

Mailing Address: 139 East Fourth Street 1212 Main / P.O. Box 960 Cincinnati, Ohio 45202

> o: 513-287-4320 f. 513-287-4385

VIA HAND DELIVERY

August 8, 2014

Jeff Derouen
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602-0615

RECEIVED

AUG 0 8 2014

PUBLIC SERVICE
COMMISSION

RE: Case No. 2014-201

Dear Mr. Derouen:

Enclosed please find an original and twelve copies of Duke Energy Kentucky's responses to the Attorney General's First Set of Data Requests.

Also enclosed are an original and twelve copies of the Petition of Duke Energy Kentucky, Inc. for Confidential Treatment of Information Contained in its Responses to Attorney General's First Set of Data Requests and one copy of the Confidential Version enclosed under sealed envelope.

Please date-stamp the two extra copies of the Responses and the extra two copies of the Petition and return to me in the enclosed return envelope.

Sincerely.

Rocco D'Ascenzo Associate General Counsel

cc: Jennifer Hans (w/enclosures)

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. 2014-00201
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.		

PETITION OF DUKE ENERGY KENTUCKY, INC. FOR CONFIDENTIAL TREATMENT OF INFORMATION CONTAINED IN ITS RESPONSES TO ATTORNEY GENERAL'S FIRST SET OF DATA REQUESTS

Duke Energy Kentucky, Inc. (Duke Energy Kentucky or Company), pursuant to 807 KAR 5:001, Section 13, respectfully requests the Commission to classify and protect certain information provided by Duke Energy Kentucky in its responses and attachments to Data Request Nos. 1, 8, 12, 13, 17, 25, 26, and 28 as requested by the Attorney General (AG) in this case on July 28, 2014. The information that the AG seeks through discovery and for which Duke Energy Kentucky now seeks confidential treatment (Confidential Information) shows sensitive economic information regarding the future operational costs, including estimates of forecasted maintenance expense and environmental compliance, confidential inspections report describing critical utility infrastructure, and analysis of bids considered as

part of the request for proposal (RFP) process that ultimately lead to the decision of pursuing the purchase of the Dayton Power and Light Company's (DP&L) 31% interest in the East Bend Unit 2 Generating Station (East Bend). Specifically, Duke Energy Kentucky is requesting confidential treatment of the following:

- a) AG-DR-01-01 Attachment E detailing future maintenance expenditures;
- b) AG-DR-01-08 Response providing estimates of future SCR system upgrades;
- c) AG-DR-01-12:
 - i. Response to (a) detailing projected costs for dry bottom ash handling;
 - ii. Attachment AG-DR-01-12A recent inspection reports of the East Bend ash pond;
 - iii. Attachments AGDR-01-12B, C, and D detailed third-party engineering studies and stability analysis;
- d) AG-DR-01-13 Response providing cost estimates of potential waste water treatment;
- e) AG-DR-01-17 Attachments depicting insurance coverage and invoices;
- f) AG-DR-01-25 Analysis of specific assets bid into the RFP;
- g) AG-DR-01-26 Describing details of the Company's hedging strategy, including information related to a specific bilateral capacity transaction; and
- h) AG-DR-01-28 Attachment B depicting RFP analysis of costs.

This information would allow potential competitors and possible vendors to have access to the Company's estimated maintenance costs and environmental compliance costs that they could then use to anticipate the Company's future performance, including outage timing, costs of compliance and equipment needs. The engineering studies provide proprietary

business information regarding the condition of the Company's waste disposal sites and that is not otherwise publicly available. The insurance invoices depict the levels and cost of coverage for the Company which is not otherwise publicly available. Releasing this information will place the insurance company at a competitive disadvantage in that its rates and types of coverage will be known to its competitors, thereby hindering its ability to compete, and in turn, Duke Energy Kentucky's ability to negotiate as other providers will have access to what the Company's current costs and coverage are. In support of this Petition, Duke Energy Kentucky states:

- 1. The Kentucky Open Records Act exempts from disclosure certain commercial information. KRS 61.878(1)(c). To qualify for this exemption and, therefore, maintain the confidentiality of the information, a party must establish that disclosure of the commercial information would permit an unfair advantage to competitors of that party. Public disclosure of the information identified herein would, in fact, prompt such a result for the reasons set forth below.
- 2. Disclosure of the factors underlying Duke Energy Kentucky's forecasted costs of maintenance projects, including likelihood of timing of outages will grant vendors and other market participants a distinct advantage in that they would be able to anticipate the economic dispatch of East Bend in the future. Duke Energy Kentucky submits that the information contained in AG-DR-01-01 Attachment E, AG-DR-01-08, AG-DR-01-12(a), AG-DR-01-12 Attachments A-D, AG-DR-01-13 if openly disclosed, would give its vendors and competitors (specifically other PJM participants), access to competitively sensitive, confidential information, which in turn could cause energy and capacity prices to consumers to be above competitive rates, and would permit competitors of Duke Energy Kentucky to

gain an unfair competitive advantage in the marketplace. Competitors and vendors could use this information to anticipate the Company's future costs and equipment needs and even outage timing to make decisions regarding pricing that they may not otherwise make in the absence of this information. If, for example, potential vendors had the knowledge of what Duke Energy Kentucky anticipated to spend on a particular compliance or maintenance project, Duke Energy Kentucky would lose its ability to negotiate and try to manage its costs.

3. The response to AG-DR-01-12(a) and the Attachments A through D estimated costs for environmental upgrades and inspection reports and detailed structural engineering studies of utility infrastructure including generator waste disposal locations and construction thereof that is not otherwise publically available. The estimated costs of compliance for dry bottom ash handling, if disclosed would provide the company's vendors and possible competitors with the Company's forecasts of compliance strategies and likely financial impact to the Company. If publicly available, this information would place Duke Energy Kentucky at a competitive disadvantage in terms of its ability to negotiate and manage its costs. Potential counterparties would have insight into what Duke Energy Kentucky would anticipate to spend on such projects and thereby place the Company at a disadvantage in its ability to negotiate and manage its costs.

The information contained in Attachments A through D is considered to include and contain confidential utility infrastructure which is protected for security reasons. If publicly released, this information would provide details regarding utility infrastructure that, in the wrong hands, could be exploited and used in ways that could create a homeland security and potential public safety risk. Therefore this information should remain confidential.

- 4. The response to AG-DR-01-17 (Attachments) includes details of the Company's insurance coverage and costs. This information is considered proprietary trade secret information. If made public, this information would place both Duke Energy Kentucky and its insurance carrier at a competitive disadvantage. The insurance carrier's coverage details and costs would become available to its competitors thereby making it difficult to compete. Moreover, if the costs and coverage Duke Energy Kentucky currently has becomes publicly known, the Company may be disadvantaged in future negotiations for insurance products as other potential carriers would know what the Company currently pays and has covered. This information is not otherwise known outside Duke Energy Corp., and is only known to those employees who have a need to know. For these reasons this information should be kept confidential.
- 5. The response to AG-DR-01-25 and AG-DR-01-28 contains the Company's analysis of a specific assets (environmental specifications and costs, respectively) bid into the RFP and why they were not selected. The identity of assets bid into the RFP are not publicly known and if the Company's analysis is disclosed publicly, it would give potential competitors information related to those specific asset(s) and the Company's decisions not to pursue such alternative(s). The information submitted in response to the RFP was done so with the expectation that the bids would remain confidential. Releasing the information in these responses, and specifically the reasoning why a particular bid was not selected would undermine the confidential RFP process and may make the Company's ability to conduct successful RFP's difficult in the future. Potential future RFP participants may be unwilling to submit a proposal if there is a risk that their information will not remain confidential. Cost information of an asset would place that asset at a competitive disadvantage to other assets

within the PJM footprint as market participants would have knowledge of the economics of a particular unit thereby allowing them to make decisions they may not otherwise make so to impact price.

- 6. The response to AG-DR-026 contains detailed information regarding the Company's capacity hedging strategy and costs to meet reliability obligations. The information contains specific information regarding a bilateral transaction the Company entered into with a third party and the price the company was able to obtain for unit-specific capacity. If this information became publicly available, the Company would be at a competitive disadvantage in future negotiations with counter parties as they would know what the Company has previously paid for a type of product, including, but not limited to, the type of product, counter-party, price, and how the Company valued the product against the market at the time. If disclosed, potential future counter parties could make decisions regarding their offers that they may not have otherwise made thereby impacting the price the Company may be able to negotiate.
- 7. The Confidential Information described herein was developed internally by Duke Energy Corporation and Duke Energy Kentucky personnel or on its behalf, is not on file with any public agency, and is not available from any commercial or other source outside Duke Energy Kentucky. The aforementioned Confidential Information in these responses is distributed within Duke Energy Kentucky only to those employees who must have access for business reasons, and is generally recognized as confidential and proprietary in the energy industry.
- 8. Duke Energy Kentucky does not object to limited disclosure of the confidential information described herein, pursuant to an acceptable protective agreement,

the Attorney General or other intervenors with a legitimate interest in reviewing the same for the purpose of participating in this case.

- 9. This information was, and remains, integral to Duke Energy Kentucky's effective execution of business decisions. And such information is generally regarded as confidential or proprietary. Indeed, as the Kentucky Supreme Court has found, "information concerning the inner workings of a corporation is 'generally accepted as confidential or proprietary." *Hoy v. Kentucky Industrial Revitalization Authority*, Ky., 904 S.W.2d 766, 768 (Ky. 1995).
- 10. In accordance with the provisions of 807 KAR 5:001, Section 13(3), the Company is filing one copy of the Confidential Information separately under seal, and one copy without the confidential information included.
- 11. Duke Energy Kentucky respectfully requests that the Confidential Information be withheld from public disclosure for a period of <u>ten</u> years. The Information considered to be critical utility infrastructure contained in attachments to AG-DR-01-12 should remain confidential for so long as the station is operational. This will assure that the Confidential Information if disclosed after that time will no longer be commercially sensitive so as to likely impair the interests of the Company or its customers if publicly disclosed.
- 12. To the extent the Confidential information becomes generally available to the public, whether through filings required by other agencies or otherwise, Duke Energy Kentucky will notify the Commission and have its confidential status removed, pursuant to 807 KAR 5:001 Section 13(10)(a).

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

Respectfully submitted,

DUKE ENERGY KENTUCKY, INC.

Rocco O. D'Ascenzo **Associate General Counsel** Amy B. Spiller Deputy General Counsel Duke Energy Business Services, LLC 139 East Fourth Street, 1303 Main

Cincinnati, Ohio 45201-0960

Phone: (513) 287-4359 Fax: (513) 287-4385

e-mail: rocco.d'ascenzo@duke-energy.com Counsel for Duke Energy Kentucky, Inc.

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

I hereby certify that a copy of the foregoing filing was served on the following via overnight mail, this day of August 2014:

Jennifer Hans
The Office of the Attorney General
Utility Intervention and Rate Division
1024 Capital Center Drive
Frankfort, Kentucky 40601
Jennifer.hans@ag.ky.gov

Rocco D'Ascenzo

STATE OF OHIO)	
)	SS:
COUNTY OF HAMILTON)	

The undersigned, Rocco O. D'Ascenzo, Associate General Counsel, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing objections, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Rócco O. D'Ascenzo, Affiant

Subscribed and sworn to before me by Rocco O. D'Ascenzo on this \underline{U} 2014.

Notary Public, State of Ohio My Commission Expires 01-05-2019

11.

My Commission Expires: 1/5/2019

STATE OF NORTH CAROLINA)	
)	SS
COUNTY OF MECKLENBURG)	

The undersigned, Mark A. Webster, Manager Insurance, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Mark A. Webster, Affiant

Subscribed and sworn to before me by Mark A. Webster on this _____ day of August, 2014.

NOTARY PUBLIC

My Commission Expires: June 14, 2016

STATE OF INDIANA)	
)	SS
COUNTY OF HENDRICKS)	

The undersigned, Steve Immel, Vice President of Midwest Regulated Operations, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Steve Immel, Affiant

Subscribed and sworn to before me by Steve Immel on this 1st day of August, 2014.

Stephanie Y. Bohlsen NOTARY PUBLIC

My Commission Expires: 6/3/20/8





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

The undersigned, John Verderame, Director of Power Trading & Dispatch, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

John Verderame, Affiant

Subscribed and sworn to before me by John Verderame on this 29 day of 1μ , 2014.



NOTARY PUBLIC

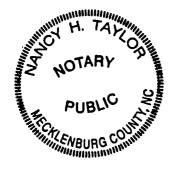
My Commission Expires: 6/17/30/7

STATE OF NORTH CAROLINA)	
)	SS
COUNTY OF MECKLENBURG)	

The undersigned, Jack Sullivan, Director of Capital Structuring, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Jack Sullivan, Affiant

Subscribed and sworn to before me by Jack Sullivan on this <u>304h</u> day of <u>July</u>, 2014.



7 Jancy H. Jaylor NOTARY PUBLIC

My Commission Expires: January 26, 2017

STATE OF NORTH CAROLINA)	
)	SS
COUNTY OF MECKLENBURG)	

The undersigned, Brett Phipps, Director of Fuel Procurement, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Brett Phipps, Affiant

Subscribed and sworn to before me by Brett Phipps on this 30 day of J_{μ}/y , 2014.



NOTARY PUBLIC

My Commission Expires: 4/17/2017

STATE OF OHIO)	
)	SS
COUNTY OF HAMILTON)	

The undersigned, J. Michael Geers, Manager EHS, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Michael Geers, Affiant

Subscribed and sworn to before me by J. Michael Geers on this 30 day of

NOTARY PUBLIC

My Commission Expires:

RUTH M. LOCCISANO Notary Public, State of Ohio - My Commission Expires 06-18-2017

STATE OF OHIO)	SS:
COUNTY OF HAMILTON)	33.
The undersigned, William Don Wa	athen Jr	., Director of Rates & Regulatory Strategy-
OH/KY, being duly sworn, deposes and say	ys that	he has personal knowledge of the matters set
forth in the foregoing data requests, and that	t the an	swers contained therein are true and correct to
the best of his knowledge, information and b		m Don Wathen Jr., Affiant
Subscribed and sworn to before many 2014.	^	Villiam Don Wathen Jr. on this 29 Hay of
ADELE M. FRISCH Notary Public, State of Ohio	NOTA	deli M. Frisch ARY PUBLIC
My Commission Expires 01-05-2019	Му Со	ommission Expires: $1/5/2019$

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 data requests, and that the information contained therein is true and correct to the best of his knowledge, information and belief.

DUKE ENERGY KENTUCKY

James P. Henning, Affiant

President Duke Energy Kentuck

Subscribed and sworn to before me by James P. Henning, President of Duke Energy Kentucky, Inc., on this 50 day of August 2014.

My Commission Expires 01-05-2019

1411

Odlly. Frisch

NOTARY PUBLIC

My Commission Expires: 1/5/2019

STATE OF NORTH CAROLINA)	
)	SS
COUNTY OF MECKLENBURG)	

The undersigned, Jim Northrup, Director of Wholesale & Renewables Analytics, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Jim Northrup, Affiant

Subscribed and sworn to before me by Jim Northrup on this day

NOTARY PUBL

My Commission Expires:

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Duke Energy Kentucky Case No. 2014-00201

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-001 PUBLIC

REQUEST:

Refer to page 5 of the application, paragraph 8, which discusses DP&L's intentions to

"no longer participate in the joint ownership of East Bend and further, to transfer or sell

its ownership interest in East Bend." Please provide all correspondence, announcements,

and other documents that evidence this assertion.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment E only)

Please see Attachments AG-DR-01-001-A through D and F.

PERSON RESPONSIBLE: Steve Immel

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4:0

February 15, 2013

Mr. Charles M. Gates
Senior Vice President, Power Generation Operations
Duke Energy Corporation
P. O. Box 1006
Charlotte, N.C. 28201-1006

East Bend Unit 2-Duke Energy Kentucky

Dear Mr. Gates:

This letter is a formal notice and request to enter into discussions on an accelerated basis with the expectation that by the end of April 2013, we will have a consensus understanding of how East Bend Unit 2 will be operated for the remainder of this year and thereafter to return the Unit to profitability. The financial performance of Unit 2 has been extremely disappointing over the last year or so for The Dayton Power and Light Company ("DP&L"). Absent some immediate and significant changes, negative financial results are projected to continue for the foreseeable future, which frustrates the purpose of the joint enterprise. This is unacceptable to DP&L and compels the development, quickly, of a plan of action.

It is likely that any such plan, collaboratively developed, will need to be implemented through the East Bend Unit 2 Operation Agreement ("Agreement"). Pursuant to Section E.6 of the Agreement, DP&L gives formal notice and requests that Duke Energy Kentucky, Inc. ("DEK") meet and confer with DP&L regarding necessary modifications to the Agreement. The regulatory environments and marketplace conditions of DP&L and DEK, and the respective power generation needs of the respective companies from East Bend Unit 2 have changed considerably, and in such a manner as to render unreasonable continued adherence to the Agreement in its present form.

Section E.6 of the Agreement states:

"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."

Therefore, DP&L requests that DEK agree to engage its "best efforts to agree upon modifications to this Agreement" respecting the divergent regulatory and market conditions of

DP&L and DEK, as well as the divergent views regarding the necessity and rationale for proposed capital improvements and plant upgrades.

DP&L is currently analyzing what immediate changes in operations, capital spend and O&M spend may be necessary for 2013. At the same time, we are considering what modifications would be appropriate to the existing Agreement both for 2013 and thereafter. We note that the Agreement expires in April 2014 and even without the immediate problems facing the joint enterprise, we would need to modify the Agreement substantially to reflect changing conditions in order to extend the Agreement beyond April 2014. We have no intent to continue participation at East Bend beyond the current expiration date, unless significant modifications can be made in a new Operation Agreement that establishes mechanisms to ensure that future operating and budgetary decisions will have results that are mutually beneficial to our companies.

We would propose a meeting at East Bend as soon as possible to present the conclusions of our analyses and proposals. Thereafter, we would like to meet either in person or via teleconference no less frequently than weekly in order to develop a consensus action plan for 2013 and the appropriate modifications governing the remaining term of the Agreement and any extension beyond its expiration date.

We look forward to DEK's prompt response and to commencing these mutual efforts to address the changing circumstances, as anticipated and required by the Agreement.

Very truly yours,

Dennis A. Lantzy

Senior Vice President, Generation

Operations

cc:

Phil Herrington Teresa F. Marrinan Michael S. Mizell



Steve Immel Vice President, Midwest Regulated Operations Steve.Immel@Duke-Energy.com Office: 317-838-1417

February 13, 2014

Via Email and U.S. Mail

Mr. Brad Scott Vice President of Generation DP&L Generation 1065 Woodman Drive Dayton, OH 45432

Re: Response to DP&L Letter of February 5, 2014, entitled "Continued Operations at East Bend"

Dear Brad:

Duke Energy Kentucky ("DEK") wishes to correct certain inaccuracies in your letter of February 5, 2014 and to respond to DP&L's request to delay the Spring outage at East Bend Unit 2. First, it is simply not the case that DEK has refused to agree to DP&L's proposed reductions in capital expenditures and O&M expenses, or that DEK's letter of May 20, 2013 evinces that refusal. The letter of May 20, 2013, was the last of two letters that followed on the heels of a series of meetings between DEK and DP&L in 2011 and 2012, during which DEK at the request of DP&L, agreed to a 60% reduction in capital expenditures over the long term. For your convenience, DEK is reattaching its letters of April 12, 2013 (Attachment 1) and May 20, 2013 (Attachment 2) which outline the facts and DEK's position.

DEK's prior letters also address the parties' disagreement concerning provisions of any new Joint Operation Agreement ("JOA"). DP&L has insisted and continues to insist that it have an equal voice in all operational and financial decisions relating to East Bend Unit 2, something to which DEK cannot agree given that it is the 69% owner of that unit and has regulatory obligations it must protect that may not align with DP&L's commercial positions.

DEK understands that the JOA will expire on April 15, 2014, but that does not mean that DP&L is absolved of its obligation as co-owner, particularly as it has sold and continues to take electricity produced by the unit and will do so through at least 2016. In the absence of a new agreement, DEK will follow the parties' prior course of conduct.

Finally, as to the Spring outage, which has been in planning since 2012, DEK will proceed and in fact, must do so to improve reliability of the unit. Further, we have already procured materials and it is prudent to undertake what we scheduled and started.

Separately, I will contact you concerning the need for and value of any further meeting on these issues.



Steve Immel
Vice President, Midwest Regulated Operations
Steve.Immel@Duke-Energy.com
Office: 317-838-1417

Very truly yours,

Stephen J. Immel

Vice President, Midwest Regulated Operations

cc: Bryan Walsh

Jenny Bulach Ariane Johnson Dina Riemann

(2) Attachments



Steve Immel
Vice President, Midwest Regulated Operations
Steve Immel@Duke-Energy.com
Office: 317-838-1417

Attachment 1: Duke Energy 4/12/13 Letter to The Dayton Power & Light Company, Page 1 of 2



Duke Energy 1000 East Main Street Plainfield, IN 46158 Stephen J Immel. Vice President Michwest Regulated Operations

April 12, 2013

Mr. Dennis A. Lantzy
Senior Vice President, Generation Operations
The Dayton Power and Light Company
P.O. Box 1247
Dayton, Ohio 45401-1247

Re: East Bend Unit 2 - Operation Agreement

Dear Mr. Lantzy:

This letter is intended to follow up on the March 14th discussions between The Dayton Power and Light Company ("DP&L") and Duke Energy Kentucky, inc. ("DEK") regarding East Bend Unit 2. During our meeting in Cincinnati, DP&L presented several proposals regarding East Bend Unit 2 and asked DEK to respond to such proposals. One such proposal related to principles for a new Operation Agreement between the parties. The following is DEK's response to each of the four principles presented by DP&L at the meeting.

First, DP&L has proposed that capital, O&M and operations be based on defined financial outcomes for both parties. We agree that capital and O&M expenditures should be based on financial analyses. That is in fact how DEK currently makes decisions as operator. We believe, however, that it would be difficult for the parties to mutually agree upon certain defined financial outcomes because the parties operate in different regulatory environments with different earning opportunities. Therefore, we do not think it is feasible to include such a requirement in the Operation Agreement.

Second, DP&L has proposed that the Operation Agreement provide for joint decision-making for key plant decisions and expenditures. We disagree with such an approach for a number of reasons. Given the fact that DP&L owns 31% of East Bend Unit 2, we do not believe it is fair and reasonable for DP&L to expect to have an equal say in operational and financial decisions. Providing such a right to a minority, non-operator owner is not practical and would not give DEK the flexibility to effectively operate the unit. Further, DEK is a regulated entity that owes duties to its customers. We cannot agree to a principle that could place DEK in a position where it cannot fulfill those duties. Finally, we note that this approach is inconsistent with how Duke Energy and DP&L operate their other jointly-owned assets.

Third, DP&L has requested that we incorporate certain provisions from the Operation Agreement amendments that were executed recently for the units jointly owned by DP&L and Duke Energy Ohio. Those amendments addressed, among other things, the term of the



Steve Immel
Vice President, Midwest Regulated Operations
Steve. Immel@Duke-Energy.com
Office: 317-838-1417

Attachment 1 cont'd.: Duke Energy 4/12/13 Letter to The Dayton Power & Light Company, Page 2 of 2

Page 2

agreement, transfers of interest, voting rights and requirements and the operating plan. While many of those terms are acceptable to DEK from a conceptual standpoint, the parties will need to discuss the details. For example, the parties will have to discuss the transfer of interest provisions, including the credit requirements for transferees.

Lastly, DP&L has suggested that the new Operation Agreement include concepts from the fuel agreement recently executed for our other jointly-owned units. Specifically, DP&L has proposed that fuel for East Bend Unit 2 be committed and communicated when purchased. DEK does not believe all the concepts from the fuel agreement are applicable to East Bend Unit 2. Unlike the other jointly-owned units, all East Bend coal contracts are specifically entered into for and committed to East Bend Unit 2 and there is little, if any, portfolio optimization. You also have proposed that all coal purchases be approved by DP&L. For the reasons stated above, we do not believe joint decision-making on coal purchases is appropriate. Instead, we believe DEK can address DP&L's concerns through communication of fuel information.

Once you have had an opportunity to review and consider DEK's responses, we would suggest a call or meeting to discuss the issues and next steps with respect to a new Operation Agreement.

Very truly yours,

Stephen J. Immel

Vice President, Midwest Regulated Operations

cc: Bryan Walsh Jenny Bulach Dina Riemann



Steve Immel
Vice President, Midwest Regulated Operations
Steve, Immel@Duke-Energy.com
Office: 317-838-1417

Attachment 2: Duke Energy 5/20/13 Letter to The Dayton Power & Light Company, Page 1 of 3



Duke Energy 1000 East Main Street Plainfield, IN 48188 Stephen J Immel; Vice President Midwest Regulated Operations

May 20, 2013

Mr. Dennis A. Lantzy Senior Vice President Generation Operations DP&L Inc. 1065 Woodman Drive Dayton, Ohio 45432

In Re: East Bend Unit 2 Operation Agreement dated March 24, 1981 ("OA") between Duke Energy Kentucky, Inc. ("DEK") and The Dayton Power and Light Company ("DP&L")

Dear Dennis:

This letter is in response to your letter dated April 22, 2013 and two earlier letters, dated February 15, 2013 and April 3, 2013, to which DEK has responded both through meetings and in writing. We include the two prior letters in this response because of the similarity of some of the issues presented in all three letters.

In the most current letter, DP&L states that in its estimation, capital and O&M expenditures for East Bend Unit 2 ("EB"), jointly owned by the parties, should be reduced substantially, both to bring the plant to profitability as defined by DP&L in the unregulated environment in which it operates and to minimize expenditures before the expiration of the OA in April 2014. According to DP&L, unless the parties are able to incorporate DP&L's financial views into a newly minted and subsequent operation agreement, DP&L does not intend to "continue participating" in EB after April 2014. Similarly, by its letter of April 3, 2013, DP&L has indicated that it does not wish DEK to enter into fuel agreements for EB which extend past April 2014. In effect, in all three letters, DP&L is treating the expiration of the OA as a bright line after which, unless its demands are met, it views itself as having no further obligations.

This view is incorrect however. The OA speaks to operations not ownership. Ownership is under separate documents and cannot be terminated without the consent of DEK. DP&L, as an owner of 31% of the EB asset, has certain obligations that run with the asset for which it will remain responsible even without an OA. Moreover, DP&L has sold its energy and capacity into the market through 2016 and therefore, apparently expects EB to operate to meet those requirements. As such, DP&L cannot benefit from EB operation without continued participation in the costs of those operations. Absent a new operation agreement, the parties' long-standing course of performance is likely to control.



Steve Immel
Vice President, Midwest Regulated Operations
Steve. Immel@Duke-Energy.com
Office: 317-838-1417

Attachment 2 cont'd.: Duke Energy 5/20/13 Letter to The Dayton Power & Light Company, Page 2 of 3

Page 2

The parties have operated under the current OA for 32 years and have done so on the understanding and express provisions that the majority owner of EB, here DEK, makes all material decisions concerning the plant, subject to input from, but not necessarily approval by, DP&L. When the parties entered into the OA, both were regulated entities. DP&L's status changed in the last five years and it is now an unregulated entity. Hence, although DEK is still required to operate EB as a regulated base load plant to serve its Kentucky customer base as has always been the case, DP&L now would like to operate its share as a merchant plant. The parties' view of reliability, long term fuel contracts, and their relationship to their respective customers are therefore, no longer the same, which is a change in circumstances since the OA was signed.

Recognizing this, DEK agreed to DP&L's request to conduct weekly meetings (not contractually required) to discuss operations and, since the fall 2011 data exchange, has cut 60% of the 10 year capital budget. Notwithstanding these efforts to accommodate DP&L's needs as a joint owner, DEK also has obligations to operate its share of EB prudently, reliably and with the interest of its ratepayers in mind.

Reliability is of utmost importance and the planned capital projects that DP&L has requested be delayed until after April 2014 are necessary now to ensure continued reliability. Likewise, long term fuel procurement is important not only to ensure reliability but prudent economic operations. It is not appropriate for DP&L to demand that DEK subordinate the interest of the Kentucky ratepayers to DP&L's desire to meet what it views as the appropriate level of profitability. DEK has balanced the interests of all parties to the best of its abilities but must move forward as it deems prudent and appropriate at this point.

Because the weekly meetings between DP&L and DEK have become a repetition of DP&L's position as expressed in its letters, DEK sees no further value in continuing these meetings and will revert to the twice yearly informational meetings that have taken place in the past. DEK will continue to operate in accordance with the environmental capital budget dated November 19, 2012 and the maintenance capital budget exchanged on December 7, 2012. DEK will also continue to operate within the O&M budget presented in the Fall 2012 joint owner exchange.

With respect to the parties' on-going relationship, DEK and DP&L need to discuss and agree upon terms for a new operation agreement. DEK previously responded to the principles of a new operation agreement that DP&L presented at the meeting on March 14, 2013. It is also our understanding that, although DP&L initially suggested the parties incorporate certain provisions from amendments that were executed recently for units jointly owned by DP&L and Duke Energy Ohio, DP&L now may no longer believe those same provisions should be included. At this point, it appears the parties have no agreement as to the terms of a new operation agreement.



Steve Immel Vice President, Midwest Regulated Operations Steve Immel@Duke-Energy.com Office: 317-838-1417

Attachment 2 cont'd.: Duke Energy 5/20/13 Letter to The Dayton Power & Light Company, Page 3 of 3

Page 3

If DP&L is seeking to terminate its relationship with DEK in the EB asset, it may make its proposals and seek approvals, which DEK will explore. DEK acknowledges that there have been initial overtures by DP&L, but those were rejected as uneconomical. If there are additional proposals, DEK will continue to consider those.

Very truly yours,

Stephen J. Immel

Vice President, Midwest Regulated Operations

cc: Bryan Walsh Jenny Bulach Dina Riemann



February 5, 2014

Via E-mail and First Class Mail

Mr. Stephen J. Immel
Vice President
Midwest Regulated Operations
Duke Energy
1000 East Main Street
WP632
Plainfield, IN 46168

Re: Continued Operations at East Bend

Dear Mr. Immel:

As you are aware from past correspondence and meetings between our two companies, Duke Energy Kentucky's ("DEK") operations at the East Bend Station have created a substantial financial hardship on The Dayton Power and Light Company ("DP&L"). The refusal of DEK, as evidenced in your letter of May 20, 2013, to agree to DP&L's proposed reductions in capital expenditures and operational and maintenance (O&M) costs, both currently and in future budgets, suggests that the highly negative financial results created by DEK will be ongoing for the indefinite future. That is an unacceptable result and DP&L cannot agree to it.

DP&L strongly urges that we have a meeting or conference call within the next few days to discuss whether East Bend should be retired, should be operated substantially differently, or should be sold. As we have communicated previously, we are ready and willing to sell DP&L's share of East Bend to DEK or some other Duke affiliate.

Please be advised that it is DP&L's position that the Operation Agreement currently in effect will expire on its own terms as of March 24, 2014. Our review of your letter of May 20,

2013, suggests that DEK believes that the expiration of the Operation Agreement will have minimal consequences on the rights, duties and obligations of DEK and DP&L. We do not share that view. The parties' performance pursuant to the terms of a written agreement during the term of that agreement does not create any "course of performance" that binds the parties *after* the expiration of the written agreement. Thus, there will be no "business-as-usual" after termination. In the absence of a new Operation Agreement, DEK has no authority to recover from DP&L any portion of the costs associated with improvements or new capital investments that DEK chooses to make to the East Bend Station without DP&L's consent. In addition, DEK is explicitly placed on notice that it should not rely on any course of dealing that may have occurred in the past either at the East Bend Station or at any other station in which DP&L and a DEK affiliate may be co-owners. Once the Operation Agreement has expired, DP&L will no longer make payments to DEK based on budgets that DEK has adopted over DP&L's objections.

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Furthermore, unless DEK is willing to make significant reductions in its current and future capital expenditures and O&M costs, paired with a new Operation Agreement that provides DP&L with clear rights to ensure that future costs are incurred only when they will be beneficial to both owners, DP&L would not wish to continue the co-owner relationship in East Bend Unit 2. Contingent on whether or not DEK is willing to take such actions or other mutually-agreeable actions that would terminate DP&L's ownership interest, DP&L intends to establish a future date certain after which the real property, structures, equipment and facilities will not be utilized by DP&L in aid of the generation of electricity.

In light of the current situation, DP&L asks the 2014 spring outage at East Bend Unit 2 be delayed until after this issue is resolved. There is significant spending, both O&M and

KyPSC 2014-201 AG-DR-01-001 Attachment C Page 3 of 3

capital, scheduled during the outage and with the upcoming expiration of the Operation Agreement DP&L believes the outage should be delayed.

I look forward to your prompt response, which should include some proposed dates within the next few days for a meeting or conference call.

Very truly yours,

Bradley Scott

Vice President of Generation

DP&L Generation

cc: Phil Herrington

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Duke Energy 1000 East Main Street Plainfield, IN 46168

Stephen J Immel: Vice President Midwest Regulated Operations

May 20, 2013

Mr. Dennis A. Lantzy Senior Vice President Generation Operations DP&L Inc. 1065 Woodman Drive Dayton, Ohio 45432

In Re: East Bend Unit 2 Operation Agreement dated March 24, 1981 ("OA") between Duke Energy Kentucky, Inc. ("DEK") and The Dayton Power and Light Company ("DP&L")

Dear Dennis:

This letter is in response to your letter dated April 22, 2013 and two earlier letters, dated February 15, 2013 and April 3, 2013, to which DEK has responded both through meetings and in writing. We include the two prior letters in this response because of the similarity of some of the issues presented in all three letters.

In the most current letter, DP&L states that in its estimation, capital and O&M expenditures for East Bend Unit 2 ("EB"), jointly owned by the parties, should be reduced substantially, both to bring the plant to profitability as defined by DP&L in the unregulated environment in which it operates and to minimize expenditures before the expiration of the OA in April 2014. According to DP&L, unless the parties are able to incorporate DP&L's financial views into a newly minted and subsequent operation agreement, DP&L does not intend to "continue participating" in EB after April 2014. Similarly, by its letter of April 3, 2013, DP&L has indicated that it does not wish DEK to enter into fuel agreements for EB which extend past April 2014. In effect, in all three letters, DP&L is treating the expiration of the OA as a bright line after which, unless its demands are met, it views itself as having no further obligations.

This view is incorrect however. The OA speaks to operations not ownership. Ownership is under separate documents and cannot be terminated without the consent of DEK. DP&L, as an owner of 31% of the EB asset, has certain obligations that run with the asset for which it will remain responsible even without an OA. Moreover, DP&L has sold its energy and capacity into the market through 2016 and therefore, apparently expects EB to operate to meet those requirements. As such, DP&L cannot benefit from EB operation without continued participation in the costs of those operations. Absent a new operation agreement, the parties' long-standing course of performance is likely to control.

The parties have operated under the current OA for 32 years and have done so on the understanding and express provisions that the majority owner of EB, here DEK, makes all material decisions concerning the plant, subject to input from, but not necessarily approval by, DP&L. When the parties entered into the OA, both were regulated entities. DP&L's status changed in the last five years and it is now an unregulated entity. Hence, although DEK is still required to operate EB as a regulated base load plant to serve its Kentucky customer base as has always been the case, DP&L now would like to operate its share as a merchant plant. The parties' view of reliability, long term fuel contracts, and their relationship to their respective customers are therefore, no longer the same, which is a change in circumstances since the OA was signed.

Recognizing this, DEK agreed to DP&L's request to conduct weekly meetings (not contractually required) to discuss operations and, since the fall 2011 data exchange, has cut 60% of the 10 year capital budget. Notwithstanding these efforts to accommodate DP&L's needs as a joint owner, DEK also has obligations to operate its share of EB prudently, reliably and with the interest of its ratepayers in mind.

Reliability is of utmost importance and the planned capital projects that DP&L has requested be delayed until after April 2014 are necessary now to ensure continued reliability. Likewise, long term fuel procurement is important not only to ensure reliability but prudent economic operations. It is not appropriate for DP&L to demand that DEK subordinate the interest of the Kentucky ratepayers to DP&L's desire to meet what it views as the appropriate level of profitability. DEK has balanced the interests of all parties to the best of its abilities but must move forward as it deems prudent and appropriate at this point.

Because the weekly meetings between DP&L and DEK have become a repetition of DP&L's position as expressed in its letters, DEK sees no further value in continuing these meetings and will revert to the twice yearly informational meetings that have taken place in the past. DEK will continue to operate in accordance with the environmental capital budget dated November 19, 2012 and the maintenance capital budget exchanged on December 7, 2012. DEK will also continue to operate within the O&M budget presented in the Fall 2012 joint owner exchange.

With respect to the parties' on-going relationship, DEK and DP&L need to discuss and agree upon terms for a new operation agreement. DEK previously responded to the principles of a new operation agreement that DP&L presented at the meeting on March 14, 2013. It is also our understanding that, although DP&L initially suggested the parties incorporate certain provisions from amendments that were executed recently for units jointly owned by DP&L and Duke Energy Ohio, DP&L now may no longer believe those same provisions should be included. At this point, it appears the parties have no agreement as to the terms of a new operation agreement.

Page 3

If DP&L is seeking to terminate its relationship with DEK in the EB asset, it may make its proposals and seek approvals, which DEK will explore. DEK acknowledges that there have been initial overtures by DP&L, but those were rejected as uneconomical. If there are additional proposals, DEK will continue to consider those.

Very truly yours,

Stephen J. Immel

Vice President, Midwest Regulated Operations

cc: Bryan Walsh Jenny Bulach

Dina Riemann

CONFIDENTIAL AG-DR-01-001 ATTACHMENT E FILED UNDER SEAL

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Duke Energy 1000 East Main Street Plainfield, IN 46168 Stephen J Immel: Vice President Midwest Regulated Operations

April 12, 2013

Mr. Dennis A. Lantzy Senior Vice President, Generation Operations The Dayton Power and Light Company P.O. Box 1247 Dayton, Ohio 45401-1247

Re: East Bend Unit 2 - Operation Agreement

Dear Mr. Lantzy:

This letter is intended to follow up on the March 14th discussions between The Dayton Power and Light Company ("DP&L") and Duke Energy Kentucky, Inc. ("DEK") regarding East Bend Unit 2. During our meeting in Cincinnati, DP&L presented several proposals regarding East Bend Unit 2 and asked DEK to respond to such proposals. One such proposal related to principles for a new Operation Agreement between the parties. The following is DEK's response to each of the four principles presented by DP&L at the meeting.

First, DP&L has proposed that capital, O&M and operations be based on defined financial outcomes for both parties. We agree that capital and O&M expenditures should be based on financial analyses. That is in fact how DEK currently makes decisions as operator. We believe, however, that it would be difficult for the parties to mutually agree upon certain defined financial outcomes because the parties operate in different regulatory environments with different earning opportunities. Therefore, we do not think it is feasible to include such a requirement in the Operation Agreement.

Second, DP&L has proposed that the Operation Agreement provide for joint decision-making for key plant decisions and expenditures. We disagree with such an approach for a number of reasons. Given the fact that DP&L owns 31% of East Bend Unit 2, we do not believe it is fair and reasonable for DP&L to expect to have an equal say in operational and financial decisions. Providing such a right to a minority, non-operator owner is not practical and would not give DEK the flexibility to effectively operate the unit. Further, DEK is a regulated entity that owes duties to its customers. We cannot agree to a principle that could place DEK in a position where it cannot fulfill those duties. Finally, we note that this approach is inconsistent with how Duke Energy and DP&L operate their other jointly-owned assets.

Third, DP&L has requested that we incorporate certain provisions from the Operation Agreement amendments that were executed recently for the units jointly owned by DP&L and Duke Energy Ohio. Those amendments addressed, among other things, the term of the

agreement, transfers of interest, voting rights and requirements and the operating plan. While many of those terms are acceptable to DEK from a conceptual standpoint, the parties will need to discuss the details. For example, the parties will have to discuss the transfer of interest provisions, including the credit requirements for transferees.

Lastly, DP&L has suggested that the new Operation Agreement include concepts from the fuel agreement recently executed for our other jointly-owned units. Specifically, DP&L has proposed that fuel for East Bend Unit 2 be committed and communicated when purchased. DEK does not believe all the concepts from the fuel agreement are applicable to East Bend Unit 2. Unlike the other jointly-owned units, all East Bend coal contracts are specifically entered into for and committed to East Bend Unit 2 and there is little, if any, portfolio optimization. You also have proposed that all coal purchases be approved by DP&L. For the reasons stated above, we do not believe joint decision-making on coal purchases is appropriate. Instead, we believe DEK can address DP&L's concerns through communication of fuel information.

Once you have had an opportunity to review and consider DEK's responses, we would suggest a call or meeting to discuss the issues and next steps with respect to a new Operation Agreement.

Very truly yours,

Stephen J. Immel

Vice President, Midwest Regulated Operations

cc: Bryan Walsh Jenny Bulach Dina Riemann

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-002

REQUEST:

Refer to page 9 of the application, generally, regarding the relative installed capacity of

East Bend being larger than Miami Fort 6 and, therefore, the potential for excess

generating capacity as referenced in footnote 19. Explain whether such a scenario, if

DEK assumes full ownership of East Bend, will result in wasteful duplication. If not, why

not?

RESPONSE:

The excess generation capacity in the portfolio during the period between the closing of

the transaction and the retirement of Miami Fort 6 is not wasteful; and in fact represents

significant value to the Kentucky ratepayer. The value of the additional approximately

186 MWs of generation lies in energy as well as capacity. From an energy perspective,

East Bend 2 is a very efficient generator that generally clears the PJM Day Ahead market.

Margins from these sales represent incremental value to ratepayers, regardless of the load

position. Additionally, if there were a full or partial forced outage at either Miami Fort 6

of East Bend 2 during that period, the additional megawatts would provide a valuable

hedge against real time prices. From a capacity perspective, the revenue received under

the terms of the transaction from the capacity sales to PJM also represents incremental

value. Duke Energy Kentucky has already fulfilled its capacity obligation to PJM for the

2014/2015 Delivery Year. If the transaction were approved and closed by January 1,

2015, these incremental revenues would be shared with customers under the Company's

proposal. Please see Confidential Response to STAFF-DR-01-029.

PERSON RESPONSIBLE: John Verderame

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-003

REQUEST:

Refer to page 14 of the application, paragraph 19. During negotiations with DP&L

regarding the proposed adjustments to the purchase price of \$12.4 million for a 31%

interest in East Bend, did DEK request banding the maximum and minimum adjustments

to the price?

a. If yes, please provide any and all communications, notes, presentations or

other documents referencing such a discussion. If no, please explain why

banding the adjustments to stabilize the purchase price was not discussed.

RESPONSE:

Objection. This question is vague, over broad and unduly burdensome. The Company

further objects to the extent this question seeks information that is protected by attorney

work product and privilege. Without waiving said objection, and to the extent

discoverable, the Parties negotiated acceptable caps to certain adjustment amounts to

protect from material swings in value and/or material unexpected expenses during the

pre-closing period. Specifically, the parties agreed to:

1. Cap the total Outstanding Outage Costs as defined in the Purchase Agreement at

\$9,500,000.

2. Cap the outstanding Non-Outage Capital Costs as defined in the Purchase

Agreement at \$125,000 per month beginning in March 2014. Timed with the

beginning of the planned outage period. Monthly cap figure represents an

acceptable level of monthly capex (apart from Outage Costs) during the pre-

closing period.

3. Cap the outstanding O&M Costs as defined in the Purchase Agreement at

\$1,200,000 per month beginning in May 2014. Timed with the May signing of the

Purchase Agreement. Monthly cap figure represents an acceptable level of O&M

expenditures during pre-closing period.

PERSON RESPONSIBLE: Objection-Legal

Objection-Legal Jack Sullivan

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Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-004

REQUEST:

Refer to the testimony of Witness Henning at page 20, line 11, referencing East Bend's

currently deriving a significant portion of its fuel from Kentucky coal. What exact

percentage of East Bend's coal deliveries for calendar years 2010 through 2014 to date

were derived from Kentucky coal production?

a. Please provide in electronic spreadsheet format (with data in all cells and rows

fully intact and accessible, together with formulas), the data upon which DEK

relies to determine the percentages per year.

RESPONSE:

Please see AG-DR-01-004 Attachment.

PERSON RESPONSIBLE: Brett Phipps

Row Labels	Sum of Shipment Payment Qty	% By State	%
East Bend ULHP	7551938.48		70
2010	1664707.11	100.00%	
Illinois	314026.85	18.86%	
Kentucky	735069.3	44.16%	-
Ohio	599713.36	36.03%	
West Virginia	15897.6	0.95%	100.00%
2011	2033596.93	100.00%	
Kentucky	1488624.24	73.20%	
Ohio	236775.19	11.64%	· <u>· · · · · · · · · · · · · · · · · · </u>
Pennsylvania	47320.5	2.33%	
West Virginia	260877	12.83%	100.00%
2012	1582221.2	100.00%	
Illinois	61026.9	3.86%	
Kentucky	1076812.4	68.06%	
Ohio	338458.15	21.39%	
West Virginia	105923.75	6.69%	100.00%
2013	1770273.93	100.00%	
Illinois	333898.23	18.86%	
Indiana	275166	15.54%	
Kentucky	1084115.8	61.24%	
Ohio	26983.3	1.52%	
West Virginia	50110.6	2.83%	100.00%
2014	501139.31	100.00%	
Illinois	69387.76	13.85%	
Indiana	50143	10.01%	
Kentucky	330131	65.88%	
Pennsylvania	51477.55	10.27%	100.00%
Grand Total	7551938.48		

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-005

REQUEST:

Provide a list of companies with whom DEK has current contracts for coal supply to East

Bend. For each company listed provide the following information:

a. The date the contract was executed and the date it expires;

b. The location (including county and state) of the coal company, which is the

counterparty to the contract;

c. The current and anticipated transport method for delivery to East Bend; and

d. The terms of how the coal price will be calculated during the relevant period

pursuant to the contract's terms.

RESPONSE:

Objection. This request includes information that is publicly available and which is

regularly filed with the Kentucky Public Service Commission as part of Fuel Adjustment

proceedings and thus equally accessible to the Attorney General. Without waiving said

objection, and to the extent discoverable, please see Case No. 2013-448, response to

STAFF-DR-01-008 and STAFF-POST HEARING-DR-01-008 (SUPPLEMENTAL).

PERSON RESPONSIBLE: As to Objection- Legal

Brett Phipps

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Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-006

REQUEST:

Reference the Geers testimony at p. 14, wherein Mr. Geers states that if the CSAPR Rule

is eventually implemented, the East Bend plant is "well positioned" to comply with the

Rule. Please define and discuss what Mr. Geers means by the phrase "well positioned."

a. Is it possible the EPA could add additional requirements or strengthen

compliance requirements in the final iteration of CASPR? If not, why not?

b. Under what scenarios could or might DEK be required to spend additional

sums to meet CSAPR compliance? Please discuss in detail.

RESPONSE:

East Bend is well positioned to comply with CSAPR because it already has the types of

emission control systems envisioned by the rule, namely FGD and SCR. Currently East

Bend has the ability to operate the FGD and SCR systems at a higher level of

performance and increase their removal efficiencies from current levels.

a.) As it stands, CSAPR is a final rule in two phases with clearly identified

emission allowance budgets and other compliance requirements. The EPA

could not add additional requirements or strengthen the compliance

requirements without reopening the rule. To do so, it would have to conduct a

full notice and comment rule making. The EPA has indicated however that it

is working on a new transport rule, but the actual schedule is uncertain. That

rule would go through the regular notice and comment process before a final

rule is adopted.

b.) Overall the company believes it can increase the removal efficiency of the

East Bend FGD and SCR to operate within its emission allocation. Duke

Energy Kentucky does anticipate that some additional capital may be required

for the SCR, particularly under the second phase of CSAPR compliance.

Please refer to the Confidential response to AG-DR-01-008 Depending upon

economics, the Company may also take advantage of the emission allowance

market.

PERSON RESPONSIBLE: J. Michael Geers

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Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-007

REQUEST:

Reference the Geers testimony in general, and in particular at pp. 14-17. Please describe

the impact on the East Bend plant if the EPA adopts an ozone standard of either: (i) 75

ppb, or (ii) any more stringent standard, such as in the range of 60 to 70 ppb.

a. On p. 17 of his testimony, Mr. Geeres states that if the greater Cincinnati area

is found out of attainment with the EPA ozone standard, that ". . . it is likely

that more restrictive NO_x limitations will be imposed upon East Bend

[b]ecause East Bend has an SCR, it is well-positioned to comply with such

limits." Please identify and discuss what Mr. Geers means by "well-

positioned."

i. If East Bend's SCR cannot achieve the limitations imposed on the station,

describe what measures DEK would or might have to take to meet

compliance.

RESPONSE:

a.) If the Cincinnati area is found out of attainment with an ozone standard at 75 ppb

or a standard in the range of 60-70 ppb, Kentucky and the other surrounding states

will have to revise their State Implementing Plans (SIP) to reduce emissions of

ozone causing materials, namely NOx and VOCs. The states have latitude to

require reductions from different source categories, but have historically sought

NOx reductions from EGUs. Duke Energy Kentucky anticipates that the states

will seek further EGU NOx reductions when they revise their SIPs for more

stringent ozone standards. For the first 6 months of 2014, East Bend's emission

rate has been about 0.17 lb/mmBtu. This makes it a relatively small source on the

basis of pounds of NOx emitted per MW-hr generated compared to many other

EGUs. East Bend achieves this low NOx emission rates because of its SCR

operation. Duke Energy Kentucky anticipates that when states revise their SIPs.

they will look for EGU NOx performance typical of a unit with a well performing

SCR. Not all coal fired units have an SCR, and adding one is a major capital

expenditure. East Bend is well positioned because it has already made this capital

expenditure.

i. Overall the Company is confident that any future restrictions that come

from Kentucky's SIP revisions addressing the 75 ppb ozone standard or

even an ozone standard in the 60-70 ppb range can be accommodated by

the East Bend's SCR by increasing its removal efficiency and/or

adjustments to its catalyst management plan. The Company has identified

some relatively small scale upgrades to the existing SCR to help ensure

this performance.

PERSON RESPONSIBLE: J. Michael Geers

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Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-008 PUBLIC

REQUEST:

Reference the Immel testimony at p. 15, wherein he states that "... in anticipation of

tighter NO_x emission limits from either CSAPR implementation or ozone NAAQS, the

Company projects a need to upgrade the existing SCR system to remove additional NO_x

emissions." Provide an approximate cost estimate for this upgrade. If there is any

difference in cost based on the compliance standards that might have to be met (i.e.,

ozone at 60 ppb, and at 70 ppb), provide the estimates on the basis of both these

standards.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET

Duke Energy Kentucky estimates the cost for the East Bend SCR upgrade to be

approximately

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proposed scope or cost estimate based on potential ozone NAAQS standard levels.

PERSON RESPONSIBLE: Steve Immel

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Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-009

REQUEST:

Reference the Geers testimony at p. 11, wherein he states that the combination of a wet

FGD and SCR reduces mercury, and "only minor process changes and/or minor chemical

addition systems" will be required at the East Bend plant to meet the MATS mercury

standard on a continuing basis.

a. Please describe the minor process changes and/or minor chemical addition

systems in more detail.

b. If DEK should conclude that an upgrade to East Bend's existing SCR system

is required to achieve compliance with anticipated tighter NO_x emission

limits, as described in question number 3, above, would or could that upgrade

remove enough mercury to achieve compliance with the MATS mercury

standard?

c. Please provide an approximate cost estimate for these minor process changes

and/or minor chemical addition systems on an annual basis.

RESPONSE:

Duke Energy Kentucky objects to this request as vague and ambiguous, particularly with respect to the reference to "question number 3, above" which does not appear related to this request. Subject to and without waiving its objection, Duke Energy Kentucky responds as follows.

a. The minor process changes are simply optimizations in the operation of the SCR and wet FGD. Additionally, Duke Energy Kentucky plans to monitor the oxidation reduction potential (ORP) of the wet FGD slurry. ORP is a key indicator of minor chemistry fluctuations in the slurry that could ultimately affect mercury removal efficiency. In the future, if mercury removal in the wet FGD becomes challenging, a chemical additive can be possibly utilized to help resolve the problem (depending on the exact nature of the problem). The typical cost for a permanent wet FGD chemical additive system is approximately \$800,000. Temporary systems for short duration use are also available.

With respect to the SCR, as the reactor's catalyst slowly deactivates over time, this could also impact mercury oxidation which results in less mercury removal. This is not expected to be a problem as the Company's robust catalyst management program should ensure continued good mercury oxidation performance. However, in the unlikely event additional mercury oxidation is required, Duke Energy Kentucky can install an SCR mercury oxidation enhancing chemical addition system. The typical cost for a permanent SCR chemical additive system is approximately \$600,000. Again, temporary systems for short duration use are also available. Based on good historical mercury removal

performance, Duke Energy Kentucky does not currently anticipate a need to

install either of the permanent chemical addition systems at East Bend.

Please see Duke Energy Kentucky's Confidential response to AG-DR-01-008.

SCRs do not remove mercury; they merely help to oxidize mercury for removal in

downstream control equipment. Also, generally, NOx removal and mercury

oxidation are competing reactions within the catalyst. The proposed scope of the

future upgrades to East Bend's existing SCR for increasing NOx removal

efficiency would generally result in more opportunity for mercury oxidation

within the SCR catalyst. However, since increased NOx removal will compete

with mercury oxidation, Duke Energy Kentucky cannot predict if increased

mercury oxidation would actually occur, or even if it did, whether that would

result in increased overall mercury removal.

Duke Energy Kentucky does not expect there to be any measureable cost C.

associated with the minor process changes. Please see the answer to part (a)

above for potential capital investments associated with the chemical addition

systems. Annual chemical addition costs cannot be estimated as, based on the

good performance of the unit to date, there is no basis for the magnitude of

potential injection rates or utilization rates.

PERSON RESPONSIBLE: As to Objection - Legal

b.

J. Michael Geers

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Duke Energy Kentucky Case No. 2014-00201

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-010

REQUEST:

Reference the Wathen testimony at pp. 13-14, wherein he states that the 2011 Sargent &

Lundy study estimated demolition costs of Miami Fort 6 at approximately \$4.3 million

(2011 dollars), and that although depreciation expenses for the demolition have been

recovered in base rates since the date DEK obtained the plant, the company "... will

evaluate whether additional recovery is necessary for retirement when the actual

retirement costs are determined." Please state:

a. when the company will know if such additional recovery is necessary;

b. if any additional recovery is necessary, how much; and

c. how and when the company will notify the Commission and the Attorney General

of that determination.

RESPONSE:

a. Approximately when the retirement work is completed or at the time a new

demolition study is conducted.

b. The Company has no new estimate of retirement costs at this time.

c. At the earlier of the time recovery is sought in a base rate case or when a new

demolition study has been conducted.

PERSON RESPONSIBLE: William Don Wathen Jr.

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Duke Energy Kentucky Case No. 2014-00201

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-011

REQUEST:

Reference the Immel testimony at p. 8, wherein he references the Spring 2014 planned

outage for East Bend.

a. In addition to the maintenance items Mr. Immel described on pp. 8-9, were

any other maintenance-related issues identified since the date that his

testimony was filed?

b. Have the boiler issues been resolved? If not, please elaborate and provide

estimates for when they should be completed, together with cost estimates for

each such item.

c. Is East Bend currently back on-line? If so, when did it return on line?

d. Are any additional maintenance measures needed on the boiler or elsewhere in

the plant?

e. Were any other issues identified during the Spring 2014 planned outage? If so,

please describe in detail.

RESPONSE:

Yes, due to welding in various areas near the turbine during the outage a turbine a)

bearing experienced electrolysis causing it to wipe. The repair of the bearing took

an additional 13 day outage in June 2014 to repair. The repair is complete.

b) Yes, the boiler issues mentioned in regards to the reheat and superheat tubes were

resolved during the outage.

Yes, the unit initially returned from the outage May 31, 2014. Following startup c)

issues and the turbine bearing replacement, the unit returned to service June 27th

and has been online since that date.

d) No additional areas of concern above normal operating and maintenance plans.

e) Normal inspections took place and repairs were made as needed. Long term items

were identified to properly budget future outages.

PERSON RESPONSIBLE: Steve Immel

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Duke Energy Kentucky Case No. 2014-00201

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-012 PUBLIC

REQUEST:

Reference the Immel testimony at p. 15, lines 5-12, wherein he states that with regard to

the CCR Rule, DEK foresees a potential need to close East Bend's existing bottom ash

pond and convert the plant to dry bottom ash handling, in addition to the existing dry fly

ash handling.

a. Please provide a cost estimate for these changes.

b. Regardless of whether the final CCR Rule adopts Subtitle C or Subtitle D, if

DEK decides to close the pond, describe what measures would have to be

taken with the remaining ash at the bottom of the pond, together with any and

all other measures that would have to be taken at the site of the ash pond in

order to achieve compliance with the CCR Rule, and any and all other federal

and state environmental regulations.

c. Is the pond currently lined?

If so, is the lining in compliance with the CCR Rule? (i)

If the pond is not lined or if the lining is not compliant with the (ii)

CCR Rule, and if the final CCR Rule adopts Subtitle D, would the

cost of permanently closing the pond, removing the ash and

placing it into compliant landfills be less than the option of removing the existing ash in the pond, placing it into compliant landfills, and then installing a compliant lining in the pond and begin reusing the pond?

- (iii) Please provide an approximate cost estimate for achieving compliance under both potential options in subpart (ii), above.
- (iv) Please confirm that FGD byproducts are not stored in the pond.
- d. When an ash pond is dewatered, describe what is done with the water that once was in the pond.
- e. Provide the approximate distance of the ash pond from the Ohio River.
- f. Is the ash pond located within the flood plane? If so, identify the flood plain year (i.e., the 100-year flood plain, etc.).
- g. Provide the approximate height and length of the dike (or dam) for the East Bend pond.
 - (i) How frequently is the dike/dam inspected? Provide a copy of the most recent inspection report.
 - (ii) Are there any inspection protocols or regulations pertaining to dikes/dams for such as ponds? If so, please provide citations.
 - (iii) When was the last time an engineering study was performed on the dike/dam? Provide a copy of the most recent such study.

- (iv) Of what material(s) is the dike/dam composed?
- h. Do any pipes or culverts run underneath the pond? If so:
 - (i) Of what material(s) is the pipe/culvert composed?
 - (ii) Can any of the chemicals in the wet ash corrode any of the material(s) of which the pipe/culvert is composed?
 - (iii) If the pipe/culvert were to leak, where would the fluids from the pipe/culvert's discharge flow to?
 - (iv) When was the last time the pipe/culvert was inspected? Please provide a copy of such report.
 - (v) How old is the pipe/culvert?
- i. Please provide a copy of the NPDES permit of which Mr. Geers speaks on p. 25, lines 11-13 of his testimony. Have there ever been any discharges from the ash pond into the Ohio River which were not compliant with the terms of the NPDES permit? If so, provide dates, and any regulatory actions resulting therefrom, including but not limited to any fines which may have been imposed.
- j. Has DEK implemented, or considered implementing, any changes in how it manages the East Bend ash pond since the time that Duke Energy Carolinas announced it would engage in a near-term engineering review of its ash ponds located in North Carolina, and that the company is developing a comprehensive longer-term ash basin strategy including a review of the

effectiveness of ash storage management and practices? If so, please describe. If not, why not?

- k. Has DEK implemented, or considered implementing, any changes in how it manages the East Bend ash pond since the 2008 TVA coal ash pond collapse? If so, please describe. If not, why not?
- I. Has DEK, or any parent or affiliate located in the Duke Energy Midwest Region, engaged in any engineering study(ies) similar to Duke Energy Carolinas' comprehensive longer-term ash basin strategy including a review of the effectiveness of ash storage management and practices? If so, please describe and provide a copy of all such studies.

RESPONSE:

Objection. Duke Energy Kentucky objects to this request as vague and ambiguous, overbroad, unduly burdensome, irrelevant and beyond the scope of reasonable discovery, and not likely to lead to the discovery of relevant and admissible evidence. Duke Energy Kentucky further objects to this request to the extent it seeks a calculation or analysis that has not been performed, cannot be performed, and/or to which the Company objects performing. Duke Energy Kentucky also objects to this request to the extent it seeks information currently protected by attorney-client privilege. Subject to and without waiving its objections, Duke Energy Kentucky responds as follows:

CONFIDENTIAL PROPRIETARY TRADE SECRET

a. Duke Energy Kentucky estimates the cost for the East Bend dry bottom ash handling system to be approximately

b. Duke Energy Kentucky cannot predict the outcome of the pending CCR regulations. However, based on the 2010 proposed rule, potential bottom ash pond closure actions could range from capping the ash pond in place with a synthetic cap, to excavating the ash in the pond and placing that ash in a permitted landfill. The ash pond would be dewatered before either action would occur.

c. No.

- (i) NA
- (ii) See objection. The Company has not performed this calculation.
- (iii) See objection. The Company has not performed this calculation.
- (iv) Duke Energy Kentucky confirms that FGD products are not stored in the bottom ash pond.
- d. The water will be treated as needed before discharge in compliance with the plant's NPDES permit.
- e. The East Bend bottom ash pond is approximately 200 to 300 feet from the Ohio River.

 The distance varies due to changes in river level.
- f. The East Bend bottom ash pond embankments are constructed within the flood plain of the Ohio River. The crest of the dam is constructed above the 100 year flood elevation.
- g. The embankment portion of the East Bend bottom ash pond has a total length of 4200 feet and has a maximum height above the exterior grade of 50 feet.
- (i) The ash pond is inspected internally by Duke Energy civil engineers monthly and annually. The annual inspection is conducted by a third party engineer as well as

Duke Energy engineers. Please see Confidential Attachment AG-DR-01-012-A for the most recent monthly and annual inspection reports.

- (ii) The Kentucky Department of Environmental Protection (KDEP), Division of Water, Dam Safety and Floodplain Compliance Section governs the inspection of dikes for such ponds. KRS 151.293, Section 6, authorizes the Energy and Environment Cabinet to inspect existing structures that meet the definition of a dam. KDEP has determined that the East Bend Station bottom ash pond falls into the Moderate Hazard Class. Moderate Hazard Class is defined as structures located such that failure may cause significant damage to property and project operation, but loss of human life is not envisioned. Moderate Hazard structures are inspected every two years by KDEP. The East Bend Station ash pond has been inspected by KDEP according to this schedule. KDEP has guidelines for maintenance and inspection of dams in Kentucky. The guidelines are located in a document issued by KDEP, Division of water in July of 1985.
- (iii) A stability analysis engineering study of the East Bend bottom ash pond dike was completed by BBC&M (S&ME) at the request of Duke Energy in August 2011. Please see Confidential Attachments AG-DR-01-012-B through D.
- (iv) The East Bend bottom ash pond (KY Dam Inventory No. 1215), which was put into service in 1980, consists of a three-sided (u-shaped) upground earthen embankment structure which abuts into existing high ground which forms the fourth side. The embankment design features a zoned earthen embankment which utilizes a central clay core and an outer granular shell. The ash pond is broken into an eastern and western cell by a non structural interior ash dike.

h. No. The bottom ash pond final discharge pipe, which is part of the normal design and

operation of the pond, passes through the dam, but no separate pipes or culverts (such as

for storm water) run underneath the pond.

(i) through (v): NA

i. Please see Attachment AG-DR-01-012-E. Within approximately the last five years,

there have been no non-compliant discharges from the ash pond to the Ohio River.

j. See objection. Duke Energy Kentucky is continuing to perform its established

inspection program and no issues of significant or immediate concern have been

identified regarding the management or operation of the East Bend bottom ash pond.

k. Following the 2008 TVA ash pond incident, Duke Energy Kentucky cooperated in full

with the USEPA inspection program and responded appropriately to all action items

identified at the East Bend bottom ash pond. That included upgrading rip-rap for erosion

control on the dam, and initiating a more formal monthly inspection program. The

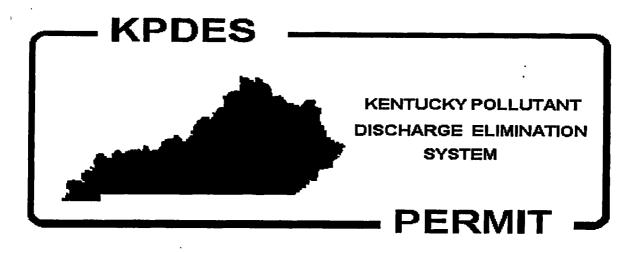
detailed structural stability analysis identified in response to part g (iii) above was also

conducted.

1. See objection.

PERSON RESPONSIBLE: J. Michael Geers / Steve Immel

CONFIDENTIAL AG-DR-01-012 **ATTACHMENTS** A THROUGH D FILED UNDER SEAL



PERMIT NO.: KY0040444

AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to Authority in KRS 224,

The Cincinnati Gas & Electric Company P.O. Box 960 Cincinnati, Ohio 45201

is authorized to discharge from a facility located at

The Cincinnati Gas & Electric Company East Bend Station Kentucky Route 338 Rabbit Hash, Boone County, Kentucky

to receiving waters named

Outfalls 001, 003, and 014 are to the Ohio River at mile points 469.9, 470.60, and 470.55, respectively.

Outfalls 007, 008, and 010 are internal outfalls to the Ash Pond (Outfall 001). Outfall 011, the plant intake, is at mile point 470.65 of the Ohio River.

in accordance with effluent limitations, monitoring requirements, and other conditions set forth in PARTS I, II, III, IV, and V hereof. The permit consists of this cover sheet and PART I $\underline{8}$ pages, PART II $\underline{1}$ page, PART III $\underline{1}$ page, PART IV $\underline{2}$ pages, and PART V $\underline{3}$ pages.

This permit shall become effective on APR 1 2004

This permit and the authorization to discharge shall expire at midnight, July 31, 2007.

FEB 5 2004

Date Signed

Jeffrey W. Pratt, Director Division of Water

Robert W. Logan Commissioner

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, Frankfort Office Park, 14 Reilly Road, Frankfort, Kentucky 40601

Permit No.: KY0040444

A1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 001 - Ash pond overflow (Significant contributing flows are: direct storm water runoff to ash pond(0.41, 142 MGD), coal pile runoff(0.11, 39 MGD), scrubber sludge landfill runoff(0.51, 176 MGD), bottom ash pyrites and economizer fly ash sluice water(0.27 0.57 MGD), miscellaneous plant drains(1.27, 1.5 MGD), cooling tower overboard(1.43, 143 MGD), sanitary wastewater(0.43, 0.043 MGD), and demineralizer regeneration water(0.33, 0.091 MGD)).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS MONITORING REQ		UIREMENTS	
	Monthly	Daily	Measurement	Sample
	Avg.	Max.	Frequency	Type
Flow (MGD)	Report	. Report	Continuous	Recorder
Total Suspended Solids (mg/l)	30	56	1/Month	Grab
Oil & Grease (mg/l)	8.5	11.5	1/Month	Grab
Hardness (as mg/l)(CaCO₃)	Report	Report	1/Month	Grab
Total Recoverable Metals (mg/l)	Report	Report	1/Quarter	Grab
Acute Toxicity (TU _a)	N/A	1.00	1/Quarter	1 Grab

The pH of the effluent shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/Month by grab sample.

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point after final treatment, but prior to actual discharge to or mixing with the receiving waters or wastestreams from other outfalls.

The abbreviation N/A means Not Applicable.

The effluent characteristic "Total Recoverable Metals" means Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, and Zinc. To report the results of the analyses for this parameter, the permittee shall total the results of the analyses for each individual parameter, and report that aggregate value on the DMR. The laboratory bench sheets showing the results for each parameter shall be attached to the DMR.

Permit No.: KY0040444

A2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 003 - Closed cooling water heat exchanger by-pass water.

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LI	MITATIONS	MONITORING REQUIREMENTS	
	Monthly	Daily	Measurement	Sample
	<u>Avg.</u>	Max.	Frequency	Type
Flow (MGD) Temperature (°F)	Report	Report 105	Continuous Continuous	Recorder Recorder

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point after final treatment, but prior to actual discharge to or mixing with the receiving waters or wastestreams from other outfalls.

Permit No.: KY0040444

A3. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 007 - Sanitary wastewater. Outfall 007 is an internal outfall to the ash pond (Outfall 001).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LI	GE LIMITATIONS MONITORING REQUIREMENT		UIREMENTS
	Monthly	Daily	Measurement	Sample
	Avg	Max.	Frequency	Type
Flow (MGD)	Report	Report	1/Month	Instantaneous
Biochemical Oxygen Demand, 5-day (mg/l)	30	45	1/Month	Grab
Total Suspended Solids (mg/l)	30	45	1/Month	Grab
Total Residual Chlorine (mg/l) (minimum)	0.5	Report	1/Month	Grab

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point after final treatment, but prior to actual discharge to or mixing with the receiving waters or wastestreams from other outfalls.

Pursuant to 401 KAR 5:010, Sections 2 and 8, the operation of this wastewater treatment plant requires a Class One certified operator, who must maintain appropriate records to assure compliance with the proper operation and maintenance requirements of 401 KAR 5:065, Section 1(5).

Permit No.: KY0040444

A4. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 008 - Metal cleaning wastes. Outfall 008 is an internal outfall to the ash pond (Outfall 001).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LI	MITATIONS	IONS MONITORING REQUIREMENTS		
	Monthly	Daily	Measurement	Sample	
	Avg.	Max.	Frequency	Type	
Flow (MGD)	Report	Report	1/Batch	Calculated	
Total Iron (mg/l)	1.0	1.0	1/Batch	Grab	
Total Copper (mg/l)	: 1.0	1.0 ,	1/Batch	Grab	
pH (Standard Units)	· · Report ·	· "Report 1	1/Batch	Grab	

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point after final treatment, but prior to actual discharge to or mixing with the receiving waters or wastestreams from other outfalls.

Permit No.: KY0040444

A5. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 010 - Cooling tower blowdown. Outfall 010 is an internal outfall that discharges to the Ash Pond (Outfall 001).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQ	MONITORING REQUIREMENTS	
	Monthly Avg.	Daily Max.	Measurement Frequency	Sample Type	
Flow (MGD)	Report	Report	1/Month	Instantaneous	
Free Available Chlorine (mg/l)	0.2	0.5	Occurrence	Multiple Grab	
Total Residual Chlorine (mg/l)	0.2	0.2	Occurrence	Multiple Grab	
Total Residual Oxidants (mg/l)	Report	0.2	Occurrence	Multiple Grab	
Time of Oxidant Addition (Minutes/unit/day)	N/A	120	Occurrence	Log	
Total Chromium (mg/l)	0 .2 .	0.2	Annually	Grab	
Total Zinc (mg/l)	1.0	1.0	Annually	Grab	
Priority Pollutants (mg/l)	Report	NDA	Annually	Grab	

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point after final treatment, but prior to actual discharge to or mixing with the receiving waters or mixing with the waters of the ash pond.

Priority Pollutants shall be monitored annually by grab sample or by engineering calculations. The results of the analyses/engineering calculations shall be totaled and reported as a single concentration on the DMR. The laboratory bench sheets/engineering calculations showing the results for each pollutant shall be attached to the DMR. The term Priority Pollutants means the 126 priority pollutants listed in 40 CFR Part 423 Appendix A. See Attachment A - Fact Sheet Addendum for Steam Electric Power Generating Plants.

The term Total Residual Oxidants (TRO) means the value obtained using the amperometric titration or DPD methods for total residual chlorine described in 40 CFR Part 136. In the event of addition of an oxidant other than chlorine, the permittee shall receive prior approval from the Division of Water permitting staff before the initial use.

The measurement frequency "Occurrence" means during periods of chlorination or oxidant addition, but no more frequent than once per week.

The sample type "Multiple Grab" means grab samples collected at the approximate beginning of oxidant discharge and once every fifteen minutes thereafter until the end of oxidant discharge.

The abbreviation N/A means Not Applicable.

The abbreviation NDA means No Detectable Amount.

Permit No.: KY0040444

A6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 011 - Plant intake.

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS MON		MONITORING REQUIR	NITORING REQUIREMENTS	
	Monthly	Daily	Measurement	Sample	
	Avg.	Max.	Frequency	Type	
Flow (MGD)	Report	Report	Continuous	Recorder	
Temperature (°F)	Report	Report	Continuous	Recorder	
Total Suspended Solids (mg/l)	Report	Report	1/Month	Grab	
Hardness (as mg/1) (CaCO3)	Report	Report	1/Month	Grab	
pH (Standard Units)	Report	Report	1/Month	Grab	
Total Recoverable Metals	N/A	Report	1/Quarter	Grab	

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: plant intake, except that temperature may be monitored at the river pumps.

The effluent characteristic "Total Recoverable Metals" means Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, and Zinc. To report the results of the analyses for this parameter, the permittee shall total the results of the analyses for each individual parameter and report that aggregate value on the DMR. The laboratory bench sheets showing the results for each parameter shall be attached to the DMR.

Permit No.: KY0040444

A7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: Outfall 014 - Storm water runoff from the main plant area.

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Monthly	Daily	Measurement	Sample
	Avg	Max.	Frequency	Type
Flow (MGD)	Report	Report	1/Quarter	Instantaneous
Precipitation (inches)	Report	Report	1/Quarter	Grab
Total Suspended Solids (mg/1)	Report	Report	1/Quarter	Grab
Oil & Grease (mg/l)	Report	Report	1/Quarter	Grab
Hardness (as mg/l)(CaCO ₃)	Report	Report	1/Quarter	Grab
pH (Standard Units)	Report	Report	1/Quarter	Grab
Total Recoverable Metals	N/A	Report	1/Quarter	Grab

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: but prior to actual discharge to or missing with the receiving waters or other wastestreams from other outfalls.

The effluent characteristic "Total Recoverable Metals" means Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, and Zinc. To report the results of the analyses for this parameter, the permittee shall total the results of the analyses for each individual parameter and report that aggregate value on the DMR. The laboratory bench sheets showing the results for each parameter shall be attached to the DMR.

PART I
Page I-8
Permit No.: KY0040444

B. Schedule of Compliance

The permittee shall achieve compliance with all requirements on the effective date of this permit.

C. Cooling Water Additives, FIFRA, and Mollusk Control

The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) in cooling water which ultimately may be released to the waters of the Commonwealth is prohibited, except Herbicides, unless specifically identified and authorized by the KPDES permit. In the event the permittee needs to use a biocide or chemical not previously reported for mollusk control or other purpose the permittee shall submit sufficient information, a minimum of thirty (30) days prior to the commencement of use of said biocides or chemicals, to the Division of Water for review and establishment of appropriate control parameters. Such information requirements shall include:

- 1. Name and general composition of biocide or chemical,
- 2. Any and all aquatic organism toxicity data,
- 3. Quantities to be used,
- 4. Frequencies of use,
- 5. Proposed discharge concentrations, and
- EPA registration number, if applicable.

D. Polychlorinated Biphenyls

Pursuant to the requirements of 401 KAR 5:065, Section 4(4) (40 CFR Parts 423.12(b)(2) and 423.13(a)), there shall be no discharge from any point source of polychlorinated biphenyl compounds such as those commonly used in transformer fluids. The permittee shall implement this requirement as a specific section of the BMP plan developed for this station.

E. Selective Catalytic Reduction Devices or Systems (SCRs) and Nonselective Catalytic Reduction Devices or Systems (NSCRs)

In response to recent Clean Air Act amendments, the installation of these devices for NOx reduction may become necessary. Associated with the installation and operation of these units, an "ammonia slip" may occur resulting in the discharge of ammonia to the ash pond. The impact of such an occurrence on the performance of the ash pond and any eventual impact on the environment are not known. Therefore, should it become necessary to install these devices, the permittee shall develop and implement an Ammonia Monitoring Plan. The plan shall be submitted to the Division of Water within ninety (90) days of the determination that these devices will be installed, and shall include at a minimum influent and effluent monitoring of each unit on a monthly basis with submission of the data as a quarterly report.

F. Section 311, Clean Water Act Exclusion

The permittee is relieved of the reporting and liability requirements under Section 311 of the Clean Water Act for the following substances, consistent with Exclusion 2, authorized by Section 311(a)(a)(B) and 40 CFR Part 117.12 for: Ammonium Hydroxide, Sodium Hypochlorite, Ethylene Diaminetetracetic Acid (EDTA), Sodium Hydroxide, Sodium Nitrite, Sodium Phosphate (Dibasic), and Sulfuric Acid.

Permit No.: KY0040444

STANDARD CONDITIONS FOR KPDES PERMIT

The permittee is also advised that all KPDES permit conditions in KPDES Regulation 401 KAR 5:065, Section 1 will apply to all discharges authorized by this permit.

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

PART III
Page III-1
Permit No.: KY0040444

PART III

OTHER REQUIREMENTS

A. Reporting of Monitoring Results

Monitoring results obtained during each month must be reported on a preprinted Discharge Monitoring Report (DMR) Form, which will be mailed to you. Each month's completed DMR must be sent to the Division of Water at the address listed below (with a copy to the appropriate Regional Office) postmarked no later than the 28th day of the month following the month for which monitoring results were obtained.

Division of Water Florence Regional Office 8020 Veterans Memorial Drive Suite 110 Florence, Kentucky 41042 ATTN: Supervisor Kentucky Natural Resources and Environmental Protection Cabinet Dept. for Environmental Protection Division of Water/KPDES Branch 14 Reilly Road, Frankfort Office Park Frankfort, Kentucky 40601

B. Reopener Clause

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under 401 KAR 5:050 through 5:080, if the effluent standard or limitation so issued or approved:

- Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- 2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

PART IV
Page IV-1
Permit No.: KY0040444

PART IV ACUTE CONCERNS Biomonitoring

In accordance with Part I of this permit, the permittee shall initiate the series of tests described below within 30 days of the effective date of this permit to evaluate wastewater toxicity of the discharge from Outfall 001. If the permittee is using a more sensitive species, the initial four (4) tests shall be conducted using both test species as indicated below to provide confirmation of previously identified most sensitive test organism.

1. Test Requirements

- The permittee shall perform a 48-hour static toxicity test with Ceriodaphnia sp. Tests shall be conducted on one (1) grab. Tests shall be conducted with appropriate replicates of 100% effluent, a control and a minimum of four (4) evenly spaced effluent concentrations. If the permit limit is less than 100% effluent and greater than or equal to 75% effluent, then one (1) concentration should be 100%. If the permit limit is less than 75% effluent, the permit limit concentration shall be bracketed with two (2) concentrations above and two (2) concentrations below. The selection of the effluent concentrations is subject to revision by the Division. Testing of the effluent shall be initiated within 36 hours of each sample collection. Controls shall be conducted concurrently with effluent testing using a synthetic water. The analysis will be deemed reasonable and good only if control survival is 90% or greater in test organisms held in synthetic water. Any test that does not meet the control acceptability criteria shall be repeated as soon as practicable within the monitoring period (i.e. monthly or quarterly). Noncompliance with the toxicity limit will be demonstrated if the LC_{50} is less than 100% effluent.
- B. Tests shall be conducted quarterly or at a frequency to be determined by the permitting authority.

2. Reporting Requirements

Results of all tests conducted with any organism shall be reported according to the most recent format provided by the Division of Water. Test results shall be submitted to the Division of Water with the next regularly scheduled discharge monitoring report.

Due to administrative and regulatory constraints regarding the requirements of Section 3 of this Part, monthly DMRs shall be submitted. Those required to conduct tests on a frequency other than monthly shall submit DMRs with "Not required this monitoring period" typed or written in the parameter row in addition to the DMR reporting the results of the test. All DMRs for biomonitoring shall be submitted monthly regardless of required monitoring frequency.

PART IV
Page IV-2
Permit No.: KY0040444

3. Acute Toxicity

A. If noncompliance with the toxicity limit occurs (the LC₅₀ is less than 100% effluent), the permittee must conduct a second test within 10 days of the first failure. This test will be used in evaluating the persistence of the toxic event and the possible need for a toxics reduction evaluation (TRE).

If the second test demonstrates noncompliance with the toxicity limit, the permittee will be required to perform either of the options listed below. The Division must be notified of the option selected within five (5) days of the failure of this second test.

1) Accelerated Testing

Complete four (4) tests within 60 days of selection of this option to evaluate the frequency and degree of toxicity. The results of the two (2) tests specified in Section 3.A and of the four (4) additional tests will be used for purposes of this evaluation.

If results from two (2) of any six (6) tests show a significant noncompliance with the acute limit (≥ 1.2 times the TU_a), or results from four (4) of any six (6) tests show acute toxicity (as defined in 1.A), a Toxicity Reduction Evaluation (TRE) will be required. The Division reserves the right to require a TRE in situations of recurring toxicity.

2) Toxicity Reduction Evaluation (TRE)

If it is determined that a TRE is required, a plan and implementation schedule must be submitted to the Division within 30 days of notification. The TRE shall include appropriate measures such as in-plant controls, additional treatment, or changes in the operation of the wastewater discharge to meet permit conditions. The TRE protocol shall follow that outlined in the most recent edition of EPA's guidance manual for conducting TREs.

B. If a violation of the toxicity limit occurs, different or more stringent monitoring requirements may be imposed in lieu of the normal requirements of this permit for whatever period of time is specified by the Division of Water. The Division reserves the right to require additional testing or a TRE in situations of recurring toxicity.

4. Test Methods

All test organisms, procedures, and quality assurance criteria used shall be in accordance with <u>Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms</u>, EPA/600/4-90/027F (4th edition) or the most recently published edition of this publication.

PART V Page V-1

Permit No.: KY0040444

PART V

BEST MANAGEMENT PRACTICES

SECTION A. GENERAL CONDITIONS

1. Applicability

These conditions apply to all permittees who use, manufacture, store, handle, or discharge any pollutant listed as: (1) toxic under Section 307(a)(1) of the Clean Water Act; (2) oil, as defined in Section 311(a)(1) of the Act; (3) any pollutant listed as hazardous under Section 311 of the Act; or (4) is defined as a pollutant pursuant to KRS 224.01-010(35) and who have ancillary manufacturing operations which could result in (1) the release of a hazardous substance, pollutant, or contaminant, or (2) an environmental emergency, as defined in KRS 224.01-400, as amended, or any regulation promulgated pursuant thereto (hereinafter, the "BMP pollutants"). These operations include material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations, and sludge and waste disposal areas.

2. BMP Plan

The permittee shall develop and implement a Best Management Practices (BMP) plan consistent with 401 KAR 5:065, Section 2(10) pursuant to KRS 224.70-110, which prevents or minimizes the potential for the release of "BMP pollutants" from ancillary activities through plant site runoff; spillage or leaks, sludge or waste disposal; or drainage from raw material storage. A Best Management Practices (BMP) plan will be prepared by the permittee unless the permittee can demonstrate through the submission of a BMP outline that the elements and intent of the BMP have been fulfilled through the use of existing plans such as the Spill Prevention Control and Countermeasure (SPCC) plans, contingency plans, and other applicable documents.

3. Implementation

If this is the first time for the BMP requirement, then the plan shall be developed and submitted to the Division of Water within 90 days of the effective date of the permit. Implementation shall be within 180 days of that submission. For permit renewals the plan in effect at the time of permit reissuance shall remain in effect. Modifications to the plan as a result of ineffectiveness or plan changes to the facility shall be submitted to the Division of Water and implemented as soon as possible.

4. General Requirements

The BMP plan shall:

- a. Be documented in narrative form, and shall include any necessary plot plans, drawings, or maps.
- b. Establish specific objectives for the control of toxic and hazardous pollutants.
 - (1) Each facility component or system shall be examined for its potential for causing a release of "BMP pollutants" due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.

PART V
Page V-2
Permit No.: KY0040444

- (2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances which could result in a release of "BMP pollutants," the plan should include a prediction of the direction, rate of flow, and total quantity of the pollutants which could be released from the facility as result of each condition or circumstance.
- c. Establish specific Best Management Practices to meet the objectives identified under paragraph b of this section, addressing each component or system capable of causing a release of "BMP pollutants."
- d. Include any special conditions established in part b of this section.
- e. Be reviewed by plant engineering staff and the plant manager.

5. Specific Requirements

The plan shall be consistent with the general guidance contained in the publication entitled "NPDES Best Management Practices Guidance Document," and shall include the following baseline BMPs as a minimum.

- a. BMP Committee
- b. Reporting of BMP Incidents
- c. Risk Identification and Assessment
- d. Employee Training
- e. Inspections and Records
- f. Preventive Maintenance
- g. Good Housekeeping
- h. Materials Compatibility
- i. Security
- j. Materials Inventory

6. SPCC Plans

The BMP plan may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under Section 311 of the Act and 40 CFR Part 151, and may incorporate any part of such plans into the BMP plan by reference.

7. Hazardous Waste Management

The permittee shall assure the proper management of solid and hazardous waste in accordance with the regulations promulgated under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1978 (RCRA) (40 U.S.C. 6901 et seq.) Management practices required under RCRA regulations shall be referenced in the BMP plan.

PART V
Page V-3
Permit No.: KY0040444

8. Documentation

The permittee shall maintain a description of the BMP plan at the facility and shall make the plan available upon request to NREPC personnel. Initial copies and modifications thereof shall be sent to the following addresses when required by Section 3:

Division of Water Florence Regional Office 8020 Veterans Memorial Drive Suite 110 Florence, Kentucky 41042 ATTN: Supervisor Kentucky Natural Resources and Environmental Protection Cabinet Dept. for Environmental Protection Division of Water/KPDES Branch 14 Reilly Road, Frankfort Office Park Frankfort, Kentucky 40601

9. BMP Plan Modification

The permittee shall amend the BMP plan whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in the release of "BMP pollutants."

10. Modification for Ineffectiveness

If the BMP plan proves to be ineffective in achieving the general objective of preventing the release of "BMP pollutants," then the specific objectives and requirements under paragraphs b and c of Section 4, the permit, and/or the BMP plan shall be subject to modification to incorporate revised BMP requirements. If at any time following the issuance of this permit the BMP plan is found to be inadequate pursuant to a state or federal site inspection or plan review, the plan shall be modified to incorporate such changes necessary to resolve the concerns.

SECTION B. SPECIFIC CONDITIONS

Periodically Discharged Wastewaters Not Specifically Covered By Effluent Conditions
The permittee shall include in this BMP plan procedures and controls necessary for
the handling of periodically discharged wastewaters such as intake screen backwash,
meter calibration, fire protection, hydrostatic testing water, water associated with
demolition projects, etc.

Duke Energy Kentucky Case No. 2014-00201

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-013 PUBLIC

REQUEST:

Reference the Geers testimony at p. 22, lines 15-16 wherein he speaks of the need to

install "balance-of-plant" waste water treatment systems at East Bend to achieve

compliance with the EPA's Effluent Guidelines and CCR Rule. Please explain the term

"balance-of-plant," and provide an approximate cost estimate for installation of such

facilities at East Bend.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET

"Balance-of-plant" refers to waste water streams within the plant that are predominantly

currently treated in the ash pond, such as run-off, lab drains, boiler blowdown, equipment

washdown water, landfill leachate, etc. To the extent it is assumed that the ash pond will

be closed, new physical/chemical water treatment processes are needed for these streams

before they could be discharged. Duke Energy Kentucky currently estimates the cost for

the East Bend waste water treatment system to be approximately

PERSON RESPONSIBLE: J. Michael Geers

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-014

REQUEST:

With regard to the ash landfills at the East Bend facility:

a. How close is each landfill (including the proposed new West Landfill) to the

Ohio River?

b. Do any such landfills lie within the flood plain? If so, please identify the flood

plain year (i.e., the 100-year flood plain, etc.).

c. Are the existing landfills lined?

(i) If so, does the lining for each landfill comply with the CCR Rule?

(ii) If not, does DEK foresee a need or potential need to line one or

more of the landfills? Provide a cost estimate to achieve

compliance.

d. Does DEK believe it will be necessary to line the proposed new West

Landfill? If so, please explain why and provide an approximate cost estimate.

e. Do any pipes or culverts run underneath any of the landfills? If so:

(i) Of what material(s) is the pipe/culvert composed?

- (ii) Can any of the chemicals in the ash corrode any of the material(s) of which the pipe/culvert is composed?
- (iii) If the pipes/culverts were to leak, where would any fluids from the pipes'/culverts' discharge flow to?
- (iv) When was the last time such pipes/culverts were inspected? Please provide a copy of such reports.
- (v) How old is the pipe/culvert?
- f. Referencing the Geers testimony at p. 25, lines 8-13, is it accurate to conclude that any and all discharges from the landfills are directed into the ash pond?
 - (i) If so, are such discharges permitted under DEK's NPED's permit?
 - (ii) If not, explain whether any regulatory actions have been taken regarding any such unpermitted discharges, the dates thereof, together with any fines which may have occurred as a result.
 - (iii) Have there been any discharges from the landfills directly into the Ohio River? If so, explain whether any regulatory actions have been taken, the dates thereof, together with any fines which may have occurred as a result.
 - (iv) Has DEK implemented, or considered implementing, any changes in how it manages East Bend's landfills since the time that Duke Energy Carolinas announced it would engage in a near-term engineering review of its ash ponds located in North Carolina, and

that the company is developing a comprehensive longer-term ash basin strategy including a review of the effectiveness of ash storage management and practices? If so, please describe. If not, why not?

g. Has DEK implemented, or considered implementing, any changes in how it manages East Bend's landfills since the 2008 TVA coal ash pond collapse? If not, why not?

RESPONSE:

- a. The current landfill is approximately 1200 feet from the river at its closest point. The new landfill will be approximately 400 feet from the river at its closest point.
- b. Neither the current nor the planned landfill lie within a floodplain.
- c. The newest section of the current landfill (cells P15 and P16) has a liner comprised of compacted clay and synthetic polymer liner. The old section of the landfill is not lined. The new landfill will have a clay and polymer liner. The CCR rule has not been finalized, however the Company believes that the liner design will comply, or would only require modification of the liner thickness. The Company does not believe the rule will require lining of existing landfill cells.
- d. The new landfill will be lined, and the liner cost is already included in the current budget. The liner is not viewed as an incremental cost, but rather as the existing standard for construction.
- e. The Company has extensively investigated this issue and to the best of its knowledge, there are no known pipes or culverts that run underneath any of the landfills.
 - (i) through (v): Not applicable

f. All contact waters discharged from the landfill are directed to the ash pond.

(i) Yes, these discharges are permitted under East Bend's NPDES permit. The

water used diagram included in the NPDES permit application shows landfill

runoff as an inlet source to the ash pond.

(ii) Not applicable

(iii) There have been no known discharges from the landfill directly into the Ohio

River.

(iv) No, Duke Energy Kentucky has not implemented or to date considered

implementing changes to how it manages East Bend's landfills since the Duke

Energy Carolinas announcement of near-term engineering review of its ash ponds

because that announcement did not involve an examination of or changes to the

management of landfills. The announcement in the Carolinas was related directly

to the management of ash storage and management practices in ash pond facilities

and not ash landfill facilities.

g. Duke Energy Kentucky has not implemented or considered implementing any changes

in how it manages East Bend's landfills since the 2008 TVA ash pond collapse because

the landfills are not structurally comparable to the TVA ash pond in any fashion. The

incident was not informative or instructive from an ash landfill management perspective.

From an engineering perspective, the East Bend landfills are designed and constructed in

an entirely different manner than the TVA ash pond. The two are not similar and cannot

be compared.

PERSON RESPONSIBLE: J. Michael Geers

Attorney General's First Set of Data Requests Date Received: July 28, 2014

AG-DR-01-015

REQUEST:

Provide a description of DEK's current ground water monitoring activities at East Bend,

with regard to both the ash pond and the landfills.

a. Explain whether DEK will change or add to any groundwater monitoring

activities at East Bend in order to achieve compliance with the CCR Rule,

Effluent Guidelines, and/or any and all other applicable federal and state

laws and/or regulations. If so, please describe any such planned activities.

Please supplement your response to this question on an on-going basis as

more information becomes available.

RESPONSE:

Groundwater monitoring wells representative of up gradient and down gradient

conditions for both the ash pond and the current landfill are sampled semiannually. The

East Landfill groundwater monitoring system is comprised of six (6) monitoring wells

(one upgradient, and five downgradient) utilized for the collection of water levels and

water quality parameters. In addition, the six (6) Ash Pond Assessment Well Group

monitoring system, three (3) additional assessment wells, and seven (7) piezometers are

utilized for water level data only. The groundwater monitoring system for the ash pond

is comprised of seven (7) monitoring wells utilized for the collection of water levels and

water quality parameters. In addition, the five (5) East Special Waste Landfill

monitoring system wells, three (3) additional wells, and seven (7) piezometers are

utilized for water level data only. The positions of the wells and piezometers were

selected based on the size of the area covered by the ash pond and the potential for

groundwater flow direction to be influenced by East Bend Station's water supply wells

and the Ohio River. Groundwater monitoring wells are also in place for the new West

landfill and are being used to collect background data.

a. With respect to CCR, Effluent guidelines, and any other applicable federal and

state laws and/or regulations, it is unknown at this time what those future

requirements might be.

PERSON RESPONSIBLE: J. Michael Geers

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-016

REQUEST:

If DEK should have to go to the expense of removing ash from its pond, landfills, or

both, would those additional costs change any of the RFP modeling results, and if so,

how? Please discuss.

RESPONSE:

Objection. Duke Energy Kentucky objects to this request as seeking a calculation or

analysis that has not been performed and to which the Company objects performing.

Subject to and without waving its objection, Duke Energy Kentucky responds as follows:

Having to excavate the ash from the ash pond would come at additional expense that

could vary significantly depending on the final outcome of pending regulations. That

additional expense would serve to erode the economic position of the East Bend Purchase

relative to gas-fired generation options, but would not likely change its relative

economics with other coal-fired options assuming that all of those stations would be

subject to similar requirements. Given that the East Bend landfill is properly permitted

and monitored, Duke Energy Kentucky has no expectation that it could be subject to

removal.

PERSON RESPONSIBLE: James S. Northrup / J. Michael Geers



Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-017 PUBLIC

REQUEST:

Does DEK, or its subsidiaries, affiliates and/or parent entities, maintain any liability

insurance policies, including but not limited to tail liability, that do or could provide

coverage for any potential exposures arising from the East Bend ash pond and/or

landfills? If so:

a. Provide the amount of premiums paid for such policies for 2012, 2013 and

2014 to date. For each such policy, provide an explanation of the reason for

any increases in premiums.

b. Provide copies of any and all applicable dec sheets.

c. Following the ash spill at Duke Energy's Dan River coal plant in North

Carolina, did DEK make any changes to its liability insurance portfolio? If so,

please describe.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment Only)

a) and b) Objection. This question is vague, overbroad and unduly burdensome.

Duke Energy Kentucky also objects to the extent that it requests information that

is subject to legal opinion and or protected by the doctrines of attorney client

privilege and work product. Without waiving said objection and to the extent

discoverable, Duke Energy Kentucky does not purchase liability insurance for

East Bend directly but Duke Energy Kentucky gets reimbursed by Duke Energy's

captive subsidiary for covered liability claims paid by Duke Energy Kentucky.

The captive charges a premium for assuming the risk similar to an insurance

policy. It is unclear if ash pond/landfill exposure is an environmental/pollution

liability risk that would be covered by the captive or industrial typical insurance

policies, as any coverage and would be a claim scenario and contractual

agreement specific. Please see Confidential Attachment AG-DR-01-17 for copies

of insurance invoices.

c) No.

PERSON RESPONSIBLE: Objection-Legal

Mark Webster

CONFIDENTIAL AG-DR-01-017 ATTACHMENT FILED UNDER SEAL

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-018

REQUEST:

Does Dayton Power & Light [hereinafter: "DP&L"] currently maintain any liability

insurance policies, including but not limited to tail liability, that do or could provide

coverage for any potential exposures arising from the East Bend ash pond and landfills?

If so:

a. Provide the amount of premiums paid for such policies for 2012, 2013 and

2014 to date. For each such policy, provide an explanation of the reason for

any increases in premiums.

b. Provide copies of any and all applicable dec sheets.

c. If the Commission should approve the instant application, please describe

what measures DEK will take to replace the amounts of liability insurance

coverage that DP&L has to date maintained with regard to the East Bend

plant.

i. Provide an estimate for any additional premiums DEK will pay

once DP&L is removed from the risk.

RESPONSE:

a), b), c) Objection. This response is vague, over broad, unduly burdensome and not

likely to lead to the discovery of relevant and admissible evidence. Objecting further, this

request asks for information that is not in the possession or control of Duke Energy

Kentucky. Duke Energy Kentucky has no knowledge whether DP&L maintains any

insurance policies applicable to Duke Energy Kentucky jointly owned and operated

generation stations. Duke Energy Kentucky does not plan to change its insurance

coverages at this time, but will simply assume 100% ownership responsibilities. .

PERSON RESPONSIBLE: Objection-Legal

Objection- Legal Mark Webster

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)			

Duke Energy Kentucky

Case No. 2014-00201

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-019

REQUEST:

Reference the Wathen testimony at pp. 18-19, wherein he states the company is seeking

approval to defer the costs associated with purchasing DP&L's share of the East Bend

plant. Please explain:

a. Is DEK seeking a regulatory asset for this purpose?

b. Beginning at what date will DEK seek to recover these costs?

c. For how many years does the company propose to amortize the costs?

RESPONSE:

a. Yes.

b. The Company will seek to recover these costs when it files its next base rate case.

c. The Company has not yet made that determination.

PERSON RESPONSIBLE: William Don Wathen Jr.



Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-020

REQUEST:

Provide a draft of the tariff changes to Rider PSM which the company seeks in both the

instant case, and in Case No. 2014-00078.

a. With regard to any true-ups arising from or in any manner associated with Rider

PSM and the changes proposed to it, please state when the Commission staff and

the Attorney General will have opportunity to pose data requests.

RESPONSE:

See Response to Staff-DR-01-15(b).

a. The Company does not propose any changes to the current review process for

Rider PSM. Under the current process, Rider PSM and the supporting schedules,

including true-ups, are filed under Case No. 2010-00203, on a quarterly basis,

thirty days before the effective date of the rate. The Company is not proposing

any changes to the Staff's and or Attorney General's existing rights to review

these quarterly filings.

PERSON RESPONSIBLE: William Don Wathen Jr.

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-021

REQUEST:

Refer to page 10 of the application, footnote 20 regarding the operation of Rider PSM.

For calendar year 2013 and 2014 to date, how much in net off-system sales for energy

and ancillary services has flowed back to customers under Rider PSM?

a. Did the extreme weather in January 2014 significantly impact this current net?

Please explain your answer, including the cost per MWh at which off-system

sales cleared.

RESPONSE:

Per TFS 2014-00460 filed on July 23, 2014, the calendar year 2013 and year-to-date June

30, 2014 net off-system sales for the energy and ancillary services flowed back to

customers under Rider PSM was \$1,142,947 and \$3,238,992, respectively. Please see

AG-DR-01-021 Attachment for details.

a. Yes, the extreme weather impacted the energy and ancillary services markets,

generally resulting in higher prices and volumes, which in turn impacted the net

off-system sales for these products. The average Day-Ahead Locational Marginal

Price for off-system sales was \$164.23/MWh and the Real-Time Locational

Marginal Price was \$99.94.

PERSON RESPONSIBLE: William Don Wathen Jr.

DUKE ENERGY KENTUCKY OFF-SYSTEM SALES SCHEDULE PERIOD: YEAR TO DATE - DECEMBER 31, 2013

Line No.	Description		Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Total
1	Off-System Sales Revenue														
2	Asset Energy	(+)	\$271,035	\$444,102	\$816,045	\$231,192	\$1,207,477	\$223,628	\$301,495	\$186,278	\$595,266	\$2,064,848	\$923,033	\$477,423	\$7,741,822
3	Non-Asset Energy	(+)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Bilateral Sales	(+)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Hedges	(+)	(\$1,227)	\$9,433	\$0	\$1,171	\$0	(\$18,157)	(\$554)	(\$8,777)	(\$380)	\$7,035	\$0	\$0	(\$11,457)
6	PJM Bal & DA Oper Reserve Credits (a)	(+)	\$0	\$0	\$19,982	\$943	\$0	\$0	\$105,697	\$0	\$5,072	\$0	\$13,248	\$281	\$145,223
7	Capacity	(+)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	Ancillary Services Market (Schedule 5, Line 16)	(+)	\$0	\$0	\$0	\$0	\$0	\$0	\$431,715	\$0	\$235,358	\$0	\$0	\$0	\$667,073
9	Sub-Total Revenues	-	\$269,808	\$453,535	\$836,026	\$233,306	\$1,207,477	\$205,471	\$838,354	\$177,501	\$835,316	\$2,071,883	\$936,280	\$477,704	\$8,542,661
10	Variable Costs Allocable to Off-System Sales														
11	Bilateral Purchases	(+)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	Non-Native Fuel Cost (a)	(+)	\$253,520	\$412,459	\$706,041	\$185,936	\$972,972	\$215,727	\$278,174	\$201,111	\$591,186	\$1,675,347	\$795,654	\$491,517	\$6,779,645
13	Variable O&M Cost	(+)	\$20,067	\$32,814	\$57,241	\$14,141	\$80,307	\$17,175	\$21,920	\$17,528	\$49,787	\$147,059	\$65,512	\$36,116	\$559,666
14	SO₂ Cost	(+)	\$46	\$447	\$617	\$384	\$ 70 7	\$200	\$19	\$43	\$3 9	\$385	\$583	\$32	\$3,500
15	NO _x Cost	(+)	\$6	\$10	\$21	\$7	\$97	\$19	\$16	\$26	\$16	\$33	(\$112)	\$280	\$419
16	PJM and Other Costs	(+)	\$1,449	\$2,371	\$4,013	\$1,321	\$5,639	\$1,303	(\$102)	(\$39)	(\$373)	(\$3,946)	(\$1,870)	(\$930)	\$8,835
17	Sub-Total Expenses	_	\$275,088	\$448,100	\$767,932	\$201,788	\$1,059,722	\$234,425	\$300,027	\$218,669	\$640,654	\$1,818,876	\$859,768	\$527,015	\$7,352,065
18	Off-System Sales Margin (Line 9 - Line 17)		(\$5,280)	\$5,435	\$68,094	\$31,518	\$147,755	(\$28,954)	\$538,326	(\$41,168)	\$194,661	\$253,006	\$76,513	(\$49,311)	\$1,190,596
19	Allocated to Customers (up to 100% of first \$1.00	millior	1) ^(b)												1,000,000
20	Sub-Total (Line 18 - Line 19, if negative = 0)														\$190,596
21	Percentage Allocated to Customers (75% of margi	ins > \$	\$1.00 million) ⁽	b)											75.00%
22	Remainder of Off-System Sales Margin Allocated	to Cus	stomers (Line	20 x Line 21)											142,947
23															

Note: (a) Line 12 - Line 6 ties to the Duke Energy Kentucky's FAC Filing Schedule 4, Line C. (b) Per the Commission's Order dated December 22, 2010, in Case No. 2010-00203.

DUKE ENERGY KENTUCKY OFF-SYSTEM SALES SCHEDULE PERIOD: YEAR TO DATE - DECEMBER 31, 2014

Line No.	Description		Jan-14	Feb-14	Mar-14	Apr-14	May-14	<u>Jun-14</u>	Total
1	Off-System Sales Revenue								
2	Asset Energy	(+)	\$2,349,191	\$862,758	\$10,559	\$0	\$0	\$0	\$3,222,508
3	Non-Asset Energy	(+)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Bilateral Sales	(+)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Hedges	(+)	\$43,287	\$0	\$0	\$0	\$0	\$0	\$43,287
6	PJM Bal & DA Oper Reserve Credits (a)	(+)	\$94,100	\$79,264	\$0	\$0	\$0	\$0	\$173,364
7	Capacity	(+)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	Ancillary Services Market (Schedule 5, Line 15)	(+)	\$2,106,409	\$0	\$9,674	\$0_	\$0_	\$0	\$2,116,083
9	Sub-Total Revenues		\$4,592,987	\$942,022	\$20,233	\$0	\$0	\$0	\$5,555,242
10	Variable Costs Allocable to Off-System Sales								
11	Bilateral Purchases	(+)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	Non-Native Fuel Cost (a)	(+)	\$984,690	\$491,808	\$6,313	\$0	\$0	\$0	\$1,482,811
13	Variable O&M Cost	(+)	\$48,281	\$38,745	\$507	\$0	\$0	\$0	\$87,533
14	SO₂ Cost	(+)	\$52	\$18	\$4	\$0	\$0	\$0	\$74
15	NO _x Cost	(+)	\$13	\$32	\$0	\$0	\$0	\$0	\$45
16	PJM and Other Costs	(+)	(\$239)	(\$348)	\$44	\$0	\$0	\$0	(\$543)
17	(Gain)/Loss on Sale of Fuef ^c)	(+)	\$0_	\$0	\$0	\$0	\$0_	\$0_	\$0_
18	Sub-Total Expenses		\$1,032,797	\$530,255	\$6,868	\$0_	\$0_	\$0_	\$1,569,920
19	Off-System Sales Margin (Line 9 - Line 18)		\$3,560,190	\$411,767	\$13,365	\$0	\$0	\$0	\$3,985,322
20	Allocated to Customers (up to 100% of first \$1.00	millio	on) ^(b)						1,000,000
21	Sub-Total (Line 19 - Line 20, if negative = 0)								\$2,985,322
22	Percentage Allocated to Customers (75% of margins > \$1.00 million) (b)								
23	Remainder of Off-System Sales Margin Allocated	to C	ustomers (Line	e 21 x Line 22)					2,238,992
24	Off-System Sales Margin Allocated to Customers (if line 21 > 0 then Line 20 + Line 23, otherwise I		9)	***************************************				1	\$3,238,992

Note: (a) Line 12 - Line 6 ties to the Duke Energy Kentucky's FAC Filing Schedule 4, Line C.
(b) Per the Commission's Order dated December 22, 2010, in Case No. 2010-00203.

⁽c) Inclusion of \$534,000 of gas losses pending order in Case No. 2014-00078.

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Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-022

REQUEST:

Has any litigation been filed against DEK, its parent entities or affiliates/subsidiaries

regarding East Bend? If so, identify and provide a status. Include in your description

actions filed in any state or federal courts, as well as any actions pending before state

and/or federal regulatory agencies.

a. Have any Notices of Intent to Sue or Notices of Regulatory Actions been

filed, and if so, by whom? If so, provide copies.

RESPONSE:

Objection. This question is vague, overbroad, and unduly burdensome. Without waiving

said objection and to the extent discoverable the Company is only aware of one case

currently pending involving East Bend. This case involves an ex-employee who alleged

his employment was wrongfully terminated. The case was dismissed on summary

judgment. An appeal is pending.

PERSON RESPONSIBLE: Legal

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-023

REQUEST:

Have any fines (state and/or federal) been issued regarding air or water pollutants from

East Bend? Please identify and provide a status.

RESPONSE:

Objection. This request is vague, overbroad, unduly burdensome as it contains no time

parameters, arguably includes periods when the station was not owned by Duke Energy

Kentucky, and is irrelevant. Without waiving said objection, and to the extent

discoverable, there have been none in the last four years.

PERSON RESPONSIBLE: As to Objection: Legal

J. Michael Geers

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-024

REQUEST:

Did DEK conduct any due diligence studies regarding DP&L's liability or potential

liability exposures (including environmental liabilities) arising from DP&L's ownership

stake in East Bend? If so, please provide a copy of any and all such studies, together with

an itemized listing of all such liabilities and potential liability exposures.

a. For each environmental liability listed reference: (i) any and all relevant

rulemakings, agreements or existing orders relating to the liability; and (ii) DEK's

plans to correct or otherwise remediate the liability and the estimated cost of

such planned action.

b. Refer to the testimony of Witness Henning at page 18 regarding the assumption

of liabilities by DEK. In the event the Commission should approve of DEK's plan

to assume DP&L's environmental liabilities, does DEK believe this creates a

presumption that the costs of remediating or otherwise addressing those

liabilities may be passed to ratepayers via the environmental surcharge, or in

base rates?

RESPONSE:

a) Objection. This question is vague, over broad and unduly burdensome.

Without waiving said objection and to the extent discoverable, the Company

did not conduct a separate analysis of DP&L's potential liabilities. Duke

Energy Kentucky is the 69% majority owner and operator of East Bend. DP&L's liability would be 31% of the total liability for the East Bend Station. Upon closing Duke Energy Kentucky will be the sole owner and would assume all liabilities except those excluded in the purchase agreement.

b) Yes. Please see Direct Testimony of James P. Henning at page 19.

PERSON RESPONSIBLE:

Objection- Legal James P. Henning

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Duke Energy Kentucky
Case No. 2014-00201
Attorney General's First Set of Data Requests
Date Received: July 28, 2014

AG-DR-01-025 PUBLIC

a. No. Regardless, the unit does not meet the minimum environmental specifications that Duke Energy Kentucky established for the RFP.

PERSON RESPONSIBLE: James S. Northrup

Duke Energy Kentucky Case No. 2014-00201 Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-026 PUBLIC

REQUEST:

Reference the Northrup testimony at p. 10, wherein he states DEK [BEGIN

CONFIDENTIAL]

[END CONFIDENTIAL]

- a. Explain why this was done.
 - (i) Was this done in whole or in part as a [BEGIN CONFIDENTIAL]

[END CONFIDENTIAL]

b. Please identify the entity who offered this [BEGIN CONFIDENTIAL]

, [END CONFIDENTIAL] and the cost thereof.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET

a.(i) Yes, the capacity purchase option was executed as a general hedge against potential exposure to capacity market prices during the period that the Company was evaluating potential responses to meeting the EPA Mercury and Air Toxics Standards Rule (MATS) requirements, and consequently how to meet its FRR requirement. At the time of the execution of the option, September 13, 2013, the Company had not decided on the least

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cost solution to the MATS rule, or for that matter the outcome of the pending legal challenge to the rule. It had, however completed a capacity Request for Proposals that indicated likely least cost alternatives to modifications at the facility. It was anticipated that these alternatives would require the purchase of capacity during the 2015/2016 Delivery Year. The eight month option gave Duke Energy Kentucky an opportunity, and right, if exercised, to purchase unit specific capacity that could be utilized in its FRR Capacity Plan for the 2015/2016 Delivery Year at the September 2013 incremental auction price, but did not obligate it to do so if it ultimately decided to either modify Miami Fort 6 or secure capacity in a more cost effective way. It also provided Duke Energy Kentucky the option of delaying alternative capacity decisions through the Delivery Year if necessary.

The capacit	The capacity option is unit specific at the						
b. 							

PERSON RESPONSIBLE: John Verderame

Duke Energy Kentucky

Case No. 2014-00201

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-027

REQUEST:

Describe any and all additional risks arising in whole or in part from the contemplated

transaction for which the company believes it will seek hedging or additional hedging.

Describe each such risk in detail, together with amounts of hedging/additional hedging

for each such risk, and the types of hedging.

a. Does DEK believe there is or could be a need to hedge against the risk posed

by lack of diversity in its generation fleet?

b. Describe the risks DEK faces if East Bend sustains a forced outage of

significant duration, in the event Miami Fort 6 is retired.

(i) What measures could the company take to mitigate against this risk?

RESPONSE:

Risks directly associated with owning generation assets manifest themselves through

exposure to both energy and capacity markets. Specifically, in the energy market, forced

outages create exposure to short term power prices. This exposure is either outright risk

to the load demand or the opportunity cost of being unable to capture non-native sales

margins. In the capacity market, forced outages create exposure to performance penalties

assessed by PJM, decremented capacity credit from PJM resulting from higher forced

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outage metrics, and outright exposure to short term capacity markets in the case of longer term outages. Duke Energy Kentucky assesses and manages these exposures through its Back-up Power Supply Plan. The current plan, approved in Case No. 2012-220, is in effect through December of 2014. The ongoing hedging program mitigates energy risks associated with outages though short term financial swaps or futures contracts. Capacity market risks have been mitigated through option contracts, and opportunistic purchases of discounted excess capacity in the bilateral markets and in PJM incremental auctions.

A preliminary analysis of the incremental energy risks associated with the proposed transaction revealed incremental, but not material, increases in energy market exposure. As expected, incremental expected costs were higher in scenarios of coincident forced outages and high market prices. An analysis of two portfolios, one consisting of 600 MWs of East Bend 2 and the Woodsdale CTs, and the other of 400 MWs of East Bend 2, a 200 MW coal facility, and the Woodsdale CTs, was completed. Generally, expected costs were similar in the two portfolios, although the variability of the expected outcomes was greater. Similarly, market purchases for both scenarios were similar, but the range of distributions shifted towards higher outcomes. From a capacity perspective, expected capacity penalties were very similar, and expected costs resulting from higher forced outage rates were slightly higher. These results were intuitive; but give the Company confidence that the incremental risks are manageable; and that the cumulative collateral benefits, when compared with other asset purchase proposals the Company received and reviewed, more than offset the marginal incremental exposure.

In recognition of these incremental risks, the Company has recently issued a Request for Proposals in order to evaluate potential hedging vehicles. Please see Attachment AG-DR- 01-27. The request identified specific financial energy and insurance products that the Company feels can address both short term and long term risks.

The financial products were specifically designed to mitigate exposure to short term forced outages, while the insurance products better address the risks of longer term outages. As it has in the past, the Company will evaluate these products for cost effectiveness and implement any that complement our ongoing financial hedging program.

- a. The purchase of the un-owned portion of East Bend 2 does concentrate the base load portion of the Duke Energy Kentucky. The current portfolio and the proposed portfolio both consist of approximately 55% base load and 45% peaking capacity. However, of the 55% of the current base load portion of the portfolio, 72% is East Bend 2 capacity and 28% is Miami Fort 6 capacity. If the portfolio converts to 100% EB2, then 28% of the base load diversity is lost, about 15% of the total portfolio diversity. The portfolio maintains diversity through the roughly 45% peaker portion of the portfolio comprised of the Woodsdale Generating Station. It is expected that, in light of this concentration, viable hedging alternatives to the current hedging program will emerge through the RFP process.
- b. As explained above, a forced outage of extended duration exposes the Company to both explicit and lost opportunity energy costs through short term energy prices, as well as capacity market exposure. Financial energy products such as futures and options can be cost effective hedging vehicles. Energy hedges, if crafted carefully can be cost effective. Capacity hedges such as insurance products have typically not been cost effective. In addition to the products

specified above, the Company made it clear in its RFP that it was open to any and all other proposals.

i) The company has issued a Backstand RFP to evaluate potential hedging vehicles for managing risk. See above.

PERSON RESPONSIBLE: John Verderame

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Duke Energy Kentucky Request for Proposals for Backstand Energy for 2015-2016

Dated: June 30, 2014

Proposals Due: August 8, 2014

Complete information on this RFP can be found at:

http://DukeEnergyKentuckyRFP.com



I. Purpose of Request for Proposals

Duke Energy Kentucky (DEK) offers this Request for Proposals (RFP) for the purpose of acquiring financial products for up to 600 MW of energy for its East Bend Unit 2 coal unit during the period of January 1, 2015 through December 31, 2016.

DEK is looking for a variety of financial offerings such as backstand call options, daily call options and insurance products. Duke Energy Kentucky seeks proposals that will provide the greatest value to DEK and its customers during unplanned outages at East Bend Unit 2 as well as products that can be called on anytime as a financially settled product.

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's regulated operations serve 7.2 million electric retail customers located in six states in the Southeast and Midwest. 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.

II. Product Definition & Eligibility

A. Product Definition

DEK is requesting proposals for the purchase of the following products:

 Backstand Energy Call Option: The Backstand Energy Call Option product is a dayahead, financially settled call option that can be used in the event of an unplanned outage at East Bend beginning January 1, 2015 through December 31, 2016. Backstand Energy products can be proposed for a maximum rate of energy of 600 MW per hour and a minimum rate of 50 MW per hour.

When an unplanned outage occurs at East Bend Unit 2, DEK will have the right, but not the obligation, to call on a financially settled amount of replacement energy proposed by the Bidder on a day ahead scheduled basis. The backstand energy call option will equal the amount of unplanned outage energy at the time of the strike. Energy pricing may be a fixed price (\$/MWH) or heat rate call option tied to natural gas or coal (Henry Hub and NYMEX Coal indices respectively). The called energy will be financially settled on a day ahead basis price at the Settlement Point (with a preference for the PJM AD

Hub or alternatively the PJM Western Hub) throughout the term of the offer. This product will cover the financial difference in bidder proposed strike price (fixed price or index price) of the energy that would have been produced from East Bend Unit 2 in the absence of an unplanned outage as compared to replacement energy from the PJM AD Hub (preferred) or PJM Western Hub settlement point. Different product options for the number of strike limitations per year and the time periods covered are shown below in the Product Parameters matrix in Section III.

- 2. <u>Daily Call Options:</u> Daily call options are financial energy products for up to 600 MW per hour beginning on January 1, 2015 available for a minimum term of two years. Minimum financial product quantity will be 50 MW per hour. Energy pricing may be a fixed price (\$/MWh) or heat rate call option tied to natural gas or coal (Henry Hub and NYMEX Coal indices respectively) at the Settlement Point. This product can be called upon anytime as a financially settled product on a day ahead price basis at the Settlement Point (with a preference for the PJM AD Hub or alternatively the PJM Western Hub) throughout the term of the offer. Different product options for number of strike limitations per year and time periods covered are shown in the Product Parameters matrix shown below in Section III.
- 3. <u>Insurance Products:</u> Insurance products are financial products in which a premium is paid as financial insurance against the backstand energy during an unplanned outage at DEK's East Bend Unit 2. Insurance products may include premiums, deductibles, and insurance payment caps. This insurance product will cover the financial difference in bidder proposed strike price (fixed price in \$/MWh) of the energy that would have been able to be produced from East Bend Unit 2 in the absence of an unplanned outage as compared to backstand energy for the unplanned outage from the PJM AD Hub (preferred) or PJM Western Hub settlement point.

III. Product Parameters

A. Product Parameters

Backstand Energy Call Options

The table below outlines the product requirements for backstand energy call options. The bid contract duration terms must be for two years beginning January 2015 with a minimum size of 50 MW per hour and a maximum size of 600 MW per hour. The Settlement Point will be on day ahead price basis from the AD Hub (preferred) or PJM Western Hub. Gas index call options must be priced on either a 7.0 MMBtu/MWh or 11.0 MMBtu/MWh heat rate

using Henry Hub index gas prices. Coal index call options must be priced on a 10 MMBtu/MWh heat rate using NYMEX coal index prices. All options must be exercised by 10:30 AM Eastern Prevailing Time (EPT) on a day ahead basis for the 16 weekday peak hours (including Sunday notifications for Monday) as called upon by the buyer. Options will be priced with annual strike limitations of 15, 25, 40 or unlimited. Calls can only be exercised during an unplanned outage at East Bend Unit 2.

Product Parameters – Backstand Energy Call Options				
Condition Precedent	Unplanned Outage at East Bend Unit 2			
Term	January 2015-December 2016			
Minimum Size Offering	50 MW per Hour			
Maximum Size Offering	600 MW per Hour (50 MW Increments)			
Power Price Index (Settlement Point)	PJM AD Hub (Preferred), PJM Western Hub			
Gas Price Index	Henry Hub			
Coal Price Index	NYMEX Coal			
Gas Heat Rate Index	7.0 MMBtu/MWh			
	11.0 MMBtu/MWh			
Coal Heat Rate Index	10.0 MMBtu/MWh			
Fixed Strike Price	\$/MWh			
Time Period Covered	16 hours weekday on-peak (HE 0800 EPT -			
	2300 EPT) or (07:00 am EPT through 11:00 PM			
	EPT)			
Exercise Notification	10:30 AM EPT Day Ahead (including Sunday			
	notification for Monday)			
Strike Limitations	15 Strikes/Year			
	25 Strikes/Year			
	40 Strikes/Year			
	Unlimited Strikes			

Daily Call Options

The table below outlines the requirements for daily call options. The bid contract duration terms must be for two years beginning January 2015 with a minimum size of 50 MW per hour and a maximum size of 600 MW per hour. The Settlement Point will be on a day ahead price basis from the AD Hub (preferred) or PJM Western Hub. Gas index call options must be priced on either a 7.0 MMBtu/MWh or 11.0 MMBtu/MWh heat rate with Henry Hub index gas prices. Coal index call options must be priced on a 10.0 MMBtu/MWh heat rate using NYMEX coal index prices. All options must be exercised by 10:30 AM EPT on a day-ahead basis for the 16 weekday peak hours (including Sunday notification for Monday) as called upon by the buyer.

Options will be priced with annual strikes limitations of 15, 25, 40 or unlimited. Calls options can be exercised at any time with no bearing on the availability of the East Bend Unit 2.

Product Parameters – Daily Call Options				
Condition Precedent	None			
Term	January 2015-December 2016			
Minimum Size Offering	50 MW per Hour			
Maximum Size Offering	600 MW per Hour (50 MW Increments)			
Power Price Index (Settlement Point)	PJM AD Hub (Preferred), PJM Western Hub			
Gas Price Index	Henry Hub			
Coal Price Index	NYMEX Coal			
Gas Heat Rate Index	7.0 MMBtu/MWh			
	11.0 MMBtu/MWh			
Coal Heat Rate Index	10 MMBtu/MWh			
Fixed Strike Price	\$/MWh			
Time Period Covered	16 hours weekday on-peak (HE 0800 EPT -			
	2300 EPT) or (07:00 am EPT through 11:00 PM			
	EPT)			
Exercise Notification	10:30 AM EPT Day Ahead (including Sunday			
· · · · · · · · · · · · · · · · · · ·	notification for Monday)			
Strike Limitations	15 Strikes/Year			
	25 Strikes/Year			
	40 Strikes/Year			
	Unlimited Strikes			

Insurance Products

The table below outlines the requirements for the insurance product. The term must be for two years with a minimum size of 50 MW per hour and a maximum size of 600 MW per hour. The bidders must provide a strike price that will be settled on a day ahead basis against AD Hub (preferred) or PJM Western Hub. Bidders should also provide any premiums, deductibles or insurance payment caps as appropriate. The time period covered will be the PJM peak 16 weekday hours. Insurance products will only be applicable during unplanned outages at East Bend Unit 2.

Product Parameters – Insurance Products				
Condition Precedent	Unplanned Outage at East Bend Unit 2			
Term	January 2015-December 2016			
Minimum Size Offering	50 MW per Hour			
Maximum Size Offering	600 MW per Hour (50 MW Increments)			
Power Price Index (Settlement Point)	PJM AD Hub (Preferred), PJM Western Hub			
Fixed Strike Price	\$/MWh			
Annual Deductible	Please Provide if Applicable			
Annual Premiums	Please Provide			
Time Period Covered	16 hours weekday on-peak (HE 0800 EPT - 2300 EPT) or (07:00 am EPT through 11:00 PM EPT)			
Annual Insurance Payment Caps	Please Provide if Applicable			

IV. Instructions to Respondents

1. Overview of Process

B&M has set-up an e-mail address at 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 throughout 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. 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 Backstand RFP Schedule

Event	Anticipated Date
Release of RFP	June 30, 2014
Notice of Intent to Bid	July 15, 2014 (Preferred)
Proposal Submittal Deadline	August 8, 2014
Selection of Short List	September 1, 2014

2. 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 and facilitate the process to complete the Nondisclosure Agreement (Attachment B) allowing prospective respondents to receive supplementary information regarding historical East Bend Unit 2 outage information and operations. Therefore, we encourage respondents to submit a NOIB by July 15, 2014

3. Nondisclosure Agreement (Attachment B)

Respondents to this RFP are required to sign Attachment B: Nondisclosure Agreement (NDA) in its present form. Respondents who submit a NOIB and sign the NDA will receive supplementary information on East Bend Unit 2 that may help in developing their bids.

Phone inquiries regarding this RFP will not be entertained. Individual questions will be submitted by email to B&M and will be answered with responses sent back via email to the respondent. Responses to frequently asked questions may be placed on the RFP website for the benefit of all respondents with all identifying information removed.

4. <u>Deadline and Method for Submitting Proposals</u>

All proposals submitted in response to this RFP must be received by B&M no later than **5:00 PM EST on August 8, 2014**. 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 proposal 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

V. Proposal Organization

1. Executive Summary

Please provide a detailed overview of the proposal.

2. Technical Proposal & Cost

Proposals should contain a detailed description of the pricing terms and conditions. Please refer to Section III.

3. 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.

VI. Proposal Evaluation and Contract Negotiations

1. 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.

2. Short List Development

DEK will then evaluate all proposals to meet 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, availability, outage history, 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.

3. Contract Negotiations

DEK may 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.

VII. 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.

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Duke Energy Kentucky Case No. 2014-00201

Attorney General's First Set of Data Requests

Date Received: July 28, 2014

AG-DR-01-028 PUBLIC

REQUEST:

With regard to costs of energy production at both Miami Fort 6 and East Bend, please

provide the following, in both \$/KW/month and \$/MWh:

a. Current costs of production for both plants;

b. Projected costs of production for both plants in 2015 and 2016, assuming both

plants remain open together with any and all environmental upgrades which

would be necessary for each plant to achieve timely compliance;

c. Projected costs of production at East Bend assuming: (i) an upgrade to East

Bend's SCR in order to comply with anticipated tighter NO_x emissions

restrictions from either CSPAR or the anticipated ozone NAAQS; and (ii) any

and all other environmental upgrades which DEK believes will be necessary,

including but not limited to compliance with the CCR and Effluent Rules, for

each of 2015, 2016, 2017 and 2018;

d. With regard to your response to subpart (d), above, provide the same

information in a table juxtaposed with the price per MWh from the top seven

(7) bids of DEK's RFP; and

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e. Assuming the application is approved in its entirety, please provide the projected "all-in" rate impact upon the monthly bill of an average residential class customer, for each of 2015, 2016, 2017 and 2018. For purposes of this question, the term "average residential class customer" means the average level of consumption for a DEK residential customer. Also for purposes of this question, the term "all-in" rate means the amount of base rates, average monthly fuel adjustment charge, average monthly environmental surcharge, together with any other costs included in residential class customers' bills.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment B)

Objection. This request as vague and ambiguous, overbroad, and unduly burdensome. Duke Energy Kentucky further objects to this request to the extent it seeks a calculation or analysis that has not been performed, cannot be performed, and/or to which the Company objects performing. Without waiving said objection, and to the extent discoverable:

- a. Please see Attachment AG-DR-01-028-A for the most recent (2013 Q4) FERC Form 1 data, as well as the direct testimony of Steve Immel at pg. 17. Duke Energy Kentucky interprets "energy production" cost to mean fuel and fixed and variable O&M costs only (no capital cost).
- b. With respect to fuel and fixed and variable O&M costs only (no capital cost), please see the following table.

	2015	2016	2015 \$/kW-	2016 \$/kW-
	\$/MWHR	\$/MWHR	Month	Month
East Bend	\$35.03	\$37.47	\$20.89	\$20.97
Miami Fort 6				
with MATS Controls	\$54.81	\$57.53	\$22.76	\$20.26

c. Please see the response to part (b) above for years 2015 and 2016. The controls listed are not expected to be in service during the time frame identified, so no energy production costs (fuel or O&M) are attributable to them.

	2017	2018	2017 \$/kW-	2018 \$/kW-
	\$/MWHR	\$/MWHR	Month	Month
East Bend	\$35.92	\$39.76	\$24.40	\$25.97

Costs are higher in 2018 due to the planned 2018 major outage (described in response Staff-DR-01-023).

d. The Company objects to the extent the question cannot be answered as written as the reference is vague, and ambiguous. Without waiving said objection, and assuming the reference is referring to sub part (c) above, please see Confidential Attachment AG-DR-01-028-B. Note the values for East Bend differ from the responses to parts (b) and (c) above. Responses to parts (b) and (c) are based on detailed annual O&M budget data, whereas the response

to this part is based on the as-modeled annualized fixed O&M cost for comparative purposes to the bids.

e. Assuming the Company does not file a rate case for rates effective during that period, and given the Company has no currently active environmental surcharge, the only impact on rates would be limited to differences in fuel costs from substiting DP&L's share of East Bend for the existing Miami Fort 6 generation and the impact of any gains/losses related to the capacity transactions discussed in the Applications. The Company has not projected any gains/losses on the capacity transactions. Further, currently, the East Bend and Miami Fort 6 fuel prices are nearly the same, so substituting East Bend for Miami For 6 should have very little impact on fuel cost, and hence also on overall rates.

PERSON RESPONSIBLE:

- (a) William Don Wathen Jr.
- (b) Jim Northrup
- (c) Jim Northrup
- (d) Jim Northrup
- (e) Jim Northrup and William Don Wathen Jr.

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Nam	e of Respondent This Report Is 14 44 15 - 8027 FERC PDF (Unoffic at) Report Is	E.22014		Date of Report	t	Year/Period	of Report
Duke					2013/Q4		
	(2) A Re	esubmission	1	11			
	STEAM-ELECTRIC GENE	RATING PLA	NT STATIS	STICS (Large Plan	nts)		
1 - 5						00.14	- D 1 l-
	eport data for plant in Service only. 2. Large plants are steam p						
	age gas-turbine and internal combustion plants of 10,000 Kw or r	•		•		• •	
as a j	oint facility. 4. If net peak demand for 60 minutes is not availab	ole, give data	which is ava	ilable, specifying	period. 5.	If any empi	oyees attend
more	than one plant, report on line 11 the approximate average number	er of employee	es assignab	le to each plant.	6. If gas is	used and p	urchased on a
therm	basis report the Btu content or the gas and the quantity of fuel b	umed convert	ted to Mct.	7. Quantities of	fuel burned	(Line 38) an	d average cost
1	nit of fuel burned (Line 41) must be consistent with charges to exp					•	•
ι.	s burned in a plant furnish only the composite heat rate for all fuel		is cor and	047 (EIIIC 42) 43 .	SHOW OIL EINE	20. 0. 11	more man one
lueis	s buttled it a plant furnish only the composite hear rate for all fuer	s builled.					
Ь							
Line	Item	Plant			Piant		
No		Name: EAS	T BEND		Name: MIA	MI FORT 6	
1	(a)		(b)		1	(c)	
		 					
 	Vind of Black (Internal Comb. Con Trush Musican			Char			Channe
_	Kind of Piant (Internal Comb, Gas Turb, Nuclear	 		Steam			Steam
2	Type of Constr (Conventional, Outdoor, Boiler, etc)			Conventional			Conventional
3	Year Originally Constructed			1981			1960
	Year Last Unit was Installed			1981			1960
	\				ļ		
	Total Installed Cap (Max Gen Name Plate Ratings-MW)			447.00	L		168.00
6	Net Peak Demand on Plant - MW (60 minutes)			424	l		165
7	Plant Hours Connected to Load			7117			7228
	Net Continuous Plant Capability (Megawatts)			414	 		163
		 			 		
9	When Not Limited by Condenser Water			414	ļ		163
10	When Limited by Condenser Water	,		0	{		0
11	Average Number of Employees			87			0
	Net Generation, Exclusive of Plant Use - KWh			2543175000	 		1135148000
							
13	Cost of Plant: Land and Land Rights			1686453			22176
14	Structures and Improvements	1		39991044			3295296
15	Equipment Costs			401456204			75612205
16	Asset Retirement Costs	 		575095			-214707
17	Total Cost			443708796			78714970
18	Cost per KW of Installed Capacity (line 17/5) Including			992.6371			468.5415
19	Production Expenses: Oper, Supv, & Engr			1431904			2019943
20	Fuel	 		68087782			27124705
21	Coolants and Water (Nuclear Plants Only)	ļ		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				2691879			401849
27	Rents	l		0			256224
28	Allowances			0			0
29				1587730			292802
							
	Maintenance of Structures			1402520			709266
31	Maintenance of Boiler (or reactor) Plant	<u> </u>		6995183			2789418
32	Maintenance of Electric Plant		_	1401595			532884
33	Maintenance of Misc Steam (or Nuclear) Plant			1396174			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	Coal		Oil
37	Unit (Coal-tons/Oil-barrel/Gas-mcf/Nuclear-indicate)	Tons		Barrels	Tons	 	Barrels
						 	
38	Quantity (Units) of Fuel Burned	1254677	0	15219	489094	0	7224
39	Avg Heat Cont - Fuel Burned (btu/indicate if nuclear)	11346	0	137178	11736	0	137303
40	Avg Cost of Fuel/unit, as Delvd f.o.b. during year	52.515	0.000	135.315	52.734	0.000	0.000
	Average Cost of Fuel per Unit Burned	52.607	0.000	136.886	53.481	0.000	133.954
$\overline{}$							
	Average Cost of Fuel Burned per Million BTU	2.318	0.000	23.759	2.278	0.000	23.229
43	Average Cost of Fuel Burned per KWh Net Gen	0.026	0.000	0.001	0.023	0.000	0.001
44	Average BTU per KWh Net Generation	11195.000	0.000	0.000	10113.000	0.000	0.000
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CONFIDENTIAL AG-DR-01-028 ATTACHMENT B FILED UNDER SEAL