.3(c)
Consents (DP&L)

DP&L shall receive from PUCO, on terms and conditions satisfactory to DP&L, in DP&L's sole reasonable judgment, all necessary approvals for the transfer of its interest in the Plant in accordance with the terms of this Agreement.

Exhibit 4.2(a)(i)

BILL OF SALE AND ASSIGNMENT

This BILL OF SALE AND ASSIGNMENT (this “Bill of Sale”), dated as of [____], 2014, by The Dayton Power and Light Company, an Ohio corporation (“DP&L”), is made in favor of Duke Energy Kentucky, Inc., a Kentucky corporation (“DEK”).

WHEREAS, DP&L and DEK have entered into that certain Purchase and Sale Agreement, dated as of May [____], 2014 (the “Purchase and Sale Agreement”), pursuant to which DP&L has agreed to convey to DEK the Purchased Assets.

1. Assignment. Pursuant to Section 2.1 of the Purchase and Sale Agreement, and subject to Section 2 hereof, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, DP&L hereby sells, conveys, transfers and assigns to DEK all of DP&L’s right, title and interest in and to the Purchased Assets, free and clear of all Liens other than Permitted Liens.

2. Terms of Purchase and Sale Agreement Control. Nothing contained in this Bill of Sale shall in any way supersede, modify, replace, amend, rescind, waive, narrow or broaden any provision set forth in the Purchase and Sale Agreement or any of the rights, remedies or obligations arising therefrom. This Bill of Sale shall in all ways be governed by, and subject to, the Purchase and Sale Agreement.

3. Miscellaneous. This Bill of Sale (a) shall be governed by and in accordance with the internal laws of the State of Ohio, without regard to the principles of conflicts of law thereof, and (b) shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns. Capitalized terms used herein without definition shall have the respective meanings assigned to them in the Purchase and Sale Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned have caused this Bill of Sale to be duly executed as of the date first written above.

THE DAYTON POWER AND LIGHT COMPANY

By: _____
Name: _____
Title: _____

Accepted:

DUKE ENERGY KENTUCKY, INC.

By: _____
Name: _____
Title: _____

Exhibit 4.2(a)(ii)

ASSIGNMENT AND ASSUMPTION AGREEMENT

This ASSIGNMENT AND ASSUMPTION AGREEMENT (this "Assumption Agreement") is made and entered into as of [_____], 2014 by and between Duke Energy Kentucky, Inc., a Kentucky corporation ("DEK"), and The Dayton Power and Light Company, an Ohio corporation ("DP&L").

1. DP&L and DEK have entered into a Purchase and Sale Agreement dated as of May [_____], 2014 (the "Agreement") pursuant to which DEK has agreed to assume, and to pay, perform and discharge, the Assumed Liabilities. All terms used, and not otherwise defined, in this Assumption Agreement which are defined in the Agreement shall have the same meanings assigned to such terms in the Agreement.

2. For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, DEK, in accordance with the terms of the Agreement, hereby unconditionally and irrevocably assumes and agrees to perform, pay and discharge all the Assumed Liabilities. DEK shall not assume or be required to perform, discharge or otherwise be responsible for any of DP&L's Retained Liabilities.

3. This Assumption Agreement is expressly being delivered with the benefit of, and otherwise made subject to, in all respects, the terms and conditions of the Agreement and the related agreements described therein and all representations, warranties, indemnities, covenants and agreements contained therein. Nothing contained in this Assumption Agreement shall in any way supersede, modify, replace, amend, rescind, waive, narrow or broaden any provision set forth in the Agreement or any of the rights, remedies or obligations arising therefrom.

4. The respective rights and obligations of the parties hereto shall not be assignable, whether by operation of law or otherwise, without the prior written consent of the other party. This Assumption Agreement shall be binding upon and inure to the benefit of the permitted successors and assigns of the parties hereto.

5. The validity, interpretation and effect of this Assumption Agreement shall be governed by and construed under and enforced in accordance with the laws of the State of Ohio.

6. This Assumption Agreement may be executed in multiple counterparts, each of which as so executed shall be deemed to be an original, but all of which together shall constitute one instrument.

[Signature Page Follows]

IN WITNESS WHEREOF, DP&L and DEK have executed and delivered this Assumption Agreement as of the day and year first above written.

The Dayton Power and Light Company

By: _____

Title: _____

Duke Energy Kentucky, Inc.

By: _____

Title: _____

Exhibit 4.2(a)(iii)

CORPORATE SPECIAL WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS: THAT THE DAYTON POWER AND LIGHT COMPANY, an Ohio corporation ("**Grantor**"), its successors and assigns, its principal offices being located at 1065 Woodman Drive, Dayton, OH 45432, in consideration of One Million One Hundred Ninety One Thousand Six Hundred Forty Dollars (\$1,191,640.00), the receipt hereof is hereby acknowledged, by **DUKE ENERGY KENTUCKY, INC.**, a Kentucky corporation ("**Grantee**"), whose tax mailing (c/o) address is **DUKE ENERGY CORPORATION**, 550 South Tryon Street, Mail Code DEC41B, Charlotte, NC 28202, Attn: Property Tax Department, for itself its successors and assigns does hereby **Grant, Bargain, Sell, and Convey**, to Grantee, its successors and assigns, all of Grantor's right, title, and interest including, but not limited to, its 31% undivided interest in and to the following described real estate below known as the East Bend Real Estate ("**Real Estate**"):

Group Nos: 2051, 2059, 3000

SEE EXHIBIT "A" - LEGAL DESCRIPTION, attached hereto and incorporated herein

The property described in Exhibit A, being all of the Grantor's remaining interest acquired by the Grantor in the following deeds of record in the Boone County Clerk's Office at Burlington, Kentucky:

- 1) Deed Book 229, Page 166, dated _____
- 2) Deed Book 229, Page 172, dated _____
- 3) Deed Book 229, Page 179, dated _____
- 4) Deed Book 229, Page 186, dated _____
- 5) Deed Book 229, Page 195, dated _____
- 6) Deed Book 229, Page 201, dated _____

- 7) Deed Book 229, Page 209, dated _____
- 8) Deed Book 229, Page 216, dated _____
- 9) Deed Book 229, Page 225, dated _____
- 10) Deed Book 237, Page 317, dated _____

It is the intention of the Grantor to convey to Grantee any and all interest it may have in the above-described real estate and any adjoining properties that may have been inadvertently omitted from the above description.

And all the **Estate, Title, and Interest** of Grantor in and to the property interest herein conveyed;

Together with all structures, equipment, and facilities presently located, or hereafter constructed or installed, on such real estate and all the privileges and appurtenances belonging to the same;

To have and to hold the same unto Grantee, its successors and assigns forever, with Covenants of Special Warranty;

None of the rights of ways and/or easements in favor of Grantee and/or its affiliates shall merge into this deed and all such easements and/or rights of way shall survive the execution and recording of this deed.

Grantor covenants and warrants the Real Estate and will forever warrant and defend the Real Estate against the claims and demands of Grantor and all persons claiming by, through or under Grantor, but no other.

The undersigned person executing this Corporate Special Warranty Deed ("**Deed**") on behalf of Grantor certifies and represents that he/she is a duly elected officer of Grantor and has been fully empowered, by the proper resolution of the Board of Directors of Grantor, to execute and deliver this Deed; that Grantor has full corporate capacity to convey the Real Estate described herein; that there is no Kentucky Gross Income Tax due and owing on this transaction; and that all necessary corporate action for the making of such conveyance has been taken and done.

IN WITNESS WHEREOF, said **THE DAYTON POWER AND LIGHT COMPANY**, has caused this Corporate Special Warranty Deed to be signed in its proper corporate name, and attested and sealed by its proper corporate officers thereunto duly authorized; and to be duly acknowledged, all as of this ____ day of _____, 2014.

THE DAYTON POWER AND LIGHT COMPANY

By: _____

Printed Name: _____

Printed Title: _____

STATE OF OHIO)
) SS:
COUNTY OF _____)

Personally appeared before me today, _____, _____ of The Dayton Power and Light Company, an Ohio company, and acknowledged the execution of this Corporate Warranty Deed to be his/her voluntary act and deed for and on behalf of said corporation, and having been duly sworn state that any representations contained therein are true to the best of his/her personal knowledge.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal, on this ____ day of _____, 2014.

My Commission Expires: _____

Notary Public

Printed Name: _____

My County of Residence: _____

This instrument prepared by:

James E. McLean, Esq.
Attorney for Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45202
(513) 421-9500

CERTIFICATE OF CONSIDERATION

IN WITNESS WHEREOF, THE DAYTON POWER AND LIGHT COMPANY, Grantor, and DUKE ENERGY KENTUCKY, INC., Grantee, do hereby certify, pursuant to KRS Section 382.135(1)(d), that the above-stated consideration in the amount of \$1,191,640.00 is the true, correct, and full consideration paid for the real property interest (31%) herein conveyed. We further certify our understanding that falsification of the stated consideration or sale price of the property is a Class D felony, subject to one to five years imprisonment and fines up to \$10,000.00.

THE DAYTON POWER AND LIGHT COMPANY

By: _____

Print: _____

STATE OF OHIO)
)
COUNTY OF _____) SS:

The foregoing consideration certificate was sworn to and acknowledged before me on the ____ day of _____, 2014, by _____, _____ of The Dayton Power And Light Company, an Ohio corporation, the Grantor herein, on behalf of the corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal on this day and year aforesaid.

Notary Public

My Commission Expires: _____

EXHIBIT "A" – LEGAL DESCRIPTION

SELLER'S AFFIDAVIT OF TITLE

STATE OF OHIO
COUNTY OF MONTGOMERY

THE DAYTON POWER AND LIGHT COMPANY, an Ohio corporation ("DP&L"), by and through the undersigned authorized representative, says(s) under oath:

1. Representations. The statements in this affidavit are true to the best of our Knowledge, information and belief, with Knowledge defined as meaning the actual awareness of a particular fact or other matter of the undersigned authorized representative or of those individuals set forth on Schedule 1.2-1(i) of the Purchase and Sales Agreement dated May __, 2014, by and between DP&L and DUKE ENERGY KENTUCKY, INC., a Kentucky corporation ("Buyer").

2. Powers and Privileges. DP&L is the sole owner of a 31% undivided interest in the property described in Exhibit "A" ("Property") which is being conveyed to Buyer.

This action and making of this Affidavit of Title have been duly authorized by a proper resolution of DP&L. DP&L is legally authorized to hold and convey title in the Commonwealth of Kentucky. Its charter and powers have never been suspended or revoked. It is not restrained from doing business nor has any legal action been taken for that purpose.

3. Ownership and Possession. It has owned its interest in the Property since the date of the source of title deeds referenced in the Corporate Special Warranty Deed to Buyer. DP&L has no Knowledge of any entity since then that has questioned its ownership or right to possession. Except for its agreement with the Buyer, it has not signed any contracts to convey or otherwise encumber its interest in the Property. It has not given anyone else other than Buyer any rights concerning the purchase of this Property.

DP&L has no Knowledge of any East Bend property or any DP&L interest in the East Bend property that is not included in the Corporate Special Warranty Deed to Buyer.

4. Improvements. DP&L has no Knowledge that anyone has filed or intends to file a mechanic's lien relating to DP&L's interest in the Property.

5. Liens or Encumbrances. Except with respect to Permitted Liens, DP&L has not allowed any interests (legal rights) to be created that affect DP&L's ownership or use of the Property. To DP&L's Knowledge, there are no pending lawsuits or judgments against DP&L or other legal obligations, which may be enforced against the Property. To DP&L's Knowledge, no one has any security interest in any personal property or fixtures included in this sale.

6. Condemnation. DP&L has not received any notice of condemnation or eminent domain affecting its interest in the Property.

7. Exceptions and Additions. The following is a list of exceptions to any of the above statements. This includes all liens or mortgages which are not being released as a result of this transaction.

See attached "Exhibit B" - Permitted Exceptions

8. Environmental. DP&L has no Knowledge of any existing or contemplated enforcement action(s) from any Environmental Protection Agency concerning enforcement action(s) with regard to any hazardous waste materials affecting the Property.

9. Reliance. DP&L makes this affidavit in order to induce the Buyer to accept its Corporate Special Warranty Deed. It is aware that the Buyers and its title insurance carrier will rely on the truthfulness and the statements made in this affidavit.

Signed and sworn to before me on

THE DAYTON POWER AND LIGHT COMPANY

By: _____

Printed Name: _____

Printed Title: _____

STATE OF OHIO)
COUNTY OF _____)

Subscribed to before me this _____ day of _____, 2014, by _____, _____ of The Dayton Power and Light Company, an Ohio company, and acknowledged the execution of this affidavit to be his/her voluntary act and deed for and on behalf of said corporation, and having been duly sworn state that any representations contained therein are true to the best of his/her personal knowledge.

My Commission Expires:

Notary Public
Printed Name _____

EXHIBIT "A" – LEGAL DESCRIPTION

EXHIBIT "B" - PERMITTED EXCEPTIONS

DP&L's share of the Plant has been bid into and "cleared" through PJM's Reliability Pricing Model ("RPM") capacity auctions for the current year and through the PJM year June 1, 2016 - May 31, 2017. Buyer's use of the Property will be subject to the rights and obligations associated with being a cleared PJM "capacity resource" as set forth in various PJM agreements and tariffs to which Buyer will be subject.

In May 2014, DP&L will be bidding its share of the Plant into the PJM RPM auction for PJM year June 1, 2017 - May 31, 2018 and, if it clears, the rights and obligations associated with being a cleared capacity resource will extend through that period as well.

Exhibit 4.2(c)

TERMINATION AND RELEASE AGREEMENT

This TERMINATION AND RELEASE AGREEMENT (this “Termination Agreement”) is made and entered into as of [_____], 2014 by and between Duke Energy Kentucky, Inc., a Kentucky corporation (“DEK”), and The Dayton Power and Light Company, an Ohio corporation (“DP&L”) (each a “Party” and together the “Parties”).

1. DP&L and DEK are co-owners of the coal-fired generating facility commonly referred to as East Bend Unit 2 (the “Plant”) and, over time, have entered into a number of agreements governing various obligations and responsibilities relating to the Plant and the co-owner relationship. DP&L and DEK have entered into a Purchase and Sale Agreement dated as of [_____], 2014 (the “Agreement”) pursuant to which DEK has agreed to purchase the Purchased Assets and to assume the Assumed Liabilities. Upon Closing, DEK will be the sole owner of the Plant, eliminating the need for certain agreements to remain in effect. All terms used, and not otherwise defined, in this Termination Agreement which are defined in the Agreement shall have the same meanings assigned to such terms in the Agreement.

2. To the extent that any of the following agreements by and between DP&L and DEK or their predecessors in interest remain in effect immediately prior to Closing, such agreements are hereby terminated effective upon Closing (collectively, the “Terminated Agreements”);

- (i) the East Bend Unit 2 Operation Agreement dated March 24, 1981;
- (ii) the Memorandum of Construction dated March 24, 1981;
- (iii) those portions of the Recommendation and Agreement dated June 5, 1981 that relate to the Plant, retaining those portions that relate to the Killen Generating Station;
- (iv) the Recommendation and Agreement dated January 30, 1980;
- (v) the Recommendation and Agreement East Bend Transmission Facilities dated November 28, 1977; and
- (vi) the Agreement of Representation (relating to certain environmental trading programs) dated September 26, 2006.

3. For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, DEK hereby unconditionally and irrevocably releases DP&L and DP&L Related Parties from any and all Liabilities under the Terminated Agreements, whether arising prior to or after Closing or relating to actions or non-actions prior to or after Closing.

4. For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, DP&L hereby unconditionally and irrevocably releases DEK and DEK

Related Parties from any and all Liabilities under the Terminated Agreements, whether arising prior to or after Closing or relating to actions or non-actions prior to or after Closing.

5.. This Termination Agreement is expressly being delivered pursuant to and is subject to, in all respects, the terms and conditions of the Agreement and the related agreements described therein and all representations, warranties, indemnities, covenants and agreements contained therein. In the event of any conflict between this Termination Agreement and the Agreement, the terms of the Agreement shall prevail.

6. The respective rights and obligations of the Parties hereto shall not be assignable, whether by operation of law or otherwise, without the prior written consent of the other party. This Termination Agreement shall be binding upon and inure to the benefit of the permitted successors and assigns of the parties hereto.

7. The validity, interpretation and effect of this Termination Agreement shall be governed by and construed under and enforced in accordance with the laws of the State of Ohio.

8. This Termination Agreement may be executed in multiple counterparts, each of which as so executed shall be deemed to be an original, but all of which together shall constitute one instrument.

[Signature Page Follows]

IN WITNESS WHEREOF, DP&L and DEK have executed and delivered this Termination Agreement as of the day and year first above written.

The Dayton Power and Light Company

By: _____

Title: _____

Duke Energy Kentucky, Inc.

By: _____

Title: _____

FIRST AMENDMENT TO PURCHASE AND SALE AGREEMENT

THIS FIRST AMENDMENT TO PURCHASE AND SALE AGREEMENT (this "**Amendment**") is entered into this 12th day of June, 2014, by and between **DUKE ENERGY KENTUCKY, INC.**, a Kentucky corporation ("**DEK**"), and **THE DAYTON POWER AND LIGHT COMPANY**, an Ohio corporation ("**DP&L**").

WHEREAS, DEK and DP&L entered into that certain Purchase and Sale Agreement dated May 15, 2014 (the "**Purchase and Sale Agreement**"), pursuant to which DP&L has agreed to convey to DEK the Purchased Assets and DEK has agreed to assume, and to pay, perform and discharge, the Assumed Liabilities (all capitalized terms used herein but not otherwise defined herein shall have the meanings ascribed to such terms in the Purchase and Sale Agreement);

WHEREAS, the parties wish to amend the Purchase and Sale Agreement and the schedules thereto.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein and in the Purchase and Sale Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the parties hereto hereby agree as follows:

1. **Revised Schedule 1.2-2 to the Purchase and Sale Agreement.** Attached hereto as **Exhibit A** is an amended and restated Schedule 1.2-2 to the Purchase and Sale Agreement, which shall amend and replace in its entirety the existing Schedule 1.2-2 to the Purchase and Sale Agreement.

2. **Revised Schedule 3.2(a) to the Purchase and Sale Agreement.** Attached hereto as **Exhibit B** is an amended and restated Schedule 3.2(a) to the Purchase and Sale Agreement, which shall amend and replace in its entirety the existing Schedule 3.2(a) to the Purchase and Sale Agreement.

3. **Amendment to Section 3.2(a) of the Purchase and Sale Agreement.** In connection with the foregoing amendments, the parties wish to update Schedule 3.2(a) to the Purchase and Sale Agreement to reflect a hypothetical Closing Date of March 31, 2014. Accordingly, the reference to "February 28, 2014" in Section 3.2(a) of the Purchase and Sale Agreement is hereby deleted and replaced with a reference to "March 31, 2014".

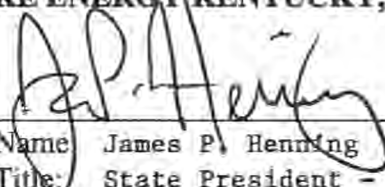

4. **Counterparts; Facsimile Signatures.** This Amendment may be executed in more than one counterpart and may be executed by facsimile or other electronic signature and shall be binding upon the parties hereto and their respective successors, assigns, heirs, personal representatives and executors.

5. **Purchase Agreement Confirmed.** Except as provided in this Amendment, the Purchase and Sale Agreement is hereby confirmed and shall continue in full force and effect.

[Signatures appear on the following page.]

IN WITNESS WHEREOF, the parties have caused this Amendment to be executed as of the date first written above.

DUKE ENERGY KENTUCKY, INC.

By:  _____ 
Name: James P. Henning
Title: State President - OH/KY

**THE DAYTON POWER AND LIGHT
COMPANY**

By: _____
Name:
Title:

IN WITNESS WHEREOF, the parties have caused this Amendment to be executed as of the date first written above.

DUKE ENERGY KENTUCKY, INC.

By: _____
Name:
Title:

**THE DAYTON POWER AND LIGHT
COMPANY**


By:  _____
Name: Timothy G. Rice
Title: Secretary

Exhibit A

Schedule 1.2-2
Outage Costs

1. EB021332 RHO Pendant Replacement – Addition
2. EB021332 RHO Pendant Replacement – Retirement
3. EB021423 Precipitator Upgrade 2014 – Addition
4. EB021423 Precipitator Upgrade 2014 – Retirement
5. EB201370 Install Stack Lining – Addition
6. EB201370 Install Stack Lining – Retirement
7. EB021438 Replace IP Turbine Blades – Addition
8. EB021438 Replace IP Turbine Blades – Retirement
9. EB021448 SSHO Partial Pendants – Addition
10. EB021448 SSHO Partial Pendants – Retirement

Exhibit B

Exhibit 3.2(a) to the Purchase Agreement

(attached)

Schedule 3.2(a)

Illustrative Adjustment Amount Statement based on a hypothetical Closing Date of March 31, 2014

Pre-Paid Amount							
<i>Pre Paid Inventory</i> ^(a)	Quantity	Unit	Unit Value	Total Value	DP&L Ownership Share	Net DP&L Value	Comments
Coal Inventory	239,309	Tons	\$51.79	\$12,394,371.99	31%	\$3,842,255.32	Month-end quantity * unit value ^(b) as reflected in latest monthly "Fuel Bill" invoice
Fuel Oil Inventory	371,528	Gallons	\$3.35	\$1,243,948.35	31%	\$385,623.99	Month-end quantity * unit value ^(b) as reflected in latest monthly "Fuel Bill" invoice
Lime Inventory	10,395	Tons	\$93.56	\$972,517.96	31%	\$301,480.57	Month-end quantity * unit value ^(b) as reflected in latest monthly "Fuel Bill" invoice
Materials & Supplies		Various		\$8,584,740.27	31%	\$2,661,269.48	Month-end quantity * unit value per latest monthly M&S report, consistent with past practice
Ammonia	19.63	Tons	\$600	\$11,778.00	31%	\$3,651.18	Month-end quantity (via physical reading) * unit value (monthly "Green Markets Tampa Ammonia" price per ton + trans cost + market premium; has fluctuated between \$545/ton - \$597/ton during Jan - April 2014)
Trona	0	Tons	\$215	\$0.00	31%	\$0.00	Month-end quantity (via physical reading) * unit value (monthly "Green River Trona" price per ton + trans cost + fuel surcharge; has remained approx \$200/ton for Jan-April 2014)
Total				\$23,207,356.57		\$7,194,280.54	
Other Pre Paid Assets (all figures represent DP&L Ownership Share)							
Property Insurance	DP&L Annual Premium	% Yr. remain at close	Value remain at close	Less Unpaid Premium		Net DP&L Value	
Prepaid Premium	\$50,220.00	75%	\$37,665.00	(\$50,220)		(\$12,555.00)	"DP&L Annual Premium" amount represents DP&L's 31% allocation of the premium for the Plant from Bison Insurance (Duke's captive insurance company), consistent with past practice
		2013					
Pension & OPEB	Asset (Liability)	Adjustment ^(d)				Net DP&L Value ^(e)	
Pension Assets	\$3,791,562.66	(\$615,736.36)				\$3,175,826.30	Agreed per DEK/DP&L discussion on 5/2/14. Consistent with past practice, the 2013 Adjustment to be paid within 30 days of determination.
OPEB (Life/Health)	(\$459,986.81)	\$81,583.38				(\$378,403.43)	Agreed per DEK/DP&L discussion on 5/2/14. Consistent with past practice, the 2013 Adjustment to be paid within 30 days of determination.
Total						\$2,797,422.87	
Total Pre-Paid Assets						\$9,979,148.41	
Plus: Reimbursement of DP&L Pre-Paid Spring Outage Related Capital						\$1,667,530.32	Per Purchase Agreement definition of "Pre Paid Amount"
Total Pre-Paid Amount						\$11,646,678.73	
Outstanding Outage Costs							
<i>Outstanding Outage Costs for Pre-Closing Periods</i>				Invoice/Project Number		Net DP&L Value	
March				DPLEBCAP0314		\$2,379,191.57	March Outstanding Outage Costs
February				DPLEBCAP0214		\$318,535.43	February Outstanding Outage Costs
Total Outstanding Outage Costs for Pre-Closing Periods						\$2,697,727.00	
Total Outstanding Outage Costs (lesser of \$9,500,000 or Total Outstanding Outage Costs for Pre-Closing Periods)						\$2,697,727.00	
Outstanding Non-Outage Costs							
<i>Outstanding Invoices for Pre-Closing Periods</i>				Invoice/Project Number		Net DP&L Value	
Outstanding Fuel Costs				EBFUEL0314		\$908,345.25	
Outstanding O&M Costs				EB0314-O&M		\$2,515,938.23	
Outstanding Non-Outage Capital Costs March				DPLEBCAP0314		587,423.63	invoiced amount of \$2,966,615.20 less \$2,379,191.57 of Outage Costs
<i>Less: Non-Outage Capital Costs exceeding \$125,000 per month, beginning with the March monthly Invoice</i>				DPLEBCAP0314		462,423.63	
<i>Less: O&M Costs exceeding \$1,200,000 per month, beginning with the May monthly Invoice</i>						\$0.00	
Total Outstanding Non-Outage Costs excluding Prorated Estimated Property Taxes						\$3,549,283.48	
<i>Plus: Prorated Estimated Property Taxes (to be determined using 2013 Property Taxes as proxy if 2014 Invoice is not available)</i>						\$ 181,620.53	See calculation on next tab
Total Outstanding Non-Outage Costs						\$3,730,904.01	
Purchase Price						\$12,400,000.00	
Final Adjustment Amount (Total Pre-Paid Amount minus Total Outstanding Outage Costs minus Total Outstanding Non-Outage Costs)						\$5,218,047.72	
Net Settlement Amount						\$17,618,047.72	

(a) Quantities of Coal Inventory, Fuel Oil Inventory, Lime Inventory and Materials and Supplies are subject to periodic reviews and surveys, with the potential for upward or downward adjustments, the methodology and timing for all of which shall be consistent with past practice

(b) Unit value determined on a weighted average cost basis, consistent with past practice

(c) For the periods between 2/28/14 and the Closing, the Net DP&L Values will be adjusted by monthly credits or debits as reflected in the O&M invoices, consistent with past practice

(d) Regardless of when the Post-Closing Adjustment occurs, there will be no 2014 Adjustment for Pension Assets and OPEB

(e) The 2013 adjustment had not been agreed to or paid as of 3/31 but is included to be consistent with previous versions of this Schedule

East Bend Generating Station - 2013 pay 2014 Estimate

Boone County

Type of Property	Value @ 12-31-2012	State Tax Rate	Estimated State Tax	Local Tax Rate	Local Taxes	Total Estimated Taxes
Real Estate	25,041,633	1.22000%	305,508	0.0019	48,581	354,089
Mfg. Machinery	68,766,480	0.15000%	103,150	-	-	103,150
Business Inventory	17,553,214	0.05000%	8,777	-	-	8,777
Tangible	162,340,418	0.45000%	730,532	0.0026	420,462	1,150,994
Total	273,701,745		1,147,966		469,042	\$ 1,617,009

Est Tax Liability

DPL Ownership	31%	\$ 726,482
DEK Ownership	69%	\$ 1,617,009
Total Ownership	100%	\$ 2,343,491

DPL Ownership Period for 2014
DPL Responsible Amount for 2014

25.0% assumes March 31 closing for original Schedule 3.2(a) upon signing amount to be included in Schedule 3.2(a) as a reduction to "Estimated Adjustment Amount" in calculating "Closing Cash Consideration"
\$ 181,620.53

East Bend Station Property



COMMONWEALTH OF KENTUCKY
BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

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- _____

DIRECT TESTIMONY OF
JAMES P. HENNING
ON BEHALF OF
DUKE ENERGY KENTUCKY, INC.

June 13, 2014

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I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is James P. Henning, and my business address is 139 East Fourth Street,
3 Cincinnati, Ohio 45202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as State
6 President of Duke Energy Kentucky, Inc. (Duke Energy Kentucky or the
7 Company) and Duke Energy Ohio, Inc. (Duke Energy Ohio). DEBS provides
8 various administrative and other services to Duke Energy Kentucky and other
9 affiliated companies of Duke Energy Corporation (Duke Energy Corp.)

10 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND**
11 **PROFESSIONAL EXPERIENCE.**

12 A. I received a Bachelor of Science in Financial Services from Wright State
13 University in 1988, and a Master's Degree in Business Administration from the
14 University of South Florida in 1990. I have attended numerous other industry and
15 company sponsored programs and courses.

16 I have worked in the energy industry for 23 years. From 1990 through
17 1993, I was employed at The Dayton Power & Light Company (DP&L) as a Gas
18 Analyst in the Gas Supply Planning Department. My responsibilities as a Gas
19 Analyst included natural gas and interstate pipeline procurement, system load
20 forecasting, and daily load dispatching. From 1993 through 1996, I worked for
21 DP&L's non-regulated natural gas sales company (MVR) as a Manager of Natural
22 Gas Sales and Marketing. In 1996, I joined Cinergy Corp.'s non-regulated natural

1 gas sales company (Cinergy Resources, Inc.) as the Manager of Energy Sales and
2 Services and worked in this capacity until 2000. As Manager of Energy Sales and
3 Services, my responsibilities included the coordination of all retail sales,
4 marketing and customer service activities in the Kentucky, Indiana, and Ohio
5 markets. From 2000 through 2001, I worked for various departments within
6 Cinergy Corp. including Environmental Services, Labor Relations, and Gas
7 Operations. Beginning October 2001, I led the commercial activities of Duke
8 Energy's regulated natural gas business in Kentucky and Ohio as General
9 Manager, Gas Commercial Operations. My responsibilities included leading the
10 planning, procurement, and recovery of more than \$400 million of annual natural
11 gas supply. I directed the 24 hour/day physical operations and control of Duke
12 Energy's natural gas distribution system. I also led the teams responsible for
13 managing the relationships with large business natural gas customers, as well as
14 the management and administration of the company's natural gas customer choice
15 program.

16 In September 2010, I became Vice President of Government and
17 Regulatory affairs for Duke Energy Kentucky and Duke Energy Ohio. In this role,
18 I was responsible for the government and regulatory policies and strategies to
19 strengthen the Duke Energy Kentucky and Duke Energy Ohio mission of
20 providing safe, reliable, and affordable energy for customers located in both
21 states. I assumed the role of President of Duke Energy Kentucky and Duke
22 Energy Ohio in December 2012.

1 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS PRESIDENT,**
2 **DUKE ENERGY KENTUCKY.**

3 A. As President of Duke Energy Kentucky, I am responsible for ensuring that our
4 customers continue to have access to safe, reliable, and reasonably priced natural
5 gas and electric service and that these services are provided in accordance with
6 applicable federal and state laws and regulations. I am also involved in external
7 efforts relating to governmental and regulatory affairs, interacting with state and
8 community leaders and regulators on matters relevant to Duke Energy Kentucky's
9 business and presence in Kentucky. I am responsible for the Company's
10 community relations and economic development efforts, as well as Duke
11 Energy's regional charitable contributions giving through the foundation.

12 **Q. ARE YOU CURRENTLY INVOLVED IN ANY PROFESSIONAL OR**
13 **CHARITABLE ORGANIZATIONS?**

14 A. I am the treasurer and member of the board of trustees of the Boone County
15 Kentucky Public Library. I serve on the board of directors of REDI Cincinnati and
16 its Executive Committee. I am a board member of the Dan Beard Council, Boy
17 Scouts of America. I also serve on the board of directors of People Working
18 Cooperatively, Cincinnati USA Regional Chamber, and Vision 2015 CEO
19 Roundtable. I am also a member of the Cincinnati Business Committee.

20 **Q. HAVE YOU EVER TESTIFIED BEFORE THE KENTUCKY PUBLIC**
21 **SERVICE COMMISSION?**

22 A. No.

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
2 **PROCEEDING?**

3 A. My testimony provides an overview of Duke Energy Kentucky's corporate and
4 business structure. I briefly discuss Duke Energy Kentucky's proposal to purchase
5 the remaining 31% interest in the East Bend Unit 2 Generating Station (East
6 Bend) and the relevant terms and conditions (East Bend Purchase). I provide an
7 overview of the Company's Application in this proceeding and introduce the
8 witnesses supporting this filing. I also sponsor the Company's Application and
9 Exhibit A, the Purchase and Sale Agreement Between Duke Energy Kentucky,
10 Inc., and The Dayton Power and Light Company (Purchase Agreement).

II. OVERVIEW OF DUKE ENERGY KENTUCKY, INC.

11 **Q. PLEASE GENERALLY DESCRIBE THE DUKE ENERGY CORPORATE**
12 **STRUCTURE.**

13 A. To more fully understand how Duke Energy Kentucky serves its customers, it is
14 helpful to understand Duke Energy Corp.'s structure. Duke Energy Corp. is a
15 holding company that was formed in connection with the merger of the previously
16 named Duke Power Corp., a North Carolina corporation, and Cinergy, a Delaware
17 corporation, which was consummated in April 2006. In July 2012, Duke Energy
18 completed its merger with Progress Energy Inc. (Progress).

19 Duke Energy Corp. is a Delaware corporation that owns several
20 subsidiaries, some of which are regulated and others which are not. Cinergy is a
21 wholly owned subsidiary of Duke Energy Corp. Cinergy, in turn, owns Duke
22 Energy Ohio and Duke Energy Indiana, Inc. (Duke Energy Indiana). Duke Energy

1 Ohio owns Duke Energy Kentucky. In addition to Cinergy, Duke Energy Corp.
2 also owns Duke Energy Carolinas, LLC (Duke Energy Carolinas), which provides
3 electric utility service in both North Carolina and South Carolina. As a result of
4 the 2012 merger with Progress, Duke Energy Corp. now owns Duke Energy
5 Progress and Duke Energy Florida, which provide utility service in the Carolinas
6 and Florida, respectively. Each of these utility operating companies is part of
7 Duke Energy Corp.'s Regulated Utilities segment.

8 **Q. IN CARRYING OUT YOUR RESPONSIBILITIES AS PRESIDENT OF**
9 **DUKE ENERGY KENTUCKY, DO YOU REGULARLY COMMUNICATE**
10 **AND COLLABORATE WITH THE EXECUTIVE MANAGEMENT OF**
11 **DUKE ENERGY CORP.?**

12 A. Yes. As President for both Duke Energy Kentucky, and its parent, Duke Energy
13 Ohio, I work closely with Duke Energy Corp.'s executive management, as well as
14 the other state utility Presidents within the Duke Energy Corp. family of
15 businesses. As president of Duke Energy Kentucky, I have ultimate responsibility
16 for the performance of the Company, including meeting its commitment to
17 provide safe, reliable, and reasonably priced service to our customers. This
18 collaboration provides Duke Energy Kentucky with valuable resources and access
19 to personnel from the Duke Energy Corp. family of companies to facilitate the
20 Company's commitment to our customers.

21 **Q. PLEASE GENERALLY DESCRIBE DUKE ENERGY KENTUCKY'S**
22 **OPERATIONS.**

1 A. Duke Energy Kentucky is a regulated utility operating company that provides
2 retail electric services in five counties and natural gas service in seven counties in
3 northern Kentucky. Duke Energy Kentucky's local business office is in Erlanger,
4 Kentucky, with its main business office across the Ohio River in Cincinnati, Ohio.
5 Duke Energy Kentucky serves a relatively densely populated territory that, though
6 not heavily industrialized, consists of a fairly diverse mix of industrial customers.

7 Duke Energy Kentucky currently provides natural gas distribution service
8 to approximately 97,000 customers in Boone, Campbell, Gallatin, Grant, Kenton,
9 Bracken and Pendleton counties in northern Kentucky. The Company also owns,
10 operates, and maintains approximately 1,490 miles of mains on its natural gas
11 distribution system. Duke Energy Kentucky also provides retail electric service to
12 approximately 138,000 customers in Boone, Campbell, Grant, Kenton, and
13 Pendleton counties in northern Kentucky. The Company owns, operates, and
14 maintains approximately 147 miles of transmission lines and 2,134 miles of
15 distribution lines. Duke Energy Kentucky's gas and electric service territories
16 encompass approximately 2,148 and 700 square miles, respectively. In addition,
17 Duke Energy Kentucky has operational facilities in Covington and Erlanger
18 Kentucky.

19 Duke Energy Kentucky currently owns and operates approximately 1,077
20 megawatts (MW) of net installed generating capacity. This generating capacity
21 includes a 69% ownership stake in East Bend, a coal-fired, base load generating
22 unit in Rabbit Hash, Boone County, Kentucky. The Company's stake in East
23 Bend amounts to 414 MW of net installed capacity. The Company also owns

1 Miami Fort Unit 6 (MF6), coal-fired base/intermediate load generating unit
2 amounting to 163 MWs of net installed capacity. MF6 is located in North Bend,
3 Ohio and is one of three units at the Miami Fort Generating Station. Finally, the
4 Company owns and operates the Woodsdale Generating Station (Woodsdale), a
5 six-unit natural gas or propane-fired station located in Trenton, Ohio. Woodsdale
6 accounts for 492 MWs of net installed peaking capacity (summer rating with inlet
7 cooling). All of these generation assets are dispatched into PJM Interconnection,
8 L.L.C. (PJM), which maintains responsibility for reliability of supply within its
9 footprint. Duke Energy Kentucky witness Steve Immel provides more detail
10 concerning the Company's generating facilities, including the operation of East
11 Bend in his direct testimony.

12 **Q. PLEASE BRIEFLY DESCRIBE DUKE ENERGY KENTUCKY'S**
13 **OPERATION IN PJM.**

14 A. Duke Energy Kentucky joined PJM effective January 1, 2102, as was approved in
15 Case No. 2010-00203. Under the terms of the Kentucky Public Service
16 Commission's (Commission) Order approving the PJM membership, Duke
17 Energy Kentucky must operate as a Fixed Resource Requirement (FRR) entity as
18 opposed to participating in the PJM Base Residual Auction (BRA) construct for
19 the provision of capacity. The FRR obligation means that Duke Energy Kentucky
20 must secure and provide capacity to meet 100% of its forecasted capacity
21 requirement and reserves via unit-specific resources under a three-year forward-
22 looking plan submitted annually to PJM. This FRR plan is based upon Company

1 load forecasts and PJM-determined reserve margins and must be submitted
2 separately from and in advance of the PJM BRA.

3 **III. DUKE ENERGY KENTUCKY'S APPLICATION**

3 **Q. PLEASE BRIEFLY SUMMARIZE DUKE ENERGY KENTUCKY'S**
4 **APPLICATION AND THE RELIEF REQUESTED IN THIS**
5 **PROCEEDING.**

6 A. Duke Energy Kentucky is requesting that the Commission grant a Certificate of
7 Public Convenience and Necessity, including any waivers deemed necessary in
8 approving Duke Energy Kentucky's purchase and acquisition of all of DP&L's
9 right, title, and interest in and to all the assets primarily related to East Bend as set
10 forth in the Purchase Agreement and the assumption of all of DP&L's liabilities,
11 including any and all environmental liabilities, to the extent arising from, or
12 related to, the purchased assets or the operation or retirement of East Bend.

13 Duke Energy Kentucky requests approval for the future recovery of the
14 purchase price of \$12.4 million as the incremental value of plant in service for the
15 newly acquired 186 MWs of net installed capacity from East Bend and the
16 creation of regulatory assets for future recovery through accounting deferrals, for
17 certain costs including but not limited to, the incremental operations and
18 maintenance expense (O&M) that the Company will become responsible for and
19 begin incurring immediately upon closing of the transaction, as well as any
20 necessary accounting treatment for the retirement of MF6.

21 The Company also requests accounting/rate treatment necessary for costs
22 incurred in satisfying the Company's FRR obligation in PJM if and when MF6 is

1 retired with the difference between such costs and the capacity revenues the
2 Company will receive from DP&L's interest in East Bend, positive or negative, to
3 flow through Profit Sharing Mechanism (Rider PSM).

4 Finally, the Company is requesting that the Commission issue its decision
5 approving the Company's Application as soon as practicable, but no later than
6 November 1, 2014. The Purchase Agreement has an expiration of December 31,
7 2014 and the Company and DP&L need adequate time to close the transaction.

8 **Q. IN ADDITION TO YOUR TESTIMONY, PLEASE IDENTIFY THE**
9 **WITNESSES SUPPORTING THE COMPANY'S APPLICATION.**

10 A. In addition to my testimony, Duke Energy Kentucky is submitting the pre-filed
11 testimony of the following witnesses in support of the Application:

- 12 • William Don Wathen Jr., Director Rates and Regulatory Strategy
13 Ohio/Kentucky, discusses the Company's anticipated rate treatment of the
14 East Bend Purchase including, but not limited to, the purchase price,
15 assumption of liabilities, the deferrals requested for the incremental O&M,
16 and the terms and conditions for sharing of net proceeds from off-systems
17 sales for the East Bend Purchase energy and capacity under the Company's
18 Rider PSM;
- 19 • James Northrup, Director Wholesale & Renewables Analytics, discusses Duke
20 Energy Kentucky's capacity request for proposal (RFP) process and analysis
21 that lead to the Company's decision to pursue the East Bend Purchase;

- 1 • Steve Immel, Vice President of Midwest Regulated Operations, discusses the
2 Company's generation fleet and specifically its operation of East Bend, and
3 costs and the efficiencies that will accrue through acquiring the remaining
4 portion of East Bend;
- 5 • J. Michael Geers, Manager of the Air Programs and Air Compliance within
6 Environmental Services, discusses the federal environmental regulations
7 impacting Duke Energy Kentucky's operation of its coal-fired generating
8 stations and more specifically, how East Bend is positioned to comply with
9 those regulations now and in the future;
- 10 • John A. Verderame, Director Power Trading & Dispatch, discusses Duke
11 Energy Kentucky's dispatch of East Bend in PJM, how the Company fulfills
12 its FRR obligation in PJM, and how the Company will meet its PJM reliability
13 obligations upon effectuation of the East Bend Purchase; and
- 14 • Will A. Garrett, Director of Accounting Research, discusses how the potential
15 early retirement for MF6 will qualify as a normal retirement and how the
16 purchase price paid for DP&L's interest should be recorded.

IV. THE EAST BEND PURCHASE

17 **Q. PLEASE EXPLAIN DUKE ENERGY KENTUCKY'S NEED TO**
18 **PURCHASE THE REMAINING 31% INTEREST IN EAST BEND.**

19 A. Duke Energy Kentucky is facing an important decision with respect to how it will
20 continue to serve our customers and comply with upcoming federal environmental
21 regulations, most significantly, the Mercury and Air Toxics Standards (MATS),
22 which comes into effect in April 2015. Duke Energy Kentucky witness Mr. Geers

1 more fully explains the environmental regulations impacting Duke Energy
2 Kentucky's coal-fired generation in his direct testimony. In summary, MF6 is an
3 unscrubbed coal-fired generating station that presently will not meet MATS
4 without significant capital investment. Moreover, the long-term viability of the
5 unit post-MATS compliance is impacted by both age and other emerging
6 environmental regulations that will lead to its discontinued operation and eventual
7 retirement.

8 As more fully explained by Mr. Verderame, Duke Energy Kentucky must
9 replace the MWs of capacity and associated energy from MF6. The MF6 station
10 provides an important service by assisting the Company to meet its reliability
11 requirements in PJM as an FRR entity to the benefit of our Kentucky customers.

12 In short, if and when MF6 is retired, the Company must find a reliable and
13 unit-specific capacity resource to replace the approximately 163 MWs of net
14 installed capacity. The East Bend purchase meets that need.

15 **Q. HOW DID DUKE ENERGY KENTUCKY COME TO THE CONCLUSION**
16 **TO PURSUE THE PURCHASE OF DP&L'S INTEREST IN EAST BEND?**

17 A. As described in the direct testimony of Mr. Northrup, Duke Energy Kentucky
18 initiated a request for proposal process managed by an independent third party
19 and employed a resource plan analysis that determined the East Bend Purchase
20 decision was the lowest cost alternative to meet the Company's capacity needs in
21 PJM. Once that analysis was completed, the Company entered into exclusive
22 negotiations with DP&L for the purchase.

1 **Q. PLEASE DESCRIBE THE NEGOTIATIONS WITH DP&L.**

2 A. The negotiations for the East Bend Purchase spanned several months. The
3 companies were well represented through the negotiations by experts and advised
4 by counsel. The companies discussed many issues that were ultimately resolved
5 through the Purchase Agreement, including, but not limited to, the acquisition of
6 DP&L's interest in East Bend itself, and its interest in the surrounding land, the
7 rights to specific benefits, the allocation of liabilities, and the parties' respective
8 rights and obligations regarding the ongoing station operation until closing of the
9 transaction.

10 **Q. WHO ULTIMATELY MADE THE DECISION ON BEHALF OF DUKE**
11 **ENERGY KENTUCKY TO PURSUE THE OPPORTUNITY TO**
12 **PURCHASE THE REMAINING 31% INTEREST IN THE EAST BEND**
13 **GENERATING STATION?**

14 A. This decision was made after thorough review and approval of many levels within
15 Duke Energy Kentucky and Duke Energy Corp. At my direction, Duke Energy
16 Kentucky issued a request for proposal (RFP) to evaluate long-term solutions for
17 capacity in the event MF6 is retired due to forthcoming federal environmental
18 regulations, including but not limited to, MATS. Duke Energy Kentucky witness
19 Mr. Northrup further explains the RFP process the Company undertook to reach
20 its recommendation.

21 The team of experts investigating these solutions was made up of both
22 local and corporate personnel, and included myself, Mr. Immel, Mr. Northrup,
23 Mr. Wathen, Mr. Verderame, Mr. Geers, as well as others from various

1 departments, including, but not limited to Legal, Regulatory Strategy, Resource
2 Planning, and Corporate Development. Once the team came to the conclusion that
3 the East Bend Purchase was the least cost option for satisfying Duke Energy
4 Kentucky's resource needs, the team presented its recommendation to me for
5 approval. Once I approved the recommendation, the decision was brought before
6 the Duke Energy Corp. Transaction Review Committee (TRC) for their review
7 and approval. The TRC is made up of the top executives in Duke Energy Corp.
8 Once vetted by the TRC, the proposal was brought to Lynn Good, the Chief
9 Executive Officer of Duke Energy Corp., for her final approval.

10 Although the ultimate decision to purchase the asset was made by the top
11 executives at Duke Energy in accordance with appropriate corporate protocols
12 and delegations of authority, the decision was based primarily upon the
13 recommendation made by the Duke Energy Kentucky management team,
14 including myself.

15 **Q. PLEASE EXPLAIN THE REASONS SUPPORTING DUKE ENERGY**
16 **KENTUCKY'S DECISION TO PURSUE THE EAST BEND PURCHASE.**

17 A. The East Bend Purchase produces many benefits to Duke Energy Kentucky's
18 customers and the Commonwealth of Kentucky. First, the East Bend Purchase
19 translates to the addition of approximately 186 net MWs of installed capacity at a

1 reasonable price that will be needed to replace approximately 163 MW of
2 installed capacity at MF6 that may be retired soon due to MATS, or as late as
3 2020 due to age and other federal environmental regulations.¹

4 As I previously stated, and as more fully explained by Mr. Northrup, the
5 East Bend Purchase was the least-cost option presented after a thoroughly vetted
6 RFP process under which approximately 30 supply-side resources were
7 considered.

8 As more fully explained by Mr. Immel, the East Bend Purchase provides
9 additional operational efficiency to Duke Energy Kentucky in that once it is the
10 sole owner of the East Bend station, the Company will no longer be subject to a
11 joint operation agreement for the plant. Because of recent developments in Ohio's
12 regulatory structure, DP&L is required to transfer its ownership interests in all of
13 its generating assets out of the utility by January 1, 2017.² And in a recent Ohio
14 regulatory filing involving the transfer of its generation assets out of the utility,
15 DP&L indicated that it may sell its entire generating fleet, including its 31%
16 interest in East Bend to a third party.³ If Duke Energy Kentucky does not
17 purchase DP&L's interest in East Bend, the Company may find itself as a joint
18 owner with an unknown third party. Finally, the East Bend Purchase is furthering

¹ At the time of the filing of Duke Energy Kentucky's IRP in 2011, the Utility Maximum Achievable Control Technology (MACT) regulation was assumed to be effective January 1, 2015. Now, the MACT regulation is finalized as the Mercury and Air Toxics Standard (MATS) and currently scheduled to become effective April 16, 2015. On or about December 12, 2013, Duke Energy Kentucky obtained a 45 day extension of compliance to align with the planning year cycle of PJM Interconnection LLC. As such, for MATS compliance purposes, Miami Fort Unit 6 must either retire or comply with MATS by June 1, 2015.

² *In the Matter of the Application of Dayton Power & Light Company for an Electric Security Plan*, Case No. 12-426-EL-SSO, Fourth Entry on Rehearing, at pp 5-6 (June 4, 2014).

³ *In the Matter of the Application of the Dayton Power and Light Company for Authority to Transfer or Sell Its generation Assets*, Case No. 13-2420-EL-UNC, Application (December 30, 2013); and Supplemental Application (February 25, 2014).

1 the Company's commitment to the Commonwealth through its acquisition of an
2 additional interest in a coal-fired station that is physically located in the
3 Commonwealth, contributes to the local tax base in Boone County, and that
4 burns, at least in part, coal sourced from Kentucky mines.

5 **Q. PLEASE BRIEFLY DESCRIBE THE SIGNIFICANT TERMS OF THE**
6 **EAST BEND PURCHASE AGREEMENT.**

7 A. Duke Energy Kentucky intends to purchase the remaining 31% interest in East
8 Bend and the surrounding land for an agreed upon purchase price of \$12.4 million
9 dollars. The purchase price, the acquisition, and the related terms are clearly
10 defined and set forth in the Purchase Agreement, included as Exhibit A to the
11 Application. Through this transaction, Duke Energy Kentucky will become the
12 sole owner of East Bend, acquiring DP&L's rights and entitlements to East Bend
13 as well as substantially all of DP&L's liabilities. The rights and entitlements that
14 Duke Energy Kentucky will receive associated with DP&L's interest in East Bend
15 will include the asset itself and the energy output, future capacity, surrounding
16 land, and the capacity payments received from PJM for DP&L's prior
17 commitments of its share of the East Bend capacity in PJM's capacity auctions.
18 The liabilities assumed by Duke Energy Kentucky will include substantially all of
19 the pre-closing and future liabilities associated with DP&L's remaining 31%
20 interest in East Bend, including any and all environmental liabilities. The
21 Purchase Agreement identifies certain liabilities that will be retained by DP&L,
22 principally certain taxes and indebtedness that are secured by a lien on its interest
23 in East Bend.

1 This assumption of rights, entitlements, and liabilities is a key provision to
2 the East Bend Purchase and the negotiations between the companies. As such,
3 these assumptions are reflected in the purchase price agreed upon by the parties.
4 Upon closing of the East Bend Purchase, and receipt of all appropriate regulatory
5 approvals, Duke Energy Kentucky will be solely responsible for all costs of
6 operation of East Bend. Messrs. Geers, Verderame, and Immel discuss the
7 environmental, capacity, and operations attributes of the East Bend Purchase,
8 respectively, in their direct testimonies.

9 The Purchase Agreement allows Duke Energy Kentucky to make a
10 financial adjustment for the unreimbursed outage costs associated with DP&L's
11 share in East Bend that the Company will have to cover against the purchase price
12 paid to DP&L. There will also be a financial adjustment with respect to certain
13 pre-paid items, including but not limited to, fuel inventories, post-employment
14 pension and benefits, and taxes for which DP&L has already paid for but will no
15 longer have any interest. The final adjustment of amounts owed to DP&L will be
16 determined within 90 days after closing.⁴ The final purchase price for valuing the
17 asset for purposes of rates will be \$12.4 million.

18 Finally, the East Bend purchase includes the acquisition of DP&L's
19 ownership interest in land surrounding the East Bend site. Duke Energy Kentucky
20 does not presently own this land, but rather the majority of it is jointly owned by
21 DP&L and Duke Energy Ohio.⁵ Duke Energy Kentucky is also in the process of

⁴ Exhibit A to Application, Purchase Agreement.

⁵ The total acreage of additional land surrounding the East Bend site to be transferred to Duke Energy Kentucky is approximately 940 acres. DP&L has a 31% interest in those acres.

1 acquiring Duke Energy Ohio's ownership interest in this land through a separate
2 transfer transaction that will be priced at the lower of cost or market in accordance
3 with Kentucky law. Eventually, this land will be solely owned by Duke Energy
4 Kentucky and will be used to expand the current East Bend landfill that is
5 necessary to dispose of future dry ash generated at East Bend. Mr. Immel
6 describes this more fully in his direct testimony.

7 **Q. PLEASE FURTHER EXPLAIN THE CONDITION REGARDING THE**
8 **UNREIMBURSED SPRING OUTAGE COSTS.**

9 A. As Mr. Immel explains in his direct testimony, DP&L's willingness to make
10 investments into the long-term operation of East Bend has changed due to the
11 recent developments in Ohio obligating it to transfer and possibly sell all of its
12 generation. This is further complicated by the recent expiration of the Operation
13 Agreement between DP&L and Duke Energy Kentucky and the inability to come
14 to terms on a new long-term replacement. This change in DP&L's philosophy has
15 resulted in a dispute regarding DP&L's share of responsibility for the current
16 spring maintenance outage at East Bend and its ongoing operations. As such, to
17 protect Duke Energy Kentucky's interests, and to avoid the likelihood of
18 protracted litigation, the Purchase Agreement allows Duke Energy Kentucky to
19 make a financial adjustment for the unreimbursed portion of DP&L's share of the
20 necessary spring 2014 outage against the \$12.4 million purchase price to be paid
21 to DP&L.

1 **Q. PLEASE FURTHER EXPLAIN THE IMPORTANCE OF THE TERM**
2 **REGARDING THE COMPANY'S ASSUMPTION OF ENVIRONMENTAL**
3 **LIABILITIES.**

4 A. The assumption of DP&L's share of any and all past, present, and future
5 environmental liabilities was a key component of this transaction and was insisted
6 upon by DP&L. It is my understanding that this is due, at least in part, to its
7 requirement to exit the generating ownership business. The low purchase price for
8 this capacity is a result of the assumption of the rights and liabilities associated
9 with this transaction.

10 Duke Energy Kentucky is already the majority shareholder and operator of
11 East Bend, and at present, the Company is currently responsible for the majority
12 of costs, including the costs of compliance with federal, state, and local
13 environmental regulations associated with operating a coal-combustion generating
14 plant. As explained by Messrs. Immel and Geers, East Bend currently is in
15 compliance with all existing environmental regulations. The Company is not
16 aware of any violations of these regulations, and is well suited to comply with
17 known emerging regulations, including MATS.

18 This particular condition is of such importance that in the Purchase
19 Agreement, the Company has reserved the right to walk away from the
20 transaction if it does not receive express Commission approval of this assumption
21 of liabilities upon acceptable terms and conditions within Duke Energy
22 Kentucky's sole discretion.

1 **Q. DID DUKE ENERGY KENTUCKY'S EVALUATION OF THE EAST**
2 **BEND PURCHASE INCLUDE POTENTIAL ENVIRONMENTAL**
3 **REQUIREMENTS?**

4 A. Yes. As more fully explained by Duke Energy Kentucky witness Geers, the
5 Company did consider environmental compliance and potential liabilities as part
6 of its evaluation of the various supply-side alternatives identified in the RFP.
7 These considerations included the compliance strategy at East Bend for existing
8 environmental laws and for potential future legislation related to treatment of fly
9 and bottom ash through ponds and landfills.

10 **Q. IS DUKE ENERGY KENTUCKY REQUESTING ANYTHING SPECIAL**
11 **FROM THE COMMISSION WITH RESPECT TO THIS CONDITION?**

12 A. No. The Company is simply looking for an express approval of this assumption of
13 liabilities, including any and all past, present, and future environmental liabilities
14 attributed to DP&L's 31% ownership interest in East Bend. The Company would
15 anticipate that if any such compliance costs, including, but not limited to potential
16 remediation expense were to occur in the future, such costs would be considered
17 in the ordinary course of the Commission's review of Duke Energy Kentucky's
18 rates under Kentucky law, and treated in a comparable manner to the Company's
19 current 69% ownership interest. Mr. Wathen describes this concept in his direct
20 testimony.

21 **Q. PLEASE EXPLAIN WHY THE COMPANY BELIEVES THIS**
22 **CONDITION IS REASONABLE.**

23 A. The Company believes this condition and the associated affirmation is reasonable

1 in that upon closing, 100% of East Bend's energy and its capacity, as explained
2 by Mr. Verderame, will be dedicated to Kentucky's customers. The Company
3 anticipates that with normal investment and in accordance with existing and the
4 known upcoming federal environmental regulations, East Bend will have a
5 minimum life, conservatively, of at least ten years, and depending upon the final
6 results of carbon legislation, perhaps even longer. This transaction thus results in
7 Kentucky's customers receiving a least cost, reliable, and long-term solution to
8 meet their generation needs. Moreover, as I previously stated, through the East
9 Bend Purchase, the Company is increasing its investment in an asset that is
10 physically located in Boone County, Kentucky and that currently derives a
11 significant portion of its fuel from Kentucky coal. East Bend has 92 employees at
12 the station and provides a substantial tax base in the area. Duke Energy Kentucky
13 already operates the station so it is familiar with its history, operation, reliability,
14 and overall performance. Acquiring DP&L's interest provides Duke Energy
15 Kentucky with a once in a lifetime opportunity to get out of its joint-ownership
16 relationship with DP&L and for a very reasonable price.

17 The low purchase price of the East Bend Purchase does not provide much
18 by way of incremental value to Duke Energy Corp.'s shareholders in terms of
19 adding to the Company's rate base like some of the other more expensive asset
20 acquisitions that were considered as part of the Company's analysis, nor does it
21 eliminate risk in terms of potential environmental compliance costs for coal
22 combustion like a more costly long-term purchase power agreement or new
23 natural gas-fired generation, both reasonable solutions considered in the RFP

1 process. Nonetheless, the Company is pursuing this alternative because it firmly
2 believes it is in the best interests of customers, the community, and the
3 Commonwealth of Kentucky. And as such, the Company believes that seeking
4 this affirmation is reasonable from the shareholder perspective so that there is no
5 confusion regarding the future treatment of these costs from the standpoint of
6 potential regulatory recovery.

7 **Q. DID THE COMPANY'S MEMBERSHIP AND PARTICIPATION IN PJM**
8 **INFORM AND IMPACT THE COMPANY'S DECISION TO PURSUE**
9 **THE EAST BEND PURCHASE?**

10 A. Yes. As more fully explained in Mr. Verderame's direct testimony, because Duke
11 Energy Kentucky is a PJM member and more importantly an FRR entity in PJM,
12 the Company must meet PJM's reliability requirements through specific
13 generation resources that are deliverable into PJM. East Bend is an asset in PJM
14 and deliverable to Duke Energy Kentucky. It is also in the Duke Energy
15 Ohio/Duke Energy Kentucky transmission delivery zone, which means the asset
16 is strategically located to serve Duke Energy Kentucky's customers. This makes
17 East Bend a good fit for meeting PJM reliability obligations now and in the
18 future.

19 **Q. WHAT OTHER REGULATORY APPROVALS ARE NECESSARY FOR**
20 **DUKE ENERGY KENTUCKY TO PURCHASE THE REMAINING 31%**
21 **INTEREST IN EAST BEND?**

22 A. As I understand, DP&L must get final approval from the Public Utilities
23 Commission of Ohio (PUCO) to complete this transfer. That said, DP&L is

1 already under an obligation to transfer its interests in all of its generation fleet,
2 including its ownership share of East Bend out of the utility no later than January
3 1, 2017.⁶ DP&L already has an application pending with the PUCO to transfer its
4 entire fleet out of the utility.⁷ Also, it is my understanding that Duke Energy
5 Kentucky and DP&L will obtain permission from the Federal Energy Regulatory
6 Commission for the asset transfer.

7 **Q. PLEASE EXPLAIN HOW THE TRANSFER WILL OCCUR.**

8 A. The transfer will occur through a single transaction whereby DP&L will sell its
9 interest directly to Duke Energy Kentucky or through a series of simultaneous
10 transactions where DP&L will transfer its interest to an affiliated merchant
11 generating company and then immediately sell it's the East Bend interest to Duke
12 Energy Kentucky.

13 **Q. WHEN IS THE TRANSACTION EXPECTED TO BE COMPLETED?**

14 A. The transaction must close before the end of the fourth quarter of 2014 or DP&L
15 could terminate the transaction.

16 **Q. WHY IS THE COMPANY REQUESTING APPROVAL BY NOVEMBER**
17 **1, 2014?**

18 A. As I previously mentioned, the Purchase Agreement is set to expire on December
19 31, 2014, and as such the Company respectfully requests the Commission issue an
20 order granting its approval as soon as practicable, but no later than on or before

⁶ *In the Matter of the Application of Dayton Power & Light Company for an Electric Security Plan*, Case No. 12-426-EL-SSO, Fourth Entry on Rehearing, at pp 5-6 (June 4, 2014).

⁷ *In the Matter of the Application of the Dayton Power and Light Company for Authority to Transfer or Sell Its Generation Assets*, Case No. 13-2420-EL-UNC, Application (December 30, 2013); Supplemental Application (February 25, 2014); and Amended Supplemental Application (May 25, 2014).

1 November 1, 2014, so that there is adequate time to close before the Purchase
2 Agreement expiration. It is my understanding that DP&L is under an Ohio
3 regulatory obligation to transfer all of its generating fleet out of the utility and is
4 exiting the generation ownership business. DP&L must receive final regulatory
5 approval to accomplish its transfer of all assets from the PUCO. DP&L, as part of
6 the East Bend Purchase, is carving out this transaction from its comprehensive
7 filing. Also, if the East Bend Purchase does not close with Duke Energy
8 Kentucky, DP&L will likely seek to re-incorporate the asset into its larger asset
9 transfer and potentially for sale to a third party. As such, there is a termination
10 date included as part of this Purchase Agreement. In addition, the Company is
11 requesting the approval by November 1, 2014, so that there is adequate time to for
12 the Company to decide whether to retire MF6 and provide the necessary notices
13 to PJM or make the necessary investment to comply with MATS.

V. CONCLUSION

14 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

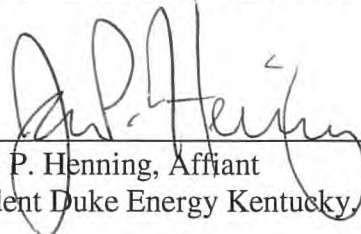
15 **A. Yes.**

VERIFICATION

STATE OF OHIO)
) SS:
COUNTY OF HAMILTON)

The undersigned, James P. Henning, being duly sworn, deposes and says that he is the President of Duke Energy Kentucky, Inc., that he has personal knowledge of the matters set forth in the foregoing, and that the information contained therein is true and correct to the best of his knowledge, information and belief.

DUKE ENERGY KENTUCKY

By: 
James P. Henning, Affiant
President Duke Energy Kentucky, Inc.

Subscribed and sworn to before me by James P. Henning, President of Duke Energy Kentucky, Inc., on this 12TH day of June 2014.

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


NOTARY PUBLIC

My Commission Expires: 1/5/2019

COMMONWEALTH OF KENTUCKY
BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

In the Matter of:

The Application of Duke Energy Kentucky,)
Inc., For (1) A Certificate of Public)
Convenience And Necessity Authorizing the) Case No. 2014-_____
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.)

DIRECT TESTIMONY OF
WILLIAM DON WATHEN JR.
ON BEHALF OF
DUKE ENERGY KENTUCKY, INC.

June 13, 2014

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Attachments:

- WDW-1 Summary of 2006 Rate Case non-fuel O&M
- WDW-2 Average non-fuel O&M for DP&L's share of East Bend
- WDW-3 FERC Form 1 Excerpts
- WDW-4 Rider PSM Schedule

I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is William Don Wathen Jr., and my business address is 139 East Fourth
3 Street, Cincinnati, Ohio 45202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as Director of
6 Rates & Regulatory Strategy - Ohio and Kentucky. DEBS provides various
7 administrative and other services to Duke Energy Kentucky, Inc., (Duke Energy
8 Kentucky or the Company) and other affiliated companies of Duke Energy
9 Corporation (Duke Energy Corp.).

10 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL**
11 **EXPERIENCE.**

12 A. I received Bachelor Degrees in Business Administration and Chemical
13 Engineering, and a Master of Business Administration Degree, all from the
14 University of Kentucky. After completing graduate studies, I was employed by
15 Kentucky Utilities Company as a planning analyst. In 1989, I began employment
16 with the Indiana Utility Regulatory Commission as a senior engineer. From 1992
17 until mid-1998, I was employed by SVBK Consulting Group, where I held several
18 positions as a consultant focusing principally on utility rate matters. I was hired
19 by Cinergy Services, Inc., in 1998, as an Economic and Financial Specialist in the
20 Budgets and Forecasts Department. In 1999, I was promoted to the position of
21 Manager, Financial Forecasts. In August 2003, I was named to the position of

1 Director - Rates, On December 1, 2009, I took the position of Director of Rates &
2 Regulatory Strategy - Ohio and Kentucky.

3 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY**
4 **PUBLIC SERVICE COMMISSION?**

5 A. Yes. I have presented testimony on numerous occasions before the Kentucky
6 Public Service Commission (Commission) and various other state, local, and
7 federal regulators.

8 **Q. PLEASE SUMMARIZE YOUR DUTIES AS DIRECTOR OF RATES &**
9 **REGULATORY STRATEGY - OHIO AND KENTUCKY.**

10 A. As Director of Rates & Regulatory Strategy - Ohio and Kentucky, I am
11 responsible for all state and federal rate matters involving Duke Energy Kentucky
12 and its parent, Duke Energy Ohio, Inc. (Duke Energy Ohio).

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
14 **PROCEEDING?**

15 A. The purpose of my testimony is to provide an overview of the Company's
16 proposed rate and regulatory treatment of its proposal to purchase the remaining
17 31% interest in Unit 2 of the East Bend generating station (East Bend) from The
18 Dayton Power and Light Company (DP&L). I describe the costs currently
19 reflected in the Company's base rates associated with East Bend and Miami Fort
20 Unit 6 (MF6) and then describe the financial and accounting treatment being
21 requested to accomplish the purchase, including the requested deferral for
22 incremental operating and maintenance expense (O&M) and capital costs for the
23 remaining 31% interest. I describe how (i) the transaction will impact the

1 Company's fuel adjustment clause (FAC) going forward, and (ii) the transaction
2 will impact the Company's profit sharing mechanism (Rider PSM), including the
3 treatment of payments and receipts for capacity-related transactions with PJM
4 Interconnection L.L.C. (PJM) following the completion of the purchase. Finally, I
5 describe the Company's proposal for rate treatment of MF6 upon its eventual
6 retirement.

II. FINANCIAL AND ACCOUNTING OVERVIEW

7 **Q. PLEASE PROVIDE A BRIEF SUMMARY OF THE COMPANY'S**
8 **PROPOSAL TO PURCHASE THE REMAINING 31% INTEREST IN**
9 **EAST BEND FROM DP&L.**

10 A. Duke Energy Kentucky is proposing to purchase the remaining 31% interest in
11 East Bend from DP&L for the agreed upon purchase price of \$12.4 million (East
12 Bend Purchase). Upon closing of the transaction, Duke Energy Kentucky will
13 become the sole owner of East Bend, acquiring DP&L's right, title, and interest in
14 and to all the assets primarily related to DP&L's share of East Bend.¹ The
15 Company will assume all of DP&L's liabilities, including any and all
16 environmental liabilities, to the extent arising from, or related to, DP&L's share in
17 the purchased assets or the operation or retirement of East Bend.

¹ DP&L has a 31% interest in land surrounding East Bend. The remaining interest is currently owned by Duke Energy Ohio and its subsidiary Tri-State Improvement Company. As explained by James P. Henning, there will be a subsequent transaction where Duke Energy Kentucky will acquire that interest as well.

1 **Q. WHAT APPROVALS DOES DUKE ENERGY KENTUCKY SEEK IN**
2 **TERMS OF ACCOUNTING AND RATEMAKING TREATMENT AS IT**
3 **RELATES TO THE PURCHASE AGREEMENT?**

4 A. As discussed in the testimony of Duke Energy Kentucky witness Will A. Garrett,
5 the Company is seeking authority to record the entire \$12.4 million purchase price
6 of DP&L's share of East Bend in FERC Account 102 (Electric Plant Purchased)
7 at the time of closing the East Bend Purchase. Assuming the Company is able to
8 record the purchase price in Account 102, after the closing, Duke Energy
9 Kentucky will depreciate its total investment in East Bend, including the newly
10 acquired portion, at the currently approved rates. At the time of the Company's
11 next base rate case, the then-current net book value associated with East Bend will
12 be included in rate base for purposes of establishing new base rates.

13 As Mr. Garrett also discusses, the Company should not be required to
14 record purchase price as a utility plant acquisition adjustment. However, if that
15 accounting treatment is required, Duke Energy Kentucky is seeking authority
16 from the Commission to treat this acquisition adjustment, for ratemaking
17 purposes, in a manner that would mirror the treatment that could be expected if
18 the investment was recorded as utility plant in service. Accomplishing this would
19 be a fairly simple matter of including the unamortized balance of the acquisition
20 adjustment in rate base and the amortization expense in the test year expenses.

21 The Company is also seeking authority to defer for future recovery in base
22 rates certain incremental costs that it expects to incur as a result of the transfer.
23 Upon closing, Duke Energy Kentucky will become responsible for the expenses,

1 including O&M, depreciation, and property taxes, associated with operating all of
2 East Bend. The Company is seeking Commission authority to create a regulatory
3 asset for the purpose of deferring recovery of the incremental O&M expenses. At
4 the time of the next base rate case, Duke Energy Kentucky will seek to amortize
5 the balance of this regulatory asset over a reasonable period to be determined in
6 that proceeding. This amortization will be included as part of the Company's
7 overall electric revenue requirement. In order to mitigate any loss due to the time
8 value of money, Duke Energy Kentucky seeks approval to accrue carrying costs
9 on the unamortized balance of the regulatory asset at the long-term debt rate
10 approved in its most recent approved rate case as well.

11 At the time of the next base rate case, the then-current ongoing level of
12 expenses would be incorporated into the overall revenue requirement and it will
13 not be necessary to continue the deferral.

14 **Q. DO YOU BELIEVE THE OVERALL OPERATIONS AND FINANCIAL**
15 **CONDITION OF THE UTILITY WILL BENEFIT FROM THE**
16 **ACQUISITION OF THE EAST BEND PURCHASE AT \$12.4 MILLION?**

17 **A.** Yes, Duke Energy Kentucky's witnesses in this proceeding discuss the many
18 operational and financial efficiencies created through the East Bend Purchase.
19 Some of these efficiencies were not otherwise available under the other proposals
20 evaluated under the Company's request for proposal (RFP) for a long-term
21 capacity solution that led us to the East Bend Purchase. From a financial
22 standpoint, the East Bend Purchase provides Duke Energy Kentucky with 186
23 megawatts (MWs) of net installed physical capacity for a price of \$12.4 million.

1 As Duke Energy Kentucky witness James Northrup discusses in his testimony, the
2 acquisition of DP&L's share of East Bend, including its share of surrounding
3 land, for a \$12.4 million purchase price was by far the least cost alternative and,
4 as explained by Duke Energy Kentucky witness Mr. Garrett, the agreed-to
5 purchase price is significantly below the historic cost of DP&L's 31% interest.
6 For Duke Energy Kentucky's customers, the acquisition of DP&L's share of East
7 Bend provides significant value by providing reasonably priced energy and
8 capacity.

9 Duke Energy Kentucky and its customers benefit from the acquisition of
10 DP&L's share of land surrounding East Bend. This land represents a valuable
11 future benefit to customers in allowing the Company to effectively address its
12 ongoing environmental compliance requirements.

13 It should be noted that DP&L is reportedly in the process of exiting its
14 generating business altogether and possibly putting its share of East Bend, along
15 with its other generating assets, on the market for any third party to purchase.²
16 Duke Energy Kentucky has the opportunity to acquire this valuable resource
17 because DP&L has offered to sell it. If DP&L were to sell its share of East Bend
18 to a third party, it is not possible to predict whether a future owner would even
19 offer to sell its share of East Bend to Duke Energy Kentucky, much less whether
20 such an offer would be at such a low price. Therefore, the opportunity to acquire

² *In the Matter of the Application of the Dayton Power and Light Company for Authority to Transfer or Sell Its Generation Assets*, Case No. 13-2420-EL-UNC, Application (December 30, 2013); Supplemental Application (February 25, 2014); Amended Supplemental Application (May 25, 2014).

1 the remainder of this asset at such a low cost to ratepayers may not be available in
2 the future.

3 **Q. DOES THE COMPANY'S PROPOSED ACCOUNTING AND**
4 **RATEMAKING REQUEST CONSIDER THE FUTURE OF MF6?**

5 A. Yes. As discussed in the testimony of other witnesses, Duke Energy Kentucky is
6 facing a significant decision with respect to the remaining life of MF6. As
7 discussed in the testimony of Messrs. Garrett, Henning, and J. Michael Geers, due
8 to environmental compliance deadlines under the Mercury and Air Toxics
9 Standard (MATS), MF6 must either comply with MATS or retire by June 1, 2015.
10 This potential retirement is five years sooner than what was anticipated at the time
11 of the Company's last electric rate case. As discussed more thoroughly by in the
12 testimonies of Messrs. Steve Immel and Geers, the Company believes that the
13 expenditures required to comply with MATS would not extend MF6's life beyond
14 2020 and thus do not warrant the burden such costs would place on ratepayers
15 when a lower cost and longer term solution is available through the East Bend
16 Purchase.

17 The decision to retire MF6, and its associated capacity, requires that the
18 Company acquire an alternative source of capacity in order to meet the
19 Company's PJM load obligations. The transaction at issue in this proceeding is
20 the outcome of the Company's extensive analysis to optimally address the
21 Company's needs with all stakeholders' interests in mind. Although the MATS
22 compliance/retirement deadline is imminent, *i.e.*, no later than June 1, 2015, the
23 proposed solution to the Company's capacity obligation, the East Bend Purchase,

1 means that there most likely will be some overlap to the extent the Company is
2 still operating and incurring costs for MF6 while it operates and incurs costs for
3 100% of East Bend.

4 **Q. WHEN WAS DUKE ENERGY KENTUCKY'S LAST BASE ELECTRIC**
5 **RATE CASE?**

6 A. The Company's last base electric rate case, Case No. 2006-00172, was filed in
7 2006 using a forecasted test year of 2007. The rates went into effect in January
8 2007.

9 **Q. PLEASE BRIEFLY SUMMARIZE HOW O&M EXPENSES FOR EAST**
10 **BEND AND MF6 ARE CURRENTLY REFLECTED IN DUKE ENERGY**
11 **KENTUCKY'S BASE RATES.**

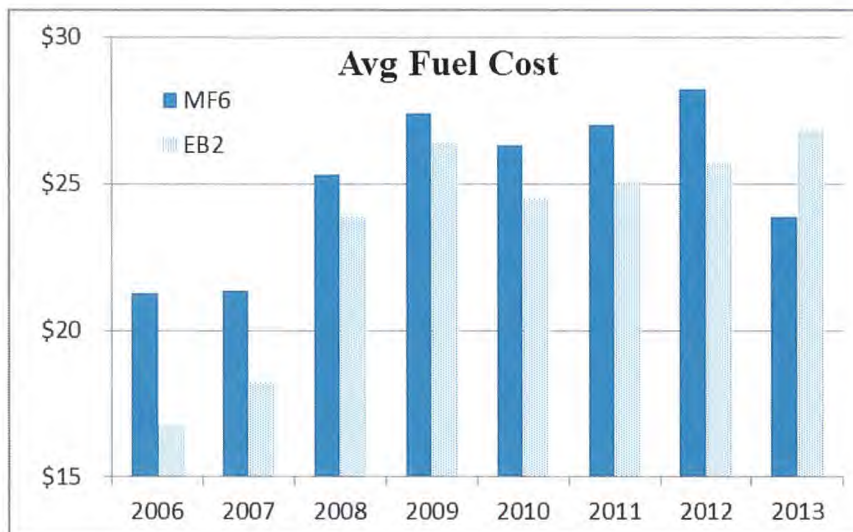
12 A. As a result of the Company's most recent base electric rate case, approved by the
13 Commission on December 21, 2006, Duke Energy Kentucky is currently
14 recovering, in base rates, expenses related to the ownership and operation of MF6
15 and for its existing share of East Bend. Based upon the forecasted test year used in
16 that proceeding, Duke Energy Kentucky estimates that the non-fuel O&M
17 expenses included in the 2007 test year revenue requirement for MF6 and the
18 Company's 69% interest in East Bend were approximately \$4.4 million and \$24.3
19 million, respectively. Although the previous rate case was resolved through a
20 negotiated settlement, no party in the case disputed the amount of non-fuel O&M
21 included in the Company's test year revenue requirement for either generating
22 unit.

1 **Q. HOW HAS THE OPERATING COST OF EAST BEND COMPARED TO**
2 **MF6?**

3 A. Attachment WDW-1 is a summary of the non-fuel O&M attributable to both East
4 Bend and to MF6 in the test year revenue requirement, based on forecasted 2007
5 data. Based on this information, the Company's base rates recover approximately
6 \$4.4 million in non-fuel O&M for MF6. Actual operating costs for each
7 generating station are reported by station in the annual FERC Form 1. In the three
8 most recent calendar years, the non-fuel O&M expenses for DP&L's share of East
9 Bend has been \$10.8 million in 2011, \$12.4 million in 2012, and \$13.1 million in
10 2013, as shown in Attachment WDW-2. The average non-fuel O&M for DP&L's
11 share of East Bend over those three years is approximately \$12.2 million.
12 Comparing the recent average actual non-fuel O&M expenses for DP&L's share
13 of East Bend to the amount currently being recovered in base rates for MF6, it is
14 expected that there will be incremental O&M after the transaction and before and
15 after the retirement of MF6.

16 The higher O&M expense is expected to be offset, at least to some degree,
17 by lower fuel costs. For every year Duke Energy Kentucky has owned East Bend
18 and MF6, except for the last calendar year, the average fuel cost at East Bend has
19 been materially lower than MF6. The chart below provides a summary of the
20 average fuel costs (in \$/MWh) for the period 2006 through 2013 for the two
21 generating units. Substituting the lower fuel cost associated with East Bend for
22 the fuel costs to operate MF6 is a savings that will be reflected immediately in

1 customers' bills inasmuch as it will flow through the FAC and should also
2 increase the margins on off-system sales flowing through Rider PSM.



3 It is my understanding that 2013 was an exception insofar as the Company
4 shifted its coal procurement strategy for MF6 away from long-term contracts and
5 relied primarily upon spot purchases, anticipating the possible early retirement of
6 MF6.

7 Attachment WDW-3 includes copies of the relevant pages from the FERC
8 Form 1 Annual Reports relied upon for Attachments WDW-1 and WDW-2, as
9 well as the graph above.

10 **Q. WHAT IS THE COMPANY PROPOSING IN THIS PROCEEDING WITH**
11 **RESPECT TO THE INCREMENTAL NON-FUEL O&M ATTRIBUTED**
12 **TO THE EAST BEND PURCHASE?**

13 A. From the time of the transaction closing until MF6 is retired, all of the expenses to
14 be associated with acquiring DP&L's share of East Bend will be incremental to
15 amounts in Duke Energy Kentucky's base rates. Once MF6 is retired, the
16 Company will have significantly less, possibly zero, O&M expenses at MF6;

1 therefore, the incremental expenses for acquiring DP&L's share of East Bend will
2 be the difference between the additional East Bend expenses and the MF6
3 expenses that will then be avoided. The Company is requesting to defer
4 incremental O&M costs.

5 **Q. WHY DO YOU BELIEVE THIS IS REASONABLE?**

6 A. Yes. Duke Energy Kentucky's customers will begin to benefit from the East Bend
7 Purchase immediately upon closing and therefore should pay for its operation. In
8 its last electric base rate case, Duke Energy Kentucky only included its
9 proportionate ownership share of East Bend's non-fuel O&M. So this new O&M
10 is an incremental expense. Therefore, the Company is not currently recovering
11 these costs in its rates.

12 **Q. WILL THE COMPANY'S REQUESTED ACCOUNTING AND**
13 **RATEMAKING AUTHORITY HAVE ANY IMPACT ON THE**
14 **COMPANY'S CURRENT BASE RATES?**

15 A. No. Duke Energy Kentucky is not proposing to make any immediate change to
16 base rates as a result of the acquisition. As part of its next base electric rate
17 proceeding, the then-current remaining net book value of all of East Bend, plus
18 the newly acquired surrounding land, will be included in Duke Energy
19 Kentucky's rate base. In addition, as part of the test year revenue requirement for
20 that future rate case, the Company will include the O&M expense, depreciation,
21 taxes, pension and benefit expense, reagents, etc., associated with all of East
22 Bend, as it would with any other used and useful asset providing service on behalf
23 of customers. And, the balance of the regulatory asset discussed above will be

1 amortized over a reasonable period of years to be determined as part of the next
2 rate case and included in the test year revenue requirement.

3 **Q. HOW WILL DUKE ENERGY KENTUCKY TREAT THE FUEL COSTS**
4 **ASSOCIATED WITH THE ADDITIONAL 31% INTEREST IN EAST**
5 **BEND?**

6 A. Upon closing of the purchase, Duke Energy Kentucky will begin including the
7 costs of fuel for the entire station as part of its FAC. The FAC process will not
8 change except that additional East Bend generation will be part of the calculation
9 and, upon retirement, MF6 will no longer be part of the FAC calculations. As for
10 the procurement of fuel, the change should be seamless in that Duke Energy
11 Kentucky, as the majority owner and sole operator of East Bend, is already
12 responsible for procuring fuel for the entire station. Mr. Immel discusses this fact
13 in his testimony. Therefore, fuel contracts for East Bend are already in place and
14 these contracts have been filed with the Commission for its review as part of
15 Duke Energy Kentucky's periodic FAC proceedings. Currently, the monthly fuel
16 expense is allocated between Duke Energy Kentucky and DP&L based upon their
17 respective ownership shares. After the transaction, Duke Energy Kentucky will be
18 the sole owner of East Bend and will then have title to all of the fuel inventory as
19 of the transaction closing date.

20 Upon closing, 100% of the energy output from East Bend will be allocated
21 to Duke Energy Kentucky; so, to the extent generation is assigned to native-load
22 customers through the stacking process, the underlying fuel costs associated with
23 that generation will flow through the FAC – no different than the current process.

1 To the extent the energy output is allocated to non-native load as an off-system
2 sale, the associated fuel cost will be netted against the sale proceeds with the
3 margin being shared with customers, again, consistent with existing formula
4 approved for the Company's Rider PSM.

5 **Q. WHEN DOES THE COMPANY ANTICIPATE SEEKING TO INCLUDE**
6 **THE PURCHASE AND OPERATION OF THE REMAINING 31%**
7 **INTEREST IN EAST BEND IN ITS BASE RATES?**

8 A. As discussed above, these incremental costs, like all of the Company's cost of
9 providing retail electric service will be included as part of the Company's next
10 base electric rate proceeding. The Company has not made a decision as to when it
11 will file its next base electric rate case. And, to reiterate, any fuel savings or
12 increased profits from off-system energy sales will benefit customers very soon
13 after the transaction is completed.

14 **Q. WHAT IS THE CURRENT ESTIMATED NET BOOK VALUE OF MF6?**

15 A. As discussed by Mr. Garrett, as of March 31, 2014, the net book value of MF6,
16 excluding the portion of accumulated depreciation related to cost of removal of
17 \$3.5 million, is approximately \$9 million.

18 **Q. HAS THE COMPANY ESTIMATED COSTS OF RETIRING MF6?**

19 A. Sargent & Lundy prepared a demolition cost estimate for Duke Energy Kentucky
20 in 2011. This study estimated a demolition cost of \$4.3 million in 2011 dollars.
21 This study assumed that all coal, oil, and other chemicals would be consumed
22 prior to demolition. Mr. Garrett describes the projected remaining net book value
23 of MF6 if the Company decides to retire the unit on or about June 1, 2015.

1 **Q. WHEN WILL THE COMPANY INCLUDE THE RETIREMENT OF MF6**
2 **IN ITS BASE RATES?**

3 A. A portion of the retirement costs associated with MF6 has been recovered since
4 Duke Energy Kentucky took ownership of the unit. As part of depreciation
5 expenses being recovered in base rates, the Company records amounts toward
6 costs of removal. The Company will evaluate whether additional recovery is
7 necessary for retirement when the actual retirement costs are determined.

8 **Q. WILL DUKE ENERGY KENTUCKY BE REQUIRED TO ISSUE DEBT**
9 **OR EQUITY TO CONSUMMATE ITS PURCHASE OF THE**
10 **REMAINING 31% INTEREST IN EAST BEND?**

11 A. No. The Company has sufficient existing financing capacity to purchase the
12 remaining 31% interest in East Bend without any new long-term debt or equity.

III. CAPACITY COSTS AND THE PROFIT SHARING MECHANISM

13 **Q. PLEASE DESCRIBE YOUR UNDERSTANDING OF THE TREATMENT**
14 **OF DP&L'S CURRENT SHARE OF EAST BEND'S CAPACITY IN PJM.**

15 A. As Duke Energy Kentucky witness John Verderame explains more fully in his
16 direct testimony, it is my understanding that DP&L, like Duke Energy Kentucky,
17 is a member of PJM. However, unlike Duke Energy Kentucky, DP&L is not a
18 Fixed Resource Requirement (FRR) entity but, instead, has been participating in
19 the PJM Base Residual Auction (BRA) and incremental auction construct for
20 some time. The Company's status as an FRR entity in PJM was required by this
21 Commission as a condition of the Company's membership into PJM.

1 DP&L's participation in the BRA means that its share of the East Bend
2 capacity is currently committed into the PJM forward capacity market through the
3 delivery year ending May 31, 2018, and, consequently, cannot be used to meet
4 Duke Energy Kentucky's FRR obligation until after May 31, 2018, without first
5 financially de-committing it from the BRA through a swap transaction as
6 discussed in the testimony of Mr. Verderame. The process is manageable but
7 involves additional transactions as Mr. Verderame more fully explains and
8 supports in his testimony.

9 **Q. HOW WILL THE COMPANY FUND THIS CAPACITY SWAP**
10 **TRANSACTION?**

11 A. Mr. Verderame discusses this issue more fully in his direct testimony. But to
12 summarize, under the terms of the East Bend Purchase, Duke Energy Kentucky
13 will receive the PJM capacity revenues related to DP&L's commitments
14 associated with its share of East Bend for the delivery years following the closing
15 through May 31, 2018. Duke Energy Kentucky is proposing to use the capacity
16 revenues it will receive as part of the East Bend Purchase to offset the costs the
17 Company will incur purchasing swaps or short-term bilateral contracts to satisfy
18 its FRR capacity obligation. The revenue Duke Energy Kentucky receives from
19 PJM will be either more or less than the costs to purchase swaps or bilateral
20 contracts; therefore, the Company is proposing to use its existing Rider PSM to
21 flow through a share of the difference between the revenues and costs.

22 Similar to the manner in which profits on off-system sales are shared, the
23 Company proposes to use Rider PSM to flow through to customers 75% of the

1 difference between the revenue received from the capacity sales and the cost to
2 purchase capacity to meet its FRR obligation. There is a provision in Rider PSM
3 ensuring that the total amount flowed through Rider PSM cannot be below \$0
4 (*i.e.*, a net charge to customers over the year). The Company is requesting that, as
5 it relates to the capacity transactions, this provision of Rider PSM not apply.

6 Another provision of Rider PSM requires that the first \$1 million of profits
7 on off-system sales be assigned to customers. That commitment will continue;
8 however, the Company requests that any net proceeds related to the capacity
9 transaction not be counted in that \$1 million threshold. The upshot of this request
10 is that the Company is willing to share most of the benefit that may accrue from
11 the required capacity transactions if customers are equally committed to sharing
12 to potential impact of purchasing capacity at a higher cost than the revenue it is
13 receiving for capacity as part of the transaction.

14 As shown in Attachment WDW-4, the Company proposes to modify Rider
15 PSM to add a new schedule. This new schedule, Schedule 6, would summarize
16 the dollar value of the capacity revenue realized during the applicable quarter of
17 the Rider PSM filing as well as the dollar value of the expenses associated with
18 purchasing replacement capacity. The difference will flow through to Schedule 2
19 of the Rider PSM schedules to be added to the calculations for profits from off-
20 system sales and profits from sales of ancillary services.

21 Since the Company has not yet made the decision to retire MF6 and thus
22 has not yet created the need to replace the MWs in its FRR capacity plan, and
23 because incremental auctions to accomplish the aforementioned capacity swaps

1 have not occurred, the Company cannot know with certainty what the costs may
2 be. Approving the Company's request to use Rider PSM as a means of flowing
3 through most of the benefit or loss associated with such transactions aligns the
4 Company's interests with the customers inasmuch as both have something to gain
5 by giving the Company an incentive to maximize the benefit of addressing the
6 needed capacity transactions described above and in the testimony of Mr.
7 Verderame.

8 **Q. WILL THE TRANSACTION IMPACT RIDER PSM IN OTHER WAYS?**

9 A. Yes. Upon closing, Duke Energy Kentucky will begin to include any off-system
10 energy sales and any incremental profits on ancillary services associated with the
11 newly acquired 31% interest in East Bend through Rider PSM. As it relates to
12 profits on off-system sales and ancillary services, Rider PSM will be the same as
13 it is under the current framework. However, as discussed above, the Company is
14 seeking to modify Rider PSM to address the required capacity transaction.

15 **Q. WHY IS THIS A REASONABLE PROPOSAL?**

16 A. Customers will benefit from the proposed East Bend Purchase transaction,
17 including the likely capacity swaps described by Mr. Verderame. As explained by
18 Duke Energy Kentucky witness James Northrup, the East Bend Purchase was the
19 least cost solution to meet the Company's customer demand and satisfy its PJM
20 FRR plan obligations as determined by a third-party administered request for
21 proposal. And, purchasing the remaining 31% interest in East Bend provides a
22 longer-term solution and is lower in cost than bringing MF6 into compliance with
23 MATS, which even then would only allow the unit to run until 2020 when it will

1 need to be retired and replaced due to age and other upcoming environmental
2 regulations.

3 If MF6 is retired before June 1, 2015, Duke Energy Kentucky will no
4 longer be allowed to count that capacity toward satisfying its FRR plan obligation
5 and, consequently, it must replace the capacity with unit-specific capacity. The
6 East Bend Purchase coupled with the capacity swaps described by Mr. Verderame
7 will allow Duke Energy Kentucky to do just that. As Mr. Verderame explains in
8 his direct testimony, the Company risks substantial penalties from PJM if it fails
9 to meet its FRR obligation in PJM.

IV. ACCOUNTING TREATMENT REQUESTS

10 **Q. WHAT ACCOUNTING TREATMENT IS THE COMPANY**
11 **REQUESTING IN THIS PROCEEDING?**

12 A. Duke Energy Kentucky is requesting the Commission approve the assumption of
13 certain liabilities associated with the transaction as defined in the Purchase and
14 Sale Agreement. Duke Energy Kentucky is requesting that the Commission grant
15 a deferral associated with the incremental expenses of the 31% interest in East
16 Bend to amortize for future recovery as part of the Company's next base rate case.
17 For some period of time, Duke Energy Kentucky will likely be operating and
18 incurring expense for both MF6 and the additional 31% interest in East Bend. As
19 part of that future base rate case, the Company may also address the retirement of
20 MF6 assuming the MATS regulation comes into effect as scheduled in April
21 2015.

1 **Q. IS THERE ANY PRECEDENT FOR THE ACCOUNTING AND RATE**
2 **TREATMENT BEING SOUGHT IN THIS CASE?**

3 A. Yes. The Commission recently approved a stipulation reached in a case involving
4 Kentucky Power, Case No. 2012-00578,³ where Kentucky Power sought to
5 recover the incremental costs associated with acquiring and operating a generation
6 asset it acquired to eventually replace its Big Sandy generating station. Similar to
7 the situation expected in Duke Energy Kentucky's case, Kentucky Power
8 expected, for some period of time, to be incurring cost for both its newly acquired
9 generation asset and the soon-to-be-retired Big Sandy units. The only material
10 difference between the relief sought by and approved for Kentucky Power and the
11 relief sought by Duke Energy Kentucky is that no immediate recovery is being
12 sought in this case where a rider was established through the terms of settlement
13 for immediate recovery in the Kentucky Power case. Duke Energy Kentucky is
14 seeking only deferral authority in this proceeding for recovery to begin after its
15 next base rate case.

V. CONCLUSION

16 **Q. ARE ATTACHMENTS WDW-1 THROUGH WDW-4 TRUE AND**
17 **ACCURATE COPIES OF THE SUMMARY OF 2006 RATE CASE NON-**
18 **FUEL O&M; AVERAGE NON-FUEL O&M FOR DP&L'S SHARE OF**

³ *In the Matter of the Application of Kentucky Power Company for a Certificate of Public Convenience and Necessity Authorizing the Transfer to the Company of an Undivided Fifty Percent Interest in the Mitchell Generating Station and Associated Assets...*, Case No. 2012-00578, Order (October 7, 2013).

1 EAST BEND; FERC FORM 1 EXCERPTS; AND RIDER PSM
2 SCHEDULE, RESPECTIVELY?

3 A. Yes.

4 Q. WERE ATTACHMENTS WDW-1 THROUGH WDW-4 COMPILED
5 UNDER YOUR DIRECTION AND CONTROL?

6 A. Yes.


7 Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

8 A. Yes.

VERIFICATION

State of Ohio)
)
County of Hamilton) SS:

The undersigned, William Don Wathen Jr., being duly sworn, deposes and says that he is the Director of Rates & Regulatory Strategy - Ohio and Kentucky, and that the matters set forth in the foregoing testimony are true and correct to the best of his information, knowledge and belief.


William Don Wathen Jr., Affiant

Subscribed and sworn to before me by WILLIAM DON WATHEN, JR. on this 3rd day of June 2014.

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


NOTARY PUBLIC

My Commission Expires: 1/5/2019

Duke Energy Kentucky
Case No. 2006-00172
Non-Fuel Expenses by FERC Account

Account	Description	2007 Forecasted Test Period	
		EB2	MF6
500	Supervision and Engineering	\$1,711,623	\$295,675
502	Steam Expenses	2,886,561	12,411
502	Ammonia Expense	366,335	1,575
502	Cost of Lime	6,664,347	28,654
505	Electric Expenses	347,413	0
506	Miscellaneous Steam Power Exp	1,893,628	1,406,764
507	Rents		464,760
510	Maint - Supervision/Engineer	661,901	434,755
511	Maintenance of Structures	738,972	448,889
512	Maintenance of Boiler Plant	7,362,518	1,059,245
512	Maintenance of Boiler Plant - TM Over	0	5,983
513	Maintenance of Electric Plant	1,194,717	82,482
513	Removal - Electric Plant	(179)	0
514	Maint Misc Steam Plant	478,268	133,478
514	Removal - Misc Steam Plant	179	0
551	Other Pwr - Maint Supv/Engr	11,419	0
553	Other Pwr-Maint Generating	0	405
		<u>\$24,317,702</u>	<u>\$4,375,076</u>

Source: ULHP Elec Rate Case . Consistent with accounts included in O&M numbers on page 402, FERC Form 1.

Duke Energy Kentucky
Summary of O&M Expenses for East Bend 2 and Miami Fort 6

Line	Expense Category	DEK Share of EB2			DEK Share of MF6			DPL Share of EB2		
		2011	2012	2013	2011	2012	2013	2011	2012	2013
1	Production Expenses: Oper, Supv, & Engr	\$1,466,057	\$1,505,469	\$1,431,904	\$1,182,283	\$1,896,410	\$2,019,943	\$569,412	\$673,827	\$638,145
2	Fuel	71,459,483	56,722,757	68,087,782	33,017,002	25,249,820	27,124,705	35,404,264	26,057,951	32,082,180
3	Coolants and Water (Nuclear Plants Only)	-	-	-	-	-	-	-	-	-
4	Steam Expenses	10,974,313	9,211,666	10,908,647	220,579	45,297	81,308	4,874,666	4,283,446	4,780,879
5	Steam from Other Sources	-	-	-	-	-	-	-	-	-
6	Steam Transferred (Cr)	-	-	-	-	-	-	-	-	-
7	Electric Expenses	379,371	457,728	484,701	128,866	192	24	162,020	211,245	218,809
8	Misc Steam (or Nuclear) Power Expenses	894,808	947,433	2,691,879	486,560	384,749	401,849	442,587	417,474	1,196,196
9	Rents	133	-	-	1,105,356	1,059,504	256,224	-	-	-
10	Allowances	-	-	-	-	-	-	11,561	3,986	4,467
11	Maintenance Supervision and Engineering	1,344,299	1,564,344	1,587,730	326,176	295,660	292,802	592,229	685,385	722,598
12	Maintenance of Structures	1,469,175	1,512,230	1,402,520	592,068	894,532	709,266	677,036	694,321	650,510
13	Maintenance of Boiler (or Reactor) Plant	6,164,759	9,618,832	6,995,183	1,388,542	3,216,148	2,789,418	2,732,436	4,043,076	3,413,117
14	Maintenance of Electric Plant	481,121	2,065,700	1,401,595	441,785	433,249	532,884	300,663	726,620	798,444
15	Maintenance of Misc Steam (or Nuclear) Plant	1,244,715	1,529,455	1,396,174	581,418	928,229	206,748	454,824	673,417	653,955
16	Total Production Expenses	\$95,878,234	\$85,136,614	\$96,388,115	\$39,470,635	\$34,403,790	\$34,415,171	\$46,221,698	\$38,470,748	\$45,159,300
17	Less: Fuel (line 2)	71,459,483	56,722,757	68,087,782	33,017,002	25,249,820	27,124,705	35,404,264	26,057,951	32,082,180
18	Total Production Expenses (Excl Fuel)	\$24,418,751	\$28,413,857	\$28,300,333	\$6,453,633	\$9,153,970	\$7,290,466	\$10,817,434	\$12,412,797	\$13,077,120
19	Three-Year Average			\$27,044,314			\$7,632,690			\$12,102,450

Name of Respondent 20120417-8000 PERC PDF (Unofficial) Duke Energy Kentucky, Inc		This Report Is: <input checked="" type="checkbox"/> Original <input type="checkbox"/> Resubmission (2)		Date of Report (Mo, Da, Yr) / /		Year/Period of Report End of 2011/Q4	
STEAM-ELECTRIC GENERATING PLANT STATISTICS (Large Plants)							
<p>1. Report data for plant in Service only. 2. Large plants are steam plants with installed capacity (name plate rating) of 25,000 Kw or more. Report in this page gas-turbine and internal combustion plants of 10,000 Kw or more, and nuclear plants. 3. Indicate by a footnote any plant leased or operated as a joint facility. 4. If net peak demand for 60 minutes is not available, give data which is available, specifying period. 5. If any employees attend more than one plant, report on line 11 the approximate average number of employees assignable to each plant. 6. If gas is used and purchased on a therm basis report the Btu content of the gas and the quantity of fuel burned converted to Mcf. 7. Quantities of fuel burned (Line 38) and average cost per unit of fuel burned (Line 41) must be consistent with charges to expense accounts 501 and 547 (Line 42) as show on Line 20. B. If more than one fuel is burned in a plant furnish only the composite heat rate for all fuels burned.</p>							
Line No.	Item (a)	Plant Name: EAST BEND (b)		Plant Name: MIAMI FORT 6 (c)			
1	Kind of Plant (Internal Comb, Gas Turb, Nuclear)	STEAM		STEAM			
2	Type of Constr (Conventional, Outdoor, Boiler, etc)	CONVENTIONAL		CONVENTIONAL			
3	Year Originally Constructed	1981		1960			
4	Year Last Unit was Installed	1981		1960			
5	Total Installed Cap (Max Gen Name Plate Ratings-MW)	447.00		168.00			
6	Net Peak Demand on Plant - MW (60 minutes)	420		166			
7	Plant Hours Connected to Load	7927		8488			
8	Net Continuous Plant Capability (Megawatts)	414		163			
9	When Not Limited by Condenser Water	414		163			
10	When Limited by Condenser Water	0		0			
11	Average Number of Employees	95		0			
12	Net Generation, Exclusive of Plant Use - KWh	2856381000		1221616000			
13	Cost of Plant: Land and Land Rights	1886453		95			
14	Structures and Improvements	39280216		3293525			
15	Equipment Costs	389627076		75517435			
16	Asset Retirement Costs	563352		-78733			
17	Total Cost	431157097		78732322			
18	Cost per KW of Installed Capacity (line 17/5) including	964.5573		468.6448			
19	Production Expenses: Oper, Supv, & Engr	1486057		1182283			
20	Fuel	71459483		33017002			
21	Coolants and Water (Nuclear Plants Only)	0		0			
22	Steam Expenses	10974313		220579			
23	Steam From Other Sources	0		0			
24	Steam Transferred (Gt)	0		0			
25	Electric Expenses	379371		128866			
26	Misc Steam (or Nuclear) Power Expenses	894808		486560			
27	Rents	133		1105356			
28	Allowances	0		0			
29	Maintenance Supervision and Engineering	1344299		325176			
30	Maintenance of Structures	1469175		592068			
31	Maintenance of Boiler (or reactor) Plant	6164759		1388542			
32	Maintenance of Electric Plant	481121		441785			
33	Maintenance of Misc Steam (or Nuclear) Plant	1244715		581418			
34	Total Production Expenses	95878234		39470635			
35	Expenses per Net KWh	0.0336		0.0323			
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	Coal	Oil	Coal	Oil		
37	Unit (Coal-Tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	Tons	Barrels	Tons	Barrels		
38	Quantity (Units) of Fuel Burned	1378381	0	11037	528126	0	
39	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)	11343	0	137100	11754	0	
40	Avg Cost of Fuel/unit, as Delvd f o, b, during year	51.012	0.000	133.147	60.463	0.000	
41	Average Cost of Fuel per Unit Burned	60.914	0.000	116.052	60.428	0.000	
42	Average Cost of Fuel Burned per Million BTU	2.244	0.000	20.154	2.571	0.000	
43	Average Cost of Fuel Burned per KWh Net Gen	0.025	0.000	0.000	0.026	0.000	
44	Average BTU per KWh Net Generation	10948.000	0.000	0.000	10163.000	0.000	

Name of Respondent 20130416-8003 FERC PDF (Unofficial) Duke Energy Kentucky, Inc.		This Report Is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission		Date of Report (Mo, Da, Yr) / /	Year/Period of Report End of 2012/Q4
STEAM-ELECTRIC GENERATING PLANT STATISTICS (Large Plants)					
1. Report data for plant in Service only. 2. Large plants are steam plants with installed capacity (name plate rating) of 25,000 Kw or more. Report in this page gas-turbine and internal combustion plants of 10,000 Kw or more, and nuclear plants. 3. Indicate by a footnote any plant leased or operated as a joint facility. 4. If net peak demand for 60 minutes is not available, give data which is available, specifying period. 5. If any employees attend more than one plant, report on line 11 the approximate average number of employees assignable to each plant. 6. If gas is used and purchased on a therm basis report the Btu content of the gas and the quantity of fuel burned converted to Mcl. 7. Quantities of fuel burned (Line 38) and average cost per unit of fuel burned (Line 41) must be consistent with charges to expense accounts 501 and 547 (Line 42) as show on Line 20. 8. If more than one fuel is burned in a plant furnish only the composite heat rate for all fuels burned.					
Line No.	Item (a)	Plant Name: EAST BEND (b)	Plant Name: MIAMI FORT 6 (c)		
1	Kind of Plant (Internal Comb, Gas Turb, Nuclear)		Steam	Steam	
2	Type of Constr (Conventional, Outdoor, Boiler, etc)		Conventional	Conventional	
3	Year Originally Constructed		1981	1960	
4	Year Last Unit was Installed		1981	1960	
5	Total Installed Cap (Max Gen Name Plate Ratings-MW)		447.00	168.00	
6	Net Peak Demand on Plant - MW (60 minutes)		420	172	
7	Plant Hours Connected to Load		8298	8304	
8	Net Continuous Plant Capability (Megawatts)		414	163	
9	When Not Limited by Condenser Water		414	163	
10	When Limited by Condenser Water		0	0	
11	Average Number of Employees		92	0	
12	Net Generation, Exclusive of Plant Use - KWH		2207323000	894114000	
13	Cost of Plant: Land and Land Rights		1686453	95	
14	Structures and Improvements		39312620	3291461	
15	Equipment Costs		399860418	75595162	
16	Asset Retirement Costs		575095	-214707	
17	Total Cost		441434586	78672011	
18	Cost per KW of Installed Capacity (line 17/5) Including		987.5494	468.2858	
19	Production Expenses: Oper, Supv, & Engr		1506469	1896410	
20	Fuel		56722757	25249820	
21	Coolants and Water (Nuclear Plants Only)		0	0	
22	Steam Expenses		8211666	45287	
23	Steam From Other Sources		0	0	
24	Steam Transferred (Dr)		0	0	
25	Electric Expenses		457728	192	
26	Misc Steam (or Nuclear) Power Expenses		947433	384749	
27	Rents		0	1059504	
28	Allowances		0	0	
29	Maintenance Supervision and Engineering		1564344	295660	
30	Maintenance of Structures		1512230	894532	
31	Maintenance of Boiler (or reactor) Plant		9618832	3216148	
32	Maintenance of Electric Plant		2065700	433249	
33	Maintenance of Misc Steam (or Nuclear) Plant		1529455	928229	
34	Total Production Expenses		85136514	34403790	
35	Expenses per Net KWh		0.0386	0.0385	
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	Coal	Oil	Coal	Oil
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	Tons	Barrels	Tons	Barrels
38	Quantity (Units) of Fuel Burned	1043737	0	16245	388663
39	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)	11451	0	137777	11730
40	Avg Cost of Fuel/unit, as Delvd f.o.b. during year	52.304	0.000	138.050	61.523
41	Average Cost of Fuel per Unit Burned	52.255	0.000	134.350	61.539
42	Average Cost of Fuel Burned per Million BTU	2.282	0.000	23.217	2.623
43	Average Cost of Fuel Burned per KWh Net Gen	0.025	0.000	0.061	0.027
44	Average BTU per KWh Net Generation	10829.000	0.000	0.000	10198.000

Name of Respondent 20140415-8027 FERC PDF (Unofficial) Duke Energy Kentucky, Inc.	This Report Is: (1) <input checked="" type="checkbox"/> Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr) / /	Year/Period of Report End of 2013/Q4
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STEAM-ELECTRIC GENERATING PLANT STATISTICS (Large Plants)

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Line No	Item (a)	Plant Name: EAST BEND (b)	Plant Name: MIAMI FORT B (c)
1	Kind of Plant (Internal Comb, Gas Turb, Nuclear)	Steam	Steam
2	Type of Constr (Conventional, Outdoor, Boiler, etc)	Conventional	Conventional
3	Year Originally Constructed	1981	1960
4	Year Last Unit was Installed	1981	1960
5	Total Installed Cap (Max Gen Name Plate Ratings-MW)	447.00	168.00
6	Net Peak Demand on Plant - MW (60 minutes)	424	165
7	Plant Hours Connected to Load	7117	7228
8	Net Continuous Plant Capability (Megawatts)	414	163
9	When Not Limited by Condenser Water	414	163
10	When Limited by Condenser Water	0	0
11	Average Number of Employees	87	0
12	Net Generation, Exclusive of Plant Use - KWh	2543175000	1135148000
13	Cost of Plant: Land and Land Rights	1686453	22176
14	Structures and Improvements	39991044	3295286
15	Equipment Costs	401456204	75612205
16	Asset Retirement Costs	575095	-214707
17	Total Cost	443708796	76714970
18	Cost per KW of Installed Capacity (line 17/5) including	992.6371	458.5415
19	Production Expenses: Oper, Supv, & Engr	1431904	2019943
20	Fuel	68087782	27124705
21	Condants and Water (Nuclear Plants Only)	0	0
22	Steam Expenses	10908647	81308
23	Steam From Other Sources	0	0
24	Steam Transferred (Cr)	0	0
25	Electric Expenses	484701	24
26	Misc Steam (or Nuclear) Power Expenses	2591879	401849
27	Rents	0	256224
28	Allowances	0	0
29	Maintenance Supervision and Engineering	1587730	292802
30	Maintenance of Structures	1402520	709268
31	Maintenance of Boiler (or reactor) Plant	6995183	2789418
32	Maintenance of Electric Plant	1401595	532884
33	Maintenance of Misc Steam (or Nuclear) Plant	1395174	206748
34	Total Production Expenses	96388115	34415171
35	Expenses per Net KWh	0.0379	0.0303
36	Fuel Kind (Coal, Gas, Oil, or Nuclear)	Coal	Oil
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	Tons	Barrels
38	Quantity (Units) of Fuel Burned	1254577	0
39	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)	11346	0
40	Avg Cost of Fuel/unit, as Delvd f.o.b. during year	52.515	0.000
41	Average Cost of Fuel per Unit Burned	52.607	0.000
42	Average Cost of Fuel Burned per Million BTU	2.318	0.000
43	Average Cost of Fuel Burned per KWh Net Gen	0.026	0.000
44	Average BTU per KWh Net Generation	11195.000	0.000

Name of Respondent 20120416-8027 FERC PDF (Unofficial) The Dayton Power and Light Company	This Report Is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr) / /	Year/Period of Report End of 2011/Q4
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STEAM-ELECTRIC GENERATING PLANT STATISTICS (Large Plants) (Continued)

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Line No	Item (a)	Plant Name: East Bend (b)	Plant Name: Miami Fort (c)
1	Kind of Plant (Internal Comb, Gas Turb, Nuclear)	Resp. Share - Note 8	Resp. Share - Note 9
2	Type of Constr (Conventional, Outdoor, Boiler, etc)	Conventional	Conventional
3	Year Originally Constructed	1981	1975
4	Year Last Unit was Installed	1981	1978
5	Total Installed Cap (Max Gen Name Plate Rating-MW)	207.00	401.00
6	Net Peak Demand on Plant - MW (60 minutes)	189	375
7	Plant Hours Connected to Load	7924	8205
8	Net Continuous Plant Capability (Megawatts)	0	0
9	When Not Limited by Condenser Water	186	368
10	When Limited by Condenser Water	186	368
11	Average Number of Employees	0	0
12	Net Generation, Exclusive of Plant Use - KWh	139088000	2255495000
13	Cost of Plant: Land and Land Rights	1221047	619143
14	Structures and Improvements	18135829	16195814
15	Equipment Costs	181017034	347999407
16	Asset Retirement Costs	507698	68851
17	Total Cost	200881408	364880215
18	Cost per KW of Installed Capacity (line 17/5) including	970.4415	909.9257
19	Production Expenses: Oper, Supv, & Engr	569412	575594
20	Fuel	35404264	62041320
21	Coolants and Water (Nuclear Plants Only)	0	0
22	Steam Expenses	4874666	3841966
23	Steam From Other Sources	0	0
24	Steam Transferred (Cr)	0	0
25	Electric Expenses	162020	96683
26	Misc Steam (or Nuclear) Power Expenses	442587	1061909
27	Rents	0	146592
28	Allowances	11561	22302
29	Maintenance Supervision and Engineering	592229	816422
30	Maintenance of Structures	677036	1439302
31	Maintenance of Boiler (or reactor) Plant	2732436	6631059
32	Maintenance of Electric Plant	300663	1750055
33	Maintenance of Misc Steam (or Nuclear) Plant	454824	2703423
34	Total Production Expenses	46221698	81230626
35	Expenses per Net KWh	0.0332	0.0360
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	COAL	OIL
37	Unit (Coal-Tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	Tons	Barrels
38	Quantity (Units) of Fuel Burned	867556 0	4959 964573 0
39	Avg Heat Cont. - Fuel Burned (btu/indicate if nuclear)	11342 0	137099 11929 0
40	Avg Cost of Fuel/unit, as Delvd f.o.b. during year	51.012 0.000	133.147 59.854 0.000
41	Average Cost of Fuel per Unit Burned	50.926 0.000	116.051 59.235 0.000
42	Average Cost of Fuel Burned per Million BTU	2.245 0.000	20.154 2.483 0.000
43	Average Cost of Fuel Burned per KWh Net Gen	0.000 2.480	0.000 0.000 2.627 0.000
44	Average BTU per KWh Net Generation	0.000 10885.000	0.000 10250.000 0.000

Name of Respondent 20130417-8042 FERC PDF (Unofficial) The Dayton Power and Light Company	This Report Is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr) / /	Year/Period of Report End of 2012/Q4
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STEAM-ELECTRIC GENERATING PLANT STATISTICS (Large Plants) (Continued)

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Line No.	Item (a)	Plant Name: East Bend (b)	Plant Name: Miami Fort (c)
1	Kind of Plant (Internal Comb, Gas Turb, Nuclear)	Resp. Share - Note 8	Resp. Share - Note 9
2	Type of Constr (Conventional, Outdoor, Boiler, etc.)	Conventional	Conventional
3	Year Originally Constructed	1981	1975
4	Year Last Unit was Installed	1981	1978
5	Total Installed Cap (Max Gen Name Plate Ratings-MW)	207.00	401.00
6	Net Peak Demand on Plant - MW (60 minutes)	189	371
7	Plant Hours Connected to Load	6296	8676
8	Net Continuous Plant Capability (Megawatts)	0	0
9	When Not Limited by Condenser Water	185	368
10	When Limited by Condenser Water	186	368
11	Average Number of Employees	0	0
12	Net Generation, Exclusive of Plant Use - KWh	977338000	2574047000
13	Cost of Plant: Land and Land Rights	1221047	619143
14	Structures and Improvements	18164774	16322897
15	Equipment Costs	187262943	344721425
16	Asset Retirement Costs	507698	65851
17	Total Cost	207156462	381729016
18	Cost per KW of Installed Capacity (line 17/5) including	1000.7559	902.0681
19	Production Expenses: Oper, Supv, & Engr	673827	634286
20	Fuel	26057951	68833541
21	Coolants and Water (Nuclear Plants Only)	0	0
22	Steam Expenses	4283446	4152533
23	Steam From Other Sources	0	0
24	Steam Transferred (Gr)	0	0
25	Electric Expenses	211245	3725
26	Misc Steam (or Nuclear) Power Expenses	417474	1731369
27	Rents	0	142284
28	Allowances	3986	5023
29	Maintenance Supervision and Engineering	685385	756451
30	Maintenance of Structures	684321	1735651
31	Maintenance of Boiler (or reactor) Plant	4043076	2971064
32	Maintenance of Electric Plant	726620	503319
33	Maintenance of Misc Steam (or Nuclear) Plant	673417	1289379
34	Total Production Expenses	38470748	82758625
35	Expenses per Net KWh	0.0394	0.0322
36	Fuel Kind (Coal, Gas, Oil, or Nuclear)	COAL	COAL
37	Unit (Coal-tons/Oil-barrels/Gas-mcf/Nuclear-indicate)	Tons	Barrels
38	Quantity (Units) of Fuel Burned	462999	7299
39	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)	11451	137777
40	Avg Cost of Fuel/unit, as Delvd f.o.b. during year	52.296	138.051
41	Average Cost of Fuel per Unit Burned	52.245	134.350
42	Average Cost of Fuel Burned per Million BTU	2.281	2.483
43	Average Cost of Fuel Burned per KWh Net Gen	0.000	0.000
44	Average BTU per KWh Net Generation	0.000	10233.000

Name of Respondent 20140418-8047 FERC PDF (Unofficial) The Dayton Power and Light Company	This Report Is (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr) 04/17/2014	Year/Period of Report End of 2013/Q4
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STEAM-ELECTRIC GENERATING PLANT STATISTICS (Large Plants) (Continued)

1. Report data for plant in Service only. 2. Large plants are steam plants with installed capacity (name plate rating) of 25,000 Kw or more. Report in this page gas-turbine and internal combustion plants of 10,000 Kw or more, and nuclear plants. 3. Indicate by a footnote any plant leased or operated as a joint facility. 4. If net peak demand for 80 minutes is not available, give data which is available, specifying period. 5. If any employees attend more than one plant, report on line 11 the approximate average number of employees assignable to each plant. 6. If gas is used and purchased on a therm basis report the Btu content of the gas and the quantity of fuel burned converted to Mct. 7. Quantities of fuel burned (Line 38) and average cost per unit of fuel burned (Line 41) must be consistent with charges to expense accounts 501 and 547 (Line 42) as show on Line 20. 8. If more than one fuel is burned in a plant furnish only the composite heat rate for all fuels burned.

Line No.	Item (a)	Plant Name: East Bend (b)	Plant Name: Miami Fort (c)
1	Kind of Plant (Internal Comb, Gas Turb, Nuclear)	Resp. Share - Note B	Resp. Share - Note B
2	Type of Constr (Conventional, Outdoor, Boiler, etc)	Conventional	Conventional
3	Year Originally Constructed	1981	1975
4	Year Last Unit was Installed	1981	1978
5	Total Installed Cap (Max Gen Name Plate Ratings-MW)	207.00	401.00
6	Net Peak Demand on Plant - MW (60 minutes)	187	371
7	Plant Hours Connected to Load	7111	8519
8	Net Continuous Plant Capability (Megawatts)	0	0
9	When Not Limited by Condenser Water	186	368
10	When Limited by Condenser Water	186	368
11	Average Number of Employees	0	0
12	Net Generation, Exclusive of Plant Use - KWh	1166733000	2788380000
13	Cost of Plant: Land and Land Rights	0	619144
14	Structures and Improvements	0	16441301
15	Equipment Costs	0	342483407
16	Asset Retirement Costs	0	65852
17	Total Cost	0	359609704
18	Cost per KW of Installed Capacity (line 17/5) including	0.0000	896.7823
19	Production Expenses: Oper, Supv, & Engr	638145	570172
20	Fuel	32082180	64099028
21	Coolants and Water (Nuclear Plants Only)	0	0
22	Steam Expenses	4780879	4188470
23	Steam From Other Sources	0	0
24	Steam Transferred (Cr)	0	0
25	Electric Expenses	218809	6029
26	Misc Steam (or Nuclear) Power Expenses	1196196	1114559
27	Rents	0	0
28	Allowances	4467	8617
29	Maintenance Supervision and Engineering	722598	704761
30	Maintenance of Structures	650510	638508
31	Maintenance of Boiler (or reactor) Plant	3413117	2156613
32	Maintenance of Electric Plant	798444	311940
33	Maintenance of Misc Steam (or Nuclear) Plant	653955	1522788
34	Total Production Expenses	45169300	76259465
35	Expenses per Net KWh	0.0387	0.0273
36	Fuel: Kind (Coal, Gas, Oil, or Nuclear)	COAL	OIL
37	Unit (Coal-Tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	Tons	Barrels
38	Quantity (Units) of Fuel Burned	573916 0	6838 1221831 0
39	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)	11346 0	137178 11728 0
40	Avg Cost of Fuel/unit, as Delvd f.o.b. during year	52.494 0.0000	135315.000 48.560 0.000
41	Average Cost of Fuel per Unit Burned	52.585 0.000	136.886 49.550 0.000
42	Average Cost of Fuel Burned per Million BTU	2.317 0.000	23.769 2.113 0.000
43	Average Cost of Fuel Burned per KWh Net Gen	0.000 2.669	0.000 0.000 2.212
44	Average BTU per KWh Net Generation	0.000 11205.000	0.000 0.000 10285.000

SCHEDULE 1

DUKE ENERGY KENTUCKY
CALCULATION OF RIDER PSM CREDIT FOR JUNE 2015 - AUGUST 2015 BILLING

Line No.	Description	Billing Month			Total
		Jan-16	Feb-16	Mar-16	
1	Off-System Sales Margin Allocated to Customers from 2014 (Schedule 2, Line 26)				(+)
2	Net Margins on Sales of Emission Allowances (Schedule 4, Line 9)				(+)
3	Prior Period Carry Forward (Schedule 3, Line 28)				(+)
4	Total Amount of Credits Owed to Customers				
5	Actual Amount Credited to Customers				(-)
6	Net Refund due to (from) Customers				\$
7	Sales (kWh) from FAC Filing January, February, and March 2014 (FAC Schedule 3, Line C)				=
8	Profit Sharing Mechanism Credit Rate (\$/kWh)				

Effective Date for Billing: _____

Submitted by: _____

Title: _____

Date Submitted: _____

SCHEDULE 2

**DUKE ENERGY KENTUCKY
OFF-SYSTEM SALES SCHEDULE
PERIOD: YEAR TO DATE - DECEMBER 31, 2015
AMENDED**

Line No.	Description	Jan-16	Feb-16	Mar-16	Total
1	Off-System Sales Revenue				
2	Asset Energy (+)				
3	Non-Asset Energy (+)				
4	Bilateral Sales (+)				
5	Hedges (+)				
6	PJM Bal & DA Oper Reserve Credits ^(a) (+)				
7	Capacity (+)				
8	Ancillary Services Market (Schedule 5, Line 15) (+)				
9	Sub-Total Revenues	\$0	\$0	\$0	\$0
10	Variable Costs Allocable to Off-System Sales				
11	Bilateral Purchases (+)				
12	Non-Native Fuel Cost ^(a) (+)				
13	Variable O&M Cost (+)				
14	SO ₂ Cost (+)				
15	NO _x Cost (+)				
16	PJM and Other Costs (+)				
17	(Gain)/Loss on Sale of Fuel ^(c) (+)	\$0	\$0	\$0	\$0
18	Sub-Total Expenses	\$0	\$0	\$0	\$0
19	Off-System Sales Margin (Line 9 - Line 18)	\$0	\$0	\$0	\$0
20	Allocated to Customers (up to 100% of first \$1.00 million) ^(b)				1,000,000
21	Sub-Total (Line 19 - Line 20, if negative = 0)				\$0
22	Percentage Allocated to Customers (75% of margins > \$1.00 million) ^(b)				75.00%
23	Remainder of Off-System Sales Margin Allocated to Customers (Line 21 x Line 22)				0
24	Off-System Sales Margin Allocated to Customers (if line 21 > 0 then Line 20 + Line 23, otherwise Line 19)				\$0
25	Plus 75% of Difference Between Capacity Revenue and Capacity Cost				XXXX
26	Net to Flow through Rider PSM				YYYY

SCHEDULE 3

DUKE ENERGY KENTUCKY
OFF-SYSTEM SALES SCHEDULE
PERIOD: TWELVE MONTHS ENDED DECEMBER 31, 2015

Line No.	Description	Total
1	Off-System Sales Revenue	
2	Asset Energy	(+)
3	Non-Asset Energy	(+)
4	Bilateral Sales	(+)
5	Hedges	(+)
6	MISO RSG Make Whole Payments	(+)
7	Capacity	(+)
9	Ancillary Services Market	(+)
10	Sub-Total Revenues	<u>\$0</u>
11	Variable Costs Allocable to Off-System Sales	
12	Bilateral Purchases	(+)
13	Fuel Cost	(+)
14	Variable O&M Cost	(+)
15	SO ₂ Cost	(+)
16	NO _x Cost	(+)
17	MISO Costs	(+)
18	Sub-Total Expenses	<u>\$0</u>
19	Total Off-System Sales Margin (Line 10 - Line 18)	(+)
20	Allocated to Customers (guaranteed 100% of first \$1.0 million) ^(a)	(-) <u>1,000,000</u>
21	Sub-Total	(+)
22	Percentage Allocated to Customers (75% of margins > \$1.0 million) ^(a)	75.00%
23	Remainder Allocated to Customers (Line 21 x Line 22)	<u>\$0</u>
24	Total Allocated to Customers (Line 20 + Line 23) ^(b)	(+)
25	Net Margins on Sales of Emission Allowances	(+)
26	Prior Period Carryforward ^(b)	(+)
27	Amount Credited to Customers in 2013	(-)
28	Remaining PSM Credit Due to Customers at 12/31/13	<u>\$0</u>

Note: ^(a) Per provisions included in the Commission's Order dated December 22, 2010, in Case No. 2010-00203.

^(b) Incremental change from prior filing is due to MISO resettlements.

SCHEDULE 4

DUKE ENERGY KENTUCKY
EMISSION ALLOWANCE SALES MARGIN
PERIOD: YEAR TO DATE - DECEMBER 31, 2015

Line No.	Description		Jan-16	Feb-16	Mar-16	Total
1	SO2 Sales Margin					
2	Proceeds	(+)	\$0	\$0	\$0	\$0
3	Cost of Sale	(-)	0	0	0	0
4	Margin		0	0	0	0
5	NOx Sales Margin					
6	Proceeds	(+)	\$0	\$0	\$0	\$0
7	Cost of Sale	(-)	0	0	0	0
8	Margin		0	0	0	0
9	Total EA Sales Margin (Line 4 + Line 8)		0	0	0	0

SCHEDULE 5

**DUKE ENERGY KENTUCKY
ANCILLARY SERVICES MARKET
PERIOD: YEAR TO DATE - DECEMBER 31, 2015**

Line No.	Description	Jan-16	Feb-16	Mar-16	Total
1	PJM Regulation				\$0
2	PJM Sync Reserve				\$0
3	PJM Synchr Condens				\$0
4	PJM DA Sched Reserve				\$0
5	PJM DASR Credit				\$0
6	Blackstart				\$0
7	PJM DA Load Resp Chrg				\$0
8	PJM RT Load Resp Chrg				\$0
9	PJM Reactive Service				\$0
10	Reg Supply				\$0
11	DA Sched Reserves				\$0
12	PJM Emergency Energy				\$0
13	PJM Reactive Supply				\$0
14	PJM Non-Sync Reserve				\$0
15	Total	\$0	\$0	\$0	\$0

Note: Per the Commission Order dated January 30, 2009, in Case No 2008-00489

SCHEDULE 6

DUKE ENERGY KENTUCKY
CAPACITY TRANSACTIONS
PERIOD: JANUARY - MARCH 2016

New Schedule for Rider PSM

<u>Line No.</u>	<u>Description</u>	<u>Jan-16</u>	<u>Feb-16</u>	<u>Mar-16</u>	<u>Total</u>
1	Revenue Received for Capacity Sales				\$0
2	Less: Cost of Replacement Capacity				\$0
3	Total	\$0	\$0	\$0	\$0

Note: Per the Commission Order dated January 30, 2009, in Case No 2008-00489

To Schedule 2, line 25

COMMONWEALTH OF KENTUCKY
BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

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 &) Case No. 2014-_____
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.)

DIRECT TESTIMONY OF
JAMES S. NORTHRUP
ON BEHALF OF
DUKE ENERGY KENTUCKY, INC.

June 13, 2014

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II. DISCUSSION	3
III. CONCLUSION	16

ATTACHMENTS:

JSN-1 Short-Term RFP

JSN-2 Long-Term RFP

JSN-3 Confidential Summary of Long-Term RFP

JSN-4 Confidential 2013 KY RFP Adjusted Cost (Present Value)

I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is James S. Northrup, and my business address is 400 South Tryon
3 Street, Charlotte, North Carolina 28202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as Director,
6 Wholesale and Renewables Analytics. DEBS provides various administrative and
7 other services to Duke Energy Kentucky, Inc., (Duke Energy Kentucky or
8 Company) and other affiliated companies of Duke Energy Corporation (Duke
9 Energy Corp.).

10 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND**
11 **PROFESSIONAL EXPERIENCE.**

12 A. I am a registered professional engineer in the state of North Carolina, having
13 received a Bachelor of Science in Civil Engineering from North Carolina State
14 University and a Master's Degree in Business Administration from Queens
15 University. I began my career at Duke Power Company in 1979 and have held a
16 variety of responsibilities across Duke Energy Corp. in the areas of electric
17 system distribution engineering, customer marketing, demand-side management
18 program design and implementation, generation business planning, generation
19 expansion planning, energy risk management, and integrated resource planning.
20 After coordinating the development of demand-side customer programs, I joined
21 the Generation System Planning Group in 1994 and coordinated the development
22 of the integrated resource plan filings for state regulatory agencies. I was

1 promoted to Manager, Generation Business Support in the Power Generation
2 Group in 2000 to lead the business case development and asset strategy for
3 fossil/hydro generation. In 2003, I was promoted to Director, System and Power
4 Planning Group to guide major investments for generation assets and develop
5 expansion plans to maintain system reliability. In 2006, I was promoted to
6 Director, Regulated Economic Analysis where I worked in integrated resource
7 planning, new generation investments, and maintaining system reliability. In
8 2012, I was promoted to my current position as Director, Wholesale and
9 Renewables Analytics.

10 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS DIRECTOR,**
11 **WHOLESALE AND RENEWABLES ANALYTICS.**

12 A. As Director, Wholesale & Renewables Analytics, I am responsible for developing
13 specific strategies for Duke Energy Corp.'s operating utilities, including
14 commercial support for requests for proposals (RFPs) for renewable and supply
15 side resources and major project/initiative business case analysis.

16 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY**
17 **PUBLIC SERVICE COMMISSION?**

18 A. No.

19 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
20 **PROCEEDING?**

21 A. The purpose of my testimony is to explain and support the Company's process for
22 issuing its request for proposal for short-term capacity (Short-Term RFP) and
23 long-term capacity (Long-Term RFP), the responses the Company received, the

1 evaluation the Company undertook, and ultimately, the decision reached by the
2 Company to pursue the acquisition of the remaining 31% interest in the East Bend
3 Generating Station (East Bend) from the Dayton Power & Light Company
4 (DP&L) as the least cost and most reasonable option available. I will describe the
5 modeling process the Company undertook to reach this conclusion. Lastly, I will
6 explain why I believe the purchase of the remaining 31% interest in East Bend
7 (East Bend Purchase) is in the public interest and beneficial to Duke Energy
8 Kentucky's customers.

II. DISCUSSION

A. THE RFP PROCESS

9 **Q. HOW DID DUKE ENERGY KENTUCKY DECIDE TO PURSUE THE**
10 **PURCHASE OF THE REMAINING 31% INTEREST IN THE EAST BEND**
11 **GENERATING STATION?**

12 A. The decision to pursue the remaining 31% interest in East Bend was the result of
13 thorough analysis and a consideration of multiple strategies to meet Duke Energy
14 Kentucky's capacity obligations to provide adequate service and meet reliability
15 requirements as a Fixed Resource Requirement (FRR) participant in PJM
16 Interconnection L.L.C. (PJM). As more fully explained by Duke Energy
17 Kentucky witness Steve Immel, Duke Energy Kentucky may need to retire
18 approximately 163 megawatts (MW) of net installed capacity due to
19 implementation of new environmental regulations, particularly the Mercury and
20 Air Toxics Standard (MATS). The decision to pursue the East Bend alternative
21 was made after thoroughly evaluating multiple resource and compliance options

1 available through publicly solicited alternatives through a RFP process managed
2 by an independent third party consultant. Attachments JSN-1 and JSN-2 are true
3 and accurate copies of the Short-Term RFP and Long-Term RFP, respectively.

4 **Q. WERE YOU DIRECTLY INVOLVED IN THE ISSUANCE OF THE**
5 **SHORT-TERM RFP AND LONG-TERM RFP AND THE ANALYSIS**
6 **THAT OCCURRED IN DECIDING ON THE COMPANY'S**
7 **COMPLIANCE STRATEGY?**

8 A. Yes. I was directly involved in the creation of both RFPs and led the analysis of
9 the proposals received under it.

10 **Q. PLEASE SUMMARIZE DUKE ENERGY KENTUCKY'S RFP PROCESS.**

11 A. Duke Energy Kentucky retained an independent consultant, Burns & McDonnell
12 (B&M) during the second quarter of 2013 to conduct the Short-Term RFP and
13 Long-Term RFP on the Company's behalf.

14 The Short-Term RFP process was launched in April 2013 and sought a
15 short term solution for resource needs up to 200 MWs of PJM Unforced Capacity
16 (UCAP) through a purchased power agreement (PPA) for PJM delivery years
17 2014/2015, 2015/2016 and/or 2016/2017.¹ The resources were required to be unit
18 contingent and dispatchable by PJM and for a minimum block of 50 MWs
19 capacity and energy from generation resources with firm deliverability to the PJM
20 DEOK load zone.

21 B&M interfaced directly with all respondents for communications and
22 redacted the initial bids. Duke Energy Kentucky analyzed these bids, ranked the

¹ The PJM delivery year runs from June 1 - May 31.

1 bids, reduced them to a short list of eight bids, and then requested refreshed
2 proposals. The RFP process, while not resulting in an executed capacity purchase,
3 none the less identifies assets uncommitted to PJM for the 2015/2016 delivery
4 year. The Company subsequently structured a capacity call option with one of the
5 short listed bidders.

6 The Long-Term RFP process was launched in June 2013 and sought a
7 long-term solution for up to 200 MWs of capacity for the Company. The
8 responses were due in August 2013. All respondents interfaced directly with
9 B&M for all communications including questions, Long-Term RFP clarification
10 issues, and Long-Term RFP bid submittal. B&M vetted the initial proposals and
11 provided a summary of the redacted responses so as to not disclose the asset or
12 the party that submitted the response to Duke Energy Kentucky for analysis. From
13 that list, the Company reduced the number of responses to a short list of viable
14 alternatives as compared to the estimated cost of compliance and continued
15 operation of Miami Fort Unit 6 (MF6) into 2020 (the estimated end of the plant's
16 useful life) with replacement by a new combined cycle (MF6 Option). B&M then
17 reached out to the parties and let them know they were on the short list and
18 requested a final refreshed proposal to be used for least cost selection. At that
19 point, B&M informed Duke Energy Kentucky of the specific generating assets
20 selected for further consideration and their associated counterparties. Duke
21 Energy Kentucky then completed its least cost assessment of short listed
22 proposals considering financial modeling using purchase price and system
23 production cost impacts, environmental legislation, alignment with load serving

1 obligations, PJM capacity markets assumptions, and reliability of energy
2 deliverability.

3 **Q. PLEASE EXPLAIN THE BASE CASE ASSUMPTION OF MF6 AND ITS**
4 **ESTIMATED RETIREMENT.**

5 A. In Duke Energy Kentucky's 2011 integrated resource plan (IRP), Case No. 2011-
6 00235, the Company explained the potential for an accelerated retirement by
7 January 2015 driven by the compliance timeframe for the EPA Utility Maximum
8 Achievable Control Technology (MACT) rule and other expected environmental
9 regulations. Based upon changes in the effective date of MACT, now renamed
10 MATS, and other factors such as aligning with PJM delivery year, the MF6
11 MATS compliance or retirement date is now June 1, 2015.² MF6 could comply
12 with the MATS requirements by equipment upgrades, additional operating
13 expense, and fuel switching, but MF6 will need to be replaced at some point in
14 the near future due to age and the likelihood of additional environmental
15 compliance regulations. So, as part of the Company's analysis of the Long-Term
16 RFP proposals, the Company assumed a base case consisting of the MF6 Option.
17 The replacement of MF6 with a similar amount of combined cycle capacity was
18 consistent with the prior 2011 IRP capacity replacement assumption for MF6.

19 **Q. PLEASE BRIEFLY EXPLAIN THE PRIMARY DRIVERS AS TO WHY**
20 **DUKE ENERGY KENTUCKY ISSUED THE LONG-TERM RFP FOR**
21 **CAPACITY LAST SUMMER.**

² The effective date for MATS compliance is on or about April 16, 2015. Duke Energy Kentucky received an extension for Compliance to June 1, 2015, so to align the compliance/retirement date with the PJM Planning year.

1 A. There are two primary drivers behind the Company's Long-Term RFP. First,
2 Duke Energy Kentucky requested a long-term capacity and energy solution to
3 potentially replace approximately 163 MWs of net installed capacity at its MF6
4 coal generating facility that may be retired due to MATS compliance. Second, as
5 more fully explained by Duke Energy Kentucky witness John Verderame, Duke
6 Energy Kentucky is a member of PJM and functions as an FRR entity. That
7 means that the Company must have sufficient unit-specific capacity to meet the
8 PJM reliability obligations three years in advance. Therefore, the combination of
9 the potential retirement of MF6 and the need to maintain adequate capacity to
10 meet reliability obligations drove the Company to look for the best and least cost
11 options to serve its customers.

12 **Q. PLEASE DESCRIBE THE LONG-TERM RFP FOR CAPACITY THAT**
13 **DUKE ENERGY KENTUCKY ISSUED LAST SUMMER.**

14 A. The Company sought multiple capacity alternatives including PPAs, Tolling
15 Agreements, Asset Purchases, and new self-build generation to potentially replace
16 MF6 if it is retired as opposed to being brought into MATS compliance. Duke
17 Energy Kentucky did allow its affiliates to participate in this Long-Term RFP,
18 which was one of the reasons why B&M was used as an independent consultant to
19 manage the process. The specific requirements for this Long-Term RFP were as
20 follows:

- 21 • Resource needed up to 200 MWs of PJM Unforced Capacity
22 (UCAP) no later than June 2017;

- 1 • Traditional supply side and renewable proposals must have been
2 for a minimum block of 50 MWs;
3 • PPA terms were from 15-20 years in duration and asset purchases
4 remaining asset life expected for 10 years or greater;
5 • Resources must have been unit contingent and dispatchable (or
6 schedulable) into PJM;
7 • Capacity and energy from generation resources must have included
8 firm deliverability to the PJM Duke Energy Kentucky Pricing
9 Node;³ and
10 • Duke Energy Kentucky did not accept proposals for projects on
11 Duke Energy Kentucky property, energy efficiency, or demand
12 side management (DSM).

13 **Q. WHAT WERE THE COMPANY'S PRIMARY CONSIDERATIONS IN**
14 **DEVELOPING THE SHORT-TERM AND LONG-TERM RFP**
15 **PARAMETERS?**

16 A. The Company's primary considerations were meeting the PJM reliability and
17 deliverability requirements over the applicable PJM planning horizon (short- and
18 long-term) so that the capacity solution would be useful to the Company to meet
19 its FRR plan obligations. Ongoing cost of operation was a consideration as well as
20 the feasibility of the project. For example, with respect to the Long-Term RFP,

³ Duke Energy Kentucky Pricing Node identifies the specific pricing point associated with the Duke Energy Kentucky load in PJM.

1 new construction projects were not disqualified necessarily, but were considered
2 in terms of likelihood of construction, timing, and risks.

3 **Q. DID THE COMPANY SPECIFICALLY SOLICIT ANY RENEWABLE**
4 **CAPACITY ALTERNATIVES?**

5 A. The RFPs did include renewables as a potential solution that the Company would
6 consider. The renewable proposals, like all other solutions, needed to meet all the
7 requirements set forth in the RFP.

8 **Q. WHY DID THE COMPANY EXCLUDE ENERGY EFFICIENCY AND**
9 **DSM PROJECTS FROM THE LONG-TERM RFP?**

10 A. As evidenced by the Company's robust energy efficiency (EE) and DSM
11 offerings in the Commonwealth, Duke Energy Kentucky supports such programs.
12 However, in this situation, the Company needs unit specific generating capacity to
13 meet its PJM reliability obligations as an FRR entity. Duke Energy Kentucky's
14 goal is the replacement of actual energy and capacity of MF6 as early as June 1,
15 2015, to serve current load, as opposed to trying to manage potential load growth.
16 Duke Energy Kentucky thus has a near term need for a source of both energy and
17 capacity to meet its unit-specific FRR plan reliability obligations. The Company
18 does not foresee sufficient EE and DSM opportunities in Duke Energy
19 Kentucky's territory to meet this near term need and fulfill the Company's FRR
20 reliability obligations in this time frame. Mr. Verderame discusses this further in
21 his testimony.

B. RFP RESPONSE AND ANALYSIS

1 **Q. PLEASE SUMMARIZE THE RESPONSES TO THE SHORT-TERM RFP**
2 **CONSIDERED BY THE COMPANY TO MEET ITS LOAD AND**
3 **RELIABILITY OBLIGATIONS.**

4 A. Duke Energy Kentucky received 13 proposals from 8 different counterparties
5 incorporating multiple terms and capacity options. Proposal sizes ranged from 50
6 MWs to 200 MWs and covered both capacity only and capacity and energy over
7 the time period requested.

8 **Q. PLEASE SUMMARIZE THE ANALYSIS PERFORMED TO EVALUATE**
9 **THESE SHORT-TERM RFP RESPONSES.**

10 A. All complying proposals were compared on an annual total adjusted cost basis.
11 Annual total adjusted costs included any energy benefits that resulted from
12 proposals with associated energy.

13 **Q. DID DUKE ENERGY KENTUCKY EXECUTE ANY OF THE SHORT-**
14 **TERM RFP RESPONSES?**

15 A. Yes. As a result of the Short-Term RFP, Duke Energy Kentucky executed a
16 2015/2016 capacity purchase option from one of the RFP respondents.

17 **Q. HOW MANY RESPONSES TO THE 2013 LONG-TERM RFP DID THE**
18 **COMPANY RECEIVE?**

19 A. The Company received approximately 30 iterations from 10 counterparties of
20 various asset portfolio options in response to its RFP.

1 **Q. PLEASE SUMMARIZE THE INITIAL RESPONSES TO THE LONG-**
2 **TERM RFP AND THE VARIOUS SUPPLY-SIDE RESOURCES**
3 **CONSIDERED BY THE COMPANY TO MEET ITS LOAD AND**
4 **RELIABILITY OBLIGATIONS.**

5 A. The Long-Term RFP responses ran the gamut of asset acquisitions and financial
6 transactions such as PPAs and Tolling Agreements. The assets bid into the Long-
7 Term RFP were primarily coal or natural gas fueled units. Attachment JSN-3 is a
8 true and accurate summary of the preliminary responses the Company received
9 under its Long-Term RFP.

10 **Q. WHAT IS A TOLLING AGREEMENT?**

11 A. In this case, a tolling agreement was a proposal whereby Duke Energy Kentucky
12 would essentially be renting a generating asset. The Company would procure and
13 provide the fuel for the asset, and then pay a third party a fee or "toll" to own and
14 operate a generating station. Duke Energy Kentucky would be able to receive the
15 capacity and energy output. It would be paying a fee for the operation of the
16 facility. These tolling agreements were evaluated under the same parameters as all
17 other options under the Long-Term RFP.

18 **Q. WERE THERE ANY BIDS SUBMITTED IN THE LONG-TERM RFP**
19 **THAT INCLUDED A RENEWABLE OPTION?**

20 A. Yes. There was one renewable wind proposal submitted in response to the Long-
21 Term RFP; however, it did not meet the minimum RFP MW threshold. The
22 overarching goal was to find the least cost available alternative to meet the
23 Company's capacity and reliability requirements for PJM. This renewable

1 solution was not a viable option because it did not meet the minimum capacity
2 requirements under the Long-Term RFP.

3 **Q. PLEASE EXPLAIN HOW DUKE ENERGY KENTUCKY NARROWED**
4 **DOWN THE FIELD OF 30 OPTIONS TO SATISFY ITS CAPACITY**
5 **NEED.**

6 A. Duke Energy Kentucky used the previously described MF6 Option as a
7 benchmark for the Company to consider and weigh against other alternatives.
8 Proposals that were higher cost than the MF6 Option were disregarded. Further,
9 the responses that did not meet the minimum RFP thresholds set forth under the
10 Long-Term RFP terms (such as minimum/maximum capacity or compliance with
11 the environmental specification for existing coal units allowing a probable
12 continued ten years of operation) were also disregarded. This included 4 bids that
13 were not in alignment with specified capacity size and 9 bids that did not meet the
14 minimum coal environmental specifications. Those remaining alternatives that
15 were less than the total cost of the MF6 Option were then further evaluated. From
16 the initial Long-Term RFP submissions, there were 7 proposals that were lower in
17 cost than the MF6 Option.

18 **Q. HOW DID DUKE ENERGY KENTUCKY EVALUATE THESE 7 SUPPLY-**
19 **SIDE RESOURCES TO DETERMINE WHICH ALTERNATIVES TO**
20 **FURTHER ANALYZE?**

21 A. From the Long-Term RFP, the 7 most competitive bids received were chosen for
22 further analysis and requested to provide a final refreshed proposal. The top 7
23 alternatives included 5 asset acquisition opportunities, 1 long-term purchase

1 power proposal, and a tolling proposal. The Duke Energy IRP team, in
2 consultation with B&M, then conducted an analysis to identify the lowest cost
3 solution under various scenarios. The top 7 proposals were modeled using the
4 Company's IRP modeling software tool, PROSYM, to determine the total
5 production costs of the bids, which were combined with the fixed costs of each
6 alternative to develop a total energy adjusted cost.

7 **Q. WHAT IS PROSYM?**

8 A. PROSYM is a chronological electric power production costing simulation
9 computer software package. It is designed for performing planning and
10 operational studies, and as a result of its chronological nature, accommodates
11 detailed hour-by-hour investigation of the operations of electric utilities. The
12 model is a proprietary model that is licensed by Ventyx, a subsidiary of ABB.
13 Because of its ability to handle detailed information in a chronological fashion,
14 planning studies performed with PROSYM will closely reflect actual electric
15 utility operations.

16 **Q. IS THIS PROCESS SIMILAR TO HOW THE COMPANY PREPARES ITS**
17 **IRP?**

18 A. Yes..

19 **Q. PLEASE DESCRIBE THE MODELING THAT OCCURRED TO ARRIVE**
20 **AT THE EAST BEND PURCHASE AS THE LOWEST COST AND BEST**
21 **SOLUTION.**

22 A. The Company identified 3 primary scenarios under which the 7 most competitive
23 alternatives were analyzed to determine the lowest present value solution for the

1 Company. The short list of alternatives did comply with the environmental coal
2 specifications included in the RFP and that put them on a comparable basis in
3 terms of allowing us to further narrow down the alternatives to a best and least
4 cost option. The base case assumed carbon pricing that incorporated a cost
5 assignment for the emission of carbon beginning in the year 2020. The First
6 Alternative Case assumed carbon pricing and Locational Marginal Prices that
7 reflected possible differing values of additional megawatts of energy at the
8 specific generating station locations being considered. The Second Alternative
9 case assumed no carbon pricing and no Locational Marginal Price differential.
10 Attachment JSN-4 is a true and accurate copy of the results of this analysis.

11 In all 3 pricing scenarios, Bid 2, Bid 8B and Bid 8C were the lowest cost
12 options. Bid 2 was the East Bend Purchase. Under this PROSYM modeling, the
13 East Bend Purchase resulted in the lowest overall cost option in all cases except
14 Alternative Case 2, which the Company considers to be a very low probability.
15 Based upon this analysis, the Company then entered into negotiations for the East
16 Bend Purchase.

17 The East Bend Purchase was analyzed using the final negotiated purchase
18 price of \$12.4 million and is the least cost alternative as compared to the other
19 alternatives from the Long-Term RFP and the MF6 Option. It is my
20 understanding that the final negotiated price took into consideration the acquisition
21 of additional land interests owned by DP&L surrounding East Bend and rights to
22 capacity revenues from PJM, among other things. Duke Energy Kentucky witness

1 Mr. James P. Henning discusses the negotiations and terms of the purchase in his
2 direct testimony.

3 **Q. ARE THERE OTHER CONSIDERATIONS MAKING THE EAST BEND**
4 **PURCHASE THE PREFERRED ALTERNATIVE?**

5 A. From a resource analysis standpoint, the East Bend Purchase is the preferred
6 option for three reasons. The East Bend purchase results in approximately \$50
7 million less in upfront capital costs when compared to the next lowest cost option
8 in the Long-Term RFP. The East Bend purchase is also the lowest Present Value
9 cost option. When environmental capital expenditures, including estimated
10 incremental coal ash costs were included in the East Bend Present Value, it
11 remained lower cost than all other noncoal options. And finally, the East Bend
12 purchase matches well with the incremental capacity requirement of Duke Energy
13 Kentucky. The remaining 31% of East Bend results in the acquisition of 186
14 MWs net installed capacity to replace the 163 MWs of net installed capacity from
15 MF6 once it is retired. The attractive purchase price coupled with the number of
16 MWs means that customer will not be over-paying for unnecessary capacity.

17 **Q. YOU DESCRIBED THE THREE REASONS WHY THE EAST BEND**
18 **PURCHASE WAS THE PREFERRED OPTION FROM A RESOURCE**
19 **ANALYSIS STANDPOINT. ARE THERE OTHER REASONS WHY THE**
20 **EAST BEND PURCHASE IS DUKE ENERGY KENTUCKY'S**
21 **PREFERRED OPTION?**

22 A. Yes. Duke Energy Kentucky witnesses Messers. Henning, Verderame, and Immel
23 explain the other reasons in greater detail in their testimonies. In summary, the

1 East Bend purchase option is the best fit of the Long-Term RFP responses in
2 terms of load serving and locational pricing and, as I understand, it will resolve
3 governance and ownership issues the Company has been having with DP&L.

4 **Q. HAS DUKE ENERGY KENTUCKY CONSIDERED THE RISKS**
5 **ASSOCIATED WITH HAVING A GENERATION PORTFOLIO THAT**
6 **LOSES DIVERSITY?**

7 A. It does present some challenges, but the Company believes this is manageable.
8 Duke Energy Kentucky currently files a back-up power supply plan with the
9 Commission to address this very issue. The Company currently and periodically
10 evaluates these risks and evaluates strategies to manage this risk. The Company's
11 current plan is approved through 2014. The Company envisions it will file a new
12 plan in accordance with the procedure established by the Commission in Case No.
13 2012-00180. Duke Energy Kentucky plans to file its next plan in the fourth
14 quarter of this year, once it has completed its evaluation. The Company intends to
15 continue this process going forward and will continue to explore options to
16 mitigate this risk.

III. CONCLUSION

17 **Q. ARE ATTACHMENT(S) JSN-1, JSN-2, JSN-3 AND JSN-4 TRUE AND**
18 **ACCURATE COPIES OF THE SHORT-TERM RFP, LONG-TERM RFP,**
19 **SUMMARY OF LONG-TERM RFP AND 2013 KY RFP ADJUSTED COST**
20 **(PRESENT VALUE), RESPECTIVELY?**

A. Yes.

21 **Q. WERE ATTACHMENT(S) JSN-1, JSN-2, JSN-3 AND JSN-4 COMPILED**
22 **BY YOU OR UNDER YOUR DIRECTION AND CONTROL?**

1 A. Yes.

2 Q. **DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

3 A. Yes.

VERIFICATION

State of North Carolina)
)
County of Mecklenburg) **SS:**

The undersigned, James S. Northrup, being duly sworn, deposes and says that he is the Director, Wholesale and Renewables Analytics, and that the matters set forth in the foregoing testimony are true and correct to the best of his information, knowledge and belief.


James S. Northrup, Affiant

Subscribed and sworn to before me by James S. Northrup on this 27th day of May 2014.


NOTARY PUBLIC

My Commission Expires: Oct. 20, 2018



REQUEST FOR PROPOSALS

Duke Energy Kentucky's Capacity and Energy Needs for Delivery Years 2014-2016

Dated: April 8, 2013
Proposals Due: May 15, 2013

Complete Information on this RFP can be found at:
<http://DukeEnergyKentuckyRFP.com>



1.0 Introduction

Duke Energy Kentucky (DEK) has a need for capacity or capacity and energy resources during the PJM delivery years of 2014/2015 through 2016/2017 in order to meet its PJM Resource Adequacy obligation. DEK will pursue Power Purchase Agreements (PPA) to satisfy this need.

Specific requirements for this Request for Proposals (RFP) are as follows:

- Resource need up to 200 MWs of PJM Unforced Capacity (UCAP) in the applicable delivery years below:

June 1, 2014/May 31, 2015:	200 MW
June 1, 2015/May 31, 2016:	200 MW
June 1, 2016/May 31, 2017:	200 MW

- 1-3 Year Terms of 2014/2015, 2015/2016, or 2016/2017 or combinations thereof
- Resources must be delivered in the 2014/2015 through 2016/2017 timeframe, but DEK will consider contracting resources as early as June 1, 2014 through delivery year ending May 31, 2017 although Duke's needs begin in early 2015
- Resources must be unit contingent and dispatchable by PJM
- Proposals and renewable proposals must be for a minimum block of 50 MWs
- Capacity and energy from generation resources must include firm deliverability to the PJM DEOK load zone

DEK has retained Burns & McDonnell (B&M) to act as an independent third party consultant to assist with this RFP. All respondents will directly interface with B&M for all communications including questions, RFP clarification issues and RFP bid submittal.

Duke Energy Corporation (Duke Energy), an energy company headquartered in Charlotte, NC, supplies and delivers energy to approximately 7.2 million U.S. customers in the Southeast and Midwest United States. The company has nearly 49,700 MWs of owned regulated electric generating capacity in the Midwest and the Southeast and natural gas distribution services in Ohio and Kentucky.

Headquartered in Charlotte, N.C., Duke Energy is a Fortune 250 company traded on the New York Stock Exchange under the symbol DUK. More information about the company is available on the internet at www.duke-energy.com.

2.0 Product Definition & Eligibility

A. Product Definition

This RFP is for unit contingent capacity or capacity and energy from assets that meet the requirements of Generation Capacity Resources (GCRs) as defined in the PJM Reliability Assurance Agreement (RAA). The hourly energy output from the GCR must be offered into the PJM Day Ahead

Market (DAM). DEK will not accept proposals for projects on DEK property, purchases of new or existing energy facilities, energy efficiency, or demand side management (DSM).

B. Eligibility

In order to participate in this RFP, respondent must submit its PJM qualifications and FERC authorization. The respondent must be a qualified market buyer and seller in good standing with PJM. Assets must meet all PJM RAA terms. Capacity resources that cleared in any Reliability Pricing Model (RPM) Auction delivery year of the RFP may not bid in for that delivery year of the RFP. In addition, the unit cannot have been specified in a FRR (Fixed Resource Requirement) Capacity Plan for the delivery year of the RFP.

3.0 General Terms

DEK is requesting up to 200 MW of capacity or capacity and energy in connection with its Resource Adequacy obligations for the PJM delivery years of 2014/2015 through 2016/2017. DEK requires that resources be dispatchable (into the PJM DAM) and unit contingent.

A. Delivery Point

The delivery point shall be the PJM DEOK load zone. DEK's preference is for supplier pricing at the DEOK load zone including applicable congestion and losses. Alternate pricing structures will be considered.

B. Contract Capacity

The contract capacity shall be stated in terms of PJM UCAP. Minimum blocks of 50 MW of UCAP capacity are required.

DEK does not desire to purchase any Renewable Energy Certificates at this time.

C. Quantity & Delivery Date

DEK will accept bids with a minimum UCAP of 50 MW. Intermittent resources must bid at least 50 MW as defined by the PJM Manual 21, Appendix B: Calculating Capacity Values for Intermittent Resources. For example, a solar facility would have to bid at least 144 MW of capacity to meet this obligation using a 38% effective class average capacity factor.

DEK is seeking up to the following cumulative UCAP capacity amounts to meet its reserve margin requirements during the following PJM delivery years:

June 1, 2014/May 31, 2015: 200 MW

June 1, 2015/May 31, 2016: 200 MW

June 1, 2016/May 31, 2017: 200 MW

Respondents must deliver capacity or capacity and energy for a minimum of one year on dates between June 1, 2014 and May 31, 2017. DEK's capacity and energy needs begin in early 2015, but DEK is willing to consider contracts as early as June 1, 2014, in order to meet its FRR obligation.

D. Capacity and/or Energy Pricing

All pricing should be comprised of a capacity component on a \$/kw-yr basis and, if applicable, an energy component consisting of a non-fuel variable O&M (\$/MWh) component and a fuel cost (\$/MMBtu) component. A heat rate must be given for conversion of fuel costs to \$/MWh. Alternatively, a fixed "dispatch" cost may be provided on a \$/MWh basis. The total variable pricing (non-fuel variable O&M +fuel) of the unit charged to DEK must be equal to the PJM DAM (or RTM) dispatch price. DEK prefers non-fuel variable pricing to be on a fixed price or fixed escalation rate basis (e.g. 2%, 3% escalation rate).

Proposals must provide a detailed description of the pricing terms and conditions. During any subsequent discussions and/or negotiations, DEK may request modifications to the proposed contract structure scheme in order to accommodate its own operational or administrative requirements.

Bidder is responsible for complying with all applicable state and federal environmental regulations and requirements, including SO₂ allowances, NO_x allowances and emission fees.

E. Contract Term

In order to accommodate DEK's uncertain capacity needs in light of environmental legislation, DEK would request that bidders offer products in one or more of the increments described below. Capacity should be priced discretely in any multi-year contracts.

Delivery Year	Incremental (MW)	Cumulative (MW)
June 1, 2014/May 31, 2015	200	200
June 1, 2015/May 31, 2016	0	200
June 1, 2016/May 31, 2017	0	200

- a. 2014/2015 (1 Year Term)
- b. 2015/2016 (1 Year Term)
- c. 2016/2017 (1 Year Term)
- d. 2014/2015 – 2015/2016 (2 Year Term)

- e. 2015/2016 – 2016/2017 (2 Year Term)
- f. 2014/2015 – 2016/2017 (3 Year Term)

Proposal term must be for at least one year and cannot extend past May 31, 2017.

F. Fuel Supply

The proposal must indicate the most applicable fuel pricing point and any applicable local distribution company (LDC) charges. Fuel supply proposals may include either a fuel index formula or fixed fuel price. For all indexed bids, a fuel pricing formula must be provided which must supply sufficient detail for DEK to understand the formula components for estimation of the cost of fuel, in \$/MMBtu, for the proposal term. For evaluation purposes, DEK plans to use its own fundamental fuel price forecast for estimates of natural gas commodity pricing for each bid.

For natural gas pipeline capacity, the cost of any firm transportation should be specified, if appropriate. If firm gas transportation is to be provided by the respondent, provide the pertinent details on the firm gas transportation arrangement and total cost. Details should include Maximum Daily Transportation Quantity (MDTQ) and any transportation demand rate information expressed as a Daily Demand Rate per MMBtu (100% LF) necessary for DEK to understand the total cost of firm gas transportation on a monthly and annual basis. Please provide the upstream interstate and LDC provider so as to give an understanding of the transportation path. Also, state if this is firm or non-firm transportation.

G. Location

Proposals must contain unit contingent offers. Proposal must identify the generation resources that have been proposed and their location. Capacity and energy from the generation resources must have firm deliverability to the PJM DEOK load zone. There will be a preference for assets with the following declining order of preference:

1. Assets located in the PJM DEOK load zone
2. Assets located in PJM with firm deliverability to the DEOK load zone
3. Assets external to PJM with firm deliverability to the PJM DEOK load zone

H. Operations and Dispatch

The hourly energy output from the GCR must be offered into the PJM Day Ahead Market (DAM). The supplier will remain responsible for the operations and maintenance of the asset including the offering and scheduling of the asset in the (DAM) or the Real Time Market (RTM). Suppliers shall also offer applicable Ancillary Service products into the PJM markets.

I. Transmission

Existing and new generation located in the PJM region must be pre-certified by PJM as meeting the Generation Deliverability Test. Resources external to PJM must contain an indication of the intended ATC path to deliver the existing capacity into the PJM DEOK load zone. (Firm transmission service from the unit to the border of PJM and generation deliverability in PJM must be demonstrated by the start of the Delivery Year). Proposals must have firm deliverability to the PJM DEOK load zone. Suppliers will have the responsibility to secure and provide all transmission services necessary for firm delivery of capacity and energy. Seller is responsible for all delivery and loss charges to the delivery point (PJM DEOK).

4.0 Instructions to Respondents

A. Overview of Process

B&M has set-up an e-mail address DukeEnergyKentuckyRFP@burnsmcd.com to collect all communications and questions from potential respondents as well as a web site <http://dukeenergykentuckyrfp.com/> to provide uniform communications, including updates and specific detail as may be provided from time to time through this bidding process.

The bid process will include the activities and events as indicated in the schedule shown below. Proposal opening will be performed in private by B&M on a confidential basis. Proposals will be reviewed for completeness and offers that do not include the information requirements of this RFP will be notified and allowed five business days to conform. All conforming proposals will be sent to DEK for evaluation with the respondent's name and other identifying information redacted from the proposal. The evaluation of the bids will be performed by DEK with assistance provided by B&M. Respondents selected for the short list may or may not be invited to begin negotiations of final details of the offers.

Duke Energy Kentucky RFP Schedule

Event	Anticipated Date
Release of RFP	April 8, 2013
Notice of Intent to Bid	April 22, 2013
Proposal Submittal Deadline	May 15, 2013
Selection of Short List	July 1, 2013
Complete Negotiations	End of Third Quarter 2013

B. Notice of Intent to Bid (Attachment A)

Each respondent is requested to advise B&M of its intent to submit a proposal by submitting a Notice of Intent to Bid (NOIB), attached hereto as **Attachment A: Notice of Intent to Bid**. The Notice of Intent to Bid form may be e-mailed, to the following address:

DukeEnergyKentuckyRFP@burnsmcd.com.

Respondent's contact information, as supplied in the NOIB, will provide a vehicle for B&M to communicate any updates/revisions to the RFP in a timely manner. Therefore, we encourage respondents to submit a NOIB by April 22, 2013

C. Nondisclosure Agreement (Attachment B) and Response Package (Attachment C)

Respondents to this RFP are required to sign **Attachment B: Nondisclosure Agreement (NDA)** in its present form. Respondents to this RFP area also required to complete the **Attachment C: Response Package** to be eligible to compete in the solicitation process. Respondents should organize their proposals as described in **Section 4.0: Proposal Organization**. All applicable information contained in the proposal must be addressed, including:

Attachment B: Nondisclosure Agreement (NDA)

Attachment C: Response Package

All correspondence concerning this RFP should be sent via e-mail to:

DukeEnergyKentuckyRFP@burnsmcd.com.

Phone inquiries regarding this RFP will not be entertained. Individual questions submitted by a respondent to B&M will be answered with responses sent via email back to the respondent. Responses to frequently asked questions may be placed on the RFP Website for the benefit of all respondents, although care will be taken not to identify any specific respondent(s).

D. Deadline and Method for Submitting Proposals

All proposals submitted in response to this RFP must be received by B&M no later than **5:00 PM EST on May 15, 2013**. DEK will not guarantee evaluation of proposals associated with this RFP if submitted after this time.

Respondents are required to submit three (3) hard copies of each proposal and a CD with the spreadsheets provided in **Attachment C: Response Package** to the address below. It is further required that multiple proposals submitted by each respondent be identified separately. **Emailed proposals will not be accepted**. Financial statements, annual reports and other large documents may be referenced via a web site address.

Burns & McDonnell
Attn: Jon Summerville
9400 Ward Parkway
Kansas City, MO 64114

5.0 Proposal Organization

A. Executive Summary

Please provide an overview of the proposal and project. Include an overview of the technology, fuel type, project benefits and location. Please also complete **Section A: General Information** located in **Attachment C: Response Package** for all projects.

B. Proposal Limitations

Please describe in reasonable detail any economic, operational or system conditions that might affect the respondent's ability to deliver capacity and energy as offered.

C. Technical Proposal & Cost

Please describe in reasonable detail the source of the capacity and energy. Operational information and pricing should be given as indicated in the **Section B: Term Sheet** section located in **Attachment C: Response Package**.

D. Company Data

Please include information on the respondent's corporate structure (including identification of any parent companies), a copy of the respondent's most recent quarterly report containing unaudited consolidated financial statements that is signed and verified by an authorized officer of respondent attesting to its accuracy, a copy of respondent's most recent annual report containing audited consolidated financial statements and a summary of respondent's relevant experience. Financial statements, annual reports and other large documents may be referenced via a web site address.

6.0 Proposal Evaluation and Contract Negotiations

A. Initial Proposal Review

After the proposal submittal deadline, B&M will privately open and review all responses for completeness and responsiveness. B&M may request that a respondent provide additional information or clarification to its original proposal. B&M will make such requests in writing via email and specify a deadline for compliance. Failure to provide the requested information or clarification by the deadline may result in disqualification of the proposal.

All conforming proposals will be sent to DEK for evaluation with the respondent's name and other identifying information redacted from the proposal.

B. Short List Development

DEK will then evaluate all proposals to meet both capacity and energy needs. Proposals will be evaluated based on present value economics and other factors that may include, but will not be limited to location, credit, relevant experience, technology feasibility, permitting, and deliverability.

During the evaluation process, DEK may or may not choose to initiate discussions with one or more respondents. Discussions with a respondent shall in no way be construed as commencing contract negotiations.

C. Contract Negotiations

DEK will contact the respondent in writing of its interest in commencing contract negotiations. DEK's commencement of and participation in negotiations shall not be construed as a commitment to execute a contract. If a contract is negotiated, it will not be effective unless and until it is fully executed with the receipt of all required regulatory approvals.

7.0 Reservation of Rights

Nothing contained in this RFP shall be construed to require or obligate DEK to select any proposals or limit the ability of DEK to reject all proposals in its sole and exclusive discretion. DEK further reserves the right to withdraw and terminate this RFP at any time prior to the proposal deadline, selection of a short list or execution of a contract.

All proposals submitted to DEK pursuant to this RFP shall become the exclusive property of DEK and may be used for any reasonable purpose by DEK. DEK and B&M shall consider materials provided by respondent in response to this RFP to be confidential only if such materials are clearly designated as "Confidential." Respondents should be aware that their proposal, even if marked "Confidential", may be subject to discovery and disclosure in regulatory or judicial proceedings that may or may not be initiated by DEK. Respondents may be required to justify the requested confidential treatment under the provisions of a protective order issued in such proceedings. If required by an order of an agency or court of competent jurisdiction, DEK may produce the material in response to such order without prior consultation with the respondent.



REQUEST FOR PROPOSALS

For Up to 200 MW of Long Term Capacity and Energy (PJM Qualifying Resources)

Duke Energy Kentucky

Dated: June 3, 2013

Proposals Due: August 15, 2013

Complete Information on this RFP can be found at:

<http://DukeEnergyKentuckyRFP.com>



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1.0 Background

Duke Energy Kentucky, Inc. (DEK) is requesting long term capacity and energy to potentially replace approximately 163 MWs of capacity at its Miami Fort 6 coal generating facility. DEK is considering the retirement of the Miami Fort 6 facility as a result of the multiple emerging environmental regulations including the EPA Mercury and Air Toxic Standards (MATS) rule and other water quality, fish impingement, and coal residual standards. The company is considering multiple capacity alternatives including power purchase agreements (PPA), tolling agreements (TA), asset purchases, new self-build generation, and PJM auction capacity to potentially replace this resource. DEK will allow company affiliates to participate in this RFP.

2.0 Introduction & Company Information

Duke Energy Kentucky has a need for capacity and energy resources no later than June 1, 2017 in order to meet its PJM Resource Adequacy obligation.

Specific requirements for this Request for Proposals (RFP) are as follows:

- Resource need up to 200 MWs of PJM Unforced Capacity (UCAP) no later than June 1, 2017
- Traditional supply side and renewable proposals must be for a minimum block of 50 MWs
- PPA terms of contracts are from 15-20 years in duration and the remaining life for asset purchases should be expected to be ten years or longer
- Resources must be unit contingent and dispatchable (or schedulable) into PJM
- Capacity and energy from generation resources must include firm deliverability to the PJM DEK Pricing Node
- DEK will not accept proposals for projects on DEK property, energy efficiency, or demand side management (DSM).

DEK has retained Burns & McDonnell (B&M) to act as an independent third party consultant to assist with this RFP. All respondents will directly interface with B&M for all communications including questions, RFP clarification issues and RFP bid submittal.

Duke Energy Corporation (Duke Energy), an energy company headquartered in Charlotte, NC, supplies and delivers energy to approximately 7.2 million U.S. customers. The company has nearly 49,700 MWs of owned regulated electric generating capacity in the Midwest and the Southeast and natural gas distribution services in Ohio and Kentucky.

Duke Energy is a Fortune 250 company traded on the New York Stock Exchange under the symbol DUK. More information about the company is available on the internet at www.duke-energy.com.

3.0 General Terms

DEK is requesting up to 200 MW of capacity and energy in connection with its PJM Resource Adequacy obligations. DEK requires that resources be dispatchable/schedulable (into the PJM DAM) and unit contingent.

A. Product Definition

DEK is seeking the following bundled products in its RFP:

1. Capacity (MW)
2. Energy (MWh)
3. Ancillary Services (if available)
4. Environmental Attributes (if available)

Assets must meet the requirements of Generation Capacity Resources (GCRs) as defined in the PJM Reliability Assurance Agreement (RAA). The hourly energy output from the GCR must be offered into the PJM Day Ahead Market (DAM). The respondent must be a qualified market buyer and seller in good standing with PJM.

B. Proposal Types

DEK is interested in potentially executing a contract for traditional supply side and/or renewable resources with one of the following proposal types:

1. Purchase Power Agreements (PPA)
2. Tolling Agreements (TA)
3. Asset Purchase

C. Contract Capacity

The contract capacity shall be stated in terms of PJM UCAP. DEK will accept bids with a minimum UCAP of 50 MW up to a maximum UCAP of 200 MW. Intermittent resources must bid at least 50 MW as defined by the PJM Manual 21, Appendix B: Calculating Capacity Values for Intermittent Resources. For example, a solar facility would have to bid at least 144 MW of capacity to meet this obligation using a 38% effective class average capacity factor.

D. Delivery Date & Term

DEK is seeking up to 200 MW of capacity and energy no later than June 1, 2017. A term with a minimum of 15 years but not longer than 20 years is required. The remaining life for asset purchases should be expected to be for ten years or longer.

E. Delivery Point

The delivery point shall be the PJM DEK Pricing Node. DEK's preference is for supplier pricing at the DEK Pricing Node including applicable congestion and losses. Alternate pricing structures will be considered.

F. Contract Pricing

1. Purchase Power Agreements/Tolling Agreements

All PPA/TA pricing should be comprised of a capacity component on a \$/kw-yr basis and an energy component consisting of a non-fuel variable O&M (\$/MWh) component and a fuel cost (\$/MMBtu) component. A heat rate must be given for conversion of fuel costs to \$/MWh. Alternatively, a fixed "dispatch" price may be provided on a \$/MWh basis. The total variable pricing (non-fuel variable O&M +fuel) of the unit charged to DEK must be equal to the PJM DAM (or RTM) dispatch price. DEK prefers non-fuel variable pricing to be on a fixed price or fixed escalation rate basis (e.g. 2%, 3% escalation rate). This information must be provided in **Attachment C: Response Package** under either **Section B: Purchase Power or Tolling Term Sheet** or **Section C: Asset Purchase Term Sheet**.

The seller of the capacity will be responsible for all relevant PJM resource performance assessment penalty charges. Bidder is responsible for complying with all applicable state and federal environmental regulations and requirements, including SO₂ allowances, NO_x allowances and emission fees.

2. Asset Purchase Price

The purchase price of the asset should be stated in millions of dollars. Operational data must also be given as detailed in **Attachment C: Response Package** under **Section C: Asset Purchase Term Sheet**.

G. Fuel Supply

1. Gas

The proposal must indicate the most applicable fuel pricing point and any applicable local distribution company (LDC) charges. Fuel supply proposals may include either a fuel index formula or fixed fuel price. For all indexed bids, a fuel pricing formula must be provided which must supply sufficient detail for DEK to understand the formula components for estimation of the cost of fuel, in \$/MMBtu, for the proposal term. For evaluation purposes, DEK plans to use its own fundamental fuel price forecast for estimates of natural gas commodity pricing for each bid.

For natural gas pipeline capacity, the cost of any firm transportation should be specified, if appropriate. If firm gas transportation is to be provided by the respondent, provide the pertinent details on the firm gas transportation arrangement and total cost. Details should include Maximum Daily Transportation Quantity (MDTQ) and any transportation demand rate information expressed as a Daily Demand Rate per MMBtu (100% LF) necessary for DEK to understand the total cost of firm gas transportation on a monthly and annual basis. Please provide the upstream interstate and LDC provider.

This information must be provided in **Attachment C: Response Package** under either **Section B: Purchase Power or Tolling Term Sheet** or **Section C: Asset Purchase Term Sheet**.

2. Coal

The proposal must provide coal specifications and projected coal prices. This information must be provided in **Attachment C: Response Package** under **Section D: Environmental and Coal Specifications**.

H. Location

Proposals must contain unit contingent offers. Proposal must identify the generation resources that have been proposed and their location. Capacity and energy from the generation resources must have firm deliverability to the PJM DEK Pricing Node. There will be a preference for assets with the following declining order of preference:

1. Assets located in the PJM DEK Pricing Node
2. Assets located in PJM with firm deliverability to the PJM DEK Pricing Node
3. Assets external to PJM with firm deliverability to the PJM DEK Pricing Node

I. Transmission

Existing and new generation located in the PJM region must be pre-certified by PJM as meeting the Generation Deliverability Test. Resources external to PJM must contain an indication of the intended ATC path to deliver the existing capacity into the PJM DEK Pricing Node. (Firm transmission service from the unit to the border of PJM and generation deliverability in PJM must be demonstrated by the start of the Delivery Year). Proposals must have firm deliverability to the PJM DEK Pricing Node. PPA/TA suppliers will have the responsibility to secure and provide all transmission services necessary for firm delivery of capacity and energy. PPA/TA supplier is responsible for all delivery and loss charges to the delivery point (PJM DEK Pricing Node).

J. Environmental Obligations

Coal fired generation will be subject to minimum environmental compliance and operational specifications in order to bid into the RFP. Both **Appendix A: Minimum Environmental**

Performance/Equipment for Coal Assets and Attachment C: Response Package, Section D: Coal Plant Environmental Specs contain the environmental and operational requirements of coal assets.

4.0 Instructions to Respondents

A. Overview of Process

B&M has set-up an e-mail address DukeEnergyKentuckyRFP@burnsmcd.com to collect all communications and questions from potential respondents as well as a web site <http://DukeEnergyKentuckyRFP.com/> to provide uniform communications, including updates and questions and answers as may be provided from time to time through this bidding process.

The bid process will include the activities and events as indicated in the schedule shown below. Proposal opening will be performed in private by B&M on a confidential basis. Proposals will be reviewed for completeness and offers that do not include the information requirements of this RFP will be notified and allowed five business days to conform. All conforming proposals will be sent to DEK for evaluation with the respondent's name and other identifying information redacted from the proposal. The evaluation of the bids will be performed by DEK with assistance provided by B&M. Respondents selected for the short list may or may not be invited to begin negotiations of final details of the offers.

Duke Energy Kentucky RFP Schedule

Event	Anticipated Date
Release of RFP	June 3, 2013
Notice of Intent to Bid	June 28, 2013
Proposal Submittal Deadline	August 15, 2013
Selection of Short List	Mid-November, 2013
Complete Negotiations	First Quarter 2014

B. Notice of Intent to Bid (Attachment A)

Each respondent is requested to advise B&M of its intent to submit a proposal by submitting a Notice of Intent to Bid (NOIB), attached hereto as **Attachment A: Notice of Intent to Bid**. The Notice of Intent to Bid form may be e-mailed, to the following address:
DukeEnergyKentuckyRFP@burnsmcd.com .

Respondent's contact information, as supplied in the NOIB, will provide a vehicle for B&M to communicate any updates/revisions to the RFP in a timely manner. Therefore, we encourage respondents to submit a NOIB by June 28, 2013.

C. Nondisclosure Agreement (Attachment B) and Response Package (Attachment C)

Respondents to this RFP are required to sign **Attachment B: Nondisclosure Agreement (NDA)** in its present form. Respondents to this RFP area also required to complete the **Attachment C: Response Package** to be eligible to compete in the solicitation process. Respondents should organize their proposals as described in **Section 4.0: Proposal Organization**. All applicable information contained in the proposal must be addressed, including:

Attachment B: Nondisclosure Agreement (NDA)
Attachment C: Response Package

All correspondence concerning this RFP should be sent via e-mail to:
DukeEnergyKentuckyRFP@burnsmcd.com .

Phone inquiries regarding this RFP will not be entertained. Individual questions submitted by a respondent to B&M will be answered with responses sent via email back to the respondent. Responses to frequently asked questions may be placed on the RFP Website for the benefit of all respondents, although care will be taken not to identify any specific respondent(s).

D. Deadline and Method for Submitting Proposals

All proposals submitted in response to this RFP must be received by B&M no later than **5:00 PM EST on August 15, 2013**. DEK will not guarantee evaluation of proposals associated with this RFP if submitted after this time.

Respondents are required to submit three (3) hard copies of each proposal and a CD with the spreadsheets provided in **Attachment C: Response Package** to the address below. It is further required that multiple proposals submitted by each respondent be identified separately. **Emailed proposals will not be accepted**. Financial statements, annual reports and other large documents may be referenced via a web site address.

Burns & McDonnell
Attn: Jon Summerville
9400 Ward Parkway
Kansas City, MO 64114

5.0 Proposal Organization

The proposal must include an executive summary, proposal limitations, the technical and cost aspects and relevant company data.

A. Executive Summary

Please provide an overview of the proposal and project. Include an overview of the technology, fuel type, project benefits and location. Please also complete **Section A: General Information** located in **Attachment C: Response Package** for all projects.

B. Proposal Limitations

Please describe in reasonable detail any economic, operational or system conditions that might affect the respondent's ability to deliver capacity and energy as offered.

C. Technical Proposal & Cost

Please describe in reasonable detail the source of the capacity and energy. For Purchase Power Agreement and Tolling Agreements, operational information and pricing should be given as indicated in the **Section B: PPA/TA Term Sheet** section located in **Attachment C: Response Package**. All proposed asset purchase proposals shall fill **Section C: Asset Purchase Term Sheet** section located in **Attachment C: Response Package**. Finally, all coal plants proposals regardless of PPA or purchase shall fill out the **Section D: Coal Plant Environmental Specs** also located in **Attachment C: Response Package**.

D. Company Data

Please include information on the respondent's corporate structure (including identification of any parent companies), a copy of the respondent's most recent quarterly report containing unaudited consolidated financial statements that is signed and verified by an authorized officer of respondent attesting to its accuracy, a copy of respondent's most recent annual report containing audited consolidated financial statements and a summary of respondent's relevant experience. Financial statements, annual reports and other large documents may be referenced via a web site address.

6.0 Proposal Evaluation and Contract Negotiations

A. Initial Proposal Review

After the proposal submittal deadline, B&M will privately open and review all responses for completeness and responsiveness. B&M may request that a respondent provide additional information or clarification to its original proposal. B&M will make such requests in writing via email and specify a deadline for compliance. Failure to provide the requested information or clarification by the deadline may result in disqualification of the proposal.

All conforming proposals will be sent to DEK for evaluation with the respondent's name and other identifying information redacted from the proposal.

B. Short List Development

DEK will then evaluate all proposals to meet both capacity and energy needs. Proposals will be evaluated based on present value economics and other factors that may include, but will not be limited to location, credit, relevant experience, technology feasibility, permitting, deliverability and impact to the DEK's balance sheet.

During the evaluation process, DEK may or may not choose to initiate discussions with one or more respondents. Discussions with a respondent shall in no way be construed as commencing contract negotiations.

C. Contract Negotiations

DEK will contact the respondent in writing of its interest in commencing contract negotiations. DEK's commencement of and participation in negotiations shall not be construed as a commitment to execute a contract. If a contract is negotiated, it will not be effective unless and until it is fully executed with the receipt of all required regulatory approvals.

7.0 Reservation of Rights

Nothing contained in this RFP shall be construed to require or obligate DEK to select any proposals or limit the ability of DEK to reject all proposals in its sole and exclusive discretion. DEK further reserves the right to withdraw and terminate this RFP at any time prior to the proposal deadline, selection of a short list or execution of a contract.

All proposals submitted to DEK pursuant to this RFP shall become the exclusive property of DEK and may be used for any reasonable purpose by DEK. DEK and B&M shall consider materials provided by respondent in response to this RFP to be confidential only if such materials are clearly designated as "Confidential." Respondents should be aware that their proposal, even if marked "Confidential", may be subject to discovery and disclosure in regulatory or judicial proceedings that may or may not be initiated by DEK. Respondents may be required to justify the requested confidential treatment under the provisions of a protective order issued in such proceedings. If required by an order of an agency or court of competent jurisdiction, DEK may produce the material in response to such order without prior consultation with the respondent.

Appendix A: Minimum Environmental Performance/Equipment for Coal Assets

Coal units must meet the follow specifications in order to be considered for this RFP.

Criteria Pollutants

The SO₂ emissions rate is not to exceed 0.15 lb/MMBtu on a 30 day rolling average basis, and the NO_x emissions rate is not to exceed 0.10 lb/MMBtu on a 30 day rolling average basis. The bidder must represent the methods by which the unit achieves the performance threshold including type, age and performance of emission control equipment. If emissions control equipment is planned, the bidder must describe the equipment, the status of construction, and the expected in service date. The bidder must also identify any known or anticipated local or regional air quality issues that have the potential to impose further reductions on SO₂ or NO_x including NAAQS nonattainment areas impacted by the unit and any air quality monitoring for the unit.

Mercury & Air Toxic Standards Rule

Mercury emission rates shall not exceed 1.2 lb/TBTU on a 30 day rolling average basis, filterable particulate matter emissions rates shall not exceed 0.03 lb/MMBtu FPM on a 30 day rolling average basis, and acid gas emissions shall not exceed 0.002 lb/MMBtu HCl on a 30 day rolling average basis. Please identify the compliance method for each type of pollutant. Also, if acid gas compliance shall be via the SO₂ alternative, please state. Alternative compliance demonstration methods for the pollutants under the MATS rule are also acceptable (for example, the lb/GWHR metrics or quarterly stack testing). Please identify any alternative methods. The bidder must represent the methods by which the unit can attain MATS compliance including the age, type and performance of installed or planned emission control equipment. Any sorbent systems such as SO₃ mitigation, activated carbon injection, FGC chemical additives, etc. should be identified whether installed or planned. If emissions control equipment is planned, the bidder must describe the equipment, the status of construction, and the expected in service date. The bidder must identify the planned outage periods during which it intends to perform the Work Practice Standard for organic HAP emissions and on whether on a 3 or 4 year frequency in the future. If the frequency is four years, then the qualifying neural network optimization system installed on the unit must be identified.

Unit Equipment Based Criteria

The unit shall be equipped with a dry flyash collection, conveyance and storage system. If dry ash conversion is planned, please describe the status of construction and the in service date. The unit shall be equipped with an on-site or accessible nearby permitted, lined landfill facility meeting proposed Subtitle D specifications, and/or demonstrate long-term contracts for the sale of all FGD waste produced and flyash collected. If landfill development is planned, the bidder must describe the status of construction and the expected in service dates. If the unit has wet flue gas desulfurization, then the waste water treatment system must be described. The unit shall be equipped with a closed cycle cooling system which either cooling towers or a closed cooling water

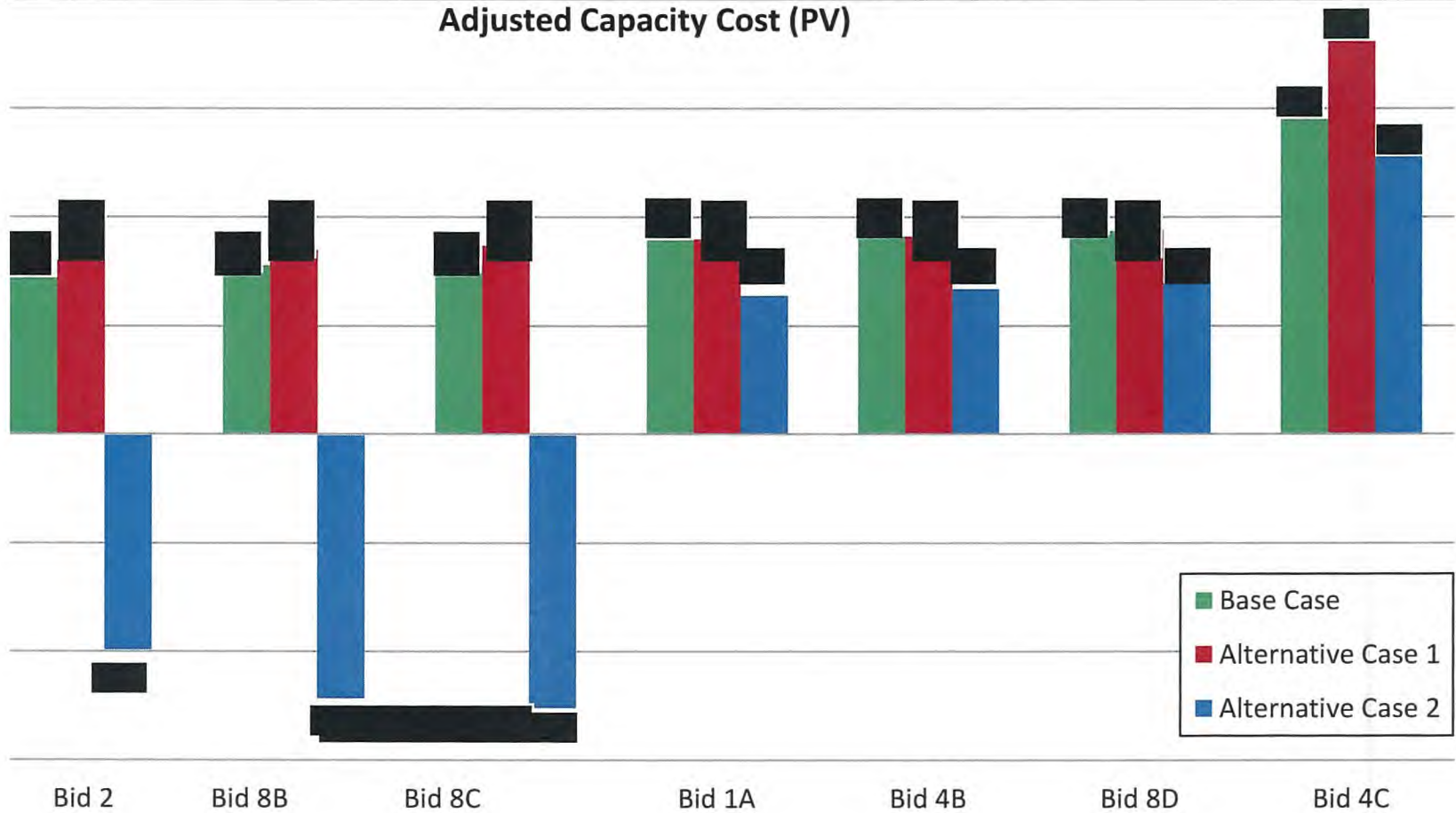
impoundment that is not Waters of the US. Please identify the cooling system makeup water source and the type of intake structure.

Bid	Company/ Plant	RFP Compliant	Type	Tech	Contract	Capacity (UCAP)	Purchase Price or Capacity Fee
1A	[REDACTED]	Yes	Tolling Agreement	CT	6/1/2015	165	[REDACTED]
1B	[REDACTED]	PPA MW Exceeded 200 MW	Tolling Agreement	CT	6/1/2015	330	[REDACTED]
1C	[REDACTED]	PPA MW Exceeded 200 MW	Tolling Agreement	CT	6/1/2015	495	[REDACTED]
1D	[REDACTED]	Purchase MW Exceeded 200 MW	Acquisition	CT	6/1/2015	Minimum of 330 MW	[REDACTED]
2	[REDACTED]	Yes	Acquisition	Coal	Immediately	172	[REDACTED]
3	[REDACTED]	PPA MW Below 50 MW Minimum	PPA	Wind	12/31/2015	15.47	[REDACTED]
4A	[REDACTED]	Yes	Tolling Agreement	CC	6/1/2017	200	[REDACTED]
4B	[REDACTED]	Yes	PPA	CC - Cap Only	6/1/2017	200	[REDACTED]
4C	[REDACTED]	Yes	Acquisition	CC	6/1/2017	275.4 (includes DF)	[REDACTED]
5A	[REDACTED]	Did Not Meet Minimum Coal Env Spec	Acquisition	Coal	Negotiable	Up to 402	[REDACTED]
5B	[REDACTED]	Did Not Meet Minimum Coal Env Spec	Lease	Coal	Negotiable	Up To 402	[REDACTED]
5C	[REDACTED]	Did Not Meet Minimum Coal Env Spec	Tolling Agreement	Coal	Negotiable	200 (Up to 402)	[REDACTED]
5D	[REDACTED]	Did Not Meet Minimum Coal Env Spec	Acquisition	Coal	Negotiable	Up to 425.4	[REDACTED]
5E	[REDACTED]	Did Not Meet Minimum Coal Env Spec	Lease	Coal	Negotiable	Up to 425.4	[REDACTED]
5F	[REDACTED]	Did Not Meet Minimum Coal Env Spec	Tolling Agreement	Coal	Negotiable	200 (Up to 425.4)	[REDACTED]

Bid	Company/ Plant	RFP Compliant	Type	Tech	Contract	Capacity (UCAP)	Purchase Price or Capacity Fee
6	[REDACTED]	Did Not Meet Minimum Coal Env Spec	Acquisition	Coal	1/1/2014	181 (ICAP Bid)	[REDACTED]
7A1	[REDACTED]	Yes	Tolling Agreement	CC	6/1/2017	200 (ICAP)	[REDACTED]
7A2	[REDACTED]	Yes	Tolling Agreement	CC	6/1/2017	200 (ICAP)	[REDACTED]
7B1	[REDACTED]	Yes	Tolling Agreement	CT	6/1/2017	149 (ICAP)	[REDACTED]
7B2	[REDACTED]	Yes	Tolling Agreement	CT	6/1/2017	149 (ICAP)	[REDACTED]
7C1	[REDACTED]	Yes	Tolling Agreement	CT	6/1/2017	179 (ICAP)	[REDACTED]
7C2	[REDACTED]	Yes	Tolling Agreement	CT	6/1/2017	179 (ICAP)	[REDACTED]
8A	[REDACTED]	Did Not Meet Minimum Coal Env Spec	Acquisition	Coal	6/1/2017	203	[REDACTED]
8B	[REDACTED]	Yes	Acquisition	Coal	6/1/2017	182.5	[REDACTED]
8C	[REDACTED]	Yes	Acquisition	Coal	6/1/2017	182	[REDACTED]
8D	[REDACTED]	Yes	Acquisition	CT	6/1/2017	198	[REDACTED]
8E	[REDACTED]	Yes	Tolling Agreement	CC	6/1/2017	200	[REDACTED]
9	[REDACTED]	Did Not Meet Minimum Coal Env Spec	Tolling Agreement	CC of CC/Coal	6/1/2017	100 MW CC	[REDACTED]
9	[REDACTED]	Did Not Meet Minimum Coal Env Spec	Tolling Agreement	Coal of CC/Coal	6/1/2017	100 MW Coal	[REDACTED]
10	[REDACTED]	Yes	Tolling Agreement	CC	6/1/2017	200 (ICAP) Includes DF	[REDACTED]

2013 KY RFP Rankings

Adjusted Capacity Cost (PV)



COMMONWEALTH OF KENTUCKY
BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

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-_____

DIRECT TESTIMONY OF
STEVE IMMEL
ON BEHALF OF
DUKE ENERGY KENTUCKY, INC.

June 13, 2014

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ATTACHMENTS:

- SI-1 The East Bend Unit 2 Operation Agreement Between The Cincinnati Gas & Electric Company and The Dayton Power and Light Company
- SI-2 Letter granting MF6 a Brief Extension for MATS Compliance

I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Steve Immel, and my business address is 1000 East Main Street,
3 Plainfield, Indiana 46168.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as Vice
6 President of Midwest Regulated Operations. DEBS provides various
7 administrative and other services to Duke Energy Kentucky and other affiliated
8 companies of Duke Energy Corporation (Duke Energy Corp.).

9 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND**
10 **PROFESSIONAL EXPERIENCE.**

11 A. I obtained a Bachelor of Science in Civil Engineering from the University of
12 Kentucky and a Master of Business Administration from Queens University in
13 Charlotte, North Carolina. I hold a license as a Professional Engineer in the states
14 of North Carolina and South Carolina. I have 34 years of experience in the
15 electric utility industry, including 25 years in the production of electricity.

16 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS VICE**
17 **PRESIDENT OF MIDWEST REGULATED OPERATIONS.**

18 A. As Vice President of Midwest Regulated Operations, I am responsible for the
19 safe, reliable, reasonable, and adequate generation serving Duke Energy Kentucky
20 and Duke Energy Indiana customers.

1 Q. HAVE YOU EVER TESTIFIED BEFORE THE KENTUCKY PUBLIC
2 SERVICE COMMISSION?

3 A. No.

4 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS
5 PROCEEDING?

6 A. The purpose of my testimony is to provide a general overview of Duke Energy
7 Kentucky's generating stations and more specifically, describe how Duke Energy
8 Kentucky currently operates the East Bend Generating Station (East Bend), as
9 well as how the Company will manage the station going forward. I will describe
10 the many benefits that the Company's proposal to purchase the remaining 31%
11 interest in East Bend (East Bend Purchase) from the Dayton Power and Light
12 Company (DP&L) provides to customers and why the East Bend Purchase is in
13 the public interest.

II. GENERAL DESCRIPTION OF DUKE ENERGY KENTUCKY'S
GENERATION STATIONS

14 Q. PLEASE PROVIDE A BRIEF OVERVIEW OF HOW DUKE ENERGY
15 KENTUCKY MEETS ITS KENTUCKY LOAD OBLIGATIONS.

16 A. Duke Energy Kentucky currently owns and operates approximately 1,077 net
17 installed megawatts (MW) of generating capacity, consisting of a 414 MW share
18 of East Bend Unit 2, a coal-fired, base load generating unit in Rabbit Hash,
19 Kentucky (Duke Energy Kentucky's 414 MW comprises 69% of the unit's total
20 installed net generating capacity); Miami Fort Unit 6, a 163 MW
21 intermediate/base load, coal-fired generating unit located in North Bend, Ohio

1 (MF6); and the six-unit approximately 500 MW (net summer rating with inlet
2 cooling) Woodsdale Generating Station, consisting of peak load, gas or propane-
3 fired generating units located in Trenton, Ohio (Woodsdale). The net ratings
4 represent the amount of power that the Company can dispatch from the plants
5 after some portion of the gross power output is used to power the plant
6 machinery. These assets are dispatched into PJM Interconnection L.L.C. (PJM),
7 which maintains responsibility for the reliability for the transmission region
8 within its footprint.

9 **Q. PLEASE FURTHER DESCRIBE THE MF6 GENERATING UNIT.**

10 A. MF6 is a coal-fired base/intermediate load unit located at Miami Fort Station
11 along the Ohio River in Hamilton County, Ohio, that was commissioned in 1960.

12 It is one of three coal-fired units at the Miami Fort Generating Station.
13 Duke Energy Kentucky wholly owns Unit 6, while Units 7 and 8 are jointly
14 owned by Duke Energy Commercial Asset Management (64%) and DP&L
15 (36%).¹ The installed net capacity for Units 7 and 8 are 510 MW and 510 MW,
16 respectively. The station has river facilities to allow for barge delivery of coal.
17 MF6 is designed to burn low- to high sulfur eastern bituminous coal and achieved
18 a net unit heat rate year-to-date through April 2014 of 10,208 BTU/kWh. The
19 major pollution control features installed on the unit are high-efficiency
20 electrostatic precipitators. The unit had a temporary selective non-catalytic
21 reduction system for nitrogen oxide (NO_x) reduction, which did not perform as

¹ Duke Energy Ohio was obligated to transfer its ownership of generation to a non-regulated affiliate by December 31, 2014. Duke Energy Ohio completed the transfer of its interest in the Miami Fort Generating station to Duke Energy Commercial Asset Management effective May 1, 2014.

1 well as anticipated, and therefore was replaced in 2006 by second-generation low
2 NO_x burners to reduce NO_x emissions. MF6 is directly connected to the Duke
3 Energy Ohio, Inc., (Duke Energy Ohio) - Kentucky (DEOK) 138 kilovolt (kV)
4 high voltage transmission system operated by Duke Energy Ohio.

5 **Q. PLEASE DESCRIBE THE WOODSDALE GENERATING STATION.**

6 A. Woodsdale is a six-unit combustion turbine (CT) station located in Butler County,
7 Ohio, just north of Cincinnati, with a collective installed net winter capability of
8 564 MW and a net summer capability of about 500 MW (installed capacity
9 including inlet cooling). Woodsdale is designed for peaking service, and it has
10 dual fuel capability (natural gas and propane) and black start capability. Black
11 start capability means that the station has the ability to initiate a recovery of a
12 substantial portion of load without relying on energy from outside sources if the
13 regional grid experiences a blackout. The black start capability is initiated by
14 either an Allison 501-KB gas turbine or 2X Cummins 1750 Diesel engines that
15 serve as a back-up power source and allows the station to start generating energy
16 without power from the electric grid.

17 Woodsdale is connected to two separate gas transmission companies,
18 Texas Eastern Transmission Company (TETCO) and Texas Gas Transmission
19 Company that transport the natural gas to supply the station. However, currently
20 the TETCO pipeline is the only pipeline in use at the station.

21 **Q. PLEASE DESCRIBE THE EAST BEND GENERATING STATION.**

22 A. East Bend is a 600 MW (net installed capacity) coal-fired base load unit located
23 along the Ohio River in Boone County, Kentucky, that was commissioned in

1 1981. East Bend is jointly owned by Duke Energy Kentucky (414 net MW or
2 69%) and DP&L (186 net MW or 31%). The duties and responsibilities between
3 Duke Energy Kentucky and DP&L regarding the operation of the plant are
4 established through the terms of the East Bend Unit 2 Operation Agreement
5 between The Cincinnati Gas & Electric Company and The Dayton Power and
6 Light Company (Operation Agreement). This Operation Agreement has been in
7 place since the East Bend's commercial operation date. Duke Energy Kentucky,
8 as the majority owner of East Bend, is responsible for the operation, maintenance,
9 and staffing of the plant. Attachment SI-1 is a true and accurate copy of the
10 Operation Agreement.

11 East Bend was originally planned for up to four coal-fired units but only
12 one unit (Unit 2) was constructed. The station has river facilities to allow barge
13 deliveries of coal and lime. East Bend is designed to burn low- to high-sulfur
14 eastern bituminous coal and achieved a net plant heat rate year-to-date through
15 December 2013 of 11,105 BTU/kWh. The major pollution control features are: a
16 mechanical draft cooling tower; a high-efficiency hot side electrostatic
17 precipitator with dry flyash collection; a lime-based flue gas desulfurization
18 (FGD) system; and a selective catalytic reduction (SCR) system designed to
19 reduce NO_x emissions by 85%. The FGD system was upgraded in 2005 to
20 increase the sulfur dioxide (SO₂) emissions removal to an average of 97%. The
21 station electrical output is directly connected to the Duke Energy Ohio 345 kV
22 transmission system. Duke Energy Kentucky currently operates a permitted

1 landfill at East Bend (East Bend Landfill), which is used for the disposal of waste
2 products resulting from the unit's FGD and other waste material.

3 **Q. PLEASE DESCRIBE THE STATUS OF THE CURRENT LANDFILL**
4 **LOCATED AT THE EAST BEND GENERATING STATION.**

5 A. The current landfill has been in place since the station was constructed and is
6 reaching its capacity. The Company will soon need to either construct a new
7 landfill or arrange to transport its waste to another landfill operated by a third
8 party. The presence of an onsite landfill has permitted Duke Energy Kentucky to
9 manage its costs of environmental compliance and provide safe and reliable
10 electric service by eliminating the need to transport and pay to dispose of the
11 generator waste in commercial landfills. The existing East Bend Landfill is
12 projected to reach its capacity in the next four to six years. The Company has a
13 plan to eventually construct a new landfill, with approximately 1,093 acres of
14 land, located adjacent to East Bend. The majority of the land is currently jointly
15 owned by DP&L (31%) and Duke Energy Kentucky's parent company, Duke
16 Energy Ohio (69%). Its affiliate, Tri-State Improvement Company (Tristate) owns
17 a small portion. As part of the transaction being proposed in this proceeding,
18 Duke Energy Kentucky will also acquire DP&L's 31% interest in this
19 surrounding land.² And in a second transaction, Duke Energy Kentucky will be
20 acquiring the majority interest in this land from Duke Energy Ohio and Tristate.
21 Mr. Geers more fully describes this landfill in his testimony.

² The additional land surrounding the existing East Bend site that will be transferred to Duke Energy Kentucky includes DP&L's 31% interest in approximately 940 acres.

1 Q. ARE THE GENERATION PLANTS THAT YOU DESCRIBED USED FOR
2 SERVING DUKE ENERGY KENTUCKY'S NATIVE LOAD
3 CUSTOMERS?

4 A. Yes. The three generation plants have performed well historically. The stations
5 are quality generating assets relative to the age and condition of comparable
6 generating plants. The plants have been well maintained and are in good working
7 order. Fuel supplies are readily available. There are no transmission constraints.

8 Q. HAVE DUKE ENERGY KENTUCKY AND ITS CUSTOMERS
9 BENEFITTED FROM OWNING THESE PLANTS?

10 A. Yes. These plants have been providing safe, reliable, reasonable, and adequate
11 electric generation service to Duke Energy Kentucky's customers for many years.

III. DUKE ENERGY KENTUCKY'S OPERATION OF EAST BEND

12 Q. PLEASE DESCRIBE HOW DUKE ENERGY KENTUCKY CURRENTLY
13 OPERATES EAST BEND.

14 A. As I previously mentioned, Duke Energy Kentucky, as the majority owner, is
15 responsible for staffing, operating, and maintaining East Bend. Duke Energy
16 Kentucky is responsible for procuring the fuel for the entire station and
17 performing all necessary maintenance. East Bend provides the base load
18 generation necessary to provide safe, reliable, reasonable, and adequate service to
19 Duke Energy Kentucky's electric customers.

20 Currently the Company has 92 full-time employees at the plant. East Bend
21 is located in PJM and, as more fully explained by witness John Verderame, the
22 Company participates in the PJM capacity market as a Fixed Resource

1 Requirement (FRR) entity. East Bend is a component of the FRR capacity
2 dedicated to the Company's customers and its energy is offered into both the day-
3 ahead and real time energy markets in PJM.

4 **Q. HOW HAS EAST BEND PERFORMED IN TERMS OF RELIABILITY?**

5 A. In general, East Bend is a reliable station and performs similarly to other plants of
6 its size and age. Like stations of similar age and design, East Bend has recently
7 dealt with boiler performance issues. These boiler issues have resulted in several
8 outages at the station, but have been targeted to be addressed as part of an
9 ongoing scheduled maintenance outage. These issues were resolved are expected
10 to be resolved during the planned outage during the Spring of 2014.

11 **Q. PLEASE DESCRIBE WHAT ACTIONS THE COMPANY IS**
12 **CURRENTLY DOING TO MAINTAIN HIGH LEVELS OF FUTURE**
13 **RELIABILITY AT EAST BEND.**

14 A. Duke Energy Kentucky follows a regular maintenance schedule for all of its
15 plants, including East Bend. Generally speaking, the stations have annual
16 maintenance activities scheduled during off-peak seasons in the spring or fall. The
17 regular maintenance is typically 1 to 2 weeks of planned outage in duration. Every
18 other year, a longer term outage is scheduled for more significant projects.
19 Approximately every ten years, a major outage of eight to twelve weeks takes
20 place. East Bend has completed a longer outage which lasted twelve weeks. The
21 primary driver of the duration of the outage is due to extensive boiler repairs.
22 There are other areas of major work scope such as the intermediate pressure
23 turbine that is being overhauled. The precipitator is undergoing major structural

1 work and a new vacuum flyash system is being installed. The stack is getting a
2 new brick liner. At the end of the outage a boiler chemical cleaning will take
3 place to clean the inside of boiler tubes. Various other maintenance activities are
4 taking place to ensure the reliability of the unit is maintained for future operations
5 of the plant.

**IV. ENVIRONMENTAL CONSIDERATIONS AT DUKE ENERGY
KENTUCKY'S GENERATING STATIONS**

6 **Q. PLEASE BRIEFLY DESCRIBE THE MOST SIGNIFICANT FEDERAL**
7 **ENVIRONMENTAL REGULATIONS CURRENTLY IMPACTING DUKE**
8 **ENERGY KENTUCKY'S GENERATING STATIONS.**

9 A. There are several federal environmental regulations promulgated by the United
10 States Environmental Protection Agency (EPA) that impact the Company's
11 generating stations, particularly the two coal-combustion stations MF6 and East
12 Bend. Duke Energy Kentucky witness J. Michael Geers describes these
13 regulations and the Company's compliance thereunder in his direct testimony.

14 In summary, the most significant regulations that impact the Company's
15 generating fleet are the Clean Air Act and Clean Water Act, which impose
16 multiple, often overlapping regulations and permitting programs; the National
17 Pollutant Discharge Elimination System (NPDES) permit that governs the quality
18 of water discharged from a plant, as well as thermal discharges and temperature
19 impacts on cooling water sources; and the Mercury and Air Toxics Standards
20 (MATS) rule. The MATS rule includes emission limits for mercury, certain non-
21 mercury metals, and acid gases (as HCl). The new standards affect coal- and

1 oil-fired power plants. These regulations are the main drivers of Duke Energy
2 Kentucky's compliance strategies for its plants.

3 **Q. HOW IS DUKE ENERGY KENTUCKY'S COAL-FIRED GENERATION**
4 **FLEET POSITIONED IN TERMS OF COMPLIANCE WITH THESE**
5 **REGULATIONS?**

6 A. As I previously described, East Bend is equipped with environmental controls
7 that, coupled with the burning of the appropriate qualities of coal, position the
8 station well to comply with the aforementioned environmental regulations.

9 MF6, alternatively, is an unscrubbed unit that has an air permit limiting
10 SO₂ emissions to 5.0 lbs/mmBTU, high-efficiency cold side electrostatic
11 precipitators, and second-generation low NO_x burners to reduce NO_x emissions.
12 Although MF6 is currently in full compliance with its existing operating permits,
13 it is unable to comply with the new MATS requirements absent significant
14 environmental retrofit and operational changes.

15 The Company has been evaluating the feasibility of the ongoing operation
16 of MF6 in light of MATS; and this was the primary driver for the Company's
17 decision to explore new capacity possibilities through the request for proposal
18 (RFP) process described by Duke Energy Kentucky witness James Northrup. The
19 Kentucky Public Service Commission's (Commission) approval of the East Bend
20 Purchase, as proposed, will enable the Company to make its decision whether to
21 retire MF6 and maintain sufficient capacity to meet its PJM capacity obligations,
22 while allowing our customers to avoid the costs of additional environmental
23 retrofits on that unit.

1 **Q. WHAT IS THE COMPLIANCE TIMELINE FOR MATS?**

2 A. MATS compliance is scheduled to become effective on April 16, 2015. Duke
3 Energy Kentucky was able to obtain from the Ohio Environmental Protection
4 Agency (OEPA) a short extension of the compliance date of the rule for MF6 to
5 align with the PJM planning year ending May 31, 2015. Therefore, Duke Energy
6 Kentucky must make its decision to either retrofit the unit to comply with MATS
7 or retire the unit by that date. Attachment SI-2 is a true and accurate copy of the
8 letter granting the brief extension for MF6.

9 **Q. WHAT ADDITIONAL ENVIRONMENTAL RETROFITS WOULD NEED**
10 **TO BE INSTALLED AT MF6 IN ORDER FOR THE UNIT TO COMPLY**
11 **WITH MATS?**

12 A. Although MF6 can be made to comply with the MATS rule, substantial
13 investment is required to achieve MATS compliance. Also, the investment would
14 likely only provide a short-term solution when the unit's age and other emerging
15 environmental regulations are factored into the equation.

16 To evaluate MATS compliance, Duke Energy Kentucky conducted
17 extensive testing on MF6 in the fall of 2012 in order to understand if the unit
18 could be MATS compliant without the installation of more traditional capital-
19 intensive environmental controls such as a FGD system or baghouse. The
20 Company tested the unit's performance on the three key MATS emissions
21 (mercury, FPM³, and HCl) using different types of in-duct reagent injection and
22 while combusting low-sulfur, low-chlorine western coal. This testing showed that

³ FPM – Filterable Particulate Matter.

1 the unit is capable of MATS compliance using a western
2 bituminous/subbituminous coal blend to reduce HCl emissions and activated
3 carbon injection (ACI) to reduce mercury emissions. The existing electrostatic
4 precipitators are large enough that the unit also stayed in compliance with FPM
5 despite the added particulate loading from the ACI. Additional HCl reduction
6 could be achieved with the use of dry sorbent injection (DSI), such as hydrated
7 lime. The DSI injection may not be necessary, provided Duke Energy Kentucky
8 could use facility-wide averaging with Miami Fort Units 7 and 8. As Mr. Geers
9 will explain further, Duke Energy Ohio's announced its intention to divest itself
10 of all of its non-regulated generating assets, including Miami Fort units 7 & 8,
11 which would make this option more difficult. The Company spent approximately
12 \$600,000 to conduct this testing for the benefit of our customers.

13 The investment just to comply with MATS would include additional
14 capital and operating and maintenance (O&M) costs for the ACI system
15 equipment, emission monitoring equipment, and coal handling safety upgrades for
16 the use of the high-cost western coal. Based on the Company's testing of water
17 quality at the unit during reagent injection, the unit would also need to be
18 converted to dry flyash handling. Duke Energy Kentucky believes the fly ash
19 conversion could be done by tying the unit into the Miami Fort Unit 7 dry fly ash
20 handling system. However, mixing the Unit 6 and 7 ash would likely make the
21 Unit 7 ash unsalable and would necessitate providing compensation to the Miami
22 Fort Unit 7 owners for lost revenue from fly ash sales as well as additional costs
23 to landfill the material instead.

1 **Q. WHAT IS THE ESTIMATED COST OF THIS RETROFIT?**

2 A. Duke Energy Kentucky estimated the capital cost to perform these retrofit
3 activities as approximately \$7.0 million (in year 2012 dollars, without AFUDC).
4 Some escalation will have occurred since this estimate was compiled two years
5 ago. There is an additional cost associated with the allocated landfill space for the
6 dry fly ash disposal as part of the MF6 retrofit, as well as the impacts the MF6
7 conversion will have on the Miami Fort Unit 7 ash. This incremental cost was
8 estimated to be approximately \$1.2 million. We further estimate an incremental
9 annual O&M cost for the equipment and reagents as approximately \$1.0 million
10 per year. Lastly, our analysis included the use of the high-cost western coal blend.
11 The additional fuel and other expenses would serve to increase the operating cost
12 of MF6, thus reducing the unit's overall dispatch into PJM, making the unit less
13 valuable in terms of the energy produced and needed to serve customers. Finally,
14 it is noteworthy to mention that this retrofit was a temporary solution to only
15 address the MATS compliance issue and did not result in a long-term viable
16 solution for capacity.

17 **Q. OTHER THAN COST CONSIDERATIONS FOR MATS COMPLIANCE,**
18 **ARE THERE OTHER REASONS WHY THE COMPANY WOULD**
19 **REPLACE THE MF6 CAPACITY AND RETIRE THE UNIT?**

20 A. Yes. MATS is but one environmental regulation that will impact the life of the
21 unit. There are other proposed and emerging regulations that will impact MF6, as
22 well as East Bend, in the near future. MF6 was commissioned in 1960 and is
23 nearing the end of its life. Any additional environmental retrofits for MATS are

1 not likely to extend MF6's life in a material manner. Although MATS may be the
2 primary driver for the Company's evaluation whether to retire the unit now, it is
3 merely accelerating the decision by a few years. MF6 will need to be retired
4 eventually and the East Bend Purchase solution will not likely be available in the
5 future.

6 Also, as this Commission is aware, MF6, while owned by Duke Energy
7 Kentucky, was operated by Duke Energy Ohio as part of that company's
8 operation of its Units 7 and 8 at Miami Fort Station. Duke Energy Ohio is
9 obligated to transfer its ownership of all of its legacy and directly owned
10 generating fleet to an affiliated generating company by December 31, 2014. The
11 transfer of Miami Fort Units 7 and 8 was completed on May 1, 2014. In addition,
12 Duke Energy Corp. has recently announced that it intends to sell this Midwest
13 Commercial Generation Fleet to a third party. Therefore, the Company's ability to
14 rely upon other Miami Fort units to effect MF6 compliance is limited.

15 **Q. ARE THERE OTHER PROPOSED OR EMERGING ENVIRONMENTAL**
16 **REGULATIONS THAT COULD IMPACT DUKE ENERGY**
17 **KENTUCKY'S GENERATING STATIONS IN THE FUTURE?**

18 A. Yes. Mr. Geers discusses these regulations in his testimony. The most significant
19 regulations include the Cross State Air Pollution Rule (CSAPR); new National
20 Ambient Air Quality Standard (NAAQS) for SO₂ and ozone; the Clean Water Act
21 "316(b)" intake structures rule; the Steam Electric Effluent Limitations
22 Guidelines revisions (ELG); the Coal Combustion Residuals (CCR) rule; and
23 New Source Performance Standards (NSPS) for greenhouse gases (GHG) for new

1 and existing generating units. In addition, on June 2, 2014, the EPA released its
2 proposed Clean Power Plan under Section 111d of the Clean Air Act aimed at
3 CO2 reductions from 2005 levels. Because this is still a proposal, the ultimate
4 impact of this rule cannot be determined at this time.

5 **Q. ARE THERE ANY FUTURE ENVIRONMENTAL CONTROLS THAT**
6 **WOULD NEED TO BE INSTALLED AT EAST BEND TO COMPLY**
7 **WITH ANY OF THE EMERGING REGULATIONS YOU MENTIONED?**

8 A. Yes, but given East Bend's existing suite of controls, the Company anticipates
9 that the impact will be relatively small. Duke Energy Kentucky foresees the
10 possible need to convert the unit to dry bottom ash handling (in addition to the
11 existing dry fly ash handling system) and close the existing bottom ash pond due
12 to the CCR rule. Along with that, the Company would install additional waste
13 water treatment capacity to comply with the ELG revisions. With the existing
14 cooling tower, East Bend should only experience very minor costs for compliance
15 with the 316(b) rule. Lastly, in anticipation of tighter NOx emission limits from
16 either CSAPR implementation or ozone NAAQS, the Company projects a need to
17 upgrade the existing SCR system to remove additional NOx emissions. The
18 Company included placeholder cost estimates for these projects in its economic
19 analysis of the unit for purchase. With respect to potential GHG regulations, the
20 Company is reviewing the EPA's proposed Clean Power Plan issued on June 2,
21 2014. Since this is a new action, and a proposal at that, the Company cannot yet
22 predict what impact it may have on Duke Energy Kentucky's generating assets.

1 However, as discussed by Mr. Northrup, the Company did include a carbon price
2 in our modeling to represent this risk.

V. THE EAST BEND PURCHASE

3 **Q. PLEASE EXPLAIN WHY THIS PURCHASE IS BENEFICIAL TO DUKE**
4 **ENERGY KENTUCKY'S CUSTOMERS FROM AN OPERATIONAL**
5 **STANDPOINT.**

6 A. Duke Energy Kentucky's parent company, Duke Energy Ohio, supervised the
7 construction of the East Bend, MF6, and Woodsdale generating stations. Prior to
8 the transfer of these plants to Duke Energy Kentucky, they were operated and
9 maintained by Duke Energy Ohio personnel. These plants have been in the Duke
10 Energy family of businesses since their inception. Therefore, Duke Energy
11 Kentucky knows that the plants, and East Bend in particular, were well
12 constructed and have been well maintained. Since the East Bend Purchase is an
13 acquisition of the remaining minority interest in the existing plant, Duke Energy
14 Kentucky does not need to face any uncertainty as to any real property
15 acquisition, siting, permitting, construction, or operational issues. This is a
16 significant benefit to the Company's customers in that they can be assured of
17 continuing to receive service from a known and reliable resource.

18 East Bend has been well maintained and is in good working order. Coal
19 supplies for the plant are readily available. There are no known environmental
20 considerations that could lead to significant derates. There are no transmission
21 constraints associated with the plant. East Bend has provided reliable service for

1 Duke Energy Kentucky's customers in the past and will continue to do so for
2 many years to come.

3 **Q. WHAT IS THE COMPANY'S CURRENT ANNUAL AVERAGE COST OF**
4 **OPERATING THE EAST BEND STATION?**

5 A. The average annual O&M cost over the last five years for East Bend is
6 approximately \$26 million (Duke Energy Kentucky's share). The projected 2014
7 annual O&M cost for East Bend is \$34.3 million; this is higher than the average
8 due to 2014 being a major planned outage year, as I previously discussed.

9 **Q. WHAT IS THE ESTIMATED INCREMENTAL ANNUAL O&M**
10 **EXPENSE ASSOCIATED WITH ACQUIRING THE REMAINING 31%**
11 **INTEREST IN EAST BEND?**

12 A. Based upon average FERC Form 1 data from the last three years for DP&L's
13 share of East Bend, the estimated typical annual incremental O&M expense
14 associated with DP&L's 31% interest in East Bend is approximately \$12.2
15 million.

16 **Q. HOW DOES THE INCREMENTAL O&M EXPENSE FOR THE 31%**
17 **INTEREST IN EAST BEND COMPARE TO THE ANNUAL**
18 **OPERATIONAL COST OF MF6 THAT WILL EVENTUALLY BE**
19 **AVOIDED ONCE THAT UNIT IS RETIRED?**

20 A. The typical average annual O&M expense based upon five years of FERC Form 1
21 data associated with MF6 is approximately \$8.1 million. Although this is a lower
22 expense than the proposed interest in East Bend, keep in mind that the higher
23 O&M expense for East Bend is predominantly due to the suite of advanced

1 environmental controls already existing on that unit. As I have discussed, where
2 the operation of East Bend is thus sustainable, the operation of MF6 is not.
3 Moreover, if MF6 were to undergo the retrofits I described above, its average
4 annual O&M expense would increase.

5 **Q. WOULD THE EAST BEND PURCHASE RESULT IN A WASTEFUL**
6 **DUPLICATION OF FACILITIES?**

7 A. No, for several reasons. First, Duke Energy Kentucky already owns the majority
8 interest in East Bend. The Company is not constructing any new facilities; this is
9 simply a purchase of the remaining interest in the station. The personnel at East
10 Bend are all Duke Energy Kentucky employees. Again, no new personnel are
11 being added outside of normal staffing variances that typically happen. The
12 Company will be acquiring DP&L's interest of 186 MWs of net installed capacity
13 at the station, which eventually will replace the 163 MWs of net installed capacity
14 at MF6 if retired. The incremental approximate 20 MWs simply provide a reserve
15 for the Company to meet its customer needs and, as more described by Mr.
16 Verderame, will be used to meet PJM reliability obligations.

17 **Q. DO YOU BELIEVE THE COMPANY'S PROPOSAL TO PURCHASE THE**
18 **REMAINING 31% INTEREST IN EAST BEND IS IN THE PUBLIC**
19 **INTEREST?**

20 A. Yes. This purchase provides an opportunity for additional well-controlled
21 generating capacity at a very attractive price, and will provide many operational
22 economies/efficiencies to Duke Energy Kentucky and, in turn, benefits for its
23 customers.

1 **Q. PLEASE DESCRIBE THESE OPERATIONAL ECONOMIES AND**
2 **EFFICIENCIES.**

3 A. The purchase of the remaining 31% interest in East Bend will eliminate the
4 current joint ownership structure with DP&L and Duke Energy Kentucky will
5 become the sole owner and operator of the station. This will provide operational
6 efficiencies as Duke Energy Kentucky will then be the sole decision maker
7 regarding the ongoing operation and maintenance of the station for the sole
8 benefit of its Kentucky customers. This will also help resolve tension in differing
9 operational philosophies between Duke Energy Kentucky, a regulated, fully
10 integrated utility, and DP&L, whose operational philosophy is now more akin to
11 that of a non-regulated merchant generator where customer load is not directly
12 served by company-owned generation.

13 The East Bend Purchase will also allow Duke Energy Kentucky to make a
14 decision regarding the MF6 retirement because the Company will have an
15 alternative to replace the energy and capacity if MF6 is retired. Mr. Verderame
16 explains how the Company will use the East Bend capacity in this regard in his
17 testimony. If and when MF6 is retired, the O&M expense associated with running
18 the station will eventually be reduced, if not completely eliminated. It will be
19 replaced by the incremental O&M to run all of East Bend. Also, historically, the
20 fuel expense for East Bend has generally been lower than that of MF6.

21 Further, as explained by Mr. Northrup, the East Bend Purchase decision
22 was not one made in a vacuum. Rather, it was the result of an independent RFP

1 process undertaken with the objective to find the least-cost, long-term solution to
2 meet customer demand and satisfy environmental requirements.

3 **Q. PLEASE EXPLAIN THE ISSUE REGARDING THE STATUS OF THE**
4 **JOINT OWNERSHIP RELATIONSHIP.**

5 A. The current Operation Agreement which has been in place since the plant's initial
6 operation, has recently expired by its terms. This agreement became effective on
7 the date of commercial operation, March 24, 1981 and lasted for a thirty-three
8 year term. Duke Energy Kentucky and DP&L had been in discussions for more
9 than a year to try to come to terms on a mutually acceptable extension or new
10 agreement. To date, this negotiation has been without success. Further
11 complication now exists because of changes in Ohio's regulatory structure; DP&L
12 is obligated to transfer its ownership interest in all of its generation out of the
13 utility. It is also my understanding that DP&L has indicated that it may actually
14 sell all of its generation ownership interests, including East Bend, to a third party.

15 **Q. DOES THE PURCHASE AND SALE AGREEMENT BETWEEN DUKE**
16 **ENERGY KENTUCKY AND DP&L ADDRESS THIS ISSUE?**

17 A. Yes. The Purchase and Sale Agreement allows the two companies to continue to
18 operate under the current Operating Agreement with some modifications until the
19 close of the transaction. There are cost caps present for DP&L to mitigate its
20 exposure for investing in a plant which it will not own in the future and
21 protections for Duke Energy Kentucky so it is not paying for more than its fair
22 share. The biggest obstacle in the joint ownership relationship of recent times, has
23 been the current spring 2014 outage whereby DP&L disagrees with the scope of

1 the work that Duke Energy Kentucky believes is necessary to continue the long-
2 term operation and reliability of the plant. While this outage has been planned for
3 several years, and DP&L had previously agreed to some of the work performed,
4 DP&L is no longer willing to invest in East Bend's long-term operation. The
5 Purchase and Sale Agreement accounts for this through a final settlement of the
6 purchase price that, among other things, allows Duke Energy Kentucky to count
7 any unpaid portion of DP&L's share of the spring outage costs against the asset's
8 purchase price paid to DP&L, up to the full \$12.4 million purchase price.

9 **Q. DO YOU BELIEVE THE OVERALL OPERATION AND FINANCIAL**
10 **CONDITION OF DUKE ENERGY KENTUCKY WILL BENEFIT FROM**
11 **ACQUIRING THE EAST BEND PURCHASE FOR \$12.4 MILLION?**

12 A. Yes. The price was negotiated over several months, taking into account the many
13 benefits associated with owning the entirety of East Bend. These benefits are
14 described and supported by other witnesses. The East Bend Purchase also
15 includes the acquisition of DP&L's interest in land surrounding the station that
16 will eventually be used to develop a new landfill for the station. Through the East
17 Bend Purchase, Duke Energy Kentucky is increasing its investment in a coal-fired
18 station located in the Commonwealth of Kentucky. The Company is purchasing
19 an asset that it has direct knowledge of now and that it has operated and
20 maintained since its initial date of commercial operation. Duke Energy Kentucky
21 will become the single owner and will be able to make the sole decisions
22 regarding future investment to benefit Kentucky customers. None of these

1 benefits were available through the more expensive alternatives evaluated in the
2 RFP.

3 **Q. TO THE BEST OF YOUR KNOWLEDGE, ARE THERE ANY OTHER**
4 **COSTS REQUIRED TO BRING EAST BEND UP TO ANY APPLICABLE**
5 **STANDARDS?**

6 A. Other than the costs I mentioned above, not at this time. As an existing owner of
7 the majority interest in East Bend, Duke Energy Kentucky is fully aware of the
8 costs of operating and maintaining the station and has historically operated East
9 Bend in accordance with good utility practice. Any future investments in East
10 Bend are of the normal categories associated with ongoing operation of a coal
11 fired generating station of a comparable age and design.

12 **Q. DO YOU BELIEVE THE \$12.4 MILLION INVESTMENT IN THE 31%**
13 **INTEREST IN EAST BEND PLUS ENVIRONMENTAL COMPLIANCE**
14 **WILL HAVE AN ADVERSE IMPACT ON CUSTOMER RATES?**

15 A. As I previously stated, the \$12.4 million purchase price is the least cost solution
16 for customers for a longer term capacity resource. With this purchase price, Duke
17 Energy Kentucky's customers will be receiving 186 MWs of net installed coal-
18 fired capacity for a very reasonable price. Customers will also be gaining DP&L's
19 31% interest in land surrounding the existing East Bend site that will be used to
20 develop additional landfill resources and thus avoid the cost of third-party
21 disposal expense. The capacity and energy from East Bend will be dedicated to
22 customers. Finally, East Bend is well positioned to comply with known existing

1 and emerging environmental regulations. This is a long way of saying that
2 customers are receiving an excellent value.

3 Although the Company is requesting that incremental O&M expense
4 associated with operating the East Bend be deferred for future recovery as part of
5 this case, the Company is also netting that O&M expense against what is reflected
6 in base rates for operating MF6, taking into account any ongoing expense for
7 maintaining the station site once retired. The deferral request made by the
8 Company means that customer will not feel an immediate rates impact related to
9 the additional and incremental O&M expense associated with the 31% interest in
10 East Bend. Also, the \$12.4 million purchase price will not be reflected in the
11 Company's rates until the next rate case. Duke Energy Kentucky witness William
12 Don Wathen Jr., explains the various rate and regulatory treatment proposals,
13 including and deferrals more fully in his testimony.

VI. CONCLUSION

14 **Q. ARE ATTACHMENTS SI-1 AND SI-2 TRUE AND ACCURATE COPIES**
15 **OF THE JOINT OPERATING AGREEMENT AND LETTER GRANTING**
16 **MF6 A BRIEF EXTENSION FOR MATS COMPLAINEE,**
17 **RESPECTIVELY?**

18 **A. Yes.**

1 Q. WERE ATTACHMENTS SI-1 AND SI-2 COMPILED BY YOU OR
2 UNDER YOUR DIRECTION AND CONTROL?

3 A. Yes.

4 Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

5 A. Yes.

VERIFICATION

State of Indiana)
)
County of Hendricks) SS:

The undersigned, Steve Immel, being duly sworn, deposes and says that he is the Vice President of Midwest Regulated Operations, and that the matters set forth in the foregoing testimony are true and correct to the best of his information, knowledge and belief.



Steve Immel, Affiant

Subscribed and sworn to before me by Steve Immel on this 2nd day of June 2014.



NOTARY PUBLIC *Stephanie L. Bohlser*

My Commission Expires: 6/3/18



EAST BEND UNIT 2 OPERATION AGREEMENT
BETWEEN
THE CINCINNATI GAS & ELECTRIC COMPANY
AND
THE DAYTON POWER AND LIGHT COMPANY

EAST BEND UNIT 2 OPERATION AGREEMENT
BETWEEN
THE CINCINNATI GAS & ELECTRIC COMPANY
AND
THE DAYTON POWER AND LIGHT COMPANY

THIS AGREEMENT, dated as of March 24, 1981, between The Cincinnati Gas & Electric Company ("Cincinnati") and The Dayton Power and Light Company ("Dayton"), Ohio corporations, sets forth the parties' agreement respecting the operation of Unit 2 located at the East Bend Generating Station ("East Bend Unit 2").

A. Basic Obligations

1. East Bend Unit 2 (which term for purposes of this Operation Agreement includes its associated equipment, East Bend Real Estate, and all additions and replacements) shall be operated and maintained, and additions, replacements and retirements shall be made thereto, in accordance with good utility practice. For purposes of this Agreement, the phrase "good utility practice" shall mean those operating procedures and policies normally implemented in the operations of similar utility facilities and shall include, without limitation, the maintenance of reasonable coal, fuel oil and lime reserves, the level of which shall be mutually agreed to by the parties, against interruptions of normal supply.
2. East Bend Unit 2 shall be used to generate three phase, 60 hertz electric service.

B. Capability and Output

1. The output of East Bend Unit 2 shall be delivered to Cincinnati's East Bend Substation and thence to Cincinnati's transmission lines emanating therefrom, which substation and lines Cincinnati agrees to provide for Dayton's use without cost or expense to Dayton and which Cincinnati agrees to maintain and repair in accordance with good utility practice.

2. The parties' entitlement to the capability of the East Bend Unit 2 shall be in accordance with their respective undivided ownership shares, as follows:

<u>Party</u>	<u>Share</u>
Cincinnati	69%
Dayton	31%

subject to the following:

a. Cincinnati shall keep Dayton informed as to the maximum practical capability of East Bend Unit 2 as it may vary in accordance with its condition and the availability of the generating unit and associated equipment.

b. Dayton shall submit to Cincinnati, with reasonable notice, a schedule of its requirements to be generated, not to exceed, for purposes of this agreement, its entitlement as indicated above.

c. Subject to necessary or unavoidable outages or reductions in capability, the East Bend Unit 2 shall be

operated so as to produce an output equal to the sum of the parties' required scheduled generation.

d. Should the capability of the East Bend Unit 2 for any reason be reduced, upon notification from Cincinnati, each party will immediately take steps to reduce its share of scheduled generation to a level not exceeding its undivided ownership share of the reduced capability.

e. Each party has full ownership of its entitlement.

C. Operation of East Bend Unit 2

Cincinnati, on its own behalf as to its own interest, and as agent for Dayton as to Dayton's interest, shall operate and maintain East Bend Unit 2 and perform the other obligations relative thereto, as herein outlined. In carrying out such responsibilities and subject to the maintenance of fuel and lime reserves in accordance with the provisions of paragraph A.1. above, Cincinnati shall provide such materials, fuels, lime, equipment, and services from such sources, which may include its own organization, as it determines in its discretion to be required.

Cincinnati shall keep Dayton reasonably informed of its stewardship, as to the past and in prospect. In that connection, it shall endeavor to obtain advance approval from Dayton of its proposed course of action relative to major operating policy matters affecting East Bend Unit 2. Dayton shall not unreasonably withhold approval. However, in the event of emergencies

or inability to obtain such approval, Cincinnati shall take such action as is reasonably necessary under the circumstances.

D. Reimbursement of Cincinnati by Dayton

Dayton shall reimburse Cincinnati for expenses and costs including applicable overheads incurred on Dayton's behalf under this Agreement. For the purposes of this Agreement, the following principles shall apply:

1. All expenses, including overheads, directly or indirectly applicable to the operation and maintenance of the East Bend Unit 2 shall be classified as operation and maintenance expenses and taxes, as appropriate. Of these, fuel and lime and associated fuel handling expenses and overheads, exclusive of no-load and start-up fuel and associated fuel handling expenses, shall be classified as energy expenses. Overhead expenses applicable to operation and maintenance shall include expenses related to payroll, such as Social Security taxes, unemployment insurance, group life insurance, group hospitalization and medical insurance, pension plan contributions, stock purchase plan expenses, workers' compensation and the cost to Cincinnati of other fringe benefit expenses related to employees and other applied overheads, including administrative and general expenses.
2. Expenses directly assignable to East Bend Unit 2 shall be so assigned. Expenses not directly assignable to East Bend Unit 2 shall be allocated on basis of cost responsibility, as mutually agreed upon by the authorized representatives of the parties.

3. Operation and maintenance expenses, related overheads and taxes shall be borne by the parties as follows:

a. All expenses, excluding energy expenses and property taxes, as described in paragraph D.1., above shall be borne by the parties in accordance with their undivided ownership shares.

b. All expenses classified as energy expenses under paragraph D.1. above, for energy usage by the parties up to and including that associated with their respective undivided ownership shares, shall be borne by the parties in accordance with such usage.

c. Each company will pay directly to the appropriate taxing authorities the applicable property taxes based on its valuation on the lien date.

4. Proper representatives of the parties are authorized to develop procedures to implement and carry out the principles of this Agreement.

5. The investment in inventories of fuel, lime, and plant material and operating supplies shall be paid for by the parties in accordance with their undivided ownership shares. It is the intent of the parties that Cincinnati shall have no obligation to advance its own funds to pay for more than its share of operation and maintenance expenses, and Dayton shall advance funds to Cincinnati representing its respective share of such expenses. The method of calculating the amount of such funds to be advanced shall be mutually agreed to by the parties.

6. Additions, replacements and retirements relating to construction accounts shall be paid for by the parties in accordance with their respective ownership interests in the property involved. Funds for such purposes will be supplied to Cincinnati by Dayton as needed on the basis of estimated disbursements and adjusted to actual costs on completion of work. At the request of Cincinnati, materials, equipment and services shall, from time to time, be purchased by Dayton and Cincinnati as tenants in common in proportion to their percentage ownership.

The parties shall supply the necessary funds notwithstanding the pendency of legal proceedings concerning the extent or propriety of the same, subject to adjustment upon the conclusions of such proceedings.

7. Cincinnati shall submit statements, in such detail as mutually agreed upon, to Dayton for its portion of the operation and maintenance expenses, related overheads and taxes, as provided in paragraph D.3. above.

Refusal on the part of either party to make payments as herein provided for, after final determination of the same by arbitration or legal proceedings shall permit the non-defaulting party to make arrangements whereby the defaulting party is denied its share of the output of East Bend Unit 2. This remedy shall be in addition to any other provided by law or under this Agreement.

E. General

1. The term of this Agreement shall be from the date hereof and shall extend to a date 33 years after the date of commercial operation of East Bend Unit 2.

2. Each party in its accounting relating to East Bend Unit 2 shall normally follow the accounting provisions of the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) for Public Utilities and Licensees, as such provisions may be in effect from time to time, provided that either party may, in its use of the same, substitute its own, or appropriate Public Utilities Commission of Ohio account numbers for the FERC account numbers or any other appropriate accounting provisions authorized by the Public Utilities Commission of Ohio.

3. Each party shall use its best efforts to agree upon and employ from time to time uniform rates for determining the annual provision for depreciation of East Bend Unit 2 depreciable property.

4. Cincinnati shall keep accurate books of account containing in detail the items of cost applicable to the operation, maintenance, taxes, depreciation, additions, replacements and retirements for East Bend Unit 2. Cincinnati shall permit said books of account to be examined from time to time by Dayton, or on its behalf by its independent public accountant, to the extent necessary to verify the assignment of costs to Dayton pursuant to the provisions of this Agreement.

5. Neither party may assign this Agreement except under the conditions provided for and to the extent applicable in the various deeds conveying East Bend Real Estate to the parties. Subject to the foregoing, this Agreement shall inure to the benefit of and be binding upon the parties and their respective successors and assigns.

6. The parties recognize that future operating conditions may change from those now contemplated. In such event, they will use their best efforts to agree upon modifications to this Agreement which are fair and reasonable.

7. The performance of each provision of this Agreement is conditioned upon the due receipt of all regulatory approvals, in form and substance satisfactory to the parties, necessary to permit the performance thereof, and each party shall use its best efforts to obtain any such necessary regulatory approval.

8. The failure of any party hereto to insist in any one or more instances upon strict performance of any of the provisions of this Agreement, or to take advantage of its rights hereunder, shall not be construed as a waiver of any such provisions, or the relinquishment of any such rights, but the same shall continue to remain in full force and effect.

9. This Agreement shall be subject to and governed by Ohio law.

IN WITNESS WHEREOF, the parties have caused this Agreement
to be duly executed.

THE CINCINNATI GAS & ELECTRIC
COMPANY



By G. C. Boyman
9-4-28

THE DAYTON POWER AND LIGHT
COMPANY

By W. H. Thayer

East Bend

ASSIGNMENT AND ASSUMPTION AGREEMENT
WITH RESPECT TO
EAST BEND UNIT 2 OPERATION AGREEMENT

This ASSIGNMENT AND ASSUMPTION AGREEMENT WITH RESPECT TO EAST BEND UNIT 2 OPERATION AGREEMENT (this "Agreement") is entered into as of January 25, 2006 and effective as of January 1, 2006 by and between The Cincinnati Gas & Electric Company, an Ohio Corporation ("CGE"), and The Union Light, Heat and Power Company, a Kentucky Corporation ("ULHP").

WHEREAS CGE and The Dayton Power and Light Company, an Ohio Corporation ("DPL"), joint owners of Unit 2 of East Bend Generating Station in Boone County, Kentucky ("East Bend Unit 2"), including the real property associated therewith (the "Real Property") are parties to that certain East Bend Unit 2 Operation Agreement, dated as of March 24, 1981 (the "Operation Agreement"), pursuant to which, subject to the terms and conditions thereof, CGE has agreed to operate and maintain East Bend Unit 2 in accordance with the terms thereof;

WHEREAS, concurrently with the execution and delivery of this Agreement, CGE and ULHP are entering into that certain Asset Transfer Agreement of even date herewith (the "Transfer Agreement"), pursuant to which, subject to the terms and conditions thereof, CGE is transferring to ULHP and ULHP is acquiring from CGE certain assets, including, without limitation, all of CGE's right, title and interest in, under and to the buildings, structures and other Improvements (as defined in the Transfer Agreement), machinery, equipment, vehicles, furniture and other personal property associated with East Bend Unit 2.

WHEREAS, in connection therewith, CGE desires to transfer all of its rights and obligations under the Operation Agreement to ULHP, and ULHP desires to succeed to all of CGE's rights and obligations thereunder, as provided herein;

WHEREAS, Section E(5) of the Operation Agreement provides that neither party thereto may assign its rights thereunder except under the conditions provided for and to the extent applicable in the various deeds conveying the East Bend Real Estate (as defined in the Operation Agreement) to the parties thereto;

WHEREAS, the various deeds conveying the East Bend Real Estate provide, in pertinent part, that neither party thereto may transfer its interest in the Real Property without the prior written consent of the other;

WHEREAS, concurrently with the execution and delivery of this Agreement, DPL is delivering its Consent recognizing the transactions contemplated by this

Agreement and releasing and discharging CGE from any further obligations and liabilities under the Operation Agreement;

NOW, THEREFORE, in consideration of the premises and the agreements and covenants herein contained, the parties hereto, intending to be legally bound, agree as follows:

ARTICLE I ASSIGNMENT AND ASSUMPTION

Section 1.1 Assignment and Assumption. Effective upon the execution and delivery hereof by the parties hereto, (a) CGE hereby unconditionally and irrevocably assigns, sells, transfers and conveys to ULHP all of its right, title, interest, obligations and liabilities in, to and under the Operation Agreement, and (b) ULHP hereby unconditionally and irrevocably accepts such assignment and hereby unconditionally and irrevocably assumes and agrees to pay and otherwise undertake, observe, perform and discharge in accordance with their terms all of CGE's payment and other obligations and liabilities under the Operation Agreement arising from and after the date of this Agreement.

ARTICLE II MISCELLANEOUS

Section 2.1 Counterparts. This Agreement may be executed in one or more counterparts, all of which shall be considered one and the same agreement, and shall become effective when one or more counterparts have been signed by each of the parties hereto and delivered (including by facsimile) to the other party hereto.

Section 2.2 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Ohio, exclusive of any conflict of laws provisions thereof that would refer jurisdiction to the laws of another state.

Section 2.3 Entire Agreement; Parties in Interest. (a) This Agreement together with the other agreements or instruments referred to herein constitutes the entire agreement between the parties hereto with respect to the subject matter hereof, and there are no agreements, understandings, representations or warranties between the parties other than those set forth or referred to herein.

(b) This Agreement is not intended to confer upon any party not a party hereto (and their successors and assigns) any rights or remedies hereunder, other than DPL.

Section 2.4 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

Section 2.5 Headings; Interpretation. The article and section headings contained in this Agreement are inserted for convenience of reference only and shall not affect the meaning or interpretation of this Agreement. All references to Articles or Sections contained herein mean Articles or Sections of this Agreement, unless otherwise stated. All capitalized terms defined herein are equally applicable to both the singular and plural forms of such terms. The terms "hereof," "herein," "hereunder," "hereby" and "herewith" and words of similar import shall, unless otherwise stated, be construed to refer to this Agreement as a whole (including all the exhibits hereto) and not to any particular provision of this Agreement. The words "including" and words of similar import when used in this Agreement shall mean "including without limitation" unless the context otherwise requires or unless otherwise specified.

Section 2.6 Amendments and Waivers. This Agreement may not be modified or amended except by an instrument or instruments in writing signed by the party against whom enforcement of any such modification or amendment is sought. Any party hereto may, only by an instrument in writing, waive compliance by the other party hereto with any term or provision of this Agreement on the part of such other party to be performed or complied with. The waiver by any party hereto of a breach of any term of this Agreement shall not be construed as a waiver of any subsequent breach.

Section 2.7 Further Assurances. Subject to the terms and conditions of this Agreement, at any time or from time to time after the execution and delivery hereof, at either party's request and without further consideration, the other party hereto shall execute and deliver to such requesting party such other instruments of sale, transfer, conveyance, assignment and confirmation, provide such materials and information and take such other actions as such requesting party may reasonably request in order to effectuate more fully the purposes of this Agreement.

Section 2.8 Notices. All notices and other communications hereunder shall be in writing and shall be deemed given (a) on the day when delivered personally or by facsimile transmission (with confirmation), (b) on the next business day when delivered by a nationally recognized overnight delivery service, or (c) five (5) business days after deposited as registered or certified mail (return receipt requested), in each case, postage prepaid, addressed to the recipient party at its address set forth below (or to such other addresses and facsimile numbers for a party as shall be specified by like notice; provided, however, that any notice of a change of address or facsimile number shall be effective only upon receipt thereof):

(i) If to CGE, to:

The Cincinnati Gas & Electric Company
139 East Fourth Street
Cincinnati, OH 45202
Attention: President
Facsimile No.: 513-287-1592

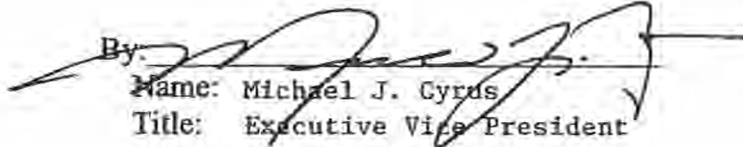
(ii) If to ULHP, to:

The Union Light, Heat and Power Company
139 East Fourth Street
Cincinnati, OH 45202
Attention: President
Facsimile No.: 513-287-4370

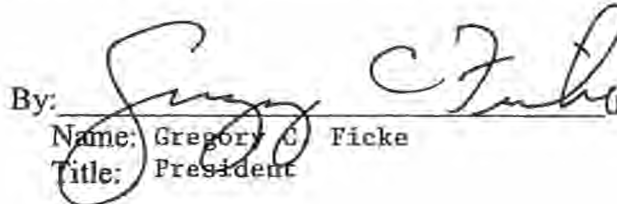
(Signature Page Follows)

IN WITNESS WHEREOF, each of the parties hereto has caused this Assignment and Assumption Agreement with respect to East Bend Unit 2 Operation Agreement to be executed on its behalf by its respective officer thereunto duly authorized, all as of the day and year first above written.

THE CINCINNATI GAS & ELECTRIC COMPANY

By: 
Name: Michael J. Cyrus
Title: Executive Vice President

THE UNION LIGHT HEAT & POWER COMPANY

By: 
Name: Gregory C. Ficke
Title: President

East Bend

CONSENT
to
Assignment and Assumption Agreement
with respect to
East Bend Unit 2 Operation Agreement

This CONSENT to Assignment and Assumption Agreement with respect to East Bend Unit 2 Operation Agreement (this "Consent") is executed and delivered by The Dayton Power and Light Company, an Ohio corporation ("DPL"), as of Sept 20, 2008.

WHEREAS, DPL and The Cincinnati Gas & Electric Company, an Ohio Corporation ("CGE"), are parties to that certain East Bend Unit 2 Operation Agreement, dated as of March 24, 1981 (the "Operation Agreement"), pursuant to which, subject to the terms and conditions thereof, CGE has agreed to operate and maintain Unit 2 located at East Bend Generating Station ("East Bend Unit 2") in accordance with the terms thereof;

WHEREAS, concurrently with the execution and delivery of this Agreement, CGE and The Union Light, Heat and Power Company, a Kentucky corporation ("ULHP"), are entering into that certain Asset Transfer Agreement of even date herewith (the "Transfer Agreement"), pursuant to which, subject to the terms and conditions thereof, CGE is transferring to ULHP and ULHP is acquiring from CGE certain assets, including, without limitation, all of CGE's right, title and interest in, under and to the buildings, structures and other Improvements (as defined in the Transfer Agreement), machinery, equipment, vehicles, furniture and other personal property associated with East Bend Unit 2.

WHEREAS, in connection with such asset transfer, on the date thereof, CGE and ULHP are executing and delivering that certain Assignment and Assumption Agreement with respect to East Bend Unit 2 Operation Agreement (the "Assignment and Assumption Agreement"), under which CGE is assigning to ULHP and ULHP is accepting and assuming, all of CGE's rights and obligations under the Operation Agreement (collectively, the "Proposed Assignment");

WHEREAS, Section E(5) of the Operation Agreement provides that neither party thereto may assign its rights thereunder except under the conditions provided for and to the extent applicable in the various deeds conveying the East Bend Real Estate (as defined in the Operation Agreement) to the parties thereto;

WHEREAS, the various deeds conveying the East Bend Real Estate provide, in pertinent part, that neither party thereto may transfer its interest in the East Bend Real Estate without the prior written consent of the other; and

WHEREAS, DPL has determined to execute and deliver this Consent to recognize the Proposed Assignment and to discharge and release CGE from its obligations and liabilities under the Operation Agreement from and after the Proposed Assignment.

NOW, THEREFORE, by its signature below, in consideration of the transactions contemplated by the Assignment and Assumption Agreement, including without limitation the assumption by ULHP of the obligations of CGE under the Operation Agreement in accordance with its terms, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, DPL hereby:

1. grants its complete, unconditional and irrevocable consent to the terms and provisions of the Assignment and Assumption Agreement, including without limitation the Proposed Assignment, and further agrees that from and after the date hereof, it shall recognize and treat ULHP as "Cincinnati" for all purposes under the Operation Agreement; and
2. releases CGE from all duties and liabilities arising under the Operation Agreement from and after the date hereof.

This Consent shall inure to the benefit of CGE and ULHP and their successors and assigns and is binding upon DPL and its successors and assigns.

No amendment or waiver of any provision hereof shall be effective unless in writing and signed by each of DPL, CGE and ULHP.

This Consent shall be governed by Ohio law, excluding its conflicts of law provisions.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the undersigned entity has caused this Consent to Assignment and Assumption Agreement with respect to East Bend Unit 2 Operation Agreement to be executed on its behalf by its officer thereunto duly authorized, all as of the day and year first above written.

THE DAYTON POWER AND LIGHT COMPANY

By: W. Steven Wolff *W.S.W.*
Name: W. Steven Wolff
Title: President, Power Production

I certify this to be a true and accurate copy of the official documents as filed in the records of the Ohio Environmental Protection Agency.



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

OHIO E.P.A.

DEC 12 2013

ENTERED DIRECTOR'S JOURNAL

By: Dmy Lasser Date: 12-12-13

December 12, 2013

Richard Brewer
Duke Energy
139 East Fourth Street
1551-M
Cincinnati, OH 45202-2373

Re: Duke Energy Kentucky Miami Fort Unit 6 MATS Extension of Time Request

Dear Mr. Richard Brewer:

This letter is to inform you that the Ohio Environmental Protection Agency, Division of Air Pollution Control (Ohio EPA, DAPC) received your request for an extension of the compliance deadline under 40 CFR Part 63, Subpart UUUUU, the *National Emission Standards for Hazardous Air Pollutants from Coal- and Oil-fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units*, also known as the Mercury and Air Toxics Standards (MATS), on November 6, 2013. On November 13, 2013, Ohio EPA issued a determination that the contents of the request application were technically and administratively complete.

Ohio EPA has completed a technical review of the request and has determined that the deactivation of Unit 6 at the Miami Fort Generating Station will require additional time to avoid reliability violations and to complete its capacity plan obligations to PJM Interconnection, L.L.C. (PJM). Pursuant to 40 CFR Part 63, Subpart UUUUU, Ohio EPA, as the Title V permitting authority in the State of Ohio, has the authority to act upon this request. Therefore, Ohio EPA is granting a limited extension to Duke Energy Kentucky (DEK), Miami Fort Generating Station Unit 6, of 47 days to achieve these reliability obligations. The final compliance date is extended to June 1, 2015, as requested in the application.

This extension is being granted based on DEK's November 1, 2013 submittal to Ohio EPA. Ohio EPA requests that quarterly reports be submitted to Ohio EPA no later than 15 days after the end of the quarter. The first submission may begin after the quarter ending December 31, 2013. Failure to achieve final compliance by the extended deadline will result in DEK being subject to an enforcement action by Ohio EPA or U.S. EPA.

The quarterly status updates shall be submitted to Christopher Beekman at Ohio EPA, Division of Air Pollution Control, Central Office. Copies should also be submitted to Brad Miller at the Southwest Ohio Air Quality Agency and DAPC. Information in the quarterly updates shall include the progress of major transmission upgrades and reliability improvements, contract approvals, and other significant milestones.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds

upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director of the Ohio Environmental Protection Agency (Ohio EPA) within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

If you have any questions or comments regarding this letter, please contact Christopher Beekman at 614-644-3597 or via email at christopher.beekman@epa.ohio.gov.

Sincerely,

A blue ink handwritten signature of Scott J. Nally, consisting of a stylized 'S' and 'N'.

Scott J. Nally
Director

cc: George Czerniak, USEPA Region V
Genevieve Damico, USEPA Region V
Brad Miller, Southwest Ohio Air Quality Agency and DAPC
Christopher Beekman, Ohio EPA CO, DAPC
Drew Bergman, Ohio EPA Legal

COMMONWEALTH OF KENTUCKY
BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

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 &) Case No. 2014-_____
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.

DIRECT TESTIMONY OF

J. MICHAEL GEERS, P.E.

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

June 13, 2014

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I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is J. Michael Geers, and my business address is 139 East Fourth Street,
3 Cincinnati, Ohio 45202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC, a service company
6 affiliate of Duke Energy Kentucky, Inc. (Duke Energy Kentucky or Company)
7 and a subsidiary of Duke Energy Corporation (Duke Energy Corp.), as Manager
8 of the Air Programs and Air Compliance within Environmental Services.

9 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND**
10 **PROFESSIONAL EXPERIENCE.**

11 A. I received a Bachelor's Degree in Chemical Engineering from the University of
12 Dayton in 1981, and a Master's of Business Administration from the University
13 of Cincinnati in 1995. I am also a Registered Professional Engineer in the State of
14 Ohio. After graduation, I joined The Cincinnati Gas & Electric Company (CG&E)
15 as an Assistant Engineer. I have held a number of positions in these organizations
16 of increasing responsibility in the power operations and environmental areas.
17 Some of those positions include Performance Engineer, and Senior Engineer at
18 various coal fired power plants, including the East Bend Station. In March 1997, I
19 joined Cinergy's Environmental Services Air Management Group and was
20 promoted to Principal Environmental Scientist. In April 2006, I was named as the
21 Manager of Duke Energy's Air Management Group within Corporate

1 Environmental Health and Safety Air Management Group. I currently supervise
2 the Air Programs and Air Compliance Groups.

3 **Q. PLEASE BRIEFLY DESCRIBE YOUR DUTIES AND**
4 **RESPONSIBILITIES AS MANAGER OF THE AIR PROGRAMS AND**
5 **AIR COMPLIANCE WITHIN ENVIRONMENTAL SERVICES.**

6 A. I lead the Air Programs and Air Compliance Groups, which has a number of
7 subject matter experts responsible for air permitting and specializing in all facets
8 of the air program. We obtain air permits for the Company's facilities, and then
9 assist them with monitoring, record keeping, reporting and other facets of our
10 compliance program. We are also responsible for reviewing new Federal and
11 State air pollution regulations such as the Mercury and Air Toxics Standard
12 (MATS), the National Ambient Air Quality Standards (NAAQS) and Clean Air
13 Interstate Rule (CAIR), among others, and determining their impact on our
14 generating facilities.

15 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

16 A. The purpose of my testimony is to discuss the environmental requirements,
17 current and future, applicable to the Company's operation of its coal-fired
18 generating stations, namely Miami Fort Unit 6 (MF6) and East Bend Unit 2
19 Generating Station (East Bend). In doing so, I provide an overview of the
20 Company's coal-fired generating fleet, and the environmental controls that exist
21 today at East Bend and MF6. I discuss how East Bend complies with the current
22 environmental regulations and how East Bend is well positioned for known and
23 emerging Federal environmental regulations.

**II. SUMMARY OF DUKE ENERGY KENTUCKY'S
COAL-FIRED GENERATION STATIONS**

1 **Q. PLEASE BRIEFLY DESCRIBE EAST BEND.**

2 A. East Bend has a single 600 megawatt (MW) (net installed capacity) coal-fired
3 base load unit located along the Ohio River in Boone County, Kentucky. It was
4 commissioned in 1981. East Bend is jointly owned by Duke Energy Kentucky and
5 the Dayton Power and Light Company (DP&L). Duke Energy Kentucky, as the
6 majority owner of East Bend, is responsible for the operation, including
7 environmental compliance, maintenance and staffing of the station.

8 **Q. PLEASE DESCRIBE THE ENVIRONMENTAL ATTRIBUTES AND**
9 **CONTROLS AT EAST BEND.**

10 A. East Bend is designed to burn low- to high-sulfur eastern bituminous coal. The
11 major pollution control features are: a mechanical draft cooling tower, a high-
12 efficiency hot side electrostatic precipitator, a lime-based flue gas desulfurization
13 (FGD) system, low nitrogen oxide (NO_x) burners and a selective catalytic
14 reduction control (SCR) system which is designed to reduce NO_x emissions by
15 85%. The FGD system was upgraded in 2005 to increase the sulfur dioxide (SO₂)
16 emissions removal capability to about 97%. The station electrical output is
17 directly connected to Duke Energy Ohio, (Duke Energy Ohio) 345 kilovolt (kV)
18 transmission system.

19 **Q. PLEASE DESCRIBE MF6.**

20 A. MF6 is a 163 MW (net installed capacity) coal-fired base/intermediate load unit
21 located at Miami Fort Generating Station (Miami Fort) along the Ohio River in
22 Hamilton County, Ohio, which began commercial service in 1960. MF6 is one of

1 three coal-fired units currently running at Miami Fort. Duke Energy Kentucky
2 wholly owns MF6, while Units 7 and 8 are jointly owned by Duke Energy
3 Commercial Asset Management¹ (64%) and DP&L (36%).

4 **Q. PLEASE DESCRIBE THE ENVIRONMENTAL ATTRIBUTES OF MF6.**

5 A. MF6 is designed to burn low- to high-sulfur eastern bituminous coal. The major
6 pollution control feature is a high-efficiency electrostatic precipitator. The unit
7 had a temporary Selective Non-Catalytic Reduction System for NO_x reduction,
8 which did not perform as well as anticipated, and therefore was replaced in 2006
9 by second-generation low NO_x burners to reduce NO_x emissions. The unit does
10 not have a FGD system for controlling sulfur dioxide emissions, or a SCR system
11 for reducing NO_x emissions. In addition the unit does not have a cooling tower,
12 and instead uses “once through” cooling water from the Ohio River.

13 **Q. IS EAST BEND OR MF6 SUBJECT TO ANY AIR EMISSION CONTROL**
14 **LIMITS?**

15 A. Yes. Both East Bend and MF6 are extensively regulated under the Clean Air Act
16 (CAA) and are bound by comprehensive permits issued under Title V of the
17 CAA. The limits that most significantly influence day to day operations are for
18 SO₂, NO_x and filterable particulate. MF6 has an air permit that limits SO₂
19 emissions to no more than 5.0 pounds per million British thermal units
20 (lbs/MMBtu). Today this limit does not impose a significant operating restriction
21 because the unit receives coal with sulfur content significantly lower than what is

¹ As of May 1, 2014, Duke Energy Ohio, in compliance with regulatory commitments and under Ohio law, transferred its ownership in Miami Fort Units 7 and 8 to a non-regulated affiliate, Duke Energy Commercial Asset Management.

1 permitted. East Bend has an SO₂ emission limit of 1.2 lbs/MMBtu, which is not a
2 significant operating restriction because the FGD system is designed to meet this
3 emission limit. East Bend has a NO_x limit of 0.70 lbs./MMBtu which it is able to
4 meet with low NO_x burners. Both units are subject to filterable particulate limits
5 of 0.10 lbs/MMBtu which they can meet with their existing particulate controls,
6 and in East Bend's case, the FGD system provides additional margin. Both units
7 are also subject to cap and trade programs for SO₂ and NO_x where they must
8 submit an emission allowance for each ton of SO₂ and NO_x emitted.

**III. CLEAN AIR ACT REQUIREMENTS IMPACTING DUKE ENERGY
KENTUCKY'S COAL FIRED GENERATING STATIONS**

9 **Q. PLEASE DESCRIBE THE CAA.**

10 A. The CAA is the comprehensive federal law that regulates air emissions from
11 stationary and mobile sources. Among other things, this law authorizes United
12 States Environmental Protection Agency (EPA) to establish a number of programs
13 to regulate air emissions so as to protect public health and public welfare. Many
14 of these programs overlap and at times regulate the same pollutants.

15 **Q. WHAT ARE THE MOST SIGNIFICANT CAA PROGRAMS
16 CURRENTLY IMPACTING DUKE ENERGY KENTUCKY'S COAL
17 FIRED GENERATING STATIONS?**

18 A. There are several programs promulgated by the EPA under the CAA that impact
19 all of the Company's generating stations, and particularly the two coal-
20 combustion stations MF6 and East Bend. These regulations are the primary

1 drivers of Duke Energy Kentucky's compliance strategies for its plants. They are
2 as follows:

- 3 1) MATS;
- 4 2) Cross State Air Pollution Rule (CSAPR); and
- 5 3) NAAQS.

6 In addition, there are other pending regulations under the Clean Water Act
7 (CWA), Coals Combustion Residual (CCR) and Green House Gas (GHG)
8 emissions which are likely to impact the Company's Generating Stations.

A. MATS

9 **Q. WHAT IS THE HISTORY OF THE MATS RULE?**

10 A. Section 112 of the CAA addresses emissions of hazardous air pollutants. It
11 requires that the EPA establish emission standards that require the maximum
12 degree of reduction in emissions of hazardous air pollutants from major sources.
13 These emission standards are commonly referred to as "maximum achievable
14 control technology" or "MACT" standards. Eight years after the technology-based
15 MACT standards are issued for a source category, the EPA is required to review
16 those standards to determine whether any residual risk exists for that source
17 category and, if necessary, revise the standards to address such risk.

18 **Q. WHEN WAS THE MATS RULE PROPOSED AND FINALIZED?**

19 A. The EPA first proposed MACT standards for coal- and oil-fired utility steam
20 electric generating units, on May 3, 2011. When EPA signed the final rule in
21 December 2011, it had gone through some fairly significant changes and had been
22 renamed MATS. MATS became effective on April 16, 2012.

23 **Q. CAN YOU PROVIDE A BRIEF SUMMARY OF THE MATS RULE?**

1 A. The MATS rule regulates hazardous air pollutant emissions from new and
2 existing coal- and oil-fired steam electric generating units (EGUs) that are greater
3 than 25 MWs in capacity. It is a command and control program that imposes unit-
4 by-unit restrictions on emissions of mercury, acid gases such as hydrogen
5 chloride, and certain non-mercury metals, including arsenic, chromium, nickel
6 and selenium. MATS allows EGUs, as one option, to demonstrate compliance by
7 measuring mercury, hydrogen chloride, and non-mercury metal emissions
8 directly. It also allows the EGUs the option of demonstrating compliance by
9 measuring surrogates for acid gases and for non-mercury metals.

10 **Q. DOES THE MATS RULE REPLACE CURRENT OR FORMER RULES**
11 **REGARDING MERCURY EMISSIONS?**

12 A. Yes. It replaces the EPA's CAMR, which was vacated by the D.C. Circuit Court
13 in February 2008. CAMR was issued to limit mercury emissions from new and
14 existing coal and oil fired EGUs in a two phased market-based cap-and-trade
15 program. The first phase was to take effect in 2010 and the second phase in 2018.
16 It would have reduced utility mercury emissions by about 70% upon full
17 implementation.

18 **Q. IS DUKE ENERGY KENTUCKY CURRENTLY SUBJECT TO LIMITS**
19 **ON ITS MERCURY EMISSIONS?**

20 A. No, East Bend and MF6 do not currently have specific mercury emissions limits
21 other than those imposed by MATS.

22 **Q. WHAT ARE THE MATS MERCURY LIMITS ON DUKE ENERGY**
23 **KENTUCKY'S MERCURY EMISSIONS?**

1 A. Conventional coal-fired units using bituminous or sub bituminous coal, such as
2 East Bend and MF6 will be subject to the “existing unit” limits of either 1.2
3 pounds of mercury emitted per trillion BTUs of heat input or 0.013 pounds per
4 gross gigawatt-hour of electricity generated.

5 **Q. WHAT ADDITIONAL LIMITS WILL DUKE ENERGY KENTUCKY’S**
6 **UNITS BE SUBJECT TO ONCE THE MATS RULE IS FULLY**
7 **IMPLEMENTED?**

8 A. In addition to limits on mercury, Duke Energy Kentucky’s coal-fired units will be
9 subject to limits on the emission of acid gases and certain non-mercury metals.
10 The rule allows sources to comply with acid gas requirements by either limiting
11 emissions of hydrogen chloride, or units equipped with an FGD can limit sulfur
12 dioxide as a surrogate. For non-mercury metallic hazardous air pollutant (HAPS)
13 emissions, sources can either measure those metals directly or use filterable
14 particulate matter (PM) as a surrogate to demonstrate compliance. Filterable PM
15 is used because non-mercury metallic hazardous air pollutant emissions are
16 generally well-correlated with filterable PM emissions. In addition to these
17 requirements, Duke Energy Kentucky’s units will also be subject to work practice
18 standards designed to minimize the emission of organic HAPS. The work practice
19 standards include certain periodic burner and combustion control system
20 maintenance activities, as well as combustion testing and tuning. These work
21 practices minimize the formation of certain organic HAPS by ensuring good
22 combustion.

1 **Q. PLEASE OUTLINE THE COMPANY'S COMPLIANCE**
2 **REQUIREMENTS FOR EAST BEND UNDER THE MATS RULE.**

3 A. In summary, per the requirements in the final MATS rule, the Company used the
4 following overall compliance emission rate limits and other requirements for
5 planning purposes:

- 6 • Mercury: 1.2 lbs/MMBtu of heat input, with compliance demonstrated using a
7 continuous emission monitor (CEM) or mercury sorbent trap device;
- 8 • Non-Mercury Metals: Based on the options available under the MATS rule for
9 complying with the filterable PM provisions *or* the non-mercury metals
10 provisions, we based compliance only on the filterable PM requirements;
- 11 • Filterable PM: 0.03 lbs/MMBtu of filterable PM of heat input, with
12 compliance demonstrated using continuous particulate emission monitors or
13 quarterly stack testing;
- 14 • Hydrogen Chloride: 0.002 lbs/MMBtu of hydrogen chloride of heat input,
15 with compliance demonstrated using quarterly stack testing or a continuous
16 hydrogen chloride emission monitor, or by meeting an SO₂ emission rate limit
17 of 0.2 lbs/MMBtu for units equipped with an FGD;
- 18 • Work Practice Standards for Organics: Institution of a specific burner
19 inspection and combustion testing and tuning program; and
- 20 • Work practice standards for startup and shutdown periods, and the
21 requirement to use clean fuels for these periods.

22 **Q. HAVE ANY PARTIES CHALLENGED THE MATS RULE?**

1 A. Yes, a number of industries, governmental and environmental organizations
2 challenged MATS. However, the DC circuit Court of Appeals decided on April
3 15, 2014 to uphold the rule in its entirety. It is not known at this time if any
4 parties will appeal that decision. For purposes of planning, Duke Energy
5 Kentucky is assuming that any further challenge will be unsuccessful and the rule
6 will go into effect on schedule.

7 **Q. WHAT IS THE TIMELINE WITHIN WHICH DUKE ENERGY**
8 **KENTUCKY IS EXPECTED TO COMPLY WITH MATS?**

9 A. Compliance with the MATS rule is required by April 16, 2015. However, in
10 certain circumstances, a source may request from its state environmental
11 regulatory body an extension of time to comply with the rule for up to one year.
12 Duke Energy Kentucky at this time does not need to request any extensions for
13 East Bend. It has however sought and received an extension until June 1, 2015 for
14 MF6 so as to align the unit's retirement with the end of the PJM 2014-2015
15 planning year which is May 31, 2015.

16 **Q. WHAT IS THE CONSEQUENCE OF FAILURE TO COMPLY BY APRIL**
17 **16, 2015, ABSENT BEING GRANTED AN EXTENSION?**

18 A. MATS rule imposes command and control limits on each generating unit (i.e.,
19 emissions trading is not allowed). Operating out of compliance would subject that
20 facility and its operator to enforcement actions such as fines and administrative
21 orders. EGUs including those of Duke Energy Kentucky will be forced to retrofit
22 controls and/or take other measures as may be required to achieve the standards or
23 shut down to avoid operating out of compliance.

1 **Q. DOES EAST BEND CURRENTLY COMPLY WITH THE MATS RULE?**

2 A. Based on testing to date, East Bend, which is equipped with wet FGD technology,
3 can comply with the limits for acid gases. This testing also shows that the wet
4 FGD system installed to remove sulfur dioxide is also very effective at removing
5 hydrogen chloride and other acid gases. East Bend's FGD is also effective at
6 reducing the small amount of residual filterable PM that leaves the existing
7 precipitators. Our testing to date confirms that the existing FGD systems will
8 allow the unit to meet the filterable PM standard. With respect to mercury, Duke
9 Energy Kentucky's emissions testing indicates that the combination of SCR and
10 wet FGD is effective at reducing mercury emissions. The company expects that
11 only minor process changes and/or minor chemical addition systems will be
12 required to meet the mercury standard on a continuous basis.

13 **Q. IS MF6 POSITIONED FOR COMPLIANCE WITH MATS?**

14 A. MF6 currently does not meet the standards for mercury, or acid gases. It can meet
15 the filterable PM limit as a surrogate for non-mercury metals. Duke Energy
16 Kentucky has determined that MF6 will need to burn a more expensive fuel with a
17 lower sulfur, chlorine, and mercury content from the western United States. The
18 unit will also require the addition of activated carbon injection for mercury
19 control, and potentially some lime injection for acid gas control. The exiting wet
20 fly ash handling system will require conversion to dry handling to avoid waste
21 water issues.

22 **Q. IS EMISSIONS AVERAGING UNDER MATS AN OPTION FOR MF6?**

1 A. In theory, emissions averaging under MATS is available for any multiple unit
2 facility. From a practical standpoint, however, MF6 has a number of complicating
3 factors. First, when emissions averaging for mercury, the compliance limit drops
4 from 1.2 lbs/TBTU for individual units to 1.0 lb./TBTU under an averaging plan.
5 Second, under an averaging plan if an “over complying” unit were to be off line
6 for an extended period of time, the “under complying” unit might also be forced
7 off line so that the average emissions remain under the compliance limit. If the
8 average exceeds the compliance limit, then all of the units in the averaging plan
9 are considered out of compliance. If for example, MF6 were in an averaging plan
10 with Miami Fort unit 7 and/or unit 8, the owners of those other units might not
11 want to accept that compliance risk, or at least not without certain restrictions
12 and/or compensation. In addition, Duke Energy Ohio, in accordance with a
13 regulatory obligation in Ohio, transferred its ownership interest in Miami Fort
14 Units 7 and 8 to a non-regulated affiliate effective May 1, 2014. Duke Energy
15 Corp. has announced its intention to divest itself of all of its non-regulated
16 generating assets, including Miami Fort units 7 & 8, and thus MF6 would have to
17 partner with an unknown entity.

18 **Q. IN SUMMARY, HOW WOULD THE MATS COMPLIANCE**
19 **REQUIREMENTS INFLUENCE THE MF6 RETIREMENT DECISION**
20 **AND THIS DECISION TO PURCHASE DP&L'S SHARE OF EAST**
21 **BEND?**

22 A. Given its existing FGD and SCR systems, East Bend has a great degree of fuel
23 flexibility so MATS will have little impact from an operations and maintenance

1 expense (O&M) standpoint. By contrast, to comply with MATS, MF6 must rely
2 on significant additional reagent costs, and use a more expensive fuel. MF6 will
3 require certain upgrades so that it can use those fuels and reagents. MATS will
4 significantly increase the dispatch cost for MF6 but should have little effect on
5 East Bend. In summary, the capital costs and the O&M costs will increase for
6 MF6, and its competitive place in the market will decline and its rate of
7 generation will decrease. Due to these factors, Duke Energy Kentucky faces a
8 decision on MF6 of whether it should expend the resources required to comply
9 with MATS or retire the unit.

B. CAIR and CSAPR

10 **Q. PLEASE PROVIDE A SHORT DESCRIPTION OF THE HISTORY AND**
11 **STATUS OF CAIR AND CSAPR.**

12 A. In 2005, the EPA finalized CAIR to address the contribution to ozone and fine
13 particulate matter (PM_{2.5}) non-attainment from the interstate transport of SO₂ and
14 NO_x emissions. In December 2008, the U.S. Court of Appeals for the D.C. Circuit
15 remanded the rule to the EPA to address provisions the court found unlawful. It
16 directed EPA to continue to administer CAIR until it finalized a replacement rule.
17 On August 8, 2011, the EPA published the final CSAPR rule to replace CAIR.
18 CSAPR established new state-level annual SO₂ and NO_x budgets and ozone-
19 season NO_x budgets. It was to take effect on January 1, 2012; however, on
20 December 30, 2011, the D.C. Circuit stayed CSAPR. On August 21, 2012, the
21 D.C. Circuit then vacated CSAPR and directed that EPA continue administering
22 CAIR pending completion of a new rulemaking to replace CSAPR. The EPA

1 ultimately petitioned the United States Supreme Court (Supreme Court), asking
2 that it review the D.C. Circuit's decision. The Supreme Court accepted the EPA's
3 request and oral arguments were held on December 10, 2013.

4 **Q. WHAT WAS THE OUTCOME OF THE LITIGATION?**

5 A. On April 26, 2014, the Supreme Court reversed the D.C. Circuit's decision in its
6 entirety and remanded the case back to the D.C. Circuit for further proceedings.
7 Potential additional judicial proceedings could extend the litigation into 2015.
8 Duke Energy Kentucky cannot predict the outcome of these proceedings;
9 however, it is likely that CAIR will continue to be implemented for some period
10 of time.

11 **Q. IF THE CSAPR WERE EVENTUALLY IMPLEMENTED, WOULD EAST
12 BEND AND MF6 COMPLY WITHOUT ADDITIONAL INVESTMENT?**

13 A. Because it has well performing wet FGD and SCR, East Bend is well positioned
14 to comply with CSAPR without additional controls. MF6, however, would have
15 to obtain additional emissions allowances beyond its allocations to comply
16 because it lacks a wet FGD and SCR. MF6 would need to obtain those allowances
17 from the market. Because of its restrictions on trading and the more limited
18 allowance budgets, the allowance prices under CSAPR are expected to be greater
19 than those of CAIR and the Acid Rain Programs.

20 **Q. WHAT IS EPA DOING NOW TO ADDRESS THE INTERSTATE
21 TRANSPORT OF EMISSIONS?**

22 A. While CAIR remains in place, the EPA indicated that it is also working on a new
23 rule to address issues related to the interstate transport of ozone across the Eastern

1 United States. The EPA also indicated that it plans to propose a rule in the second
2 half of 2014. While CSAPR was based on the prior 80 parts per billion (ppb)
3 ozone standard, the EPA has indicated that its new ozone transport rule will be
4 based on the current 75 ppb standard. Duke Energy Kentucky cannot predict the
5 outcome of this rulemaking at this time. This rulemaking would not be in place
6 prior to January 1, 2015, when CAIR Phase 2 is scheduled to go into effect. The
7 EPA has not announced any plans to undertake a new rulemaking to address
8 PM_{2.5} non-attainment.

9 **Q. WHAT SO₂ AND NO_x LIMITS ARE CURRENTLY IN PLACE UNDER**
10 **CAIR?**

11 A. CAIR is a cap-and-trade program and EPA has established emissions budgets for
12 the affected states. Under the CAIR SO₂ program, affected entities must surrender
13 2.0 Acid Rain Program allowances for each ton of SO₂ emissions. In 2015, this
14 increases to 2.86 acid rain allowances per ton of SO₂ emissions. For the seasonal
15 and annual NO_x programs, sources must surrender one seasonal and one annual
16 NO_x allowance per ton of NO_x emissions. If sources are not allocated enough
17 allowances, or if they have surplus allowances, they can purchase from, or sell
18 allowances to other entities, or bank them for future use. Duke Energy Kentucky
19 receives allowances under the Acid Rain and CAIR programs and it uses the
20 market to manage its portfolio based on generation, market forces, and other
21 factors.

C. NAAQS

22 **Q. PLEASE DESCRIBE THE EPA'S PM_{2.5} NAAQS.**

1 A. In 1997, the EPA established annual and 24-hour PM_{2.5} NAAQS at 15
2 micrograms per cubic meter (µg/m³) and 65 µg/m³, respectively. In 2006, the EPA
3 lowered the 24-hour PM_{2.5} standard to 35 µg/m³ and retained the 15 µg/m³ annual
4 standard. The annual and 24-hour PM_{2.5} standards have been primary drivers
5 behind the EPA's 2005 CAIR and 2011 CSAPR rules that were designed to lower
6 NO_x and SO₂ emissions from electric generating units in affected states (including
7 Kentucky) that, according to EPA, significantly contribute to PM_{2.5} non-
8 attainment and maintenance areas in other states.

9 On December 14, 2012, EPA lowered the annual standard to 12 µg/m³.
10 Area designations are expected to be finalized by the end of 2014 or early 2015.
11 Once those designations are made, states with non-attainment areas will have 18
12 months to develop a State Implementation Plan outlining how they will reduce
13 emissions to meet the standard by 2021.

14 **Q. PLEASE DESCRIBE THE RECENT HISTORY OF THE 8-HOUR OZONE**
15 **NAAQS.**

16 A. In March 2008, the EPA lowered the 8-hour ozone standard from 80 ppb to 75
17 ppb. On September 16, 2009, the EPA announced that it would reconsider the 75
18 ppb standard, thus suspending its implementation. On January 7, 2010, in
19 response to its reconsideration, the EPA proposed lowering the 75 ppb primary
20 ozone standard to between 60 and 70 ppb. A standard in the 60 to 70 ppb range is
21 considered to be extremely stringent and would likely drive additional NO_x
22 emission reduction requirements.

1 After several delays in finalizing a revised standard, the Obama
2 Administration announced on September 2, 2011, that the EPA would not finalize
3 its reconsideration of the 75 ppb primary standard, or the secondary standard,
4 ahead of the agency's normal 5-year review cycle. This decision means that the
5 75 ppb standard is effective; the next proposed ozone standard is expected in late
6 2014, with a final standard in late 2015. The potential for the EPA to lower the 75
7 ppb standard when it completes its next review, possibly into the 60 to 70 ppb
8 range, is considered highly probable. Compliance with the next standard could be
9 required in the 2020-2023 timeframe.

10 **Q. WHAT IS THE GREATER CINCINNATI AREA'S STATUS UNDER THE**
11 **OZONE STANDARD?**

12 A. The EPA published final area designations for the 75 ppb standard on April 30,
13 2012, and the Greater Cincinnati area was classified as in Marginal Non-
14 Attainment. This is the lowest level of non-attainment and the area is expected to
15 come into attainment based on measures already in place. As a result, no
16 immediate additional measures are expected for East Bend and MF6 unless the
17 area fails to reach attainment. Assuming that the EPA strengthens the ozone
18 standard in late 2015, it is likely that more restrictive NO_x limitations will be
19 imposed upon East Bend and MF6. Because East Bend has an SCR, it is well-
20 positioned to comply with such limits. Since MF6 only has low NO_x burners, it
21 could face expensive additional NO_x controls.

22 **Q. PLEASE DESCRIBE THE HISTORY OF THE 1-HOUR SO₂ NAAQS.**

1 A. On June 22, 2010, the EPA established a new 75 ppb 1-hour SO₂ NAAQS and
2 revoked the prior annual and 24-hour SO₂ standards. The new standard became
3 effective on August 23, 2010. On July 25, 2013, the EPA took final action to
4 designate as nonattainment those areas where the 2009-2011 ambient air quality
5 had been shown by means of monitoring to exceed the level of the standard. The
6 area around East Bend and Miami Fort Stations is currently considered as
7 “unclassified”. The EPA must still address the attainment status of all areas not
8 designated as nonattainment in July 2013. In April 2014, the EPA issued the
9 proposed Data Requirements Rule that establishes a strategy for completing initial
10 area designations for the unclassified areas. The EPA’s proposed rule would allow
11 either ambient air quality monitoring or computer-based air quality modeling to
12 be used by the states to determine the attainment status of areas currently
13 designated as unclassifiable. The schedule the EPA laid out in its proposed rule
14 calls for states to submit designation recommendations to the EPA by January
15 2017 for recommendations based on modeling, or by May 2020 for
16 recommendations based on air quality monitoring. The EPA would issue final
17 designations by December 2017 if based on modeling or by December 2020 if
18 based on monitoring. State attainment demonstrations would be due by August
19 2019 for modeled nonattainment areas, and by August 2022 for monitored
20 nonattainment areas. Finally, attainment dates would likely be by early 2023 for
21 modeled nonattainment areas and early 2027 for monitored nonattainment areas.
22 Indiana, Kentucky and Ohio will evaluate the air quality around East Bend and

1 Miami Fort Station as part of their determination of the area designations they
2 will recommend to the EPA.

3 **Q. WHAT ARE THE IMPLICATIONS FOR DUKE ENERGY KENTUCKY'S**
4 **PLAN?**

5 A. Any evaluation in Indiana, Kentucky or Ohio that results in a final nonattainment
6 designation for an area associated with a Duke Energy Kentucky coal-fired unit
7 would place that unit at risk for additional SO₂ emission reduction requirements.
8 The greater potential risk of nonattainment is associated with MF6 because it does
9 not have a wet FGD system. Duke Energy Kentucky is concerned that without
10 greatly restricting the rate of SO₂ emissions from MF6, Miami Fort Station will
11 not be able to demonstrate attainment with the one hour SO₂ standard. East Bend
12 however is well-positioned because of its wet FGD system.

IV. GREEN HOUSE GAS REGULATION

13 **Q. PLEASE DESCRIBE THE MAJOR EFFORTS TO REGULATE**
14 **GREENHOUSE GASES THAT RELATE TO ELECTRIC GENERATING**
15 **UNITS.**

16 A. In 2007, the Supreme Court ruled in *Massachusetts v. EPA* that greenhouse gases
17 are a pollutant subject to regulation under the CAA.² Subsequently, the EPA
18 undertook a number of rulemakings including requiring major stationary sources
19 of greenhouse gases to obtain construction and operating permits. Because
20 immediate regulation of all such sources would overwhelm permitting authorities
21 and sources, the EPA issued the Timing and Tailoring Rules, in which it

² *Massachusetts v. Environmental Protection Agency*, 549 U.S. 497 (2007).

1 determined that only the largest stationary sources would initially be subject to
2 permitting requirements. On January 8, 2014, the EPA re-proposed New Source
3 Performance Standards for CO₂ emissions from new natural gas and coal-fired
4 electric generating units. At the President's direction, the EPA on June 2 2014
5 proposed CO₂ emissions requirements for existing, modified and reconstructed
6 fossil-fueled EGUs. EPA plans to finalize those requirements by June 1, 2015.
7 States will then be required to submit their implementation plans to the EPA for
8 approval by June 30, 2016.

9 **Q. WAS THE EPA'S UPCOMING CO₂ REGULATION FOR EXISTING**
10 **EGUS CONSIDERED IN THE CONTEXT OF THE EAST BEND**
11 **PURCHASE?**

12 A. The final outcome of the EPA's proposed CO₂ regulations for existing EGUs is
13 uncertain. Once the EPA finalizes its rule by June 1, 2015, the states will then
14 develop their own regulations to implement those emissions guidelines. Duke
15 Energy Kentucky will not know the exact regulatory requirements that will apply
16 to its facilities until the State of Kentucky completes its rule and it is approved by
17 the EPA. As I stated before, the President directed the EPA to require that states
18 submit their rules to the EPA for approval by June 30, 2016, but the actual EPA
19 approval is not likely to occur until sometime in 2017. Duke Energy Kentucky
20 cannot predict what those regulatory requirements might be or whether the
21 resulting program might establish a price on CO₂ emissions. Duke Energy
22 Kentucky has therefore not attempted to model this regulation, but believes that

1 the CO₂ prices utilized in our analyses can act as reasonable placeholders for costs
2 that may be incurred as a result of this regulation.

V. **COAL COMBUSTION RESIDUALS REQUIREMENTS IMPACTING
DUKE ENERGY KENTUCKY'S COAL FIRED
GENERATING STATIONS**

3 **Q. PLEASE DESCRIBE THE CURRENT STATUS OF, AND THE**
4 **COMPANY'S MODELING ASSUMPTIONS FOR, THE PROPOSED CCR**
5 **RULE.**

6 A. In April 2009, the EPA began assessing the integrity of ash dikes nationwide, and
7 began developing regulations to manage CCRs. CCRs primarily include fly ash,
8 bottom ash, and FGD byproducts (typically calcium sulfate (gypsum) or calcium
9 sulfite) that are destined for disposal. In June 2010, the EPA proposed a rule
10 containing two options for handling CCRs: 1) as a special waste listed under the
11 Resource Conservation and Recovery Act (RCRA) Subtitle C Hazardous Waste
12 Regulations; and 2) as a solid waste under RCRA Subtitle D Non-Hazardous
13 Waste Regulations. Both options included dam safety requirements and had strict
14 new requirements regarding the handling, disposal, and beneficial use of CCRs
15 except when reused in encapsulated applications (such as ready mix concrete and
16 the production of wallboard).

17 When the EPA published its proposed Electric Effluent Limitations
18 Guidelines (ELG) revisions, it indicated that it was working to integrate the ELG
19 rule with the pending CCR rule. In the ELG proposal, the EPA said that there
20 could be strong support for a conclusion that regulation of CCR disposal under
21 RCRA Subtitle D would be adequate because of 1) potentially lower CCR risk

1 assessment results, 2) the ELG requirements that the EPA may promulgate, and 3)
2 increased Federal oversight such requirements could achieve. The final CCR rule
3 and/or ELG rule will likely result in conversions to dry handling of flyash and
4 bottom ash; increased use of landfills; the closure of existing wet ash storage
5 ponds; and the addition of alternative wastewater treatment systems. In its ELG
6 proposal, the EPA indicated that the requirements of the two rules needed to be
7 harmonized before either rule was released. The EPA has indicated that it will
8 finalize the CCR rule sometime in 2014. Compliance with some aspects of the
9 CCR rule may begin within 6-12 months, while other actions may require 5 years
10 or more.

11 For Duke Energy Kentucky, we assumed that the EPA will finalize a
12 Subtitle D non-hazardous waste rule for CCR. We also assumed that the
13 combination of Effluent Guideline changes and CCR rule implementation will
14 require conversion to dry ash handling (both flyash and bottom ash); initiation of
15 closure of active and inactive wet ash storage ponds within 5 years; installation of
16 balance-of-plant wastewater treatment systems; and otherwise higher operations
17 and maintenance costs for managing CCR under more stringent disposal
18 requirements. We expect that the EPA will publish a final rule in 2014, with a six
19 month period to begin immediate compliance with some requirements of the final
20 rule, and full compliance with the entire rule after a five year period.

21 **Q. PLEASE DESCRIBE HOW CCRS ARE HANDLED AT EAST BEND.**

22 A. Duke Energy Kentucky currently operates a landfill at its East Bend Generating
23 Station (East Bend Landfill), which is used for the disposal of CCRs resulting

1 from the Company's FGD process and other coal combustion residual material.
2 Approximately 80% of the ash produced at East Bend is dry fly ash. That material
3 is mixed with the spent scrubber slurry and lime. The mixture sets up much like
4 concrete, and is placed in an onsite landfill. The remaining 20% is bottom ash.
5 This bottom ash is treated in an ash pond located on site at East Bend.

6 **Q. PLEASE DESCRIBE THE STATUS OF THE CURRENT LANDFILL**
7 **LOCATED AT EAST BEND.**

8 A. The current landfill has been in place since East Bend was constructed and is
9 reaching its capacity. The Company will need to either construct a new landfill or
10 arrange to transport its CCR to another landfill operated by a third party. The
11 presence of an onsite landfill has permitted Duke Energy Kentucky to manage its
12 costs of environmental compliance and provide safe and reliable electric service
13 by eliminating the need to transport and pay for sending its CCRs to commercial
14 landfills. The existing East Bend landfill is projected to reach its capacity in
15 approximately seven years, however, East Bend will need additional landfill space
16 before the current landfill is full due to the manner in which the material being
17 landfilled must be handled.

18 **Q. PLEASE DESCRIBE HOW DUKE ENERGY KENTUCKY WILL**
19 **ADDRESS THIS LANDFILL ISSUE IN THE FUTURE.**

20 A. Duke Energy Kentucky will need to construct a new landfill, which will take time
21 to accomplish. The Company anticipates starting construction of the first landfill
22 cell sometime in the next 1-2 years and has already obtained the necessary
23 permits to do so. To construct the proposed landfill, Duke Energy Kentucky will

1 acquire an interest in land, located adjacent to its East Bend Generating Station,
2 from its affiliates, Duke Energy Ohio and Tri-State Improvement Company. This
3 transfer of interest will occur at the lower of cost or market. Much of that land is
4 jointly owned with DP&L who maintains a 31% interest. An additional benefit of
5 the acquisition of the East Bend Purchase is that the Company has negotiated to
6 also acquire DP&L's 31% interest in the approximately 940 acres that surround
7 the existing East Bend site.

8 The new landfill will be constructed over time and in eight separate
9 phases, with the first phase estimated to be completed by approximately 2018.
10 The additional seven phases will be constructed in approximately three-year
11 increments with a projected completion date of 2042. The new landfill, which has
12 been permitted under the name "West Landfill", will be owned and operated by
13 Duke Energy Kentucky just as it has owned and operated the East Bend Landfill
14 for the past several years. Duke Energy Kentucky already has the personnel and
15 expertise in place to construct and operate the West Landfill. The proximity of the
16 West Landfill to East Bend will allow Duke Energy Kentucky to continue to
17 control its costs for transporting and disposing of the generator waste material.

18 **Q. IS THE NEED TO CONSTRUCT THE NEW LANDFILL A RECENT**
19 **DEVELOPMENT?**

20 **A.** No. The lifespan of the current East Bend Landfill, and the eventual need for a
21 new alternative, were discussed before the Commission in Case No. 2003-00252
22 when the Commission approved Duke Energy Kentucky's acquisition of the
23 generating plants from Duke Energy Ohio. At that time, it was contemplated that

1 to address future waste disposal needs, Duke Energy Kentucky would either
2 acquire land from Duke Energy Ohio to expand its existing landfill or that Duke
3 Energy Ohio might construct its own landfill and charge Duke Energy Kentucky
4 for disposal services. As Duke Energy Ohio is positioning itself to no longer own
5 generating assets, the company will not be in a position or have a need to
6 construct a landfill in the future.

7 **Q. PLEASE DESCRIBE THE ASH POND LOCATED AT EAST BEND.**

8 A. The ash pond located at East Bend was commissioned in 1981. It has a volume of
9 1,844 acre feet. It is used to separate bottom ash from the water used to convey
10 the ash from the plant before the water is discharged to the Ohio River from the
11 pond under a National Pollutant Discharge Elimination System (NPDES) permit.
12 The pond is also used to treat other plant water streams, such as coal pile run-off
13 and landfill leachate, before they are discharged under the NPDES permit.

14 **Q. WILL ANY OF THE PROPOSED CCR REGULATIONS IMPACT THE**
15 **CURRENT ASH POND OR LANDFILL AT EAST BEND?**

16 A. It is possible. The CCR regulations have the potential to impact the current ash
17 pond and landfill at East Bend. The June 2010 CCR proposed EPA rule include
18 provisions which may require the conversion to dry handling of ash and closure of
19 the ash pond. The rule will most likely require an altered groundwater monitoring
20 program for both the landfill and the ash pond. The results of the groundwater
21 monitoring program may require corrective actions, including but not limited to,
22 lining or closing the ash pond. The landfill may be required to have a more
23 stringent cap design than currently in the permit. The post-closure requirements

1 for both the ash pond and landfill are expected to be more stringent than current
2 standards.

**VI. CLEAN WATER ACT REQUIREMENTS IMPACTING DUKE ENERGY
KENTUCKY'S COAL FIRED GENERATING STATIONS**

3 **Q. PLEASE DESCRIBE THE CURRENT STATUS OF, AND THE**
4 **COMPANY'S MODELING ASSUMPTIONS FOR, THE PROPOSED ELG**
5 **RULE.**

6 A. On June 7, 2013, EPA proposed revisions to the Steam Electric ELGs. These
7 guidelines govern the quality of water discharged from generating facilities that
8 employ a steam cycle. The ELG are technology-based limits that will be set based
9 on the capability of the best technology available for treating that specified power
10 plant wastewater streams. The proposed rule contained eight options for
11 controlling these wastewater streams, and the EPA identified four of those options
12 as preferred. The primary focus in the proposal was coal-fired generation, and
13 targeted FGD wastewater treatment systems, ash handling systems, and coal
14 combustion residual leachate. The EPA will likely set limits directing the industry
15 to adopt certain FGD wastewater treatment technologies, and may require the
16 conversion to wet bottom and fly ash handling to dry handling. Per an EPA
17 agreement, the final rule is expected by September 30, 2015, and the new
18 requirements will be included in a station's next NPDES permit renewal.

19 For our modeling purposes, the Company assumes that the EPA will
20 finalize a guideline requiring the application of FGD wastewater treatment
21 technology, specifically physical-chemical treatment with bio-reactors, and
22 prohibit the discharge of fly ash transport water.

1 As I said before, East Bend already dry handles its fly ash. The spent FGD
2 material (both solid and liquid) are combined with the fly ash and lime to make a
3 stable material called Poz-o-tec. This material is landfilled onsite as a solid
4 material. Therefore, the final ELG rule is not expected to require additional
5 retrofit costs related to those wastewater streams. East Bend currently sluices its
6 bottom ash to an impoundment, and is expected to install a dry bottom ash
7 handling system under ELG. MF6 does not have an FGD system. However, the
8 Station currently sluices both fly ash and bottom ash to an impoundment. Under
9 the expected ELG rule, we believe it will be required to convert at least the fly ash
10 systems and possibly the bottom ash systems to dry handling.

11 **Q. PLEASE DESCRIBE THE CURRENT STATUS OF, AND THE**
12 **COMPANY'S MODELING ASSUMPTIONS FOR, THE PROPOSED**
13 **316(b) RULE.**

14 A. The EPA finalized the 316(b) Rule on May 19, 2014. The EPA's rule establishes
15 aquatic protection requirements for existing facilities and new on-site facility
16 additions that have a design intake flow of two million gallons per day or more
17 from U.S. waters; that utilize at least 25% of the water withdrawn for cooling
18 purposes; and that are a point source as defined in the Clean Water Act. The rule
19 provides subject facilities with seven options for reducing aquatic mortality
20 caused by impingement of aquatic organisms against cooling water intake
21 screens, with closed-cycle cooling being a pre-approved option. Facilities that use
22 once-through cooling water must be evaluated for best technology available
23 (BTA) to reduce entrainment, meaning the impacts to aquatic organisms drawn

1 into and passed through the cooling system. Existing facilities that withdraw very
2 large amounts of water (125 million gallons per day or more) are required to
3 conduct studies to assist the permitting authority in determining whether site-
4 specific controls are needed. The need is based on several factors, including the
5 social benefits and costs of entrainment and due to entrainment of organisms in
6 the cooling water systems. Both East Bend, with closed-cycle cooling, and MF6,
7 with once-through cooling, are affected by the final 316(b) rule. In view of the
8 rule, technical evaluations will be conducted for each station to determine the
9 most appropriate compliance option with regards to cost, feasibility and
10 operational issues.

11 For our modeling purposes, we had assumed that the EPA would
12 generally finalize its proposed preferred approach which is essentially the form
13 of the final rule. The impingement provisions of the rule do require various
14 aquatic, technical, and engineering studies. The final rule also requires intake
15 structure upgrades, such as the installation of modified intake screens and fish
16 return systems. Impingement mortality monitoring and numeric reporting will
17 be required.

18 The primary risk associated with entrainment compliance is the
19 installation of closed cycle cooling towers. The installation of cooling towers was
20 not specified as presumptive BTA for entrainment. The EPA instead outlined a
21 process to determine whether closed cycle cooling towers will be required on each
22 individual station based on nine factors, including economic, environmental, and
23 social factors. Compliance with the impingement provisions of the rule is

1 generally tied to the NPDES permit renewal schedule by facility, and compliance
2 dates are expected to be about 2019 or later.

3 **Q HOW WOULD 316(b) IMPACT EAST BEND AND MF6?**

4 A. East Bend is already equipped with closed-cycle cooling and has a mechanical
5 draft cooling tower. Based on the proposed rule, it is expected to have minimal
6 impacts from 316(b). We anticipate that East Bend will be deemed in compliance
7 with the entrainment standard, though it may be subject to additional reporting.
8 As I said previously, MF6 is has a once-through cooling water system, and will be
9 expected to replace its present traveling screens with modified screens more
10 protective of fish, to install a fish return system, and to perform an entrainment
11 characterization with evaluation of compliance technologies. The cost for these
12 actions will be significant.

**VII. HOW ENVIRONMENTAL REQUIREMENTS IMPACT DUKE ENERGY
KENTUCKY'S GENERATION PLANNING**

13 **Q. HOW IS DUKE ENERGY KENTUCKY'S COAL-FIRED GENERATION
14 FLEET POSITIONED IN TERMS OF COMPLIANCE WITH THE
15 ENVIRONMENTAL REGULATIONS YOU PREVIOUSLY DESCRIBED?**

16 A. As I previously described, East Bend is equipped with a mechanical draft cooling
17 tower, a high-efficiency hot side electrostatic precipitator, a lime-based FGD
18 system and a SCR system. These controls, coupled with the flexibility to burn
19 different coals, well position the station to comply with the aforementioned
20 environmental regulations.

21 MF6 is an unscrubbed station that has an air permit allowing SO₂
22 emissions of up to 5.0 lbs/MMBTU and has second-generation low NO_x burners

1 to reduce NO_x emissions. MF6 is currently unable to comply with MATS without
2 significant environmental retrofit. The Company has been evaluating the
3 feasibility of the ongoing operation of MF6 considering MATS and other pending
4 rules. A potential retirement prompted by MATS was the primary driver for the
5 Company's decision to explore new capacity possibilities through the request for
6 proposal process described by Duke Energy Kentucky witness James Northrup.
7 The Commission's approval of the East Bend Purchase as proposed will enable
8 the Company to decide to retire MF6 and, allows customers to avoid the costs of
9 significant environmental retrofits at the plant, and while ensuring that the
10 company has sufficient capacity to meet its reliability obligations.

11 **Q. OTHER THAN COST CONSIDERATIONS FOR MATS COMPLIANCE,**
12 **ARE THERE OTHER REASONS WHY THE COMPANY WOULD**
13 **REPLACE THE MF6 CAPACITY AND RETIRE THE UNIT?**

14 A. Yes. MATS is but one environmental regulation that would impact the life of the
15 unit. Previously I have described a number of other proposed and emerging
16 regulations that will impact MF6 as well as East Bend. MF6 was commissioned in
17 1960 and is nearing the end of its life. When the Commission approved the
18 Company's acquisition of its three generating stations in 2003, prior to MATS, it
19 was anticipated that MF6 had an estimated useful life of seventeen years, and thus
20 would likely be retired by 2020. Therefore, significant environmental retrofits are
21 not likely to extend the plant's life in a material manner. Even if the Company
22 were to proceed with the necessary retrofits to achieve MATS compliance, the
23 additional production costs would almost certainly ensure that it would operate

1 much less than it does today. Furthermore, the Company would still need to retire
2 MF6 due to other emerging environmental regulations by 2020. So, although
3 MATS may be the primary driver for the Company's consideration whether or not
4 to retire the unit within the next year, it is merely accelerating the decision by a
5 few years.

6 **Q. ARE YOU AWARE OF THE CONDITION OF THE TRANSACTION**
7 **THAT DUKE ENERGY KENTUCKY WILL ASSUME ALL OF THE**
8 **PAST, PRESENT AND FUTURE ENVIRONMENTAL LIABILITIES OF**
9 **THE DAYTON POWER AND LIGHT COMPANY?**

10 A. Yes.

11 **Q. DO YOU BELIEVE THIS IS A REASONABLE CONDITION FOR THE**
12 **COMMISSION TO APPROVE?**

13 A. Yes.

14 **Q. PLEASE EXPLAIN WHY YOU BELIEVE THIS CONDITION IS**
15 **REASONABLE.**

16 A. East Bend has been and will continue to be a well-run and managed facility. From
17 its first operation, Duke Energy Kentucky and its predecessor companies have run
18 the facilities and have been responsible for 69% of the costs. There will be an
19 improved efficiency associated with becoming the sole owner of the facility.
20 From an environmental perspective, I consider the unit to be well equipped to
21 meet current and future environmental requirements with its modern emissions
22 controls. East Bend is in compliance with current environmental regulations and
23 there are no known deficiencies in that regard. What I consider the most

1 significant exposure for environmental liabilities are the future liabilities
2 associated with the future regulatory changes I have described in my testimony.
3 As a current 69% owner in the station, Duke Energy Kentucky presently bears a
4 proportionate share of those potential future risks. Once the transaction is
5 completed, Duke Energy Kentucky's customers will benefit from the Company's
6 ownership of 100% of East Bend. The assumption of all liabilities means that the
7 costs of compliance due to these regulatory changes, if any will be apportioned in
8 accordance with the ownership of the asset, meaning DP&L will no longer be
9 responsible for a percentage of costs because it no longer has any interest in the
10 asset. I believe that those potential risks are adequately reflected by the relatively
11 low purchase price. I also note that DP&L and Duke Energy Kentucky operate
12 under different regulatory structures and have different operational strategies for
13 the station. As a result DP&L's 186 MW share of East Bend is more valuable to
14 Duke Energy Kentucky than DPL. These factors allow me to conclude that the
15 purchase of DP&L's share is a sound investment and accepting the environmental
16 liabilities is a reasonable condition.

VIII. CONCLUSION

17 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

18 **A. Yes.**

VERIFICATION

State of Ohio)
)
County of Hamilton) SS:

The undersigned, J. Michael Geers, being duly sworn, deposes and says that he is the Manager of Air Programs and Air Compliance, and that the matters set forth in the foregoing testimony are true and correct to the best of his information, knowledge and belief.

J. Michael Geers
J. Michael Geers, Affiant

Subscribed and sworn to before me by *J. Michael Geers* on this *29th* day of May 2014.

Ruth M. Loccisano
NOTARY PUBLIC

My Commission Expires: *6/18/2017*

RUTH M. LOCCISANO
Notary Public, State of Ohio
My Commission Expires 06-18-2017

COMMONWEALTH OF KENTUCKY
BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

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) Case No. 2014-_____
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.

PUBLIC VERSION

DIRECT TESTIMONY OF

JOHN A. VERDERAME

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

June 13, 2014

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ATTACHMENT

JAV-1 Confidential FRR Capacity Plan

I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is John A. Verderame, and my business address is 526 South Church
3 Street, Charlotte, North Carolina 28202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Progress, Inc. (Duke Energy Progress or the
6 Company) as Director, Power Trading and Dispatch. Duke Energy Progress is the
7 utility formerly known as Progress Energy Inc., (Progress Energy) located in
8 North and South Carolina. In 2012, upon consummation of the merger between
9 Duke Energy Corporation (Duke Energy Corp.) and Progress, Progress became
10 Duke Energy Progress and I was promoted to my current position. As part of the
11 merger integration process, Duke Energy Progress now provides various
12 administrative and other services to the regulated affiliated companies within
13 Duke Energy Corp., including Duke Energy Kentucky.

14 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND**
15 **PROFESSIONAL EXPERIENCE.**

16 A. I received a Bachelor of Arts degree in Economics from the University of
17 Rochester in 1983, and a Masters in Business Administration in Finance from
18 Rutgers University in 1985. I have worked in the energy industry for 14 years.
19 Prior to that, from 1986 to 2001, I was a Vice President in the United States (US)
20 Government Bond Trading Groups at the Chase Manhattan Bank and Cantor
21 Fitzgerald. My responsibilities as a US Government Securities Trader included
22 acting as the Firm's market maker in US Government Treasury securities. I joined

1 Progress Energy, in 2001, as a Real-Time Energy Trader. My responsibilities as a
2 Real-Time Energy Trader included managing the real-time energy position of the
3 Progress Energy regulated utilities. In 2005, I was promoted to Manager of the
4 Power Trading group. My role as manager included responsibility for the short-
5 term capacity and energy position of the Progress Energy regulated utilities in the
6 Carolinas and Florida.

7 In July 2012, following the consummation of the merger between Duke
8 Energy Corp and Progress Energy, I was promoted to my current position of
9 Director, Power Trading and Dispatch.

10 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS DIRECTOR,**
11 **POWER TRADING AND DISPATCH.**

12 A. As Director, Power Trading and Dispatch of Duke Energy Progress, I am
13 responsible for Power Trading and Generation Dispatch on behalf of the
14 Company's regulated utilities in the Carolinas, Florida, Indiana, and Kentucky. I
15 am primarily responsible for Duke Energy Kentucky's generation dispatch, unit
16 commitment; 24-hour real-time operations, and plant communications related to
17 short-term generating maintenance planning. I lead the team responsible for
18 managing the Company's capacity position with respect to meeting its Fixed
19 Resource Requirement (FRR) obligation as a member of PJM Interconnection,
20 L.L.C. (PJM), for the submission of the Company's supply offers and demand
21 bids in PJM's day-ahead and real-time electric energy (collectively Energy
22 Markets) and ancillary services markets (Ancillary Services Markets), as well as
23 managing the Company's short-term and long-term supply position to ensure that

1 the Company has adequate economic resources committed to serve its retail
2 customers' electricity needs. In that respect, I am also responsible for any
3 financial hedging done to mitigate exposure to short-term energy prices and
4 congestion risks.

5 **Q. HAVE YOU EVER TESTIFIED BEFORE THE KENTUCKY PUBLIC**
6 **SERVICE COMMISSION?**

7 A. No.

8 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
9 **PROCEEDING?**

10 A. My testimony provides an overview of Duke Energy Kentucky's participation in
11 PJM, how it manages its capacity position as an FRR entity, and how its
12 generation resources are dispatched in PJM. I will also discuss the Company's
13 current capacity position, the risks the Company faces as an FRR entity if it does
14 not have adequate capacity to fulfill PJM's reliability requirements, and how the
15 Company's proposal to purchase The Dayton Power & Light Company's (DP&L)
16 31% interest in the East Bend Unit 2 Generating Station (East Bend) will help the
17 Company to manage its FRR position going forward. I discuss the Company's
18 proposal to share capacity revenues derived from DP&L's 31% interest in East
19 Bend with customers and net those revenues against any costs the Company will
20 incur to satisfy its FRR plan obligations assuming Duke Energy Kentucky's
21 Miami Fort Unit 6 generating station (MF6) is retired.

II. DUKE ENERGY KENTUCKY'S PARTICIPATION IN PJM

1 **Q. ARE YOU PERSONALLY INVOLVED IN DAY-TO-DAY DECISIONS**
2 **REGARDING THE DISPATCHING AND COMMITMENT OF**
3 **RESOURCES USED TO SERVE DUKE ENERGY KENTUCKY'S RETAIL**
4 **ELECTRIC CUSTOMERS?**

5 A. Yes, I am. My responsibilities include managing Duke Energy Kentucky's short-
6 term and long-term generation supply position to ensure adequate resources are
7 economically committed to meet Duke Energy Kentucky's retail customers'
8 electricity needs in the most cost-effective manner.

9 **Q. PLEASE BRIEFLY DESCRIBE PJM'S ENERGY MARKET.**

10 A. PJM administers both Energy Markets utilizing locational marginal pricing
11 (LMP). LMP can be broadly defined as the value of one additional megawatt of
12 energy at a specific point on the electric grid. In PJM, LMP is composed of three
13 components; the system energy price, the transmission marginal congestion price,
14 and the marginal loss price. Both Energy Markets are based on supply offers and
15 demand bids submitted to PJM by market participants, including both generator
16 owners (as sellers) and load serving entities (as buyers). Thus, Duke Energy
17 Kentucky functions as both a seller and a buyer in the Energy Markets on behalf
18 of its retail electric customers in Kentucky.

19 The day-ahead energy market provides a means for market participants to
20 mitigate their exposure to price risk in the real-time energy market. The day-
21 ahead energy market also provides meaningful information to PJM regarding
22 expected real-time operating conditions for the next day, which enhances PJM's

1 ability to ensure reliable operation of the transmission system. The real-time
2 energy market functions as a balancing market between generation and load in
3 real-time. Through these Energy Markets and the LMP price signals, PJM
4 provides a market-based solution to value and thus manage energy production,
5 transmission congestion, and marginal losses in the PJM region.

6 PJM also operates, and Duke Energy Kentucky participates in, the
7 Ancillary Services Market. Ancillary services include:

- 8 • Synchronized Reserves, which provide energy during an
9 unexpected period of need;
- 10 • Non-Synchronized Reserves, which also provide energy during an
11 unexpected period of need, but which are typically off-line;
- 12 • Regulating Reserves, which are utilized to manage short-term
13 changes in energy requirements;
- 14 • Day-Ahead Scheduling Reserves, a 30-minute day-ahead reserve
15 product; and
- 16 • Black Start Service, which provides energy to the grid in the event
17 of a black out condition.

18 PJM Ancillary Services Markets are co-optimized with the Energy
19 Markets in order to minimize production costs.

20 In addition to these more physical Energy Markets, PJM offers financial
21 products that can be utilized to hedge exposure to the Energy Markets. Virtual
22 transactions can hedge risk in the real-time energy market, and Financial
23 Transmission Right (FTR) transactions can hedge exposure to day-ahead

1 congestion costs. FTR auctions are conducted annually and monthly. FTRs are
2 defined with source and sink points that entitle and obligate the holder to a stream
3 of revenues or charges based on the hourly day-ahead congestion price
4 differences across the defined path. Duke Energy Kentucky utilizes FTRs to
5 manage the congestion risk from our generation stations to our load zone. Virtual
6 transactions clear in the day-ahead energy market as virtual generators and loads
7 at specific points on the grid. Virtual transactions settle based on the difference
8 between the day-ahead and real-time LMP at the specific node. Duke Energy
9 Kentucky utilizes virtual transactions to hedge generator performance risk,
10 primarily during start up or as a potential operational contingency.

11 Other non-PJM operated financial markets that are based on PJM market
12 settlements exist. Duke Energy Kentucky participates in these financial markets to
13 hedge Duke Energy Kentucky's customer's exposure to day-ahead and real-time
14 energy prices when our generation stations are unavailable due to planned
15 maintenance outages or are not expected to clear the Energy Markets in volumes
16 sufficient to serve native load demands.

17 **Q. PLEASE BRIEFLY EXPLAIN HOW DUKE ENERGY KENTUCKY'S**
18 **CURRENT GENERATION PORTFOLIO PARTICIPATES AND IS**
19 **DISPATCHED IN THE DAY-AHEAD AND REAL-TIME ENERGY**
20 **MARKETS.**

21 A. As an FRR entity and generation owner in PJM, Duke Energy Kentucky is under
22 a must offer requirement to offer all of its generation committed to the FRR plan
23 into the day-ahead energy market. The generating units are offered with

1 designations including; Must Run, Economic, Emergency, and Unavailable. Must
2 Run status units will clear the market regardless of economics and are generally
3 dispatched at a minimum load during periods when the marginal cost of the unit is
4 above the LMP solved by the dispatch model. Economic status units will
5 generally be committed if their “all in” costs, including startup costs, are
6 economic across the following day. Emergency status units are committed during
7 an energy emergency event. Unavailable status units will not be considered by the
8 commitment and dispatch model.

9 Each generating unit is offered hourly in a segmented incremental energy
10 and ancillary service offer curve across the unit’s operational range. The hourly
11 offers consist of price and quantity pairs based on the daily fuel cost, unit
12 efficiency, emissions and variable operations and maintenance (O&M) costs, and
13 plant output availability. Unit status is determined based upon unit availability,
14 marginal energy costs, and anticipated market clearing prices.

15 Day-ahead generation unit offers are submitted to PJM by 12PM Eastern
16 Prevailing Time the day prior to energy flow. Generally by 4PM that day,
17 following execution of a security constrained unit commitment model, PJM posts
18 energy and ancillary services awards for the following day. These awards are
19 financially binding on both Duke Energy Kentucky and PJM.

20 In real time, Duke Energy Kentucky makes hourly updates to the energy
21 and ancillary service offers, primarily with respect to unit availability. The Duke
22 Energy Kentucky generation dispatchers follow PJM generation dispatch signal
23 instructions, and relay necessary instructions to the generation stations.

1 It is possible that in real time, despite receiving a day-ahead energy award,
2 PJM dispatch signals will instruct Duke Energy Kentucky plants to move to
3 generation loadings below their day-ahead award level. These instructions are
4 based on the real-time energy needs of the system as manifested through LMP
5 price signals at the generator bus. If the real-time LMP is below a unit's marginal
6 cost of energy, PJM will likely reduce output, or delay or cancel a unit startup.
7 Conversely, if system conditions have changed from day-ahead model
8 assumptions, PJM may direct a Duke Energy Kentucky unit to start up without a
9 day-ahead energy award. Duke Energy Kentucky has an obligation and financial
10 incentive to follow PJM dispatch instructions.

11 **Q. PLEASE DESCRIBE THE PJM CAPACITY MARKET.**

12 A. PJM's capacity market is called RPM, which is an acronym for Reliability Pricing
13 Model. The purpose of RPM is to provide a market construct that enables PJM to
14 secure adequate generation resources to meet the reliability needs of the regional
15 transmission organization (RTO). The RPM construct and the associated rules
16 regarding how PJM members participate in the PJM capacity market is described
17 within the PJM Open Access Transmission Tariff (OATT) and Reliability
18 Assurance Agreement (RAA). The PJM capacity market operates on what is called
19 a delivery year that spans a twelve month period beginning June 1st and ending
20 May 31st (Delivery Year). In PJM, the capacity market structure is intended to
21 provide transparent forward market signals that support generation and
22 infrastructure investment. There are two ways for a PJM member to participate in
23 the RPM capacity structure: 1) through the RPM baseline procurement auctions;

1 or 2) as a self-supply FRR entity. The baseline procurement auctions are called
2 the base residual auctions (BRA). BRAs are conducted three years in advance of
3 the actual Delivery Year in order to allow bidders to complete construction of
4 projects that clear the BRA. The PJM capacity market provides incentives for the
5 development of generation, demand response, energy efficiency, and transmission
6 solutions. Another important component of RPM is that price signals are
7 locational, and designed to recognize and quantify the geographical value of
8 capacity. PJM divides the RTO into multiple sub-regions called Locational
9 Delivery Areas (LDA) in order to model the locational value of generation. If
10 PJM determines that a particular LDA does not have sufficient generation or
11 import transmission capacity to meet its anticipated reliability obligation it will
12 define that LDA as constrained and the model will solve a separate supply/
13 demand solution for that LDA. All capacity within a LDA receives the clearing
14 price for that LDA.

15 **Q. PLEASE BRIEFLY DESCRIBE THE PJM CAPACITY AUCTION**
16 **CONSTRUCT.**

17 A. PJM utilizes four auctions, the BRA plus three incremental auctions, up to the
18 prompt year in order to procure the correct amount of capacity supply for the
19 actual demand in the Delivery Year. The first auction is the BRA and typically
20 occurs in May for the Delivery Year beginning in June three years into the future.
21 Then, in September of the following year, PJM holds the first incremental
22 auction. In July of the following year, PJM hold its second incremental auction.
23 Finally, in the February that is three months before the beginning of the associated

1 Delivery Year, and after the final effective Equivalent Forced Outage Rate in
2 Demand (EFOR_d) and Final Daily Unforced Capacity Obligations ratings are
3 posted, PJM will conduct the third incremental auction. The EFOR_d postings are
4 based upon the prior year, and are a significant milestone in this process as they
5 establish the factor that is applied to individual generator's Installed Capacity
6 ratings (ICAP) in order to calculate Unforced Capacity ratings (UCAP). PJM
7 capacity obligation requirements are stated in UCAP, in other words, the nominal
8 capacity of a generation unit adjusted down for its historical performance. Each
9 incremental auction is an opportunity for both suppliers and PJM to balance their
10 respective capacity positions, meaning that if a supplier sold too much capacity
11 due to changes in EFOR_d, it can buy back some of the capacity that it previously
12 sold in the BRA or an incremental auction. Similarly, if PJM finds that the peak
13 load forecast was too high or too low, and it subsequently procured too much or
14 too little capacity in the BRA, it can sell back or buy more capacity to balance to
15 the actual reliability requirements.

16 **Q. PLEASE EXPLAIN PJM'S FRR PROCESS.**

17 A. PJM provides an alternative means for a PJM Load Serving Entity (LSE) to
18 satisfy its capacity obligation under the PJM RAA to commit unforced capacity to
19 meet capacity requirements. This self-supply capacity alternative is called FRR.
20 The PJM OATT and RAA also specify the obligations for FRR entities and the
21 options for compensation to FRR entities for supplying capacity. The FRR
22 alternative provides a LSE with the option to submit an FRR capacity plan that
23 meets a fixed capacity resource requirement (FRR Plan). The FRR Plan must

1 identify the unit specific generating or demand response resources that will be
2 providing the necessary MWs of capacity to fulfill the FRR obligation. FRR
3 allows the LSE to match its reliability requirement to its own generation, demand
4 response, energy efficiency and/or transmission resources, while still being
5 permitted to sell some or all of its excess supply into RPM auctions up to the FRR
6 limit. The FRR limit is the lesser of 25% of the Preliminary Unforced Capacity
7 Obligation or 1,300 MW. For example, if the Duke Energy Kentucky reliability
8 requirement was 1,000 MWs, then its FRR sales limit would be 250 MWs.

9 **Q. ARE THERE DIFFERENCES IN THE OBLIGATIONS AND RISKS FOR**
10 **AN FRR ENTITY RELATIVE TO THOSE OF AN ENTITY THAT**
11 **PARTICIPATES IN THE RPM AUCTIONS?**

12 A. Yes. First, in order to align with the three-year forward BRA, LSEs entering into
13 PJM are generally required to do so as an FRR entity for a minimum five year
14 term before they can participate in the RPM auctions. In the case of Duke Energy
15 Kentucky's transition to PJM, the Company was required to establish an FRR
16 Plan for the 2011/2012, 2012/2013, 2013/2014, 2014/2015, and 2015/2016
17 Delivery Years prior to its integration into PJM on January 1, 2012.

18 An FRR entity is responsible for establishing an FRR Plan, with unit-
19 specific capacity identified that meets its full expected reliability requirement for
20 capacity for each Delivery Year, no later than one month prior to the BRA for that
21 Delivery Year. In other words, because the BRA for a Delivery Year occurs three
22 years before the actual start of the Delivery Year, an FRR entity must also supply
23 its entire FRR Plan for the period three years into the future. In the BRA,

1 however, PJM secures only 97.5% of the capacity needed to meet the expected
2 resource requirements for all participating LSEs, leaving 2.5% to be procured in
3 incremental auctions, with the goal of allowing participation by short-term
4 resources that may not be able to make a supply commitment at the time of the
5 BRA. Hence, an FRR entity is responsible for securing the unit-specific resources
6 to cover 100% of its resource requirement, typically three years in advance (five
7 years upon entering PJM), while on the same three-year-ahead time frame,
8 resources will be locked in for only 97.5% of the expected reliability requirements
9 for LSEs relying on RPM.¹

10 Second, FRR entities are limited in their ability to monetize the full value
11 of any excess generation capacity they may have. An FRR entity is restricted in
12 its ability to sell surplus capacity resources in the RPM auctions. An FRR entity is
13 allowed to sell bilaterally into RPM or in RPM auctions only if it withholds
14 additional capacity called the “Threshold Quantity” in its Initial FRR Plan. The
15 Threshold Quantity is defined as the lesser of 3% of the Preliminary Daily
16 Unforced Capacity Obligation² or 450 MW. The quantity of resources that an
17 FRR entity may sell into the RPM auctions is also limited to the lesser of 1,300
18 MW or 25% of its Preliminary Unforced Capacity Obligation. In other words, if

¹ By way of example, the BRA that occurred in May 2014 was for the Delivery Year spanning June 1, 2017, through May 31, 2018. As an FRR entity, Duke Energy Kentucky submitted its FRR plan for the 2017/2018 Delivery Year, in April 2014.

² Preliminary Daily Unforced Capacity Obligation is defined as the Based Obligation Peak Load times Based Zonal FRR Scaling Factor times the Forecasted Pool Requirement at the BRA. The Preliminary Zonal Scaling Factor is the Preliminary Zonal Peak Load Forecast divided by the Zonal Weather Normalized Summer Peak for the summer four years prior to the Delivery Year. The Forecast Pool Requirement is the measure determined for the specified Delivery Year to establish the level of unforced capacity UCAP that will provide an acceptable level of reliability consistent with PJM Reliability Principles and Standards.

1 an FRR Entity has not satisfied a Threshold Quantity, they are prohibited from
2 selling excess capacity bilaterally into RPM or in the RPM Auction. They may
3 still offer to sell excess capacity to a party external to PJM or to an FRR Entity.

4 Third, there can be a difference in the amount of capacity that each entity
5 must procure. An FRR entity is responsible for procuring resources to cover its
6 resource requirement, which may differ from the resource requirement that
7 otherwise would have resulted from the RPM auction clearing process. An FRR
8 entity is subject to additional risks related to changes in the peak load forecast, as
9 compared to an entity participating in the BRA and incremental auctions. If for
10 example, the final load forecast in advance of the Delivery Year is lower than the
11 preliminary forecast used to set the resource requirements for the BRA for that
12 Delivery Year, both the FRR entity and the full RPM participant may have to face
13 additional costs for procurement of more capacity than they may ultimately need
14 to meet their final requirement. While the capacity secured to meet BRA
15 participant's demand covered just 97.5% of the expected VRR of BRA, the FRR
16 entity would be responsible for an FRR Plan than included 100% of its resource
17 requirement.³ If the final resource requirement is below the level expected prior to
18 the BRA for a Delivery Year, the FRR entity may be left with more "orphaned"
19 resources because of the limitations on the ability to sell excess capacity I
20 previously described, even though these resources were secured three years in
21 advance.. Thus, the FRR entity faces a greater risk of having over-procured
22 capacity.

³ If the FRR entity had opted to be eligible to offer surplus resources in the auctions, due to the 3% holdback requirement, the obligation would be 103%.

1 **Q. PLEASE EXPLAIN HOW DUKE ENERGY KENTUCKY CURRENTLY**
2 **PARTICIPATES IN THE PJM CAPACITY CONSTRUCT.**

3 A. Duke Energy Kentucky follows an FRR Plan for capacity submitted annually to
4 PJM. This is consistent with the Commission's Order in Case No. 2010-00203
5 whereby the Commission required the Company to participate in PJM as an FRR
6 entity until such time as it received Commission approval to participate in the
7 PJM capacity auctions. To date, the Company has not requested such permission,
8 but continues to evaluate the merits of exiting the FRR obligation and becoming a
9 full RPM auction participant.

10 **Q. PLEASE EXPLAIN WHAT BEING AN FRR ENTITY MEANS FOR DUKE**
11 **ENERGY KENTUCKY.**

12 A. As an FRR entity, Duke Energy Kentucky must secure and commit unit-specific
13 generation resources to meet the full load capacity requirements for all of its
14 customers in advance of the PJM BRA through its FRR Plan. The FRR Plan is
15 forward-looking in that it covers the Delivery Year three years into the future. For
16 example, as part of its most recent FRR plan submitted in 2014, Duke Energy
17 Kentucky must own or contract and commit the unit specific generation resources
18 to satisfy its forecasted load requirements for the period from June 1, 2017,
19 through May 31, 2018. Presently, the load requirements include both the
20 forecasted load of Duke Energy Kentucky's customers, as well as the reserve
21 requirement mandated by PJM.

22 **Q. PLEASE EXPLAIN WHAT YOU MEAN BY THE PHRASE UNIT-**
23 **SPECIFIC GENERATION RESOURCES.**

1 A. A unit-specific generation resource, as the phrase implies, simply means a
2 specific generating resource that meets the eligibility requirements defined by
3 PJM. PJM eligible resources include both physical and demand-side management
4 resources. Duke Energy Kentucky must identify the specific generation resources
5 it owns or has contracted for to provide capacity to meet its entire Delivery Year
6 FRR obligation. Unit-specific capacity is distinguishable from the more “generic”
7 buy-buy capacity that may be purchased through the BRA or incremental auctions
8 of PJM. The capacity product available for purchase in those auctions is not
9 directly tied to a specific generator, so it cannot, in itself, be used to satisfy an
10 FRR plan obligation. While sellers in the BRA identify the generation resource
11 offered into the auction, the end product is not so specific. The entire generator
12 performance obligation in the BRA is to PJM, not the purchaser of the buy-bid
13 capacity. From the purchaser’s perspective, buy-bid capacity has guaranteed
14 deliverability and performance by PJM. This is distinguishable from the FRR
15 entity where the performance obligation of generation committed to FRR plans is
16 the responsibility of the FRR entity.

17 As such, Duke Energy Kentucky has similar performance risk to RPM
18 entities, but less flexibility to adjust its plan to account for changes in its resource
19 requirements between the BRA and the Delivery Year than an RPM participant
20 who can simply buy and sell capacity to meet its needs through the BRA and
21 incremental auctions.

1 **Q. WOULD MOVING TO FULL PARTICIPATION IN THE RPM**
2 **CAPACITY CONSTRUCT INCREASE DUKE ENERGY KENTUCKY**
3 **CUSTOMERS EXPOSURE TO MARKET CAPACITY PRICES?**

4 A. Duke Energy Kentucky customers would be exposed to market capacity prices
5 only to the extent that its net capacity position, the difference between its owned
6 or contracted capacity and its load obligation, either exceeds or does not meet its
7 capacity obligation. To the extent the capacity position exceeds the load
8 obligation and the Company is a net seller, the exposure is positive in the sense
9 that revenues from selling capacity would exceed cost of bidding load. From a
10 practical perspective, capacity prices outside of RPM but inside of PJM are
11 largely driven by the RPM capacity market. In other words, whatever exposure
12 customers have to market prices already exists. In fact, during periods of excess
13 capacity, monetizing the value of capacity is much easier in a liquid organized
14 construct such as RPM.

15 **Q. ARE THERE OTHER POTENTIAL CONSIDERATIONS ASSOCIATED**
16 **WITH FULL PARTICIPATION IN THE RPM CAPACITY CONSTRUCT?**

17 A. Yes. Under current PJM market rules, new generation resources can potentially
18 fall under the Minimum Offer Price Rule (MOPR), a rule intended to counteract
19 manipulation in the capacity market. These resources, known as MOPR Screened
20 Generation Resources, are required to offer generation at no lower than a defined
21 MOPR Floor Offer Price which is intended to be representative of their cost. As
22 described above, LSEs participating in the BRA sell all of their generation into
23 the auctions, while simultaneously purchasing the capacity load obligation of their

1 customers. The potential risk in the RPM auction construct for a vertically
2 integrated utility such as Duke Energy Kentucky, is that a purchased or self-built
3 generation resource subject to the MOPR and offered into the BRA at the MOPR
4 Floor Offer Price potentially may not clear the BRA. Consequently, under these
5 circumstances, ratepayers would be forced to purchase capacity in the BRA, as
6 well as pay the explicit costs of the new resource that may be approved through a
7 state regulatory construct, without the benefit of offsetting capacity revenues from
8 the RPM auctions.

9 While there are exemptions to the MOPR that Duke Energy Kentucky
10 could qualify for under the current rule structure, it is possible that these rules
11 could change in the future.

12 **Q. AT THE PRESENT, WHAT IS THE EARLIEST TIME THAT THE**
13 **COMPANY COULD POSSIBLY EXIT THE FRR OBLIGATION AND**
14 **BECOME A PARTICIPANT IN THE RPM CAPACITY CONSTRUCT?**

15 A. At present the earliest the Company could possibly exit its FRR obligation and
16 become a full RPM participant is for the delivery year beginning June 1, 2018.

17 **Q. PLEASE BRIEFLY DESCRIBE DUKE ENERGY KENTUCKY'S MOST**
18 **RECENT FRR PLAN.**

19 A. The Company's most recent FRR plan is for the 2017/2018 Delivery Year and
20 consists of unit-specific capacity associated primarily with the Company's
21 ownership share of three generating stations, East Bend, MF6, and the six gas-
22 fired units at the Woodsdale Generating Station (Woodsdale), as well as some
23 limited MWs of qualifying demand response. These Duke Energy Kentucky

1 generating assets represent a total of 1069 MWs of ICAP dedicated to Duke
2 Energy Kentucky's load obligations. Confidential Attachment JAV-1 is a true and
3 accurate copy of the Company's current FRR capacity plan through the
4 2017/2018 Delivery Year.

5 However, that does not provide the complete picture of Duke Energy
6 Kentucky's FRR Plan and capacity position and obligations in PJM. These
7 positions and obligations change annually.

8 **Q. PLEASE EXPLAIN HOW THE COMPANY'S CAPACITY RESOURCE**
9 **POSITION AND OBLIGATION COULD CHANGE.**

10 A. Prior to each RPM Auction, PJM updates all of the planning parameters such as
11 Forecast Pool Requirement, Zonal Scaling Factor, Demand Response Factor,
12 EFOR_d, Load Forecast, etc. As a result, the Final Unforced Capacity of the
13 resources and the Unforced Capacity Obligation may change significantly from
14 what was filed in its initial FRR Plan filed three years prior.

15 An FRR entity's capacity resource position and load obligation can change
16 due to many factors. For example, the actual performance of generation units
17 committed to the FRR Plan can impact the obligation because changes in actual
18 forced outage rates directly impact the UCAP value of the unit. Also,
19 unanticipated unit retirements, structural market changes in resource eligibility or
20 reserve requirements, and changes in load forecast can also cause a change to the
21 obligation. If the FRR entity finds itself short on capacity to meet its obligation,
22 for a Delivery Year, it must act to procure unit-specific resources to satisfy its
23 obligations or face penalties from PJM.

1 **Q. CAN DUKE ENERGY KENTUCKY SIMPLY PURCHASE**
2 **INCREMENTAL CAPACITY IN THE PJM INCREMENTAL AUCTIONS**
3 **TO USE AS PART OF ITS FRR PLAN?**

4 A. Not directly. As I previously stated, the capacity product available in the BRA
5 and incremental auctions is buy-bid or generic capacity and not tied to a specific
6 generator. Therefore, capacity available in the auction is not the type of unit-
7 specific capacity eligible for inclusion in an FRR plan.

8 However, it is possible for Duke Energy Kentucky to purchase MWs of
9 the buy-bid buy capacity in the auction that it could then swap with a counterparty
10 who has already committed its specific capacity in the auction. This swap would
11 free the specific generating unit that was already committed and then Duke
12 Energy Kentucky could point to that specific generator in its FRR Plan. This swap
13 is generally done for a small fee to the owner of the specific capacity. The swap
14 involves entering into a short-term bilateral agreement with a RPM participant
15 who is willing to sell their unit-specific capacity dedicated to PJM and purchase
16 buy-bid capacity to replace the unit-specific capacity auction commitment. It is
17 also important to note that capacity only transactions, while satisfying FRR
18 obligations do not provide any hedge against Energy Market prices. While cost
19 effective to manage temporary shortages or bridges in the FRR Plan, capacity
20 only purchases may not be the best long-term strategy.

21 **Q. WHAT WOULD HAPPEN IF AN FRR ENTITY LIKE DUKE ENERGY**
22 **KENTUCKY FAILED TO PROVIDE CAPACITY FOR ITS FOOTPRINT,**
23 **AS REQUIRED BY THE RAA?**

1 A. If Duke Energy Kentucky failed to provide the full amount of capacity for its
2 footprint as required by the RAA, the Company would be subject to a substantial
3 penalty – the FRR Commitment Insufficiency Charge of two times the CONE per
4 MW of shortage. For the current 2014/2015 Delivery Year, that charge would be
5 two times \$351.30 per MW-day, or \$256,452 per MW-Year of shortage for the
6 Delivery Year and the remaining term of the FRR Plan. In addition, the Company
7 would be ineligible to continue the FRR Alternative. The PJM RAA, in section
8 D.7 states:

9 The Office of the Interconnection will review the adequacy of
10 all submittals hereunder both as to timing and content. A Party
11 that seeks to elect the FRR Alternative that submits an FRR
12 Capacity Plan which, upon review by the Office of the
13 Interconnection, is determined not to satisfy such Party's
14 capacity obligations hereunder, shall not be permitted to elect
15 the FRR Alternative. If a previously approved FRR Entity
16 submits an FRR Capacity Plan that, upon review by the Office
17 of the Interconnection, is determined not to satisfy such Party's
18 capacity obligations hereunder, the Office of the
19 Interconnection shall notify the FRR Entity, in writing, of the
20 insufficiency within five (5) business days of the submittal of
21 the FRR Capacity Plan. If the FRR Entity does not cure such
22 insufficiency within five (5) business days after receiving such
23 notice of insufficiency, then such FRR Entity shall be assessed
24 an FRR Commitment Insufficiency Charge, in an amount equal
25 to two times the Cost of New Entry for the relevant location, in
26 \$/MW-day, times the shortfall of Capacity Resources below
27 the FRR Entity's capacity obligation (including any Threshold
28 Quantity requirement) in such FRR Capacity Plan, for the
29 remaining term of such plan.

30 **Q. ARE YOU AWARE OF ANY FACTORS THAT COULD CAUSE A**
31 **CHANGE IN DUKE ENERGY KENTUCKY'S FRR PLAN OR**
32 **OBLIGATION IN THE FUTURE?**

1 A. Yes. Duke Energy's capacity resource position currently includes the 163 MWs of
2 net installed capacity at MF6 that may not be available in future Delivery Years if
3 the unit is retired. It is possible that MF6 may retire on or before June 1, 2015, to
4 coincide with the implementation of the US Environmental Protection Agency
5 (EPA) Mercury and Air Toxics Standard (MATS) Rule. The MATS compliance
6 deadline is scheduled to become effective on April 16, 2015. Duke Energy
7 Kentucky was able to receive a compliance extension from the Ohio EPA to June
8 1, 2015, to align with the PJM Delivery Year. Nonetheless, Duke Energy
9 Kentucky must decide whether or not to retire the unit or comply with MATS
10 prior to June 1, 2015. As more fully explained by Duke Energy Kentucky
11 witnesses James Northrup, and J. Michael Geers, the Company believes the
12 purchase of the remaining 31% interest East Bend is a lower cost and longer term
13 alternative to investing in technology to bring MF6 into compliance with MATS.

**III. DUKE ENERGY KENTUCKY'S PURCHASE OF THE
REMAINING INTEREST IN EAST BEND**

14 **Q. HOW WILL THE PURCHASE OF THE REMAINING 31% INTEREST IN**
15 **EAST BEND ALIGN WITH THE COMPANY'S CURRENT FRR**
16 **OBLIGATION?**

17 A. The purchase of the remaining 31% interest in East Bend from DP&L (East Bend
18 Purchase) fits well with Duke Energy Kentucky's current FRR and future FRR
19 obligations, in that it provides both unit specific capacity and competitively priced
20 energy. DP&L is also a member of PJM, so its 31% interest in the plant is an
21 eligible and dedicated PJM resource for capacity. Duke Energy Kentucky
22 currently owns the majority interest, and staffs and operates all of East Bend.

1 Additionally, the East Bend Purchase presents a great opportunity for the
2 Company to acquire needed capacity at a reasonable price. As explained by
3 Messers Immel and Geers, the MF6 station is eventually going to face retirement
4 as soon as June 2015 as a result of MATS compliance, or by 2020 due to its age
5 and future environmental regulations. The MF6 unit represents 163 MWs of net
6 installed capacity that the Company will eventually need to replace. The East
7 Bend Purchase represents 186 MWs of net installed capacity that could be
8 dedicated to Duke Energy Kentucky and included in its FRR Plan.

9 **Q. WHAT DO YOU MEAN BY THE EAST BEND PURCHASE CAPACITY**
10 **COULD BE DEDICATED TO DUKE ENERGY KENTUCKY?**

11 A. As an RPM entity in PJM, DP&L is required to offer all available generation into
12 the RPM auctions. Therefore, DP&L has already bid its share of the East Bend
13 capacity into the PJM BRA and incremental auctions through the 2017/2018
14 Delivery Year. This means that DP&L's share of East Bend's capacity has
15 already been committed in PJM through May 31, 2018. Duke Energy Kentucky
16 will use the East Bend Purchase as part of the Company's PJM capacity
17 obligation beginning June 1, 2018.

18 **Q. DOES THAT MEAN THE EAST BEND PURCHASE CAPACITY HAS NO**
19 **USE OR VALUE TO DUKE ENERGY KENTUCKY OR ITS**
20 **CUSTOMERS UNTIL JUNE 2018?**

21 A. Absolutely not. Duke Energy Kentucky has an ability to use the East Bend
22 Purchase capacity as part of its FRR Plan prior to the 2017/2018 Delivery Year
23 and is likely to do so if needed. As discussed earlier, Duke Energy Kentucky will

1 simply have to purchase buy-bid capacity in the incremental auctions in an
2 amount to cover whatever amount is needed to satisfy the PJM reliability
3 obligations and then swap that “non-unit-specific” capacity with the East Bend
4 Purchase unit-specific capacity previously committed in a BRA. Essentially Duke
5 Energy Kentucky will execute the swap without a counter party.

6 Further, as part of the East Bend Purchase Duke Energy Kentucky will
7 receive the capacity payments associated with DP&L’s BRA capacity
8 commitments in PJM attributable to East Bend. Duke Energy Kentucky intends to
9 use these capacity payments as a funding source to mitigate any costs to satisfy
10 the Company’s FRR Plan needs, including any purchases of unit specific capacity
11 or buy-bid capacity in incremental auctions that can then be used to conduct a
12 capacity swap for East Bend unit-specific capacity through the Delivery Year
13 ending May 31, 2018. Duke Energy Kentucky witness Mr. Wathen describes the
14 Company’s proposal to account for this through rates more fully in his testimony.
15 But, in summary, Duke Energy Kentucky is proposing to share the net proceeds
16 of the difference, positive or negative, between the PJM capacity revenues
17 associated with the 31% of East Bend and the costs the Company will incur to
18 purchase the buy-bid capacity in an incremental auction. The Company will
19 include 75% of this difference, positive or negative, as an off-system sale under
20 the Company’s Profit Sharing Mechanism (Rider PSM). This netting means that
21 Customers will receive 75% of the benefit or costs of the capacity transaction
22 through use of the East Bend Purchase capacity immediately. This netting will
23 only last through May 2018, after which time, the 31% of East Bend that has not

1 been committed into a BRA will be available for the Company to utilize in its
2 FRR Plan.

3 Additionally, Duke Energy Kentucky customers will benefit immediately
4 and for the life of the asset from energy revenues resulting from sales in the PJM
5 day-ahead and real-time Energy Markets.

6 **Q. WHAT ARE THE PJM CAPACITY REVENUES THAT DUKE ENERGY**
7 **KENTUCKY WILL RECEIVE?**

8 A. Assuming the transaction closes before the end of the PJM 2014/2015 Delivery
9 Year, Duke Energy Kentucky will receive the pro-rata portion of the monthly
10 PJM capacity revenues attributed to the 31% interest in East Bend for the
11 2014/2015 Delivery Year. Duke Energy Kentucky will also receive all of the
12 capacity revenues for the 2015/2016, 2016/2017 and 2017/2018 Delivery Years.
13 The estimated value of these revenues is reflected in the chart below.



14 As previously stated, these revenues will be utilized to offset the expense
15 of any bilateral unit specific capacity purchases or incremental auction swapped
16 buy-bid capacity purchases made to meet the FRR capacity plans. Because Duke
17 Energy Kentucky does not know where incremental auction capacity will clear for
18 future Delivery Years, the Company cannot guarantee that these revenues will
19 exceed costs associated with purchasing replacement capacity. Similarly, the
20 precise number of MWs the Company will be required to replace is unknown and

1 will be driven by changes in the Duke Energy Kentucky load obligation,
2 generation resource capacity credit, or if the Company decides to retire MF6. Any
3 net positive balance provides additional revenues to offset costs.

4 Historically, the incremental auctions have generally resulted in clearing
5 prices that were much lower than the corresponding delivery year's BRA. While
6 it is possible that the gross revenues received from the RPM auctions do not
7 completely offset the replacement capacity costs, customers will have the added
8 benefit of the additional share of East Bend Purchase energy market revenues
9 during the entire period. The proposed capacity purchase and replacement plan,
10 while potentially resulting in a charge through the Profit Sharing Mechanism,
11 guarantees a cost effective alternative to potential deficiency charges if Duke
12 Energy Kentucky were unable to secure resources to meet its FRR obligation.

13 **Q. HOW WILL DUKE ENERGY KENTUCKY MANAGE REPLACEMENT**
14 **CAPACITY EXPOSURE?**

15 A. The replacement capacity exposure will be addressed differently across the four
16 Delivery Years, Specifically:

- 17 • Delivery Year 2014/2015

18 Given that the earliest contemplated retirement date of MF6 is May 31, 2015,
19 Duke Energy Kentucky has no replacement capacity exposure for MF6 in the
20 2014/2015 Delivery Year. The entire net revenue will be available to offset future
21 capacity expenses.

- 22 • Delivery Year 2015/2016

1 In September of 2013, in anticipation of a potential shortfall in capacity in the
2 event that the Company decided to retire MF6, the Company purchased a capacity
3 call option. The capacity option gave Duke Energy Kentucky the right, but not the
4 obligation to purchase [REDACTED] of unit-specific capacity for the 2015/2016
5 Delivery Year. The option premium for this call was \$ [REDACTED]. The strike price of
6 the underlying capacity [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED] The explicit benefit
10 of exercising this option is the capture of the margin between the BRA and the
11 strike price. Exercising the option locks in this margin against future year capacity
12 costs.

- 13 • Delivery Years 2016/2017 and 2017/2018

14 The Company will manage the replacement capacity exposure through
15 bidding in the three annual incremental auctions for each Delivery year. As stated
16 above, if historical trends hold, it is likely that these auctions will clear below the
17 BRA for each Delivery Year. The Company will also actively engage the bilateral
18 capacity market for opportunities to either structure transactions such as the
19 capacity call above, or make outright purchases of unit specific capacity that can
20 satisfy required shortfalls in FRR plans through the 2017/2018 Delivery Year.

21 **Q. HAS DUKE ENERGY KENTUCKY FULLY EVALUATED UTILIZING**
22 **DEMAND SIDE RESOURCES IN ITS CAPACITY PLANNING?**

1 A. Duke Energy Kentucky is mindful of the potential economic and social value of
2 demand side resources. The Company has described its activities in various filings
3 including the Integrated Resource Plan and DSM Annual status report. The
4 Company currently includes the Demand Response resources it feels will actually
5 be deliverable three years ahead in its FRR Plans. While these programs provide
6 value in the energy markets, the shifting nature of PJM market rules relative to
7 DSM resources makes over reliance on these resources in the FRR Plans a risky
8 strategy. PJM, with the support of the Federal Energy Regulatory Commission,
9 has instituted capacity eligibility changes to DSM resources effective within the
10 three year plan that have contributed to Duke Energy Kentucky's need to
11 purchase additional capacity in the marketplace. In this shifting regulatory
12 landscape Duke Energy Kentucky must also be mindful not to put itself and its
13 customers in the competitively disadvantageous position of needing to go to
14 market under adverse market conditions or in short execution time constraints.

15 **Q. DO YOU ANTICIPATE DUKE ENERGY KENTUCKY ACTUALLY**
16 **USING THE EAST BEND PURCHASE CAPACITY IN ITS FRR PLAN**
17 **PRIOR TO JUNE 1, 2018?**

18 A. Yes. PJM can, and does, change the Company's FRR capacity obligation on an
19 annual basis to ensure there are adequate planning reserves in the FRR Plan based
20 upon the specific unit performance EFOR_d and other load forecast adjustments. If
21 recent experience is any indication, Duke Energy Kentucky will likely have a
22 need for additional MWs of unit specific capacity for future delivery years to

1 meet planning reserve requirements or changes in obligations resulting from load
2 forecast adjustments.

3 Also, if the Company determines it must retire MF6, in response to the
4 MATS rule, the Company will need to immediately replace those MWs in its FRR
5 plan. The opportunity to purchase DP&L's interest in East Bend may not be
6 available in the future as DP&L has made known that it is considering selling its
7 entire generating fleet. As such, I believe it is prudent for the Company to take
8 action now before its FRR Plan becomes deficient or before DP&L's East Bend
9 interest is sold to a third-party.

10 **Q. HOW DOES THE EAST BEND PURCHASE AFFECT DUKE ENERGY**
11 **KENTUCKY'S CAPACITY STRATEGY IF IT SOMEDAY DECIDES TO**
12 **SEEK COMMISSION APPROVAL TO EXIT THE FRR OBLIGATION**
13 **AND PARTICIPATE IN THE BRA?**

14 A. An RPM participant is not required to identify unit-specific resources to satisfy its
15 capacity needs. Rather, it simply purchases the required MWs of capacity, and
16 offers its generation in the BRA and incremental auctions. Since Duke Energy
17 Kentucky owns capacity, it would also be selling that capacity into the BRA. So,
18 on the one hand, Duke Energy will offer all the MWs it has, while on the other
19 hand purchase all the MWs it needs to meet its obligation. As long as the MWs
20 needed are less than the MWs sold, Duke Energy Kentucky would be a net seller
21 and any incremental revenue would run through the Company's Profit Sharing
22 Mechanism (Rider PSM) as part of the net off system sales calculation.

1 Under the hypothetical, whereby MF6 is retired, the East Bend Purchase
2 will allow Duke Energy Kentucky to acquire an incremental 23 MWs of installed
3 capacity to its current resource portfolio. Under the hypothetical whereby MF6
4 continues to run, the incremental capacity from the East Bend Purchase will
5 provide an incremental 186 MWs of capacity that will be sold into the auctions.
6 As a BRA participant, Duke Energy Kentucky would have greater flexibility to
7 meet its capacity obligations in PJM and anticipates being a net seller of capacity
8 in the PJM BRA.

9 **Q. HAS DUKE ENERGY KENTUCKY CONSIDERED THE RISKS**
10 **ASSOCIATED WITH HAVING A GENERATION PORTFOLIO THAT**
11 **LOSES DIVERSITY?**

12 A. Yes. Reliability is always at the front of Duke Energy Kentucky mind. When
13 considering the East Bend Purchase, Duke Energy Kentucky evaluated the known
14 risks and benefits of concentration in the generation fleet. The Company's
15 analysis of this concentration risk revealed the expected result of a slight
16 incremental risk associated with outages at East Bend that coincide with high
17 market prices. Duke Energy Kentucky believes that this risk is more than offset
18 by the benefits described in the Company's Application and as supported by the
19 witnesses in this case.

20 With respect to maintaining adequate generation resources, the Company
21 continually evaluates those risks and periodically files a back-up supply plan with
22 the Commission. The most recent back-up supply plan was filed and approved by
23 the Commission in 2012 and runs through the end of 2014. The intent of this plan

1 is to make sure that Duke Energy Kentucky is continuing to evaluate the most
2 reasonable and cost-effective strategies to manage the risks associated with its
3 generation portfolio. The Company periodically evaluates insurance products,
4 hedging strategies, and managing risks through various other market alternatives.
5 This is typically done through an RFP process and internal forecasting and
6 modeling. Duke Energy Kentucky submits this supply plan to the Commission for
7 its evaluation and approval. Duke Energy Kentucky will evaluate the impact of
8 changes in the generation fleet; and the current plan provides the flexibility to
9 adapt our hedging strategy against forced outages as necessary.

10 **Q. WILL DUKE ENERGY KENTUCKY CONTINUE TO PERFORM THIS**
11 **EVALUATION AND PERIODICALLY SUBMIT A BACK-UP SUPPLY**
12 **PLAN TO THE COMMISSION EVEN AFTER IT CONSUMMATES THE**
13 **EAST BEND PURCHASE?**

14 A. Yes.

15 **Q. DO YOU BELIEVE THE EAST BEND PURCHASE RESULTS IN**
16 **OVERALL BENEFITS IN THE FINANCIAL AND SERVICE ASPECTS**
17 **OF DUKE ENERGY KENTUCKY'S OPERATIONS?**

18 A. Definitely. As I previously explained, the East Bend Purchase will allow the
19 Company to obtain capacity that it will be able to use to meet its PJM reliability
20 obligation if and when MF6 is retired. East Bend is a younger unit than the
21 Company's MF6 and barring any unforeseen circumstance should have many
22 years of service left. East Bend is slightly larger than MF6 and thus will provide
23 additional MWs that will be dedicated to the Company's customers. Upon

1 closing, the energy from this purchase will also be available for customers and
2 sold into the day-ahead and real-time Energy Markets providing immediate value.
3 From a geographic and transmission congestion risk perspective, the East Bend
4 facility pricing node is well correlated to the Duke Energy Kentucky load zone,
5 where our customer load is priced. The Company has experience and is
6 comfortable managing this risk. The East Bend Purchase was the least cost
7 alternative evaluated under the Company's RFP analysis. And, unlike the other
8 resource options bid into the RFP, because Duke Energy Kentucky owns the
9 majority interest in the station already, the Company is intimately familiar with its
10 operation and dispatch-ability in PJM. These are just a few of the benefits of this
11 transaction.

IV. CONCLUSION

12 **Q. DO YOU HAVE ANY FINAL THOUGHTS RELATED TO THE EAST**
13 **BEND PURCHASE?**

14 A. Yes. In my opinion, the East Bend Purchase provides many benefits and
15 incremental value to customers. The East Bend station has been providing reliable
16 service for Duke Energy Kentucky's customers for many years. The potential to
17 purchase the remaining interest in East Bend makes sense from an operational and
18 on-going business standpoint. It will protect customers and the Company from the
19 risks of becoming a joint owner with an unknown third party if DP&L proceeds
20 with a decision to sell its entire generation fleet to a third party. The purchase
21 price for DP&L's 31% interest is very reasonable and was the lowest cost
22 alternative derived through a public and third-party administered RFP process.

1 From an operational dispatching standpoint, Duke Energy Kentucky has the
2 experience and knowledge required to optimize the value of this asset in the PJM
3 market for our customers.

4 **Q. IS ATTACHMENT JAV-1 A TRUE AND ACCURATE COPY OF THE**
5 **CONFIDENTIAL FRR CAPACITY PLAN?**

6 A. Yes.

7 **Q. WAS ATTACHMENT JAV-1 COMPILED BY YOU OR UNDER YOUR**
8 **DIRECTION AND CONTROL?**

9 A. Yes.

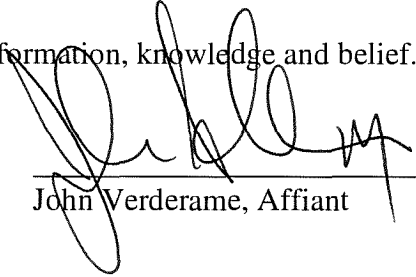
10 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

11 A. Yes.

VERIFICATION

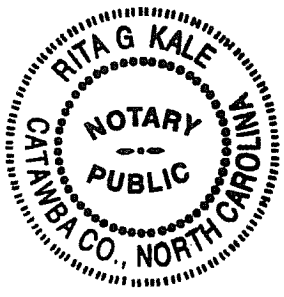
State of North Carolina)
)
County of Mecklenburg) SS:

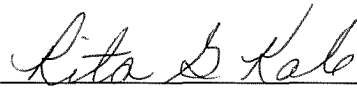
The undersigned, John Verderame, being duly sworn, deposes and says that he is the Director, Power Trading and Dispatch, and that the matters set forth in the foregoing testimony are true and correct to the best of his information, knowledge and belief.



John Verderame, Affiant

Subscribed and sworn to before me by John Verderame on this 3rd day of June 2014.





NOTARY PUBLIC

My Commission Expires: 6/17/2017

ATTACHMENT JAV-1

CONFIDENTIAL

IN ITS ENTIRETY

COMMONWEALTH OF KENTUCKY
BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

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 &) Case No. 2014-_____
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.)

DIRECT TESTIMONY OF
WILL A. GARRETT
ON BEHALF OF
DUKE ENERGY KENTUCKY, INC.

June 13, 2014

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ATTACHMENTS:

- WAG-1 FERC-Approved Journal Entries
- WAG-2 Proposed Journal Entries for East Bend Purchase

I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Will A. Garrett and business address is 550 South Tryon Street,
3 Charlotte, North Carolina 28202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services (DEBS), as Director of
6 Accounting Research for Duke Energy Corporation (Duke Energy Corp.). DEBS
7 provides various administrative and other services to affiliated companies of Duke
8 Energy Corp.

9 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND**
10 **PROFESSIONAL EXPERIENCE.**

11 A. I joined Duke Energy Corp in July of 2012 as part of the merger with Progress
12 Energy, Inc. (Progress Energy). Prior to this role, I was with Progress Energy as
13 the company Controller for Progress Energy Florida, having joined Progress
14 Energy on November 7, 2005. As the Controller for Progress Energy Florida, I
15 provided testimony on a variety of regulatory accounting matters before the
16 Florida Public Service Commission, in connection with regulatory cost recovery
17 clauses and general base rate proceedings. My other direct relevant experience
18 includes over two years as the Corporate Controller for DPL, Inc., and its major
19 subsidiary, The Dayton Power and Light Company (DP&L), headquartered in
20 Dayton, Ohio. Prior to this position, I held a number of finance and accounting
21 positions for eight years at Niagara Mohawk Power Corporation, Inc., (NMPC) in
22 Syracuse, New York, including Executive Director of Financial Operations,

1 Director of Finance, and Assistant Controller. As the Director of Finance and
2 Assistant Controller, my responsibilities included regulatory proceedings, rates,
3 financial planning, and providing testimony on a variety of matters before the
4 New York Public Service Commission. Prior to joining NMPC, I was a Senior
5 Audit Manager at Price Waterhouse in upstate New York, with 10 years of direct
6 experience with investor-owned utilities and publicly traded companies. I
7 graduated from the State University of New York in Binghamton, with a Bachelor
8 of Science in Accounting, in 1981, and I am a Certified Public Accountant in the
9 State of New York.

10 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS DIRECTOR OF**
11 **ACCOUNTING RESEARCH.**

12 A. As Director of Accounting Research for Duke Energy Corp., I am responsible for
13 all material accounting matters that impact the reported financial results of the
14 consolidated Duke Energy Corp. entity. I have direct management and oversight
15 of director and manager level employees supporting a wide variety of complex
16 accounting matters; including, but not limited to, regulatory accounting, plant
17 abandonment accounting issues, mergers and acquisitions, derivative and fair
18 value accounting, goodwill valuations, and general accounting matters.

19 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY**
20 **PUBLIC SERVICE COMMISSION?**

21 A. No.

22 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
23 **PROCEEDING?**

1 A. My testimony explains the various applicable accounting rules for plant
2 retirements under Generally Accepted Accounting Principles (GAAP) and
3 describes the anticipated accounting impact to Duke Energy Kentucky as a result
4 of a decision whether or not to retire the Miami Fort Unit 6 Generating Station
5 (MF6). I then describe the various factors informing the Company's evaluation of
6 the appropriate accounting treatment, including but not limited to, the current net
7 book value of MF6, its remaining useful life, and the impact of a potential
8 retirement on or before June 2015.

9 In addition, my testimony describes the Company's recommended
10 accounting for recording the acquisition of the 31% interest in the East Bend
11 Generating Station (East Bend) and why it should be adopted and approved by the
12 Kentucky Public Service Commission (Commission).

II. OVERVIEW OF GAAP ACCOUNTING RULES THAT IMPACT PLANT RETIREMENT

13 **Q. WHAT ARE GAAP AND HOW ARE THEY RELEVANT TO THE**
14 **REQUEST PROPOSED IN THIS PROCEEDING?**

15 A. GAAP is the set of accounting rules used to prepare and report financial
16 statements for publicly held companies in the United States. The primary
17 rulemaking body for the accounting rules that public companies comply with is
18 the Financial Accounting Standards Board (FASB). The FASB's Accounting
19 Standards Codification (ASC) 980, *Regulated Operations*, applies to an entity that
20 has regulated operations that meet all criteria from ASC 980-10-15-2, formerly
21 Financial Accounting Standards No. 71 or FAS 71.

1 **Q. DOES DUKE ENERGY KENTUCKY FOLLOW GAAP?**

2 A. Yes.

3 **Q. PLEASE DESCRIBE THE VARIOUS GAAP PROVISIONS THAT**
4 **IMPACT UTILITY PLANT RETIREMENT.**

5 A. The FASB's *ASC 980-360-35 Accounting for Abandonments* are the GAAP
6 provisions that impact utility plant retirements and they state:

7 **35-1** When it becomes probable (likely to occur) that an operating asset
8 or an asset under construction will be abandoned, the cost of that
9 asset shall be removed from construction work-in-process or plant-
10 in-service.

11 **35-2** The entity shall determine whether recovery of any allowed cost is
12 likely to be provided with either of the following:

13 a. Full return on investment during the period from the time when
14 abandonment becomes probable to the time when recovery is
15 completed

16 b. Partial or no return on investment during that period.

17 **35-3** That determination shall focus on the facts and circumstances
18 related to the specific abandonment and shall also consider the past
19 practice and current policies of the applicable regulatory
20 jurisdiction on abandonment situations. Based on that
21 determination, the entity shall account for the cost of the
22 abandoned plant as follows:

23 a. Full return on investment is likely to be provided. Any
24 disallowance of all or part of the cost of the abandoned plant
25 that is both probable and reasonably estimable (as defined in
26 Topic 450) shall be recognized as a loss and the carrying basis
27 of the recorded asset shall be correspondingly reduced. The
28 remainder of the cost of the abandoned plant shall be reported
29 as a separate new asset.

30 b. Partial or no return on investment is likely to be provided. Any
31 disallowance of all or part of the cost of the abandoned plant
32 that is both probable and reasonably estimable shall be
33 recognized as a loss. The present value of the future revenues
34 expected to be provided to recover the allowable cost of that

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abandoned plant and return on investment, if any, shall be reported as a separate new asset. Any excess of the remainder of the cost of the abandoned plant over that present value also shall be recognized as a loss. The discount rate used to compute the present value shall be the entity's incremental borrowing rate, that is, the rate that the entity would have to pay to borrow an equivalent amount for a period equal to the expected recovery period.

9 **Q. WHAT CONSTITUTES A NORMAL VERSUS ABNORMAL**
10 **RETIREMENT AND HOW DOES ONE DETERMINE WHICH**
11 **PROVISION IS APPLICABLE?**

12 A. ASC 980-360 does not provide explicit guidance on what constitutes a normal
13 versus abnormal retirement. However, Deloitte (Duke Energy Corp.'s external
14 auditor and an accounting and industry expert) provides the following guidance in
15 *Power & Utilities, Accounting, Financial Reporting and Tax Update January*
16 *2014:*

17 While ASC 980-360 provides no explicit guidance on what constitutes an
18 abandonment of an operating asset, an asset that will be retired in the near
19 future and much earlier than its previously expected retirement date typically
20 is subject to the ASC 980-360 disallowance test. Alternatively, if an asset is to
21 be retired, but not in the "near future" and not much earlier than its previously
22 expected retirement date, the use of abandonment accounting in accordance
23 with ASC 980-360 may not be appropriate. Instead, the appropriate
24 accounting may be to prospectively modify the remaining depreciable life of
25 the asset in accordance with ASC 360-10-35. Under this accounting,
26 determining whether an early retirement of an asset constitutes an
27 abandonment is a matter of judgment. Factors for entities to consider in
28 evaluating whether a plant is being abandoned include the following:

- 29 • A change in remaining depreciable life of the operating asset outside
30 the utility's normal depreciation study.

- 31 • Any accelerated depreciation because of a change in depreciable life
32 that is not currently reflected in rates or expected to be reflected in
33 rates in the near future.

1 • Retirement of the asset sooner than its remaining useful life and in the
2 near future.

3 • Reduction in the estimated remaining depreciable life by more than 50
4 percent.

5 It may be probable that a plant will be abandoned before a final decision has
6 been made to retire the plant. Factors for an entity to consider in assessing the
7 likelihood of abandonment may include:

8 • If environmental rules require additional spending for the plant to
9 continue operating after a certain date, whether management's cost-
10 benefit analysis indicates that this additional spending is cost-justified.

11 • If a possible early-retirement decision will not be made for several
12 years, whether the factors that most affect the decision (such as power
13 and gas prices) could reasonably change in the next several years.

14 • If the decision to retire a plant requires approval from an RTO or a
15 regulator, whether it is unclear that approval will be granted.

16 This guidance has been effectively incorporated into Duke Energy Corp.'s
17 Capitalization Guidelines, which also state the following with regards to normal
18 versus abnormal retirement:

19 Duke Energy Corp.'s general guidelines are as follows:

20 1. Under group depreciation, assets are assumed to be fully depreciated at
21 retirement if the retirement is considered "normal." If not deemed a
22 normal retirement, the remaining net book value is generally taken to
23 income. An assessment concerning Regulatory deferral and recovery
24 would be performed.

25 2. Actual retirement date compared to the date currently being used for
26 depreciation purposes:

- 27 a. "Normal": ≤ 5 years
28 b. "Abnormal": ≥ 10 years
29 c. Between 6 and 10 years will require a more in-depth analysis

30 3. Material net book values must also be considered in making the
31 normal vs. abnormal assessment, regardless of the retirement date
32 comparison.

1 4. Even with a "normal" retirement, an assessment will need to be made
2 as to whether an adjustment in depreciation rates is required
3 concurrent with the retirement.

4 In addition, Duke Energy Corp. considers the following factors to assess whether
5 plants being retired early should be considered abandoned per ASC 980-360-35:

- 6 • Estimated plant retirement dates embedded in the existing
7 depreciation studies;
- 8 • Reduction in estimated remaining depreciable life much earlier
9 than previously expected;
- 10 • Number of years of operation remaining prior to retirement;
- 11 • Total years of operation of the plant/unit, and number of years
12 being retired early relative to this total (i.e. 5 years early of a 60
13 year total life); and
- 14 • Estimated PP&E net book value based on an allocation of the
15 current group reserve balance using the assumptions embedded in
16 the most recent depreciation study.

**III. THE ACCOUNTING OF THE POTENTIAL
RETIREMENT OF MF6**

17 **Q. ARE YOU FAMILIAR WITH THE COMPANY'S REQUEST IN THIS**
18 **PROCEEDING?**

19 A. Yes. It is my understanding that the Company is proposing to purchase the
20 remaining 31% interest in East Bend from DP&L for the agreed upon purchase
21 price of \$12.4 million (East Bend Purchase). To accomplish this purchase, the
22 Company is requesting the Commission approve the transaction as well as certain
23 deferrals related to the transaction and incremental costs of owning and operating
24 the entirety of East Bend immediately upon closing the transaction until the
25 Company files its next base electric rate case. It is also my understanding that the
26 East Bend Purchase will allow the Company to make its decision regarding the

1 retirement of MF6 in lieu of compliance with the impending Mercury and Air
2 Toxics Standard (MATS) on or before June 1, 2015. As I describe below, this
3 retirement will qualify as a “normal retirement” under GAAP and the Company is
4 requesting, among other things, the concurrence of the Commission with respect
5 to that designation of retirement.

6 **Q. WHAT IS THE CURRENT REMAINING NET BOOK VALUE OF MF6?**

7 A. As of March 31, 2014, the net book value of MF6, excluding the portion of
8 accumulated depreciation related to cost of removal of \$3.5 million, is
9 approximately \$9 million.

10 **Q. WHAT IS THE ESTIMATED REMAINING LIFE OF MF6, EXCLUDING**
11 **THE POTENTIAL ACCELERATED IMPACT OF MATS?**

12 A. Absent the potential accelerated retirement due to the MATS rules, MF6 is
13 scheduled to retire in 2020 or approximately six years from the date of this filing.

14 **Q. WHAT IS THE BASIS FOR THIS ESTIMATE OF THE REMAINING**
15 **LIFE FOR MF6?**

16 A. The retirement date is based on what is currently reflected in the Company’s base
17 electric rates and is derived from the depreciation study filed in the Company’s
18 last electric base rate case in 2006.¹

19 **Q. HAS THE COMPANY PREPARED AND FILED A MORE RECENT**
20 **DEPRECIATION STUDY?**

21 A. Yes. The Company filed a depreciation study for informational purposes in
22 December 2013. This was done pursuant to the terms of the Commission-

¹ *In the Matter of the Application of the Union Light Heat and Power Company D/B/A Duke Energy Kentucky for an Adjustment of Electric Rate*, Case No. 2006-00172, Order (December 21, 2006).

1 approved settlement in Case No. 2006-00172, wherein the Company agreed to file
2 a new depreciation study by the earlier of the filing of an application for new rates
3 or January 1, 2014. This more recent depreciation study reflects the anticipated
4 implementation of MATS and, consequently, assumes an anticipated retirement of
5 MF6 in June 2015.

6 **Q. WHY IS THE COMPANY NOT USING THIS MORE RECENT**
7 **DEPRECIATION STUDY?**

8 A. The terms of the settlement of the last rate case made it clear that unless the
9 Company submitted the depreciation study as part of a base retail electric case,
10 the study would not impact Duke Energy Kentucky's base electric rates.
11 Therefore, we have not implemented the results of this study.

12 **Q. IN YOUR OPINION, IF MF6 IS RETIRED ON OR BEFORE JUNE 1, 2015,**
13 **DUE TO MATS, WOULD THAT BE CONSIDERED A "NORMAL"**
14 **RETIREMENT UNDER GAAP?**

15 A. In my opinion, if MF6 is retired on or before June 1, 2015, due to MATS, the
16 retirement would be considered a "normal" retirement under GAAP.

17 **Q. WHY WOULD A RETIREMENT OF MF6 ON OR BEFORE JUNE 1, 2015,**
18 **BE CONSIDERED A NORMAL PLANT RETIREMENT?**

19 A. A retirement of MF6 on or before June 1, 2015, would be considered a normal
20 plant retirement because of the following reasons:

21 1. The actual retirement date compared to the date currently being used
22 for depreciation purposes would be five years that is at the time of
23 retirement the remaining useful life of the plant would be 5 years

1 based on the useful life assumed in the implemented depreciation
2 study (*i.e.*, 2020 vs. 2015). Consistent with Duke Energy Corp.’s
3 Capitalization Guidelines. If the remaining useful life is equal to or
4 less than 5 years, the retirement would be considered normal.

5 2. At the time of the retirement on or before June 1, 2015, the asset was
6 already used for approximately 92% of its useful life (55 years out of a
7 60-year estimated useful life).

8 3. Lastly based on the current level of annual depreciation on MF6, the
9 plant assets will be substantially depreciated at June 1, 2015, or 90.5%,
10 while the undepreciated plant value of MF6 represents approximately
11 3.6% of the remaining group assets net book value (excluding cost of
12 removal) in steam production plant.

13 **Q. PLEASE DESCRIBE THE ACCOUNTING IMPACT OF AN EARLY AND**
14 **“NORMAL” RETIREMENT OF MF6 ON DUKE ENERGY KENTUCKY.**

15 A. Under a normal retirement, depreciation expense would cease and the remaining
16 net book value of the retired asset would be charged against accumulated
17 depreciation and any cost of removal not incurred related to MF6 would remain in
18 accumulated depreciation assigned to the remaining group of assets in steam
19 production.

20 **Q. WHAT IS THE EXPECTED NET BOOK VALUE OF MF6 AT JUNE 1,**
21 **2015, THE ANTICIPATED RETIREMENT OR COMPLIANCE**
22 **DEADLINE FOR MATS?**

23 A. The projected net book value at June 1, 2015, excluding the portion of

1 accumulated depreciation related to cost of removal is approximately \$7.5
2 million, based on the current level of annual depreciation being recognized on
3 MF6.

4 **Q. PLEASE DESCRIBE THE ACTION DUKE ENERGY KENTUCKY IS**
5 **REQUESTING FROM THE COMMISSION WITH RESPECT TO THE**
6 **RETIREMENT OF MF6 SHOULD IT OCCUR ON OR BEFORE JUNE 1,**
7 **2015.**

8 A. Duke Energy Kentucky is requesting the concurrence of the Commission to
9 account for the retirement of MF6 and the cost of removal related to MF6 as a
10 “normal retirement.”

11 **Q. HAS THE COMPANY PREVIOUSLY COMMUNICATED THE**
12 **LIKELIHOOD OF A NORMAL RETIREMENT TREATMENT OF MF6**
13 **TO THIS COMMISSION?**

14 A. Yes. As part of the Commission’s investigation surrounding the Company’s 2011
15 Integrated Resource Plan in Case No. 2011-00235, the Company responded to
16 data requests issued by Commission Staff regarding the normal versus abnormal
17 accounting treatment of MF6. At that time, the Company explained why it
18 believed the retirement of MF6 would be considered a normal retirement.²

19 **Q. WHAT ARE THE IMPLICATIONS IF THE MF6 RETIREMENT WERE**
20 **DEEMED TO NOT BE A “NORMAL RETIREMENT”?**

21 A. As outlined in my testimony above in more detail, FASB’s ASC 980-360-35
22 Accounting for Abandonments are the GAAP provisions that cover accounting

² *In re the Matter of Duke Energy Kentucky 2011 Integrated Resource Plan*, Case No. 2011-00235, Company Responses to Commission Data Requests September 13, 2011, and October 25, 2011.

1 implications of utility plant retirements. If MF6 retirement were deemed to
2 qualify as an abandonment, then the Company would need to request and secure
3 additional Commission action to support the creation of a regulatory asset for the
4 remaining net book value of MF6.

**IV. ACCOUNTING FOR THE ACQUISITION OF 31% INTEREST
IN THE EAST BEND GENERATING STATION**

5 **Q. WHAT IS THE HISTORIC COST OF DP&L'S 31% INTEREST IN EAST**
6 **BEND?**

7 A. The historic cost of DP&L's interest in East Bend, prior to the end of 2013, was
8 more than \$76 million. During the fourth quarter of 2013, DP&L recorded a \$76
9 million impairment to its interest in East Bend on its FERC Form 1. This
10 impairment was the full carrying value of its 31% of East Bend. DP&L likely did
11 this as a result of a potential sale of the asset as it had bid its share of East Bend in
12 response to the Company's request for proposal for capacity, and as explained by
13 Duke Energy Kentucky witness Steve Immel, the original operating agreement for
14 East Bend was set to expire in March 2014 and the Company had not been
15 successful in negotiating a replacement agreement with DP&L. Since December
16 31, 2013, DP&L's current net book value of the East Bend plant, excluding pre-
17 paid items such as inventory and materials and supplies is approximately \$2.5
18 million as of March 31, 2014. This represents new investment at East Bend since
19 the impairment. It is likely that DP&L's net book value of its share of East Bend
20 will change over time until the closing of the transaction. However, the purchase
21 price will remain \$12.4 million.

22 **Q. DID DUKE ENERGY KENTUCKY TAKE A SIMILAR IMPAIRMENT**

1 **FOR ITS MAJORITY INTEREST IN EAST BEND?**

2 A. No. East Bend is still providing safe, reliable, and adequate service to Kentucky
3 customers and retains significant value in that regard.

4 **Q. BASED ON THE FACTS AND CIRCUMSTANCES OF THE**
5 **ACQUISITION OF THE 31% INTEREST IN EAST BEND, AND**
6 **CONSIDERING DP&L'S IMPAIRMENT OF ITS INTEREST IN EAST**
7 **BEND, HOW SHOULD THE \$12.4 MILLION PURCHASE PRICE BE**
8 **RECORDED?**

9 A. Duke Energy Corp. has experienced similar situations involving an asset
10 acquisition where Federal Energy Regulatory Commission (FERC) previously
11 required Duke Energy Carolinas LLC (Duke Energy Carolinas) to ignore the
12 impairment to arrive at an adjusted historic carrying value. If the adjusted historic
13 carrying value is higher than the purchase price, the transaction results in a
14 negative electric plant acquisition adjustment. This negative acquisition
15 adjustment is then cleared by an increase to the accumulated depreciation
16 resulting in a new net book value equaling the purchase price. In the situation
17 involving the East Bend Purchase, if DP&L's \$76 million impairment was
18 ignored, the historic carrying value of \$76 million would be higher than the
19 purchase price of \$12.4 million, resulting in a negative acquisition adjustment
20 which would be cleared by increasing accumulated depreciation to arrive at a new
21 net book value to the 31% interest of \$12.4 million.

22 Based on the facts and circumstances of this transaction, it is my
23 professional judgment that this is a preferred methodology for recording the

1 transaction and is consistent with transactions approved by the FERC based on a
2 similar fact pattern Duke Energy Carolinas had when it purchased the remaining
3 interests at Catawba (FERC Docket No. EC08-94-000; transaction included a \$61
4 million negative acquisition adjustment and ignored an impairment loss of \$226
5 million) and Rockingham (FERC Docket No. EC06-145-000, transaction included
6 a negative acquisition adjustment of \$9.4 million and ignored an impairment loss
7 of \$9.3 million) and respectfully request that it be adopted and approved by this
8 Commission. Attachment WAG-1 is a true and accurate copy of the journal
9 entries and the approvals received by FERC with respect to the Catawba and
10 Rockingham purchases. Attachment WAG-2 is a true and accurate copy of the
11 proposed journal entry for the East Bend Purchase.

12 **Q. IS THERE ANOTHER METHOD FOR RECORDING THE EAST BEND**
13 **PURCHASE?**

14 A. Yes. Pursuant to the FERC's Uniform System of Accounts Prescribed for Public
15 Utilities and Licensees Subject to the Provisions of the Federal Power Act, the
16 transfer of a capital asset would be recorded based on historical carrying value
17 with any premium or discount recorded separately. Therefore, since DP&L's
18 historical carrying value is zero, the \$12.4 million net purchase price would be
19 treated as a positive electric plant acquisition adjustment (FERC account 114).

20 If this alternative for recording the transaction is deemed the appropriate
21 option by the Commission, resulting in an acquisition premium, Duke Energy
22 Kentucky believes the premium should still be covered in rates as the value of the
23 newly acquired 31% interest in East Bend.

1 **Q. PLEASE EXPLAIN WHY THE PURCHASE PRICE OF \$12.4 MILLION**
2 **SHOULD STILL BE RECORDED AS THE VALUE OF THE NEWLY**
3 **ACQUIRED 31% INTEREST IN EAST BEND.**

4 A. It is my understanding that the Commission previously has allowed the recovery
5 of acquisition adjustments where:

- 6 • the overall operations and financial condition of the utility have
7 benefited from acquisitions at prices in excess of net book value;
- 8 • the purchase price was established upon arms-length negotiations;
- 9 • the initial investment plus the cost of restoring the facilities to
10 required standards will not adversely impact the overall costs and
11 rates of the existing and new customers;
- 12 • operational economies can be achieved through the acquisition;
- 13 • the purchase price of utility and non-utility property can be clearly
14 identified; and
- 15 • the purchase will result in overall benefits in the financial and
16 service aspects of the utility's operations.

17 The Company respectfully submits that each of these requirements are met
18 through the East Bend Purchase and explained by the testimony of the other
19 witnesses in this case. For example, Company witnesses Steve Immel, John
20 Verderame and William Don Wathen Jr. describe in detail how the overall
21 financial and operational conditions of the utility are benefitted by this
22 acquisition. Duke Energy Kentucky witness James P. Henning discusses the arms-
23 length negotiation that occurred to arrive at the final purchase price and that the

1 purchase price can be clearly identified. Messrs Immel, Northrup and Wathen
2 further describes how the investment, which was the least cost solution derived
3 from a third party administered request for proposal, will not adversely impact the
4 overall costs and rates. Mr. Immel describes the operational economies that can be
5 achieved through the East Bend Purchase and the overall benefits in the financial
6 and service aspects of the Company's operations.

V. CONCLUSION

7 **Q. ARE ATTACHMENTS WAG-1 AND WAG-2 TRUE AND ACCURATE**
8 **COPIES OF THE FERC APPROVED JOURNAL ENTRIES AND**
9 **PROPOSED JOURNAL ENTRIES FOR EAST BEND PURCHASE,**
10 **RESPECTIVELY?**

11 A. Yes.

12 **Q. WERE ATTACHMENTS WAG-1 AND WAG-2 COMPILED BY YOU OR**
13 **UNDER YOUR DIRECTION AND CONTROL?**

14 A. Yes.

15 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

16 A. Yes.

VERIFICATION

State of North Carolina)
)
County of Mecklenburg) SS:

The undersigned, Will A. Garrett, being duly sworn, deposes and says that he is the Director of Accounting Research, and that the matters set forth in the foregoing testimony are true and correct to the best of his information, knowledge and belief.



Will A. Garrett, Affiant

Subscribed and sworn to before me by Will A. Garrett on this 3rd day of June 2014.



NOTARY PUBLIC

My Commission Expires: October 24, 2014



JEFFREY M. TREPEL
Associate General Counsel
Duke Energy Corporation

526 South Church Street/EC03T
Charlotte, NC 28202-1802

Mailing Address:
P.O. Box 1006/EC03T
Charlotte, NC 28201-1006

704-382-8131
704-382-2637 fax
jtrepel@duke-energy.com

May 9, 2007

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street N.E.
Washington, DC 20426

RE: Proposed Final Accounting Entries in Docket No. EC06-145-000 et al.

Dear Secretary Bose:

Pursuant to 18 C.F.R. § 33.5 and Ordering Paragraph (6) of *Duke Power Company, LLC*, 117 FERC 62,094 (October 31, 2006), Duke Energy Carolinas, LLC ("Duke") submits the attached accounting entries regarding its acquisition of the Rockingham combustion turbine facility. Duke's purchase of the facility closed on November 9, 2006.

With regard to Ordering Paragraph (7) of said order, in light of recent letter orders issued by the FERC Chief Accountant, Duke does not take the position, for the purposes of the Proposed Final Accounting Entries in this docket only, that the Rockingham facility was not previously devoted to public service.

Respectfully submitted,

/s/ Jeffrey M. Trepel

CERTIFICATE OF SERVICE

I hereby certify that I have this day caused to be served the foregoing document upon each person designated on the official service lists compiled by the Secretary in these proceedings. Dated this 9th day of May, 2007.

/s/ Jeffrey M. Trepel

Purchase of the Rockingham Assets by Duke Energy Carolinas
As of December 31, 2006
(Dollars in Thousands)

<u>Entry</u>	<u>Account</u>	<u>Account Title</u>	<u>Debit</u>	<u>Credit</u>
1	102	Electric Plant Purchased or Sold	\$ 193,811	
	151	Fuel Stock (Fuel/Oil Inventory)	\$ 232	
	154	Plant Materials and Inventory Supplies	\$ 962	
	131	Cash		\$ 194,195
	236	Taxes accrued (Dynergy portion of property tax liability for 2006)		\$ 735
	447	Sales for resale (Credit Pursuant to Third Amendment to Purchase Agreement)		\$ 75
	To record the purchase price of \$195M and charge Electric Plant Purchased or Sold, Fuel Stock and Plant Materials and Inventory Supplies.			
2	102	Electric Plant Purchased or Sold	\$ 118	
	131	Cash		\$ 118
	To credit Miscellaneous Deferred Debits and charge Electric Plant Purchased or Sold with the administrative and legal costs.			
3	131	Cash	\$ 363	
	102	Electric Plant Purchased or Sold		\$ 363
	To book payment from PNG for Pressure Reduction Equipment per Purchase Agreement, Section 3.1.12(a)-Assumed Agreements			
4	101	Electric Plant in Service	\$ 250,807	
	108	Accumulated provision for depreciation of electric utility plant		\$ 57,241
	102	Electric Plant Purchased or Sold		\$ 193,566
	To clear Electric Plant Purchased or Sold and charge Electric Plant in Service for the fixed assets and land at Dynergy original cost with an adjustment to add back the impairment loss of \$9.3M Dynergy recorded; and to record the Accumulated Depreciation adding a negative acquisition adjustment of \$9.4M.			
			<u>\$ 446,293</u>	<u>\$ 446,293</u>

Submission Contents

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FEDERAL ENERGY REGULATORY COMMISSION
Office of Enforcement
Washington, D.C. 20426

In Reply Refer To:
OE
Docket Nos. AC07-209-
000, AC07-209-001 and
AC07-209-002
February 27, 2008

Duke Energy
Attention: Mr. Jeffrey M. Trepel
Associate General Counsel
526 South Church Street/EC03T
Charlotte, NC 28202

Dear Mr. Trepel:

This is in reply to Duke Energy Carolinas' (Duke Energy) May 9, 2007 letter, as supplemented on February 8, 2008 requesting approval of proposed accounting entries to clear Account 102, Electric Plant Purchased or Sold, related to the purchase of the Rockingham combustion turbine generating facility. The Commission authorized the transaction in Docket No. EC06-145-000.¹

Duke Energy's proposed journal entries are approved.

Duke Energy cleared the purchase through Account 102 and recorded the original cost and related accumulated depreciation on its books consistent with Electric Plant Instruction (EPI) No. 5.² In addition, Duke Energy recorded a \$9.2 million negative acquisition adjustment in Account 114, Electric Plant Acquisition Adjustments, consistent with EPI No. 5, and appropriately cleared the negative acquisition adjustment to Account 108, Accumulated Provision for Depreciation of Electric Utility Plant.³

¹ 117 FERC ¶ 62,094 (2006).

² 18 C.F.R. Part 101 (2007).

³ See *Locust Ridge Gas Company*, 29 FERC ¶ 61,052 at 61,114 (1984) and *Southwestern Public Service Company and New Mexico Electric Service Company*, 23 FERC ¶ 61,153 (1983).

Docket Nos. AC07-209-000,
AC07-209-001 and AC07-209-002

2

The Commission delegated authority to act on this matter to the Chief Accountant under 18 C.F.R. § 375.303 (2007). This letter order constitutes final agency action. Your company may file a request for rehearing with the Commission within 30 days of the date of this letter order under 18 C.F.R. § 385.713 (2007).

Sincerely,

Scott P. Molony
Chief Accountant

FEDERAL ENERGY REGULATORY COMMISSION
Washington, D.C. 20426

In Reply Refer To:
Office of Enforcement
Docket Nos. AC10-37-000
and AC10-37-001
May 7, 2010

Duke Energy Carolinas, LLC
Attention: Paul R. Kinny
Associate General Counsel
526 South Church Street
P.O. Box 1006
Charlotte, NC 28202

Dear Mr. Paul R. Kinny:

This is in response to Duke Energy Carolinas, LLC's (Duke) letter dated March 30, 2009, as supplemented on March 8, 2010, requesting approval of proposed journal entries to clear Account 102, Electric Plant Purchased or Sold, in connection with the acquisition of an approximately 153 MW interest in Unit 1 and related facilities at the Catawba Nuclear Generating Station from Saluda River Electric Cooperative, Inc. (Saluda River). The Commission authorized the transaction in Docket No. EC08-94-000,¹ and the acquisition was completed on September 30, 2008.

Duke's proposed journal entries are approved.

Duke indicates that the utility plant assets were purchased for \$145 million and had an original cost less accumulated depreciation of approximately \$206.2 million. Duke's proposed journal entries clear the acquisition through Account 102 and record the original cost and related accumulated depreciation on its books consistent with Electric Plant Instruction (EPI) No. 5.² In addition, Duke proposes to record a \$61.2 million negative acquisition adjustment by crediting Account 114, Electric Plant Acquisition Adjustments, consistent with EPI No. 5. Duke appropriately proposes to clear the

¹ *Duke Energy Carolinas, LLC*, 124 FERC ¶ 62,223 (2008).

² 18 C.F.R. Part 101 (2009).

Duke Energy Carolinas, LLC

Docket Nos. AC10-37-000
and AC10-37-000

negative acquisition adjustment by debiting Account 114 and crediting Account 108, Accumulated Provision for Depreciation of Electric Utility Plant.³

In addition, Duke proposes to recognize an asset retirement obligation (ARO) asset and liability of \$42.7 million related to the decommissioning of the assets acquired at the Catawba Generating Nuclear Station by debiting Account 101, Electric Plant In Service, and crediting Account 230, Asset Retirement Obligations, consistent with General Instruction No. 25.⁴ Finally, Duke proposes to recognize the receipt of \$41.6 million in decommissioning funds transferred from Saluda River in Account 128, Other Special Funds, in accordance with the Commission's accounting requirements.

The Commission delegated authority to act on this matter to the Director of the Office of Enforcement or his designee under 18 C.F.R. § 375.311 (2009). The Director has designated this authority to the Chief Accountant. This letter constitutes final agency action. Your company may file a request for rehearing with the Commission within 30 days of the date of this order under 18 C.F.R. § 385.713 (2009).

Sincerely,

Bryan K. Craig
Director & Chief Accountant, Division of Audits
Office of Enforcement

³ See *Locust Ridge Gas Company*, 29 FERC ¶ 61,052 at 61,114 (1984); and *Southwestern Public Service Company and New Mexico Electric Service Company*, 23 FERC ¶ 61,153 (1983).

⁴ 18 C.F.R. Part 101 (2009).



Paul R. Kinny
Associate General Counsel

OFFICE OF THE GENERAL COUNSEL

Duke Energy Corporation
EC03T / P.O. Box 1006
Charlotte, NC 28201
Phone (980) 373-6609
Fax (980) 373-9906
prkinny@duke-energy.com

March 30, 2009

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street N.E.
Washington, DC 20426

Re: Final Accounting Entries in Docket No. EC08-94-000

Dear Secretary Bose:

Pursuant to 18 C.F.R §33.5 and Ordering Paragraph (7) of *Duke Energy Carolinas, LLC* 124 FERC ¶62,223 (September 24, 2008), Duke Energy Carolinas, LLC ("Duke") submits the attached accounting entries regarding its acquisition of an approximately 153 MW interest in Unit 1 and related facilities at the Catawba Nuclear Generating Station. Duke's purchase of such interest closed on September 30, 2008.

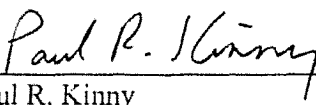
Respectfully submitted,

A handwritten signature in black ink that reads 'Paul R. Kinny'.

Paul R. Kinny

CERTIFICATE OF SERVICE

I hereby certify that I have this day caused to be served the foregoing document upon each person designated on the official service lists compiled by the Secretary in these proceedings. Dated this 30th day of March, 2009.



Paul R. Kinny
Associate General Counsel
Duke Energy Corporation
526 South Church Street
P.O. Box 1006
Charlotte, NC 28202
(980) 373-6609
prkinny@duke-energy.com

DUKE ENERGY CAROLINAS
PURCHASE OF 71.96% OF SALUDA RIVER'S OWNERSHIP IN THE CATAWBA NUCLEAR PLANT
As of December 31, 2008
(Dollars in Thousands)

PURCHASE OF PLANT

Journal Entry Number	FERC Account Number	Description	Amount	
			Debit	Credit
1	102 Electric Plant Purchased or Sold 131 Cash		\$ 145,000	\$ 145,000
		To record the purchase price to Electric Plant Purchased or Sold Account Of the \$158 million purchase price, \$145 million was the cost of the plant asset, \$7.381 million was for nuclear fuel, \$5.682 million was for inventory at the plant. The Company incurred \$63,000 for legal costs .		
2	101 Electric Plant in Service_Asset Retirement Cost 230 Asset Retirement Obligation		\$ 42,695	\$ 42,695
		To record Asset retirement cost and obligation The amount was calculated under the ARO rules per SFAS No. 143.		
3	128 Other special funds -Nuclear Decommissioning trust fund 182.3 Other Regulatory Asset		\$ 41,603	\$ 41,603
		To record receipt of Duke's share of Saluda River's decommissioning fund The acquisition agreement provides that Saluda River will transfer their nuclear decommissioning fund to the new owners who will record the appropriate liability.		
4	101 Electric Plant in Service 108 Accumulated provision for depreciation of electric utility plant 102 Electric Plant Purchased or Sold 114 Electric Plant Acquisition Adjustments		\$ 225,771	\$ 19,539 \$ 145,000 \$ 61,232
		To clear Electric Plant Purchased or Sold and record the Original Cost, Accumulated Depreciation and Acquisition Adjustments Since the purchase price was below Saluda Rivers' original cost less accumulated depreciation, the Company is recording a negative acquisition per FERC's prior guidelines to the Company in a prior acquisition.		
5	114 Electric Plant Acquisition Adjustments 108 Accumulated provision for depreciation of electric utility plant		\$ 61,232	\$ 61,232
		To clear Electric Plant Acquisition Adjustments to Accumulated Depreciation of the Plant Per FERC's prior guidelines to the Company in a prior acquisition, the negative acquisition adjustment recorded in journal entry #4, is being moved to increase accumulated depreciation. As a result, plant in service less accumulated depreciation will reflect the Company's purchase price of the asset of \$145 million.		

DUKE ENERGY CAROLINAS
PURCHASE OF 71.96% OF SALUDA RIVER'S OWNERSHIP IN THE CATAWBA NUCLEAR PLANT
As of December 31, 2008
(Dollars in Thousands)

Reconciliation for the purchase price

Purchase price	\$	158,000
Less: Nuclear Fuel in process		(3,009)
Less: Nuclear Fuel in reactor		(17,081)
Less: Amortization of Nuclear Fuel		12,709
Less: Inventory		(5,682)
Add: Administrative and Legal costs		63
Net amount in Account 102	\$	<u>145,000</u>

Reconciliation to acquisition adjustment

Net amount in Account 102	\$	145,000
Account 101_Saluda's original cost		225,771
Account 108_Saluda's accumulated depreciation		(19,539)
Total acquisition adjustment	\$	<u>(61,232)</u>

Purchase of 31% of East Bend Assets by Duke Energy Kentucky
(Dollars in Thousands)

Duke Energy Kentucky's acquisition of the thirty-one percent (31%) interest in East Bend Unit 2 will be accounted for in accordance with the requirements of Electric Plant Instruction No. 5, as depicted below.

1. Entry to record the acquisition of 31% East Bend from DP&L

<u>Account</u>	<u>Account Description</u>	<u>Debit</u>	<u>Credit</u>
102	Electric Plant Purchased or Sold	12,400	
154	Plant materials and operating supplies	2,966	
151	Fuel Stock	4,228	
228	Accumulated Provision for pensions and benefits	2,785	
236	Taxes accrued		182
165	Prepayments		4,592
131	Cash		17,605
		<u>22,379</u>	<u>22,379</u>

Amounts are based on Schedule 3.2(a) in the purchase agreement as of March 31, 2014. Actual journal amounts will be based on balances as of the acquisition date.

2. Proposed Entry to clear account 102 (to be booked 6 months from the acquisition date)

<u>Account</u>	<u>Account Description</u>	<u>Debit</u>	<u>Credit</u>
101-106	Electric plant in service	208,483	
107	Construction Work in Progress-Electric	8,222	
105	Electric plant held for future use	588	
108	Accumulated provision for depreciation of electric utility plant		140,053
102	Electric Plant Purchased or Sold		12,400
114	Electric plant acquisition adjustments		64,840
		<u>217,293</u>	<u>217,293</u>

Amounts are based on the DP&L balance sheet as of March 31, 2014. Actual journal amounts will be based on balances as of the acquisition date. The entries reflect the original cost with an adjustment to disregard the impairment loss of \$76.0 million Dayton Power and Light recorded in 2012. (\$-millions)

Net book value as of March 31, 2014	\$	2.5
Impairment recognized by DPL in 2012		76.0
Less: Impairment related to Asset Retirement Obligation asset		(0.4)
Depreciation on assets for the three months ending March 31, 2014		(0.9)
Adjusted net book value	\$	77.2
Purchase Price		12.4
Negative Acquisition Adjustment	\$	64.8

3. Proposed Entry to clear account 114 electric plant acquisition adjustment to account 108 Accumulated Depreciation of electric utility plant

<u>Account</u>	<u>Account Description</u>	<u>Debit</u>	<u>Credit</u>
114	Electric plant acquisition adjustments	64,840	
108	Accumulated provision for depreciation of electric utility plant		64,840

To clear negative acquisition adjustment in account 114-Electric plant acquisition adjustments to account 108 accumulated depreciation of electric utility plant.