COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

| APPLICATION OF KENTUCKY POWER |) |
|---------------------------------------|-----------------------|
| COMPANY FOR APPROVAL OF THE TERMS |) |
| AND CONDITIONS OF THE RENEWABLE |) |
| ENERGY PURCHASE AGREEMENT FOR |) |
| BIOMASS ENERGY RESOURCES BETWEEN |) CASE NO. 2013-00144 |
| THE COMPANY AND ECOPOWER |) |
| GENERATION-HAZARD LLC; AUTHORIZATION |) |
| TO ENTER INTO THE AGREEMENT; GRANT OF |) |
| CERTAIN DECLARATORY RELIEF; AND GRANT |) |
| OF ALL OTHER REQUIRED APPROVALS AND |) |
| RELIEF | • |

NOTICE OF FILING

Notice is given to all parties that the following materials have been filed into the record of this proceeding:

- The digital video recordings of the evidentiary hearing conducted August 28 August 29, 2013 in this proceeding;
- Certifications of the accuracy and correctness of the digital video recordings;
- All exhibits introduced at the evidentiary hearing conducted August 28 August 29, 2013 in this proceeding;
- The written logs listing, *inter alia*, the date and time of where each witness' testimony begins and ends on the digital video recordings of the evidentiary hearing conducted August 28 August 29, 2013.

A copy of this Notice, the certifications of the digital video records, exhibit lists, and hearing logs have been served by first class mail upon all persons listed at the end

of this Notice. Parties desiring electronic copies of the digital video recordings of the hearing in Windows Media format may download copies at:

http://psc.ky.gov/av broadcast/2013-00144/2013-00144 28Aug13 Inter.asx http://psc.ky.gov/av broadcast/2013-00144/2013-00144 29Aug13 Inter.asx

Parties wishing annotated digital video recordings may submit a written request by electronic mail to pscfilings@ky.gov. A minimal fee will be assessed for copies of these recordings.

The exhibits introduced at the evidentiary hearing may be downloaded at http://psc.ky.gov/pscscf/2013%20cases/2013-00144/.

Done at Frankfort, Kentucky, this 4th day of September 2013.

Linda Eaulkner

Director, Filings Division

Public Service Commission of Kentucky

Hector Garcia American Electric Power Service Corpo 1 Riverside Plaza, 29th Floor Columbus, OHIO 43215-2373 Kenneth J Gish, Jr. Stites & Harbison 250 West Main Street, Suite 2300 Lexington, KENTUCKY 40507 Jennifer B Hans Assistant Attorney General's Office 1024 Capital Center Drive, Ste 200 Frankfort, KENTUCKY 40601-8204

Honorable Michael L Kurtz Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202 Honorable Mark R Overstreet Attorney at Law Stites & Harbison 421 West Main Street P. O. Box 634 Frankfort, KENTUCKY 40602-0634 Ranie Wohnhas Managing Director Kentucky Power Company 101 A Enterprise Drive P. O. Box 5190 Frankfort, KY 40602

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

| APPLICATION OF KENTUCKY POWER COMPANY |) |
|--|-----------------------|
| FOR APPROVAL OF THE TERMS AND CONDITIONS | ,) |
| OF THE RENEWABLE ENERGY PURCHASE |) |
| AGREEMENT FOR BIOMASS ENERGY RESOURCES |) CASE NO. 2013-00144 |
| BETWEEN THE COMPANY AND ECOPOWER |) |
| GENERATION-HAZARD LLC; AUTHORIZATION TO |) |
| ENTER INTO THE AGREEMENT; GRANT OF CERTAIN |) |
| DECLARATORY RELIEF; AND GRANT OF ALL OTHER |) |
| REQUIRED APPROVALS AND RELIEF |) |
| | |

CERTIFICATE

- I, Sonya Harward, hereby certify that:
- 1. The attached DVD contains a digital recording of the hearing conducted in the above-styled proceeding on August 28, 2013; (excluding any confidential segments, which were recorded on a separate DVD and will be maintained in the non-public records of the Commission, along with the Confidential Exhibits and Hearing Log). The hearing was recorded on two consecutive days, August 28, 2013 and August 29, 2013, separately. (Confidential portions were also recorded separately).
 - 2. I am responsible for the preparation of the digital recording;
- The digital recording accurately and correctly depicts the hearing of August 28,
 2013 (excluding any confidential segments);
- 4. The "Exhibit List" attached to this Certificate correctly lists all exhibits introduced at the hearing of August 28, 2013 (excluding any confidential exhibits).
- 5. The "Hearing Log" attached to this Certificate accurately and correctly states the events that occurred at the hearing of August 28, 2013 (excluding any confidential segments) and the time at which each occurred.

Given this 29th day of August, 2013.

Sonya Harward (Boyd), Notary Public

State at Large

My commission expires: August 27, 2017



Session Report - Detail

2013-00144_28Aug2013

Kentucky Power Company

| Date: | Туре: | Location: | Department: | |
|-----------|-------|----------------|-----------------------|--|
| 8/28/2013 | Other | Public Service | Hearing Room 1 (HR 1) | |
| | | Commission | | |

Judge: David Armstrong; Linda Breathitt; Jim Gardner

Witness: Jay Godfrey - KY Power; Greg Pauley - KY Power; Ranie Wohnhas - KY Power

Clerk: Sonya Harward

| R | E | n | A | 14 | D |
|---|---|---|-----|------------------|---|
| - | | | 4 - | 1 1 4 | - |

| 10:01:48 AM 10:03:03 AM | Log Event Session Started Chairman Armstrong Note: Harward, Sonya | |
|----------------------------|---|---|
| 10:01:48 AM 10:03:03 AM | Chairman Armstrong Note: Harward, Sonya | |
| 10:03:03 AM | Note: Harward, Sonya | |
| | · · · · · · · · · · · · · · · · · · · | |
| | | Preliminary remarks |
| 10.04.50 AM | Introductions | |
| | Publishing of public notice confirm | ned. |
| 10:05:00 AM | Pending motions addressed. | |
| | Note: Harward, Sonya | PSC Atty. Nguyen discussed three Orders that were published the previous evening. |
| 10:07:02 AM | KY Power Atty. Gish | |
| | Note: Harward, Sonya | Asked for ruling on Atty. Garcia being approved to appear before the Commission, pro hac vice. |
| 10:07:27 AM | No Public Comments | |
| 10:08:24 AM | Witness Greg Pauley - KY Power | |
| | Note: Harward, Sonya | President and COO of KY Power Company |
| | Note: Harward, Sonya | Confirmed that testimony and data responses are still correct as filed. |
| 10:09:49 AM | KIUC Atty. Kurtz cross examinatio | n of Witness Pauley |
| | Note: Harward, Sonya | Referenced page 4 of Pauley Direct Testimony, lines 9-12. |
| 10:10:44 AM | Atty. Kurtz asked to go into confid | dential mode. |
| 10:11:59 AM | ***CONFIDENTIAL MODE*** | |
| 10:13:08 AM | | |
| | | |
| 10:13:50 AM | Exhibit 1 - KIUC | |
| | | |
| | | |
| | ***RETURNED TO PUBLIC MODE | *** |
| 10:16:55 AM | Exhibit 2 - KIUC | |
| | Note: Harward, Sonya | Portions of Wohnhas's Responses to PSC First Set of Data Requests, Dated May 10, 2013, 6 pages of responses to various items. |
| 10:17:29 AM | KIUC Atty. Kurtz | |
| | Note: Harward, Sonya | Questioned witness about Exhibit 2 - KIUC. |
| 10:21:17 AM | KY Power Atty. Gish | |
| | Note: Harward, Sonya | Clarified that the Exhibit being discussed was responses by Ranie Wohnhas, not Witness Pauley. |
| 10:22:22 AM | Interjection by Vice Chairman Gar | dner |
| | Note: Harward, Sonya | Stipulation does not have us approving the alternative life of Big Sandy 1, does it? |
| 10:23:01 AM | KIUC Atty. Kurtz | |
| | Note: Harward, Sonya | Referenced page 6, line 18, of Witness's Testimony |
| 10:25:22 AM | KIUC Atty. Kurtz | |
| | Note: Harward, Sonya | Asked about Witness Pauley's knowledge regarding KIUC Witness Taylor's testimony. |

| 10:27:56 AM | Exhibit 3 - KIUC | |
|--------------|--|--|
| 10.27.30 AM | Note: Harward, Sonya | Annual Average Excess Cost Per Residential Consumer Because of |
| | motor mannara, com, a | Eco Power RPA, 6 pages. |
| 10:28:18 AM | Commissioner Breathitt asked a | clarifying question of Witness Pauley. |
| | Note: Harward, Sonya | Witness said something about there being no other sources of |
| | | supplyplease clarify. |
| 10:29:39 AM | KIUC Atty. Kurtz continued ques | |
| 40.00.00.414 | Note: Harward, Sonya | Referencing Exhibit 3 - KIUC |
| 10:33:29 AM | KIUC Atty. Kurtz | Acking if Elected Officials know that there will be an increase of |
| | Note: Harward, Sonya | Asking if Elected Officials know that there will be an increase of \$100 per year for customers. |
| 10:33:40 AM | Objection - KY Power Atty. Gish | proper year for customers. |
| | Note: Harward, Sonya | If going to ask about specific documents, document needs to be |
| | , , | provided. |
| 10:35:53 AM | KIUC Atty. Kurtz | |
| | Note: Harward, Sonya | Referencing page 7 of Witness's Direct Testimony, line 14. |
| 10:38:47 AM | KIUC Atty. Kurtz | |
| | Note: Harward, Sonya | Asking about trucking jobs -is it new and incremental job growth. |
| 10:40:57 AM | ***CONFIDENTIAL MODE*** | |
| 10:41:24 AM | Exhibit 4 - KIUC (Confidential) | |
| | and the state of t | |
| | | |
| | | |
| | | |
| | • | |
| 10:46:30 AM | Exhibit 5 - KIUC (Confidential) | |
| | | |
| | | |
| | | |
| | | |
| 10:56:40 AM | KIUC Atty. Kurtz, no further ques | |
| 10:56:46 AM | ***RETURNED TO PUBLIC MOD | |
| 10:57:47 AM | AG Atty. Hans cross examination | · |
| 40.00.40.40 | Note: Harward, Sonya | Referencing Exhibit 3 - KIUC |
| 10:59:45 AM | AG Atty, Hans | Defendancing the table in the Dublic Netice available DCC on Ava |
| | Note: Harward, Sonya | Referencing the table in the Publie Notice supplied to PSC on Aug. 16th. |
| 11:02:48 AM | AG Atty. Hans | 1001. |
| | Note: Harward, Sonya | Was ecoPower eligible for federal incentives and subsities that are |
| | , | no longer available? |
| 11:04:05 AM | AG Atty. Hans | |
| | Note: Harward, Sonya | Is ecoPower shovel ready? |
| 11:04:32 AM | Exhibit 1 - AG | |
| | Note: Harward, Sonya | Response to Question Posed at June 27, 2013 Informal Conference |
| 11:07:06 AM | AG Atty. Hans, no further question | |
| 11:07:14 AM | PSC Atty. Nguyen cross examina Note: Harward, Sonya | tion of Witness Pauley. Referencing KY Power's Response Item 23 of KIUC's First Request. |
| 11:09:28 AM | PSC Atty. Nguyen | Referencing KT Fower's Response Hell 25 of Rioc's First Request. |
| 11.03.20 AN | Note: Harward, Sonya | Referencing Witness's Rebuttal Testimony, page 2, starting at line |
| | | 19. |
| | Note: Harward, Sonya | Also referenced bottom of page 4 and top of page 5, |
| | | |

| 11:13:26 AM | KY Power Atty. Gish interjected. | |
|--------------------------|---|---|
| | Note: Harward, Sonya | The information that Atty. Nguyen is seeking is on page 3 of Mr. Coomes's Testimony. |
| 11:14:18 AM | PSC Atty. Nguyen | |
| | Note: Harward, Sonya | Economic analysis of ecoPower performed? |
| 11:19:22 AM | PSC Atty. Nguyen | Was DED assessed to any analitic renounbles? Could IV Dower |
| | Note: Harward, Sonya | Was RFP presented to any specific renewables? Could KY Power have submitted an RFP for specific renewables? |
| 11:22:49 AM | PSC Atty. Nguyen | |
| | Note: Harward, Sonya | Outside of economic benefits, does contract rate give you any pause by itself? |
| 11:25:13 AM | PSC Atty. Nguyen | To Mitagoria 20 years with AED, is it unused for AED to enter into a |
| | Note: Harward, Sonya | In Witness's 39 years with AEP, is it unusal for AEP to enter into a power contract outside an RFP process? |
| 11:26:13 AM | Witness Pauley | TOTAL TOTAL CONTRACTOR OF THE PROPERTY OF THE |
| | Note: Harward, Sonya | KY Power knows it's more expensive, but this is an oppportunity to move into another area of renewables. |
| 11:28:11 AM | PSC Atty. Nguyen, no further que | |
| 11:28:53 AM | Chairman Armstrong cross exam | |
| 11:29:48 AM | Vice Chairman Gardner cross exa | · · · · · · · · · · · · · · · · · · · |
| 11.22.E0 AM | Note: Harward, Sonya Vice Chairman Gardner | Any risk to KY Power due to EPA rules. |
| 11:32:50 AM | Note: Harward, Sonya | Will the approval of this case and the Mitchell case effect the filing of |
| | Note: Harward, Sonya | Big Sandy 1 CPCN? |
| 11:36:21 AM | Commissioner Breathitt cross exa | - • |
| | Note: Harward, Sonya | Confirmed that ecoPower planning to be online in 2017. |
| 11:37:37 AM | ***CONFIDENTIAL MODE*** | |
| 11:38:24 AM | | |
| | | |
| 11:40:46 AM | ***RETURNED TO PUBLIC MODI | <u>-</u> *** |
| 11:40:54 AM | Commissioner Breathitt | 2 percent suchion with DIM describe that |
| 11:42:23 AM | Note: Harward, Sonya Commissioners have no further of | 3 percent cushion with PJMdescribe that. |
| 11:42:31 AM | KY Power Atty. Gish re-direct of | • |
| 11.72.31 AM | Note: Harward, Sonya | Addressed Comm. Breathitt's questions, AG Atty. Hans's questions, |
| | | etc. |
| 11:45:03 AM | ***CONFIDENTIAL MODE*** | |
| 11:45:28 AM | | |
| | | |
| 11:46:40 AM | ***RETURNED TO PUBLIC MODI | |
| 11:46:49 AM | Witness Pauley dismissed from s | tand. |
| 11:47:24 AM | Break for Lunch | |
| 11:47:38 AM | Session Paused | |
| 1:01:15 PM 1:01:19 PM | Session Resumed Witness Ranie Wohnhas, KY Pow | or . |
| 1.01.15 FM | Note: Harward, Sonya | Managing Director Regulatory and Finance |
| 1:02:32 PM | Correction to responses of Witne | · |
| 1.02.02 | Note: Harward, Sonya | KIUC 2-9, asked for support for those hours, will provide an updated disk that supports the hours. |
| | Note: Harward, Sonya | PSC 1-10, incorrectly states 75 hours above REPA price, should be 28 hours. |
| 1:03:49 PM | KIUC Atty. Kurtz cross examination | |
| 1:04:23 PM | KIUC Atty. Wohnhas | |
| | Note: Harward, Sonya | Referenced Exhibit RKW-1 from Direct Testimony of Witness. |

| 1:07:07 PM | KIUC Atty. Kurtz, no further qu | |
|--------------|---|---|
| 1:07:14 PM | AG Atty. Hans cross examination | on of Witness Wohnhas |
| 1:08:15 PM | AG Atty. Hans | |
| | Note: Harward, Sonya | Regarding BioMass Energy Rider, in notices published, residential |
| | | increase estimate will be 8.69 percent. |
| 1:11:11 PM | POST HEARING REQUEST | |
| | Note: Harward, Sonya | Provide, for the tables included in newspaper, the spreadsheet of |
| | 10 Au 11 5 th | what was included to arrive at those numbers. |
| 1:12:41 PM | AG Atty. Hans, no further ques | |
| 1:12:45 PM | PSC Atty. Nguyen cross examin | nation of witness wonnnas |
| 1:14:14 PM | PSC Atty. Nguyen | Evaluin what the avoided capacity cost means |
| 1.17.42 DM | Note: Harward, Sonya | Explain what the avoided capacity cost means. |
| 1:17:42 PM | PSC Atty. Nguyen | Referencing page 13, of Amended Verified Application, paragraph 43 |
| | Note: Harward, Sonya | - explain what is meant by this paragraph. |
| 1:19:22 PM | Witness Wohnhas | - explain what is meant by this paragraph. |
| 1.19.22 FM | Note: Harward, Sonya | Answered by referencing RKW-2 of his Testimony. |
| 1:24:24 PM | PSC Atty. Nguyen | Allowered by referencing taxw 2 of this resultionly. |
| 1,27,2711 | Note: Harward, Sonya | Referencing Exhibit 5 of Amended Verified Application - does |
| | Note: Harwara, Jonya | formula contain provisions for over- or under-recovery? |
| 1:27:05 PM | POST HEARING REQUEST | Tomala contain provide to the container of the container |
| 1127 103 111 | Note: Harward, Sonya | Change/amend the rider language concerning over- and under- |
| | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | recoveries and submit to Commission. |
| 1:27:46 PM | POST HEARING REQUEST | |
| | Note: Harward, Sonya | Provide a sample monthly filing for this tariff. |
| 1:28:05 PM | Vice Chairman Gardner cross e | xamination of Witness Wohnhas |
| | Note: Harward, Sonya | Does this have anything to do with PJMrelated to PJM? |
| 1:30:19 PM | Vice Chairman Gardner | |
| | Note: Harward, Sonya | Referencing page 13, of Amended Verified Application, paragraph 43 |
| | | could there be adverse credit rating due to this contract? |
| 1:32:55 PM | Vice Chairman Gardner | |
| | Note: Harward, Sonya | What is 'stream of capacity' payments? |
| 1:37:50 PM | Vice Chairman Gardner | |
| | Note: Harward, Sonya | Questioning about production tax credit, how calculated, etc. |
| 1:40:45 PM | Vice Chairman Gardner | |
| | Note: Harward, Sonya | Questioning regarding escalator, there is a 13 percent increase in |
| 400404 | DOCT LICADING DEGLICOT (-I- | total revenues - 7 percent is likewise total revenue. |
| 1:42:24 PM | POST HEARING REQUEST (cla | |
| | Note: Harward, Sonya | Compute what rate increase will be as result of this case in 2017 using several scenarios - 4, 5, 6 or more scenarios - if PSC does or |
| | | does not approve the Mitchell case. |
| 1:48:02 PM | Commissioner Breathitt cross e | examination of Witness Wohnhas |
| 1. 10.02 111 | Note: Harward, Sonya | Referencing Direct Tesitmony, page 4, question 9 and its answer. |
| 1:51:26 PM | Commissioners have no further | • |
| 1:51:29 PM | KY Power Atty. Gish redirect of | • |
| 1.53125 | Note: Harward, Sonya | Clarified some items discussed during cross examination. |
| 1:53:01 PM | AG Atty. Hans re-cross examin | _ |
| 1:53:45 PM | Witness Wohnhas dismissed from | |
| 1:54:03 PM | Witness Jay Godfrey, KY Power | |
| .= | Note: Harward, Sonya | Managing Director of Renewable Energy |
| 1:55:56 PM | · · · · · · · · · · · · · · · · · · · | ness in previously filed documents. |
| | Note: Harward, Sonya | Commission Staff First Data Requests, Item 5, previous answer was |
| | | \$2-\$6 per RECnow \$14-\$15. |
| | KIUC Atty. Kurtz cross examina | |
| 1:57:43 PM | | |
| 1:57:43 PM | Note: Harward, Sonya | Referencing Exhibit 2 of Witness's Testimony. |

| 2:01:15 PM | Exhibit 6 -KIUC | |
|--|--|---|
| | Note: Harward, Sonya | Except from the Application of Indiana Michigan Power Company for |
| | | approval pursuant to Sec. 6j(13)(b) of 1982 PA 304 of capacity charges in excess of six months associated with a power purchase |
| | | agreement with Headwaters Wind Farm, LLC. |
| 2:03:35 PM | KIUC Atty. Kurtz | |
| 2.04.24 PM | Note: Harward, Sonya | Questioning about Exhibit 6 - KIUC, 3rd to last page. |
| 2:04:31 PM | Objection - KY Power Atty. Garcia Note: Harward, Sonya | Witness asking to answer about someone else's statements. |
| 2:05:12 PM | Objection - KY Power Atty. Garcia | _ |
| | Note: Harward, Sonya | No foundation for this line of questioning for this Witness. |
| 2:08:52 PM | Session Paused | |
| 2:08:56 PM | Session Resumed | |
| 2:08:59 PM | Session Paused | |
| 2:09:02 PM | Session Resumed | |
| 2:09:07 PM | ***CONFIDENTIAL MODE*** | |
| 2:09:21 PM | Exhibit 7- KIUC (Confidential) | |
| | | |
| | | |
| | As a surpuspherus and his fact of the addition and continue of the surpuspherus and the surpu | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| AND THE PROPERTY AND TH | | |
| | | |
| | | |
| | | |
| 2:48:21 PM | Session Paused | |
| 2:48:25 PM | Session Resumed | |
| 2:48:29 PM | ***RETURNED TO PUBLIC MODE | *** |
| 2:49:16 PM | KY Power Atty. Garcia, objection | to entering Exhibit 8 - KIUC |
| | Note: Harward, Sonya | No foundation for the first pages of the exhibit. |
| 2:50:33 PM | Chairman Armstrong - ruling on E | |
| | Note: Harward, Sonya | Noted that Atty. Kurtz prepared cover of Exhibit and will allow it. |
| 2:51:20 PM | KIUC Atty. Kurtz, no further ques | |
| 2:51:25 PM | PSC Atty. Nguyen cross examinat | |
| | Note: Harward, Sonya | With respect to bio mass, how many negotiations has Witness been |
| 7.EE EE 511 | DCC Attack Name | involved in? |
| 2:55:55 PM | PSC Atty. Nguyen | Quarticaling about biomass being more synapsize than wind naver |
| 2.50.24 544 | Note: Harward, Sonya | Questioning about biomass being more expensive than wind power. |
| 2:58:31 PM | Witness Godfrey | Color is an more of an even playing field with his mass in terms of |
| | Note: Harward, Sonya | Solar is on more of an even playing field with bio mass in terms of cost. |
| | | COSC |

| 3:02:38 PM | PSC Atty. Nguyen Note: Harward, Sonya | Was the Witness asked about the reasonableness of the contract rate? |
|---|--|--|
| 3:07:17 PM | PSC Atty. Nguyen | rate: |
| 0.07.127 | Note: Harward, Sonya | Referencing JFG Exhibit 2 regarding 40-50 [or more than 50] percent of contracts being a result of an RFP. |
| 3:09:15 PM | PSC Atty. Nguyen | |
| | Note: Harward, Sonya | Referencing page 10 of Direct Testimony, lines 10-12 - what is status of the negotiations discussed here? |
| 3:13:53 PM | PSC Atty. Nguyen | |
| 2.1E.10 DM | Note: Harward, Sonya | When will system impact study be finalized - end of September. |
| 3:15:18 PM | Session Paused | |
| 3:15:22 PM | Session Resumed | |
| 3:15:23 PM 3:16:34 PM | ***CONFIDENTIAL MODE*** | |
| 3.10.34 PM | | |
| | | |
| | | |
| | | |
| | | |
| *************************************** | | |
| | | |
| | | |
| 2:42:42 DM | Session Paused | |
| 3:43:43 PM 3:43:47 PM | Session Resumed | |
| 3:43:51 PM | ***RETURNED TO PUBLIC MOD | E*** |
| 3:44:25 PM | | s cross examination in Public Mode |
| 3:47:39 PM | Vice Chairman Gardner Continue Vice Chairman Gardner | is cross examination in Public Mode |
| J.77.JJ FN | Note: Harward, Sonya | Discussion regarding contract with ecoDower governing pricing |
| | Note: Harward, Sorrya | Discussion regarding contract with ecoPower governing pricing relationship. |
| 3:52:51 PM | Vice Chairman Gardner | |
| | Note: Harward, Sonya | What is a fair price per kW for IGCC? What about combined cycle? |
| 3:54:27 PM | Vice Chairman Gardner | |
| | Note: Harward, Sonya | Referencing Witness Taylor's Testimony dealing with RECs. |
| 3:56:04 PM | VIce Chairman Gardner | |
| | Note: Harward, Sonya | Referencing Witness Taylor's Testimony, page 16, answer to the 2nd question. |
| 3:58:19 PM | Vice Chairman Gardner | question. |
| 3.30.13 111 | Note: Harward, Sonya | Discussion about ecoPower being the developer, not clear what part |
| | Note: Harward, Sonya | they will playmanaging or co-managing or an investor? |
| 4:00:28 PM | Vice Chairman Gardner | are the play mindred and or community or an investor. |
| | Note: Harward, Sonya | Does contract deal with the actual type of biomass that will be used |
| | | by ecoPower? |
| | Note: Harward, Sonya | Open loop biomass what it is. What type of fuel will ecoPower be |
| | ,, | using? |
| 4:05:05 PM | Commissioner Breathitt cross ex | |
| | Note: Harward, Sonya | Page 13 of Witness's Direct Testimony - regarding capacity |
| | | payments associated with contract. |
| | | |

| 4:08:43 PM | Commissioner Breathitt | |
|------------|-------------------------------|---|
| | Note: Harward, Sonya | Do you know the actual physical location? |
| | Note: Harward, Sonya | Referencing Witness's Testimony, page 9, line 4 - regarding fuel supply coming from 55 mile radius and then on page 8 it says it will come from Eastern Kentucky. |
| 4:11:48 PM | Commissioner Breathitt | |
| | Note: Harward, Sonya | Discussing approvals, page 12 of Witness's Testimony. |
| 4:14:25 PM | Commissioners have no further | er questions. |
| 4:14:42 PM | PSC Atty. Nguyen re-cross exa | amination of Witness Godfrey |
| 4:17:39 PM | KY Power Atty. Gish | |
| | Note: Harward, Sonya | KY Power has no further witnesses. |
| 4:17:46 PM | Witness Godfrey dismissed fro | m the stand. |
| 4:18:46 PM | Chairman Armstrong | |
| | Note: Harward, Sonya | Counsel asked to approach bench and discussed resuming tomorrow. |
| 4:19:44 PM | Adjourned for the day. | |
| 4:20:31 PM | Session Paused | |
| 4:22:25 PM | Session Ended | |



Exhibit List Report

2013-00144_28Aug2013

Kentucky Power Company

Judge: David Armstrong; Linda Breathitt; Jim Gardner

Witness: Jay Godfrey - KY Power; Greg Pauley - KY Power; Ranie Wohnhas - KY Power

Clerk: Sonya Harward

| Name: | Description: |
|---------------------------------|--|
| Exhibit 1 - AG | Response to Question Posed at June 27, 2013 Informal Conference |
| Exhibit 1 - KIUC | Supplemental Testimony of Richare □d E. Munczinski on behalf of Kentucky Power - CN 2012-00578 |
| Exhibit 2 - KIUC | Portions of Wohnhas's Responses to PSC First Set of Data Requests, Dated May 10, 2013, 6 pages of responses to various items |
| Exhibit 3 - KIUC | Annual Average Excess Cost Per Residential Consumer Because of Eco Power RPA, 6 pages. |
| Exhibit 4 - KIUC (Confidential) | ecoPower Generation LLC, Initial Due Diligence |
| Exhibit 5 - KIUC (Confidential) | Value of Eco Power Permanent Jobs Versus Excess Power Costs, 18 pages. |
| Exhibit 6 - KIUC | Except from the Application of IndianaMichigan Power Company for approval pursuant to Sec. 6j(13)(b) of 1982 PA 304 of capacity charges in excess of six months associated with a power purchase agreement with Headwaters Wind Farm, LLC. |
| Exhibit 7 - KIUC (Confidential) | Memorandum of Understanding Between ecoPower and KY Power and other items, 11 pages. |
| Exhibit 8 - KIUC (Confidential) | ecoPower Hazard Pro Forma and other items, 14 pages. |

RECEIVED

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

JUN 2 8 2013
PUBLIC SERVICE
COMMISSION

In The Matter Of:

| The Application Of Kentucky Power Company For: |) |
|---|-----------------------|
| (1) The Approval Of The Terms And Conditions Of The |) |
| Renewable Energy Purchase Agreement For Biomass |) |
| Energy Resources Between The Company And |) Case No. 2013-00144 |
| ecoPower Generation-Hazard LLC; (2) Authorization |) |
| To Enter Into The Agreement; (3) The Grant Of Certain |) |
| Declaratory Relief; And (4) The Grant Of All |) |
| Other Required Approvals and Relief |) |
| | |

Response To Question Posed At June 27, 2013 Informal Conference

At the conclusion of the June 27, 2013 Informal Conference in this matter counsel for Kentucky Power Company was asked about the status of PJM System Impact Study for the ecoPower Generation-Hazard LLC project. Counsel for Kentucky Power is informed by representatives of ecoPower that the System Impact Study is due by September 30, 2013.

Respectfully submitted,

Mark R. Overstreet R. Benjamin Crittenden

STITES & HARBISON PLLC

421 West Main Street

P. O. Box 634

Frankfort, Kentucky 40602-0634

Telephone: (502) 223-3477

Kenneth J. Gish, Jr. STITES & HARBISON PLLC 250 West Main Street, Suite 2300 Lexington, Kentucky 40507 Telephone: (859) 226-2300

COUNSEL FOR KENTUCKY POWER COMPANY

CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of the foregoing was served by U.S. Mail, postage prepaid, on the following:

Michael L. Kurtz Jody Kyler Cohn Boehm, Kurtz & Lowry 36 East Seventh Street, Suite 1510 Cincinnati, Ohio 45202 Jennifer Black Hans
Dennis G. Howard II
Lawrence W. Cook
Kentucky Attorney General's Office
1024 Capital Center Drive, Suite 200
Frankfort, Kentucky 40601-8204

on this the 28th day of June, 2013.

Mark R. Overstreet

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In The Matter Of:

The Application Of Kentucky Power Company For: (1) A Certificate Of Public Convenience And Necessity Authorizing The Transfer To The Company Of An Undivided Fifty Percent Interest In The Mitchell Generating Station And Associated Assets; (2) Approval Of The Assumption By Kentucky Power Company Of Certain Liabilities In Connection With The Transfer Of The Mitchell Generating Station; (3) Declaratory Rulings; Case No. 2012-00578 (4) Deferral Of Costs Incurred In Connection With The Company's Efforts To Meet Federal Clean Air Act And Related Requirements; (5) Approval Of The Renewable Energy Purchase Agreement For Biomass Energy Resources Between The Company And ecoPower Generation-Hazard LLC; And (6) For All Other Required Approvals And Relief

SUPPLEMENTAL TESTIMONY OF

RICHARD E. MUNCZINSKI

ON BEHALF OF KENTUCKY POWER COMPANY

1811

KIUC EXHIBIT __/

| 1 | | solution for generation service for retail customers of several of the Investor Owned |
|----|----|---|
| 2 | | Utilities (IOUs) in the state, including AEP Ohio. |
| 3 | Q. | HAVE ANY CUSTOMER GROUPS EXPRESSED CONCERN OVER THE RATE |
| 4 | | IMPACT FOR CUSTOMERS RELATED TO THIS TRANSITION TO MARKET |
| 5 | | BASED PRICING IN OHIO? |
| 6 | A. | Yes. The Ohio Consumers Council and the Ohio Energy Group recently filed testimony |
| 7 | | with the PUCO expressing concern with the impact on customer rates that could result |
| 8 | | from the energy auctions that AEP Ohio will hold to serve non-shopping customers |
| 9 | | (customers that have not selected an alternative supplier and will be served by AEP Ohio |
| 10 | | under a default service retail tariff) for the period from late 2013 through mid-2015. |
| 11 | | Their testimony goes on to use an estimated energy cost of over \$56/MWh before |
| 12 | | consideration of capacity costs. This compares to a five-year average cost for the |
| 13 | | Mitchell asset transfer of approximately \$60/MWh. In addition, several of Ohio's largest |
| 14 | | industrial customers have filed petitions to increase their discounts associated with |
| 15 | | special arrangement contracts due to a fear of market prices. |
| 16 | Q. | IF KENTUCKY POWER WERE TO LARGELY RELY ON THE MARKET TO |
| 17 | | MEET THE GENERATION NEEDS OF ITS CUSTOMERS, IS THIS THE SAME |
| 18 | | AS KENTUCKY BECOMING A DEREGULATED STATE? |
| 19 | A. | In many respects the result would look very much like a deregulated state from a |
| 20 | | customer perspective. The customer would experience all of the market volatility that |
| 21 | | customers in a deregulated state would see. |
| 22 | Q. | HAVE OTHER STATES MOVED TO DEREGULATE THEIR RETAIL |

23

ELECTRICKTY MARKETS?

KPSC Case No. 2013-00144 PSC First Set of Data Requests Dated May 10, 2013 Item No. 11 Page 1 of 1

Kentucky Power Company

REQUEST

Refer to page 7 of the Pauley Testimony, lines 12-19. Provide any economic studies or analyses that have been performed in connection with the ecoPower biomass generating facility by Kentucky Power, American Electric Power ("AEP"), any AEP subsidiaries or affiliates, by ecoPower.

RESPONSE

Neither Kentucky Power, American Electric Power ("AEP") or any AEP subsidiary or affiliate has performed any economic studies or analyses in connection with the ecoPower biomass generating facility.

WITNESS: Gregory G Pauley

KPSC Case No. 2013-00144
KIUC First Set of Data Requests
Dated May 10, 2013
Item No. 13
Page 1 of 1

Kentucky Power Company

REQUEST

Did Kentucky Power perform any studies in order to identify the least-cost means of providing energy and capacity to Kentucky Power. Please provide all reports, analyses, workpapers, and documentation of any type that was produced from conducting those studies. If no studies were performed, please explain why they were not performed. This information should be provided electronically with all formulas intact and no pasted in values.

RESPONSE

There were no studies performed.

Please see the Company's response to KIUC 1-11.

WITNESS: Gregory G Pauley

KPSC Case No. 2013-00144 KIUC First Set of Data Requests Dated May 10, 2013 Item No. 12 Page 1 of I

Kentucky Power Company

REQUEST

Refer to Mr. Pauley's Testimony, page 6 beginning on line 18.

- a. If the REPA is not the least cost alternative to supply the contracted capacity and energy; is it the least cost "renewable" capacity and energy?
- b. Did Kentucky Power conduct an RFP to determine the least cost "renewable" capacity and energy? If so, then please provide all reports, analyses, workpapers, and documentation of any type in support of your answer. If not, then please explain why it did not.

RESPONSE

a. & b. KPCo did not conduct an RFP to determine the least cost "renewable" capacity and energy. See the Company's response to KIUC 1-1 and KIUC 1-11.

WITNESS: Gregory G. Pauley/ Jay F. Godfrey

KPSC Case No. 2013-00144 KIUC First Set of Data Requests Dated May 10, 2013 Item No. 19 Page 1 of 1

Kentucky Power Company

REQUEST

Provide all studies and analysis demonstrating Kentucky Power's need for the energy and capacity supplied in the REPA. Please provide all reports, analyses, workpapers, and documentation of any type that was produced from conducting such studies or analysis. This information should be provided electronically with all formulas intact and no pasted in values.

RESPONSE

There are no studies or analysis. Please see the Company's response to KIUC 1-11.

WITNESS: Gregory G Pauley

KPCO Case No. 2013-0144 Commission Staff's Second Set of Data Requests Order Dated June 5, 2013 Item No. 1 Page 1 of 2

KENTUCKY POWER COMPANY

REQUEST

Refer to the Response to Items 6 and 7 of Commission Staff's First Information Request ("Staff's First Request"). In the Response to Item 6, Kentucky Power states that the Renewable Energy Power Agreement ("REPA") "would be a very small addition that only assists with the Company's total capacity and energy needs after the Company's base load is covered by the Mitchell transfer." In the Response to Item 7, Kentucky Power states that when approached by ecoPower in 201 1 concerning the REPA, Kentucky Power was evaluating options for the disposition of its Big Sandy generating station and that it eventually entered into the REPA to provide flexibility in meeting future load growth.

- a. Identify with specificity when the REPA would enable Kentucky Power to meet its future load requirements.
- b. Would the capacity and energy associated with the REPA still be needed if Kentucky Power were to ultimately determine that repowering Big Sandy 1 would be the most cost-effective disposition for that generating unit?
- c. The Response to Item 7 of Staff's First Request also mentions that Kentucky Power evaluated the financial and accounting impacts of the REPA. Provide any and all documentation related to the financial and accounting analysis performed by, or on behalf of, Kentucky Power, including any and all supporting workpapers in electronic format.

RESPONSE

- a. The capacity and energy from the project can be used to meet the Company's future load requirements once it becomes operational.
- b. Assuming the Mitchell transfer is approved, and further assuming Big Sandy Unit 1 were to be retired and replaced with an alternative, more cost-effective supply source of roughly equivalent capacity (and energy), the REPA capacity and energy would not be required.

5 % 6

KPCO Case No. 2013-0144 Commission Staff's Second Set of Data Requests Order Dated June 5, 2013 Item No. 1 Page 2 of 2

c. The evaluation of the REPA's accounting considerations was performed through internal reviews and discussions. The financial analysis was the calculation of the rate impact of the REPA.

As part of its accounting review of the REPA, the Company determined that certain language in the agreement would require that the Company to treat the REPA as a capital lease. Through subsequent negotiations the contract language was amended to delete the language in question.

Following the parties' agreement on a final contract document, there was a subsequent accounting review and report to management. Please see Attachment 1 of this response for the accounting analysis of the REPA.

The formal documentation will not be completed until the REPA is approved by the KPSC.

WITNESS: Ranie K Wohnhas

Kentucky Public Service Commission

Case No.: 2013-00114

In the matter of: The Application of Kentucky Power Company For Approvals

Related to Renewable Energy Purchase Agreement.

Annual Average Excess Cost Per Residential Consumer Because of Eco Power RPA

15,605 Kwh x \$0.913 = \$1,425 average annual cost per residential consumer

 $$1,425 \times 7.02\%^{1} = 100.03

average annual excess cost

 $$1,425 \times 7.84\%^2 = 111.72

average annual excess cost including additional equity

¹ Exhibit RKW-1

² Kollen Direct Testimony at p. 16

| Kentucky Power Company SALES OF ELECTRICITY BY RATE SCHEDULES 1. Report below for each rate schedule in effect during the year the MWH of electricity sold, revenue, average number of customer, average Kwh per customer, and average revenue per Kwh, excluding date for Sales for Resale which is reported on Pages 310-311. 2. Provide a subheading and total for each prescribed operating revenue account in the sequence followed in "Electric Operating Revenues," Page 300-301. If the sales under any rate schedule are classified in more than one revenue account, List the rate schedule and sales data under each applicable revenue account subheading. 3. Where the same customers are served under more than one rate schedule in the same revenue account classification (such as a general residential schedule and an off peak water heating schedule), the entries in column (d) for the special schedule should denote the duplication in number of reported customers. 4. The average number of customers should be the number of bills rendered during the year divided by the number of billing periods during the year (12 if all billings are made monthly). 5. For any rate schedule having a fuel adjustment clause state in a footnote the estimated additional revenue billed pursuant thereto. 6. Report amount of unbilled revenue as of end of year for each applicable revenue account subheading. | Name of Respondent Year/Period of Report Science | | | | | | |
|--|--|--|---|--|---|---|--|
| Performance | Z (Ken | 0130412-8002 FERC PDF(Utucky Power Company | | | (Mo, Da, Yr) | | · |
| 1. Report below for each rule schedule in effect during the year the MNN-16 plecificity soid, revenue, sorange number of customer, severage Kish per customer, and severage revenue per Kin, excluding dating for each prescribed operating revenue account in the sequence followed in Electric Operating Revenues, Page 300-311. If the sale under any rate schedule are disabilitied in more than one revenue account, little the rate schedule and sales data under each applicable revenue account subhaeding. 3. Where the same under war are selened under more than one rate schedule in the sales data under any care selened are disabilitied in more than one rate schedule should develope the duplication in number of reported account, little schedule should develope the duplication in number of reported account. (In the special schedule should develope the duplication in number of reported the schedule should develope the duplication in number of reported the schedule should develope the schedule should schedule should develope the schedule schedule schedule schedule schedule should develope the schedule sched | | | | | | | |
| customers, and average revenue per Kwit, excluding date for Sales for Resale which is reported on Pages 310-311. 2. Provide a subdeading and bold for each prescribed operating revenue account, list the rale action Operating Revenues. Page 300-301. If the sales under any rate schedule and classified in more than one revenue account, list the rale activation and sales data under each applicable revenue account schedule and dealer more than one rate schedule in the same revenue account classification (such as a gameral residential control of the special schedule should detecte the duplication in number of reported controllers. Page 310-310 (1996) (| | | | | | | |
| 4. The everage number of clustomers should be the number of billing periods during the year divided by the number of billing periods during the year (12 if albillings are node monthly). 5. For any rate schoolube having a fuel adjustment clause state in a footnote the estimated additional revenue billed pursuant thereto. 6. Report amount of unbilled revenue as of end of year for each applicable revenue account behaving. No. (a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c | custo 2. P 300- appli 3. W sche | omer, and average revenue per Kwh, exprovide a subheading and total for each 301. If the sales under any rate scheducable revenue account subheading. Where the same customers are served udule and an off peak water heating schedule and an off peak water heating schedule. | cluding date for Sales prescribed operating re le are classified in mon inder more than one ra | for Resale which is re evenue account in the re than one revenue a te schedule in the sar | eported on Pages 310-c sequence followed in the account, List the rate so the revenue account clar | 311. 'Electric Operating Revited and sales data assification (such as a | venues," Page under each general residential |
| ria bilbilings are made monthly). 5. For any rate schedule having a fuel adjustment clause state in a footnote the estimated additional revenue billed pursuant thereto. 6. Report amount of unbilled revenue as of end of year for each applicable revenue account subheading. No. (a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c | | | | | | | |
| 5. For any rate schedule having a fuel adjustment clause state in a footnote the estimated additional revenue account of unbilled versue as of end of year for each applicable revenue account subheading. Line Number aird Inte of Rela schedule Number of ceach applicable revenue account subheading. 1. 440 Residential Sates 1. 440 Residential Sates 2. 197,557 200,713,678 140,824 15,805 0,0913 3. Res Service Load Management 2,515 200,766 100 25,150 0,0738 4. Residential Sarvice TOD 43 3,715 3 14,333 0,0864 5. Small General Service D. 45 1,817 2 2,7500 0,1214 6. All Outdoor Lighting 26,797 5,010,776 1,187 2 1,590 0,10214 6. All Outdoor Lighting 22,259.27 205,798,765 140,929 15,800 0,0913 7. Subtotal Billed 2,226,927 205,798,765 140,929 15,800 0,0918 7. Total Residential Sates 7. Total Residential 2,240,727 205,798,765 140,929 15,800 0,0918 7. Total Residential 3,240,727 205,798,765 140,929 15,800 0,0918 7. Total Residential 3,240,727 205,798,765 140,929 15,800 0,0918 7. Total Content Service 1,288,23 15,790,067 22,292 5,779 0,1226 7. Total Content Service 549,481 48,800,300 711 772,828 0,085 7. Total Content Service 549,481 48,800,300 711 772,828 0,085 7. Large General Service 70 4,015 36,900 710 710,900,900 710 710,900,900 710 710,900,900 710 710,900,900 710 710,900,900 710 710,900,900 710 710,900,900 710 710,900,900 710 710,900,900 710 710 710,900,900 710 710 710,900,900 710 710 710,900,900 710 710 710,900,900 | | | d be the number of bill | s rendered during the | year divided by the nu | mber of billing periods | during the year (12 |
| 6. Report amount of unbilled revenue as of end of year for each applicable revenue account subhaeding. Inc. Number and Title of Rate schildule MVh Stid Revenue Average Number Revenue | | 5, | stment clause state in a | a footnote the estimat | ed additional revenue l | nilled nursuant thereto | |
| No. (a) (b) (c) of Cisignners Per Cyctomer (WW) Sold" (140 Residential Sales 2 Residential Service 1 2,197,557 200,713,978 140,824 15,605 0.0913 3 Res Service Load Management 2,515 200,766 100 25,150 0.0798 4 Residential Service TOD 43 3,715 3 14,333 0.0864 5 Small General Service 1 15 1,117 2 7,500 0.1211 5 1,117 2 7,500 0.1226 5 1,117 2 7,500 0.1226 5 1,117 2 7,500 0.1226 5 1,117 2 7,500 0.1226 5 1,117 2 7,500 0.1226 5 1,117 2 7,500 0.1226 5 1,117 2 7,500 0.1226 5 1,117 2 7, | | | | | | - | Ì |
| 1 440 Residential Sales | Line | Number and Title of Rate schedule | MWh Sold | Revenue | | | Revenue Per |
| Residential Service | No. | (a) | (b) | (c) | of Customers (d) | | |
| Res Service Load Management 2,515 200,766 100 25,150 0,0788 | 1 | 440 Residential Sales | | | | | |
| 4 Residential Service TOD | 2 | Residential Service | 2,197,557 | 200,713,978 | 140,824 | 15,605 | 0.0913 |
| S. Small General Service | 3 | Res Service Load Management | 2,515 | 200,766 | 100 | 25,150 | 0.0798 |
| 6 All Outdoor Lighting 26,797 5,010,876 0,1870 7, Subtotal Billied 2,225,927 205,931,152 140,929 15,900 0,0925 0,0 | 4 | Residential Service TOD | 43 | 3,715 | 3 | 14,333 | 0.0864 |
| 7 Subtotal Billed 2,226,927 205,931,152 140,929 15,802 0,0925 8 Unbilled Revenue 13,800 1-132,247 | 5 | Small General Service | 15 | 1,817 | 2 | 7,500 | 0.1211 |
| Substitute Revenue | 6 | All Outdoor Lighting | 26,797 | 5,010,876 | | | 0.1870 |
| Substitute Revenue | 7 | Subtotal Billed | 2,226,927 | 205,931,152 | 140,929 | 15,802 | 0.0925 |
| 10 11 442 Commercial Sales 15,790,067 22,292 5,779 0,1226 12 Small General Service 128,823 15,790,067 22,292 5,779 0,1226 13 Medium General Service 473,288 48,345,041 6,942 68,177 0,1021 14 Medium General Service 549,481 48,890,306 711 772,828 0,0898 15 Large General Service 549,481 48,890,306 711 772,828 0,0898 16 Quantity Power 171,687 10,364,349 21 8,175,571 0,0604 17 All Outdoor Lighting 15,320 2,250,797 0,1469 18 Mark West HC 4,415 367,687 13 339,615 0,0833 19 Estimated Revenue 495 36,596 1 495,000 0,0739 19 10,1000 10, | 8 | Unbilled Revenue | 13,800 | -132,247 | *************************************** | | -0.0096 |
| 11 442 Commercial Sales 128,823 15,790,667 22,292 5,779 0.1226 12 Small General Service 128,823 15,790,667 22,292 5,779 0.1226 13 Medium General Service 473,288 48,346,041 6,942 68,177 0.1021 14 Medium General Service 549,481 48,690,306 711 772,828 0.0886 15 Large General Service 549,481 48,690,306 711 772,828 0.0886 16 Quantity Power 171,687 10,364,349 21 8,175,571 0.0604 17 All Outdoor Lighting 15,320 2,250,787 0.1469 18 Mark West HC 4,415 367,887 13 339,615 0.0833 19 Estimated Revenue 495 36,596 1 495,000 0.0738 19 Stimated Revenue 4,495 36,596 1 495,000 0.0733 20 Subtotal Billed 1,347,524 126,206,308 30,059 44,829 0.0937 21 Unbilled Revenue 2,129 489,092 -0,2297 22 Total Commercial 1,349,653 125,717,216 30,059 44,900 0.0931 23 24 422 Industrial Sales 24 2,842,209 346 81,283 0.1111 27 Large General Service 5,192 598,435 777 6,682 0.1153 28 Quantity Power 571,034 39,376,033 63 9,064,032 0.0896 29 Commercial & Industrial TOD 2,172,055 107,395,388 16 135,753,313 0.0494 30 All Outdoor Lighting 928 123,674 0.333 31 Estimated Revenue 133,820 5,273,380 0.0394 32 Subtotal Billed 3,069,830 69,169,564 1,368 2,243,862 0.0551 30 Unbilled Revenue 9,878 -1,194,610 0.1209 34 Total Industrial 3,059,752 167,974,954 1,368 2,243,862 0.0551 30 Total Unbilled Revenue 9,878 -1,194,610 0.000000000000000000000000000000000 | 9 | Total Residential | 2,240,727 | 205,798,905 | 140,929 | 15,900 | 0.0918 |
| 12 Small General Service 128,823 15,790,067 22,292 5,779 0.1226 13 Medium General Service | 10 | | | | | | |
| 13 Medium General Service 473,288 48,345,041 6,942 68,177 0.1021 14 Medium General Service TOD 4,015 360,465 79 50,823 0.0988 15 Large General Service 549,481 48,890,306 711 772,828 0.0886 16 Quantity Power 171,687 10,384,349 21 8,175,571 0.0604 17 All Outdoor Lighting 15,320 2,250,797 | 11 | 442 Commercial Sales | | | | | |
| Medium General Service TOD | 12 | Small General Service | 128,823 | 15,790,067 | 22,292 | 5,779 | 0.1226 |
| 14 Medium General Service TOD 4,015 360,465 79 50,823 0.0898 15 Large General Service 549,481 46,690,306 711 772,828 0.0886 16 Quantity Power 171,687 10,364,349 21 8,175,571 0.0604 17 All Outdoor Lighting 15,320 2,250,797 0.1469 18 Mark West HC 4,415 367,687 13 339,615 0.0833 19 Estimated Revenue 495 36,596 1 495,000 0.0738 20 Subtotal Billed 1,347,524 126,206,308 30,059 44,829 0.0937 21 Unbilled Revenue 2,129 489,092 48,909 0.0931 22 Total Commercial 1,349,653 125,717,216 30,059 44,900 0.0931 23 24 442 Industrial Sales 5 598,435 777 6,882 0.1153 25 Small General Service 5,192 598,435 777 6,882 0.1153 26 Medium General Service 158,479 13,588,445 166 | 13 | Medium General Service | | | | | |
| 15 Large General Service | 14 | Medium General Service TOD | | | | · | |
| 16 Quantity Power 177,887 10,364,349 21 8,175,571 0.0604 17 All Outdoor Lighting 15,320 2,250,787 0.1469 18 Mark West HC 4,415 367,687 13 339,615 0.0833 19 Estimated Revenue 495 36,586 1 495,000 0.0739 20 Subtotal Billed 1,347,524 126,206,308 30,059 44,829 0.0937 21 Unbilled Revenue 2,129 489,092 -0.2297 2 Total Commercial 1,349,653 125,717,216 30,059 44,900 0.0931 23 24 42 Industrial Sales | 15 | Large General Service | | | | | |
| 17 All Outdoor Lighting 15,320 2,250,797 1 3,39,615 0,1469 18 Mark West HC 4,415 367,687 13 339,615 0,0833 19 Estimated Revenue 495 36,596 1 495,000 0,0739 20 Subtotal Billed 11,347,524 126,206,308 30,059 44,829 0,0937 21 Unbilled Revenue 2,129 489,092 | | | | | | | |
| 18 Mark West HC | | | | | | 0,170,071 | |
| Sestimated Revenue | | | | | 13 | 339 615 | |
| 20 Subtotal Billed 1,347,524 126,206,308 30,059 44,829 0.0937 21 Unbilled Revenue 2,129 -489,092 -0.2297 22 Total Commercial 1,349,653 125,717,216 30,059 44,900 0.0931 23 | | | | | | | |
| 21 Unbilled Revenue 2,129 | | <u></u> | | | | | |
| 22 Total Commercial 1,349,653 125,717,216 30,059 44,900 0.0931 23 24 442 Industrial Sales 25 Small General Service 5,192 598,435 777 6,682 0.1153 26 Medium General Service 28,124 2,842,209 346 81,283 0.1011 27 Large General Service 158,479 13,558,445 166 954,693 0.0856 28 Quantity Power 571,034 39,378,033 63 9,064,032 0.0690 29 Commercial & Industrial TOD 2,172,053 107,395,388 16 135,753,313 0.0494 30 All Outdoor Lighting 928 123,674 0.1333 31 Estimated Revenue 133,820 5,273,380 0.0334 32 Subtotal Billed 3,069,630 169,564 1,368 2,243,882 0.0551 33 Unitled Revenue -9,878 -1,194,610 0.1209 34 Total Industrial 3,059,752 167,974,954 1,368 2,236,661 0.0549 35 36 39 39 39 39 39 39 39 | | | | | 30,000 | 47,023 | |
| 23 24 442 Industrial Sales 25 598,435 777 6,682 0.1153 26 Medium General Service 28,124 2,842,209 346 81,283 0.1011 27 Large General Service 158,479 13,558,445 166 954,693 0.0856 28 Quantity Power 571,034 39,378,033 63 9,064,032 0.0690 29 Commercial & Industrial TOD 2,172,053 107,395,388 16 135,753,313 0.0494 30 All Outdoor Lighting 928 123,674 0.1333 31 Estimated Revenue 133,820 5,273,330 0.0394 32 Subtotal Billed 3,069,630 169,169,564 1,368 2,243,882 0.0551 33 Unbilled Revenue -9,878 -1,194,610 0.1209 34 Total Industrial 3,059,752 167,974,954 1,368 2,236,661 0.0549 36 37 38 39 40 40 40 40 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0.0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 -0.3004 41 TOTAL Billed 10,0514 10,0514 10,0514 10,0514 10,0514 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0.0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 43 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 44 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 45 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 46 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 0 -0.3004 47 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 48 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 0 -0.3004 49 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 0 -0.3004 40 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 0 0 0 0 41 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 0 0 0 0 0 41 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 0 0 0 0 0 0 | | | | | 30.050 | 44 900 | |
| 24 442 Industrial Sales 25 Small General Service 5,192 598,435 777 6,682 0.1153 26 Medium General Service 28,124 2,842,209 346 81,283 0.1011 27 Large General Service 158,479 13,558,445 166 954,693 0.0856 28 Quantity Power 571,034 39,378,033 63 9,064,032 0.0690 29 Commercial & Industrial TOD 2,172,053 107,395,388 16 135,753,313 0.0494 30 All Outdoor Lighting 928 123,674 1 135,753,313 0.0494 31 Estimated Revenue 133,820 5,273,380 0 0.0394 32 Subtotal Billed 3,069,630 169,169,564 1,368 2,243,882 0.0551 33 Unbilled Revenue -9,878 -1,194,610 0 0.1209 34 Total Industrial 3,059,752 167,974,954 1,368 2,236,661 0.0549 36 37 38 39 39 39 39 39 | | | 1,010,000 | 120,717,210 | 00,000 | 111,000 | 0.0001 |
| Small General Service 5,192 598,435 777 6,682 0.1153 | | | | | | | |
| 26 Medium General Service 28,124 2,842,209 346 81,283 0,1011 27 Large General Service 158,479 13,558,445 166 954,693 0,0856 28 Quantity Power 571,034 39,378,033 63 9,064,032 0,0690 29 Commercial & Industrial TOD 2,172,053 107,395,388 16 135,753,313 0,0494 30 All Outdoor Lighting 928 123,674 0,1333 31 Estimated Revenue 133,820 5,273,380 0,0394 32 Subtotal Billed 3,069,630 169,169,564 1,368 2,243,882 0,0551 33 Unbilled Revenue -9,878 -1,194,610 0,1209 34 Total Industrial 3,059,752 167,974,954 1,368 2,236,661 0,0549 36 37 38 39 40 40 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0,0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 | | | 5 192 | 598 435 | 777 | 6 682 | n 1153 |
| 27 Large General Service 158,479 13,558,445 166 954,693 0.0856 28 Quantity Power 571,034 39,378,033 63 9,064,032 0.0690 29 Commercial & Industrial TOD 2,172,053 107,395,388 16 135,753,313 0.0494 30 All Outdoor Lighting 928 123,674 0.1333 31 Estimated Revenue 133,820 5,273,380 0.0394 32 Subtotal Billed 3,069,630 169,169,564 1,368 2,243,882 0.0551 33 Unbilled Revenue -9,878 -1,194,610 0.1209 34 Total Industrial 3,059,752 167,974,954 1,368 2,236,661 0.0549 35 36 37 38 39 40 41 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0.0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 0 40 | | | ····· | | | | |
| 28 Quantity Power 571,034 39,378,033 63 9,064,032 0.0690 29 Commercial & Industrial TOD 2,172,053 107,395,388 16 135,753,313 0.0494 30 All Outdoor Lighting 928 123,674 0.1333 31 Estimated Revenue 133,820 5,273,380 0.0394 32 Subtotal Billed 3,069,630 169,169,564 1,368 2,243,882 0.0551 33 Unbilled Revenue -9,878 -1,194,610 0.1209 34 Total Industrial 3,059,752 167,974,954 1,368 2,236,661 0.0549 35 36 37 38 39 40 40 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0.0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 | | | | | | | |
| 29 Commercial & Industrial TOD 2,172,053 107,395,388 16 135,753,313 0.0494 30 All Outdoor Lighting 928 123,674 0.1333 31 Estimated Revenue 133,820 5,273,380 0.0394 32 Subtotal Billed 3,069,630 169,169,564 1,368 2,243,882 0.0551 33 Unbilled Revenue -9,878 -1,194,610 0.1209 34 Total Industrial 3,059,752 167,974,954 1,368 2,236,661 0.0549 35 36 37 38 39 40 40 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0.0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 | | | | | | | |
| 30 All Outdoor Lighting 928 123,674 0.1333 31 Estimated Revenue 133,820 5,273,380 0.0394 32 Subtotal Billed 3,069,630 169,169,564 1,368 2,243,882 0.0551 33 Unbilled Revenue -9,878 -1,194,610 0.1209 34 Total Industrial 3,059,752 167,974,954 1,368 2,236,661 0.0549 35 36 37 38 39 40 40 40 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0.0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 -0.3004 | | | | | | | |
| 31 Estimated Revenue 133,820 5,273,380 0.0394 32 Subtotal Billed 3,069,630 169,169,564 1,368 2,243,882 0.0551 33 Unbilled Revenue -9,878 -1,194,610 0.1209 34 Total Industrial 3,059,752 167,974,954 1,368 2,236,661 0.0549 35 36 37 38 39 40 40 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0.0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 | | | | <u> </u> | 10 | 100,700,010 | |
| 32 Subtotal Billed 3,069,630 169,169,564 1,368 2,243,882 0.0551 33 Unbilled Revenue -9,878 -1,194,610 0.1209 34 Total Industrial 3,059,752 167,974,954 1,368 2,236,661 0.0549 35 36 37 38 39 40 40 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0.0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 | | | | | | | |
| 33 Unbilled Revenue | | | | | 1 260 | 2 242 800 | |
| 34 Total Industrial 3,059,752 167,974,954 1,368 2,236,661 0.0549 35 36 37 38 39 39 39 39 39 39 39 39 39 39 39 39 30 <td></td> <td></td> <td></td> <td></td> <td>1,300</td> <td>2,243,002</td> <td></td> | | | | | 1,300 | 2,243,002 | |
| 35 36 37 38 39 40 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0.0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 | | | | | 1 369 | 2 226 661 | |
| 36 37 38 39 40 40 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0.0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 | | Total muusinal | 5,005,702 | 107,574,554 | 1,300 | 2,230,001 | 0,0343 |
| 37 38 39 40 40 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0.0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 | | | | | | | |
| 38 | | | | | ··· | | |
| 39 40 | | | | | | | |
| 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0.0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 0 -0.3004 | | | | | | | |
| 41 TOTAL Billed 6,654,605 502,854,370 172,757 38,520 0.0756 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 -0.3004 | | | | | | | |
| 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 -0.3004 | 40 | | | | | | |
| 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 -0.3004 | | | | | | | |
| 42 Total Unbilled Rev.(See Instr. 6) 6,051 -1,817,619 0 0 -0.3004 | 41 | TOTAL Billed | 8 851 805 | 500 854 970 | 170 757 | 20 520 | 0.0756 |
| | | | | | 1/2,/3/ | 30,320 N | |
| | | | | | 172.757 | 38.555 | |

38,555

| Najn | e of Respondent | This Report | tls: /2002 | Date of Repo | rt Year/Pe | riod of Report |
|---------------|--|--|---|---|-------------------------------|-------------------------|
| Ken | e of Respondent 0130412-8002 FERC PDF (U tucky Power Company | (2) A | n⊬Orrgma⊬ > Resubmission | (Mo, Da, Yr) 04/11/2013 | End of | 2012/Q4 |
| | | | ECTRICITY BY RA | | | |
| custo 2. P | eport below for each rate schedule in eformer, and average revenue per Kwh, exprovide a subheading and total for each page 1. If the sales under any rate schedu | fect during the year the cluding date for Sales f prescribed operating rev | MWH of electricity s or Resale which is revenue account in the | sold, revenue, average reported on Pages 310-3 sequence followed in " | 11. Electric Operating Rev | renues," Page |
| | cable revenue account subheading. | | | | | |
| | here the same customers are served u dule and an off peak water heating sche | | | | | |
| 1 | omers. | sadio, the office in co. | idi.iii (d) for the open | , a. 00, 100 a. 0 0, 100 a. 0 0, 1 | ioto trio daprioation in | |
| | he average number of customers should | d be the number of bills | rendered during the | year divided by the nur | mber of billing periods | during the year (12 |
| | billings are made monthly). or any rate schedule having a fuel adjus | tmont clause state in a | footnote the estimat | ed additional revenue h | illed nursuant thereto | |
| | eport amount of unbilled revenue as of | | | | illed parsuant trieseto. | |
| Line | Number and Title of Rate schedule | MWh Sold | Revenue | Average Number | KWh of Sales | Revenue Per KWh Sold |
| No. | (a) | (b) | (c) | of Customers (d) | Per Customer (e) | (f) |
| 1 | 444 Public Street Lighting | | | | | |
| 2 | Small General Service | 723 | 123,097 | 334 | 2,165 | 0.1703 |
| 3 | Medium General Service | 1,208 | 118,506 | 11 | 109,818 | 0.0981 |
| 4 | Street Lighting | 8,487 | 1,283,492 | 56 | 151,554 | 0.1512 |
| 5 | All Outdoor Lighting | 106 | 22,249 | | | 0.2099 |
| | Subtotal Billed | 10,524 | 1,547,344 | 401 | 26,244 | 0.1470 |
| | Unbilled Revenue | | -1,670 | | | |
| | Total Public Street Lighting | 10,524 | 1,545,674 | 401 | 26,244 | 0.1469 |
| 9 | | | | | | |
| | Instruction 5. (See Footnote) | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| | | | | | | |
| 16 | | | | | | |
| 18 | | | | | | |
| 19 | <u> </u> | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | <u> </u> | | | | | |
| 23 | | | | | | |
| 24 | <u></u> | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |
| 31 | | | | | | |
| 32 | | | | | | |
| 33 | | | | | | |
| 34 | | | | | | |
| 35 | | | | | | |
| 36 | | | | | | |
| 37 | | | | | | |
| 38 | | | | | | |
| 39 |) | | | | | |
| 40 |) | | | | | |
| | | | | | | |
| | | | | | | |
| 4 | TOTAL Billed | 6,654,605 | 502,854,370 | 172,757 | 38,520 | 0.0756 |
| 42 | | 6,051 | -1,817,619 | | 30,320 | -0.3004 |
| 43 | | 6,660,656 | | | 38,555 | |

Kentucky Power Company Estimated Year 1 Impact on Cost of Service ecoPower REPA

| <u>Line</u> | <u>Description</u> | <u>Amount</u> |
|-------------|--|---------------|
| 1 | Estimated Purchase Power Costs (\$000) | 50,661 |
| 2 | Less: | |
| 3 | Avoided Fuel Costs (\$000) | 12,780 |
| 4 | Avoided Capacity Costs (\$000) | 2,730 |
| 5 | Incremental Rev. Req. (\$000)(L1 - L3 - L4) | 35,151 |
| 6 | KPCo Juris. Sales Revenue - 2012 (\$000) | 501,037 |
| 7 | Percent Increase (L5 / L6) | 7.02% |

| 1 | | utility that must litigate time and again its right to recover these costs." The |
|----|----|--|
| 2 | | Company replicated the entirety of the Standard & Poor's article as Exhibit RKW-2 |
| 3 | | attached to Mr. Wohnhas' Direct Testimony. |
| 4 | | |
| 5 | Q. | Is the Company able to cite any evidence that Standard & Poor's would use or |
| 6 | | has ever used a risk factor of less than 25% where a regulator has established a |
| 7 | | power cost adjustment mechanism that recovers all prudent PPA costs? |
| 8 | A. | No. The Company was asked this question in KIUC 2-16 and could cite no instances |
| 9 | | where Standard & Poor's would or has ever used a risk factor of less than 25% in |
| 10 | | those circumstances. The Company further stated that it "understands that most |
| 11 | | regulated PPAs are assigned a 25% risk factor." I have attached a copy of this |
| 12 | | response as my Exhibit(LK-10). |
| 13 | | |
| 14 | Q. | What is the effect on the Company's base and environmental surcharge revenue |
| 15 | | requirements of the REPA debt equivalent and the additional common equity |
| 16 | | necessary to maintain its capital structure for credit ratings purposes? |
| 17 | A. | The effect is an increase in the base and environmental surcharge revenue |
| 18 | | requirements of \$4.133 million. I multiplied the Company's quantification of the |
| 19 | | additional equity based on a 25% risk factor, which I obtained from the confidential |
| 20 | | attachment provided in response to KIUC 1-38, times the excess of the Company's |
| | | |

grossed-up return on equity over the grossed-up weighted average cost of the debt displaced (10.5% divided by 0.6047 less 6.48% divided by 0.9958)⁵

This results in a combined increase of \$39.284 million, or 7.84% on total revenues.

A.

Q. Should the Commission apply a strict scrutiny test when assessing the Company's request to enter into this REPA and recover the costs thereunder?

Yes. A strict scrutiny test should be applied because of the special regulatory treatment awarded to biomass power plants by SB 46. Under this new law, once a biomass power plant is approved for recovery from rate payers, the Commission can never revisit that decision. The prohibition against subsequent Commission review would appear to apply even if it later turned out that the contract was procured by fraud, if there was a change in the law, if lower cost resources were available, or for any other significant reason which we cannot envision now. I am aware of no other contract or power plant resource which receives such favorable treatment. I cannot think of a rational basis to treat biomass power plants differently from other types of renewable resources, such as wind, solar or landfill gas. SB 46 gives the developers of biomass power plants an undue advantage, which comes at the expense of

⁵ The return on equity and the gross-up factors were obtained from the record in Case No. 2009-00459, the Company's most recent base rate case proceeding. The weighted average cost of debt was obtained from the confidential attachment provided in response to KIUC 1-38.

KIUC EXHIBIT 4 (CONFIDENTIAL)

Maintained on the Confidential Materials DVD

Or

In the Confidential File Materials at PSC

KIUC EXHIBIT 5 (CONFIDENTIAL)

Maintained on the Confidential Materials DVD

Or

In the Confidential File Materials at PSC

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of Indiana)
Michigan Power Company for approval)
pursuant to Sec. 6j(13)(b) of 1982 PA 304)
of capacity charges in excess of six months)
associated with a power purchase agreement)
with Headwaters Wind Farm, LLC.

Case No. U-17375

APPLICATION

Indiana Michigan Power Company (I&M or Company) applies to the Michigan Public Service Commission (MPSC or Commission) for an order, pursuant to MCL 460.6j(13)(b) and other applicable law, approving a long-term renewable wind energy power purchase agreement (REPA) with Headwaters Wind Farm, LLC (Headwaters). In support of this application, I&M represents the following:

- 1. I&M is a corporation organized and existing under the laws of the State of Indiana with its principal offices located at One Summit Square in the City of Fort Wayne, Indiana. I&M has corporate power and authority to engage in, among other things, generating, transmitting, distributing, and selling electric energy within the State of Michigan and within the State of Indiana.
- 2. I&M's electric system is a completely integrated and interconnected entity and is operated as a single utility. I&M's service area is located in southwestern Michigan and northern and eastern Indiana. I&M provides electric service to approximately 129,000 retail electric customers in the State of Michigan. I&M's service area in Michigan consists of customers in the counties of Allegan, Berrien, Cass, Kalamazoo, St. Joseph, and Van Buren.

- 3. I&M's electric business in the State of Michigan is subject to the jurisdiction of the Commission pursuant to 1909 PA 106, as amended, MCL 460.551 et seq; 1909 PA 300, as amended, MCL 462.2 et seq.; 1919 PA 419, as amended, MCL 460.51 et seq.; and 1939 PA 3, as amended, including the amendments set forth in 1982 Public Act 304, MCL 460.1 et seq.
- 4. In 2008, Michigan enacted the Clean, Renewable, and Efficient Energy Act, (Public Act 295), MCL 460.1001 through 460.1195. Among other things, Act 295 established programs for use of renewable energy resources as part of a retail electric utility's supply portfolio. In particular, the one of the purposes of Act 295 is to promote the development of renewable energy which will diversify the resources used to meet the energy needs of consumers in the state, provide greater energy security, encourage private investment in renewable energy and provide improved air quality and other benefits to energy consumers in the state. MCL 460.1001,
- 5. On February 25, 2013, AEPSC, as agent for I&M, issued an RFP for 200 MW of Wind Energy from sources located in either Indiana or Michigan. Parties qualifying to submit complete proposals into the RFP process were notified by March 15, 2013; and final proposals were submitted by April 8, 2013. The product sought by the RFP was between 200 MW (nameplate) of renewable wind generation to fulfill a portion of AEP's energy and capacity requirements for I&M. Headwaters was selected after proposals were received in response to I&M's RFP. On June 5, 2013, I&M executed a REPA with Headwaters. As I&M evaluated potential renewable strategies, timing was a key factor. The federal subsidy (Section 45 Production Tax

- Credit (PTC)) for wind resources, set to expire December 2013, can provide a net benefit to I&M and its customers through a lower REPA rate. I&M viewed it beneficial to issue the RFP in February 2013 and complete the evaluation and contracting so that projects could qualify for the PTC.
- 6. I&M seeks approval of the Commission under MCL 460.6j(13) for purposes of cost recovery in Power Supply Cost Recovery (PSCR) proceedings. Although the Headwaters REPA provides renewable energy credits to I&M, I&M is not seeking, at this time, Commission approval for the Headwaters REPA for purposes of Act 295ⁱ.
- 7. The Headwaters REPA and resulting costs are reasonable and prudent and consistent with Act 295. Increasing the amount of renewable energy in its portfolio will provide a measure of protection from potentially costly future emissions regulations, satisfy environmental interests, and reduce dependence on fossil fuels. A renewable resource purchase will improve fuel diversity, lessen exposure to fuel price volatility and represent a valuable safeguard to utility ratepayers. Wind generation technology has advanced and wind mapping has also improved to identify the best locations for the siting of wind resources. These factors make wind energy more economic, especially when viewed over the long term. I&M also committed to add new wind resources to the system as part of the Third Joint Modification of the Consent Decree effective May 14, 2013. Development of wind energy in general offers environmental benefits, diversity in energy supply resources and advancement of wind energy technology and experience.
- 8. The Headwaters REPA furthers I&M's efforts to meet these renewable goals

in its electric generation resource portfolio. The REPA is the product of a thorough RFP process. The power supply arrangements set forth in the Headwaters REPA represent reasonable and prudent power supply arrangements based upon the wide circulation given the RFP, the responses received, I&M's knowledge of the marketplace, and the terms of the power purchase agreement that has been negotiated. I&M seeks Commission approval of the Wind REPA. These matters are further discussed in the prefiled testimony and exhibits filed with this Application and are incorporated by reference.

- 9. On September 27, 1983, the Commission approved I&M's requested PSCR Clause, with certain modifications, and rescinded I&M's previously approved fuel and purchased and interchange power clauses. By its Order in Case No. U-9912, the Commission modified I&M's PSCR Clause to reflect separate PSCR factors for the St. Joseph and Three Rivers Rate Areas. By its Order in Case No. U-16180, the Commission modified I&M's PSCR Clause to reflect a single rate area with a unified PSCR Clause.
- 10. Subsection 6j(13)(b) of Act 304 requires Commission approval prior to PSCR reconciliation of capacity charges associated with power purchased for periods in excess of six months. The expected summer peaking capacity attributable to the Headwaters REPA is a reasonable and necessary resource in providing capacity, diversity of supply and maintaining adequate reserve margins for I&M. The Headwaters REPA has been modeled by I&M giving appropriate consideration to alternatives such as conservation, demand side management, customer specific contracts, cogeneration and

- the purchase of power. The Heawaters REPA contains reasonable pricing and terms that are economic over the long-term.
- 11. The REPA with Headwaters provides for the purchase of electric energy and capacity for a 20-year term. The Wind REPA has associated capacity charges for a period of time exceeding six months and energy charges.
- 12. I&M seeks Commission approval of the reasonableness and prudence of I&M's purchasing decision and authority for the inclusion of the cost associated with the Wind REPA in I&M's PSCR Clause. The reasonableness and prudence of I&M's decisions and the resulting costs is supported by the testimony and exhibit flied with and incorporated in this Application by reference.
- 13. Through a separate motion filed in this case, I&M is requesting confidential treatment of the Headwaters REPA pricing terms, since that information is considered confidential and commercially sensitive business information.

 I&M is seeking similar approval and confidential treatment for the Headwaters REPA in Indiana and protection of such information will be lost if confidential treatment is not afforded in both states.
- 14. As more fully explained in the pre-filed testimony, I&M seeks expedited review and approval in both Michigan and Indiana. I&M has acted with all reasonable dispatch to complete the RFP process and to file this application so as to preserve the benefits of a valuable opportunity to foster the development of renewable energy.

Respectfully submitted,

INDIANA MICHIGAN POWER COMPANY

By: Marc E. Lewis Digitally signed by Marc L Lewis 2013 On Constant of the Con

Marc Lewis
Vice President Regulatory & External Relations

Richard J. Aaron (P35605)
Warner Norcross & Judd LLP
120 North Washington Square, Suite 410
Lansing, Michigan 48933
(517) 679-7400
raaron@wnj.com
Attorneys for Indiana Michigan Power Company

¹ As more fully detailed in the pre-filed testimony, I&M reserves the future right to request Commission approval under Act 295 as circumstances change.

INDIANA MICHIGAN POWER COMPANY

CASE NO. U-17375

PRE-FILED DIRECT TESTIMONY

OF

MOHAMED M. ABU-KARAM

PRE-FILED DIRECT TESTIMONY OF MOHAMED M. ABU-KARAM ON BEHALF OF INDIANA MICHIGAN POWER COMPANY

| 1 | Q. | Would you please state your name and business address? | | | | |
|----|----|--|--|--|--|--|
| 2 | A. | My name is Mohamed M. Abu-Karam, and my business address is 1 Riverside | | | | |
| 3 | | Plaza, Columbus, Ohio 43215. | | | | |
| 4 | Q. | By whom are you employed and in what capacity? | | | | |
| 5 | A. | I am employed by the American Electric Power Service Corporation (AEPSC) as | | | | |
| 6 | | Engineer-Production Resource Modeling. AEPSC is a wholly owned subsidiary of | | | | |
| 7 | | the American Electric Power Company, Inc. (AEP), the parent company of | | | | |
| 8 | | Indiana Michigan Power Company (I&M). | | | | |
| 9 | Q. | Would you please describe your educational and professional | | | | |
| 10 | | background? | | | | |
| 11 | A. | I received a Bachelor of Science in Industrial & Systems Engineering from the | | | | |
| 12 | | Georgia Institute of Technology in 2006, and a Master of Business Administration | | | | |
| 13 | | from Ohio University in 2011. I was employed by AEPSC in 2007 as an Engineer | | | | |
| 14 | | in the Resource Planning Section. Since employment I have assumed | | | | |
| 15 | | increasing roles and responsibilities as an Engineer by researching and | | | | |
| 16 | | implementing advanced modeling techniques and procedures. | | | | |
| 17 | Q. | What are your principal responsibilities as Engineer-Production Resource | | | | |
| 18 | | Modeling? | | | | |
| 19 | A. | My responsibilities include developing the power systems modeling of AEP's | | | | |
| 20 | | energy assets, (e.g. coal, gas and nuclear power plants, renewable energy) | | | | |
| 21 | | energy contracts, and market transactions. This modeling supports the Strategic | | | | |

and Financial Planning of the company by providing production cost forecasts to internal stakeholders such as the Financial Forecasting group and various company officials. In addition, I construct production cost forecasts which are utilized to support regulatory filings throughout our jurisdictions in the AEP-East service territory. I also perform ad-hoc sensitivity analyses and economic studies relating to the operation of our energy assets and contracts.

7 Q. What is the purpose of your testimony in this cause?

1

2

3

4

5

6

- A. The purpose of my testimony in this proceeding is to support I&M's request for Michigan Public Service Commission (MPSC) approval of a wind Renewable Energy Purchase Agreement (REPA) between I&M and Headwaters Wind Farm LLC (Headwaters), a subsidiary of EDP Renewables North America (EDPR NA). In my testimony I will discuss the forecasted cost impact on I&M customers of the Headwaters Wind Farm Renewable Energy Purchase Agreement (REPA).
- 14 Q. Are you sponsoring any exhibits in this proceeding?
- 15 A. Yes. I am sponsoring Exhibit IM-5 (MMA-1): I&M Total Company, Relative
 16 Change in Annual Revenue Requirement, Due to Headwaters Wind Farm REPA.
 17 Exhibit IM-5 (MMA-1) has one public and one confidential version.
- 18 Q. Has the Company estimated the cost impact of the Headwaters Wind Farm19 REPA?
- 20 A. Yes, Exhibit IM-5 (MMA-1) (public) offers a 2015 2034 summary view of the net 21 cost impact of the Headwaters REPA on I&M's customers. This cost impact is 22 progressively derived in the columns of Exhibit IM-5 (MMA-1). Overall the 23 Headwaters REPA is expected to result in a cost savings to I&M's customers.

1

2

3

5

6

7

9

11

12 13

14

15

16

17

1819

20

21 22

23

A high level explanation of this derivation is as follows. Column E displays the total Wind REPA Cost which is based on the Wind Energy shown in column C and the Wind REPA dollars per MWh Cost in column D. Column G displays the impacts that the Headwaters REPA has on I&M's Off-System Sales (OSS) revenue and cost of energy from the PJM power market.

During hours in which I&M's generation meets or exceeds demand without the need to purchase from the market (i.e., energy-surplus), the additional 200 MWs of wind allows for the company's thermal units to contribute more to OSS. Conversely, the additional 200 MWs of wind will lessen the amount of energy purchased during hours in which I&M is in need to acquire from the market to meet demand (i.e., energy-deficit). Column J shows the Wind Capacity Credit Value. This credit is based on 13% of the Wind Capacity (this equates to 26 MW of the Headwaters REPA) displayed in column I and the Capacity Price in column H. Since Headwaters REPA is an Immature Intermittent Capacity Resource, the PJM Class Average Capacity Factor of 13% was utilized in this analysis. More information on the PJM Capacity Value Calculations may be found at this link, http://pjm.com/~/media/documents/manuals/m21.ashx. Column K shows the Total Change in Net Revenue Requirement which is the sum of columns E, G & J. As shown, the net cost of a full year's energy purchase is estimated to range from a net benefit of \$0.9 million to a net benefit of \$15.4 million.

On a cost per kWh basis as is displayed in column M, the estimated incremental net cost through to the Company's customers for an annual supply of renewable wind energy is estimated to range from a net benefit of 0.003 cents

per kWh to a net benefit of 0.056 cents per kWh. The average cost (average of rows 12-31 in column M) to the Company's customers over the 2015 – 2034 time frame is projected to be a net benefit of 0.042 cents per kWh. Thus, the Headwaters Wind Farm Renewable Energy Purchase Agreement (REPA) is expected to result in a cost savings to I&M's customers.

- 6 Q. Does this conclude your pre-filed direct testimony?
- 7 A. Yes.

1&M - Total Company

Relative Change in Annual Revenue Requirement Due to 200 MW Headwater Wind Farm REPA 2015-2034

| Α | В | С | D | E | F | G | Н | ı | J | К | L | М | N |
|------|---------------------------------|----------------|----------------------|----------------------|---|---|-------------------|---------------------------|-------------------------------|---|-------------------------|---|---|
| | | | | =(C x D)/1000 | | | | = B x 13% | =(H x I x 365)/10^6 | =E+G+J | | =K/Lx100 | = K x 1000/C |
| | Wind Capacity (Nameplate) | Wind Energy | WIND REPA Cost | Wind REPA Cost | Wind Energy Weighted Avg Market Price | Wind Energy Impact on Market Sales/Purchase | Capacity Price | Wind Capacity Value | Wind Capacity Credit Value | Total Change in Net Revenue Requirement | I&M Internal Load | Net Revenue Requirement Impact on I&M Customer | I&M Wind Net Cost per MWh of Wind Generated |
| | MW | GWh | (\$/MWh) | (\$M) | (\$/MWh) | (\$M) | (\$/MW-Day) | (MW) | (\$M) | (\$M) | (GWh) | (¢/kWh) | (\$/MWh) |
| 2015 | 200 | | | | | | i | | | (0.9) | 25,684 | (0.003) | |
| 2016 | 200 | | | | | | | | | (4.4) | 25,791 | (0.017) | j |
| 2017 | 200 | | | | | | | | | (5.5) | 25,711 | (0.021) | |
| 2018 | 200 | | | | | | | | | (6.1) | 25,590 | (0.024) | |
| 2019 | 200 | | | | | | | | | (6.2) | 25,548 | (0.024) | |
| 2020 | 200 | | | | | | | | | (6.3) | 25,584 | (0.025) | |
| 2021 | 200 | | | | | | | | | (6.9) | 25,640 | (0.027) | |
| 2022 | 200 | | | Prop | rietary an | d Confident | ial Data | | | (12.8) | 25,770 | (0.050) | |
| 2023 | 200 | | | | | | | | | (13.0) | 25,891 | (0.050) | Į |
| 2024 | 200 | | | | | | | | | (13.6) | 26,032 | (0.052) | |
| 2025 | 200 | | | | | | | | | (13.9) | 26,162 | (0.053) | |
| 2026 | 200 | | | | | | | | | (13.71 | 26,314 | (0.052) | |
| 2027 | 200 | | | | | | | | | (14.4) | 26,451 | (0.054) | |
| 2028 | 200 | | | | | | | | | (14.6) | 26,607 | (0.055) | |
| 2029 | 200 | | | | | | | | | (14.8) | 26,759 | (0.055) | |
| 2030 | 200 | | | | | | | | | (14.8) | 26,916 | (0.055) | |
| 2031 | 200 | | | | | | | | | (14.8) | 27,067 | (0.055) | |
| 2032 | 200 | | | | | | | | | (15.3) | 27,234 | (0.056) | 1 |
| 2033 | 200 | | | | | | | | | (15.4) | 27,393 | (0.056) | |
| 2034 | 200 | | | | | | | | | (15.3) | 27,572 | (0.056) | l |

Column Definitions:

- B. Total nameplate capacity of the REPAs.
- C. Total estimated energy output of the REPAs.
- D. Projected price for generic wind REPAs.
- E. Total estimated cost of the REPAs column C times column D + 1000.
- F. Price of energy displaced by incremental wind REPAs. Price based on AEP Fundamental Forecast
- G. Change in revenue requirement due to wind energy impact on market sales/purchases (column C times column F÷ 1000).
- H. Based on PJM Capacity Clearing price through May 2017, AEP Fundamental Forecast thereafter.
- I . Based on 13 percent PJM Capacity Credit.
- J. Product of Columns H and I .
- K. Net Revenue Requirement Change is the sum of columns E, G & J, i.e., the cost of the REPAs plus the wind energy impact on market sales/purchase, plus the capacity credit value.
- L. Projected annual I&M internal load (Original, 2012 "4+8", completed in Aug-12, revised in Jan-13).
- M. Cost per kWh impact on 1&M customers represents the average incremental cost impact of the Wind Project divided by I&M's internal energy requirements
- N. The annual Net Revenue Requirement impact of the REPAs divided by the corresponding annual estimated energy output of the projects.

KIUC EXHIBIT 7 (CONFIDENTIAL)

Maintained on the Confidential Materials DVD

Or

In the Confidential File Materials at PSC

KIUC EXHIBIT 8 (CONFIDENTIAL)

Maintained on the Confidential Materials DVD

Or

In the Confidential File Materials at PSC

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

| APPLICATION OF KENTUCKY POWER COMPANY |) |
|--|-----------------------|
| FOR APPROVAL OF THE TERMS AND CONDITIONS |) |
| OF THE RENEWABLE ENERGY PURCHASE |) |
| AGREEMENT FOR BIOMASS ENERGY RESOURCES |) CASE NO. 2013-00144 |
| BETWEEN THE COMPANY AND ECOPOWER |) |
| GENERATION-HAZARD LLC; AUTHORIZATION TO |) |
| ENTER INTO THE AGREEMENT; GRANT OF CERTAIN |) |
| DECLARATORY RELIEF; AND GRANT OF ALL OTHER |) |
| REQUIRED APPROVALS AND RELIEF |) |

CERTIFICATE

- I, Sonya Harward, hereby certify that:
- 1. The attached DVD contains a digital recording of the hearing conducted in the above-styled proceeding on August 29, 2013; (excluding any confidential segments, which were recorded on a separate DVD and will be maintained in the non-public records of the Commission, along with the Confidential Exhibits and Hearing Log). The hearing was recorded on two consecutive days, August 28, 2013 and August 29, 2013, separately. (Confidential portions were also recorded separately).
 - 2. I am responsible for the preparation of the digital recording;
- The digital recording accurately and correctly depicts the hearing of August 28,
 2013 (excluding any confidential segments);
- 4. The "Exhibit List" attached to this Certificate correctly lists all exhibits introduced at the hearing of August 29, 2013 (excluding any confidential exhibits).
- 5. The "Hearing Log" attached to this Certificate accurately and correctly states the events that occurred at the hearing of August 29, 2013 (excluding any confidential segments) and the time at which each occurred.

Given this 29th day of August, 2013.

Sonya Harward (Boyd), Notary Public

State at Large

My commission expires: August 27, 2017



Session Report - Detail

2013-00144_29-Aug2013

Kentucky Power Company

| Date: | Туре: | Location: | Department: | |
|-----------|-------|----------------|-----------------------|--|
| 8/29/2013 | Other | Public Service | Hearing Room 1 (HR 1) | |
| | | Commission | | |

Judge: David Armstrong; Linda Breathitt; Jim Gardner

Witness: Lane Kollen - KIUC; Paul Coomes - KIUC; Alan Taylor - KIUC

Clerk: Sonya Harward

| Event Time | Log Event | | | | |
|-------------------|---|---|--|--|--|
| 10:01:39 AM | Session Started | | | | |
| 10:01:42 AM | KY Power Atty. Gish addressed some questions from the previous day. | | | | |
| | Note: Harward, Sonya | Address Vice Chairman's request from the previous day about rate impacts. | | | |
| | Note: Harward, Sonya | Jan. 31, 2017 is the planned operation date of the facility, per the Chairman's request. | | | |
| 10:03:24 AM | POST HEARING REQUEST | | | | |
| | Note: Harward, Sonya | Vice Chairman Gardner presented a document to KY Power and addressed the items he'd like to have submitted in a post hearing request in regards to this document. | | | |
| 10:06:24 AM | Witness Alan Taylor - KIUC | | | | |
| | Note: Harward, Sonya | President, Sedway Consulting, Inc. | | | |
| | Note: Harward, Sonya | Confirmed that previously filed testimony is still accurate. | | | |
| 10:08:01 AM | KY Power Atty. Gish cross exam | mination of Witness Taylor | | | |
| | Note: Harward, Sonya | Referencing Witness's Testimony on page 6, KPC 1-2, and PSC 1-1. | | | |
| 10:09:35 AM | KY Power Atty. Gish | | | | |
| | Note: Harward, Sonya | Reference page 16 of Witness Testimony. | | | |
| 10:13:05 AM | Exhibit 1 - KY Power | | | | |
| | Note: Harward, Sonya | United States- Annual Average Wind Speed at 80 m | | | |
| 10:15:59 AM | Exhibit 2 - KY Power | | | | |
| | Note: Harward, Sonya | Photovoltaic Solar Resource of the United States . | | | |
| 10:18:24 AM | KY Power Atty. Gish | | | | |
| | Note: Harward, Sonya | Continued questioning about renewables available to KY Power service area. | | | |
| 10:20:03 AM | Exhibit 3 - KY Power | | | | |
| | Note: Harward, Sonya | American Electric Power Service Corporation as agent for Kentucky Power Company Request for Proposals | | | |
| 10:23:51 AM | KY Power Atty. Gish | | | | |
| | Note: Harward, Sonya | Referencing Witness Testimony, page 17. | | | |
| 10:26:20 AM | Witness Taylor | | | | |
| | Note: Harward, Sonya | Discussing fixed priced contracts. | | | |
| 10:27:36 AM | KY Power Atty. Gish | | | | |
| | Note: Harward, Sonya | Referencing page 18 of Witness Testimony. | | | |
| 10:28:40 AM | KY Power Atty. Gish, no furthe | r questions. | | | |
| 10:28:45 AM | AG Atty. Hans cross examinati Note: Harward, Sonya | on of Witness Taylor Discussing subsities that are no longer available. | | | |
| 10:30:12 AM | AG Atty. Hans, no further ques | stions. | | | |
| 10:30:16 AM | PSC Atty. Nguyen cross examin Note: Harward, Sonya | nation of Witness Taylor Discussing biomass REPA vs. wind and solar purchase agreements. | | | |
| 10:33:52 AM | PSC Atty. Nguyen, no further of | - | | | |
| | c / itty gay any no raidle it | 1 | | | |

| 10:33:55 AM | VIce Chairman Gardner cross ex | kamination of Witness Taylor |
|----------------------------|--|--|
| | Note: Harward, Sonya | Referencing page 6 of Testimony, beginning on line 9 - regarding |
| | · | risks and costs and what is meant by weak and vague. |
| 10:36:22 AM | - | to caution about confidential information. |
| 10:37:49 AM | Vice Chairman Gardner | |
| | Note: Harward, Sonya | Article 7 deals with production tax credits? |
| 10:39:13 AM | - | o see confidential version of RFP. |
| 10:42:32 AM | Vice Chairman Gardner | |
| | Note: Harward, Sonya | Referencing analysis of RECs, regarding costs to customers and |
| 10.50.20 414 | Vien Chairman Condon | negative costs. |
| 10:50:28 AM | Vice Chairman Gardner | Asking guestions related to the sale of DECs |
| 10:54:59 AM | Note: Harward, Sonya Commissioner Breathitt cross ex | Asking questions related to the sale of RECs. |
| ווא בכיבכיחו | Note: Harward, Sonya | GATS - generation attribute tracking system |
| 10:55:16 AM | Commissioner Breathitt | GATS - generation attribute tracking system |
| 10133110 FIN | Note: Harward, Sonya | RECs can be obtained bilaterallysold at auction? |
| 10:59:43 AM | Commissioner Breathitt | The Control of Statistical States any Tribola at addition. |
| | Note: Harward, Sonya | Negative RECwhat is meant by this? |
| 11:00:15 AM | Commissioners have no further | · |
| 11:00:18 AM | KIUC Atty. Kurtz re-direct exam | • |
| 11:03:07 AM | KIUC Atty. Kurtz | · |
| | Note: Harward, Sonya | Discussing Big Sandy 1 RFP. |
| 11:04:25 AM | KIUC Atty. Kurtz, no further que | |
| 11:04:39 AM | Vice Chairman Gardner re-cross | • |
| | Note: Harward, Sonya | If RECs sold at a loss, is it deductible on income taxes? |
| 11:05:50 AM | Witness Taylor dismissed from s | stand. |
| 11:05:56 AM | Witness Paul Coomes - KIUC | To day the state of the state o |
| | Note: Harward, Sonya | Independent economic consultant |
| 11.07.17 AM | Note: Harward, Sonya | Confirmed that previously filed testimony is still accurate. |
| 11:07:17 AM 11:10:15 AM | KY Power Atty. Garcia cross exa KY Power Atty. Garcia | initiation of whitess coomes. |
| 11.10.13 AM | Note: Harward, Sonya | Comparing new jobs created by ecoPower and coal jobs. |
| 11:13:34 AM | KY Power Atty. Garcia | companing new jobs created by econower and coar jobs. |
| 11.13.317(1 | Note: Harward, Sonya | Discussing household spending. |
| 11:16:30 AM | Witness Coomes | Distance of the second special second |
| | Note: Harward, Sonya | Discussing the use of a tool to come up with household impact. |
| 11:18:02 AM | KY Power Atty. Garcia | |
| | Note: Harward, Sonya | Did Witness take into account the new spending by those with new |
| | | jobs and the investment. |
| 11:20:35 AM | KY Power Atty. Garcia, no furthe | er questions. |
| 11:20:39 AM | AG Atty. Hans cross examination | |
| | Note: Harward, Sonya | Asking about a multiplier effect of job creation. |
| 11:26:11 AM | AG Atty. Hans, no further quest | |
| 11:26:14 AM | PSC Atty. Nguyen, no questions | |
| 11:26:18 AM | Vice Chairman Gardner cross ex | amination of Witness Coomes |
| 11:27:48 AM | Vice Chairman Gardner | |
| | Note: Harward, Sonya | Should a utility include a price elasticity if they assume prices are |
| 11:30:11 AM | Vice Chairman Gardner | going up. |
| 11.20.11 W. | Note: Harward, Sonya | Asking about some information in the Rand Study. |
| 11:31:37 AM | Vice Chairman Gardner | Asking about some information in the Naha Stady. |
| TIOTION ALI | Note: Harward, Sonya | Discussing coal demand being down, 5,000 less jobs in east KY |
| | Hotel Hallyard, Jonya | biseassing coal demand being down, show less jobs in east it in |

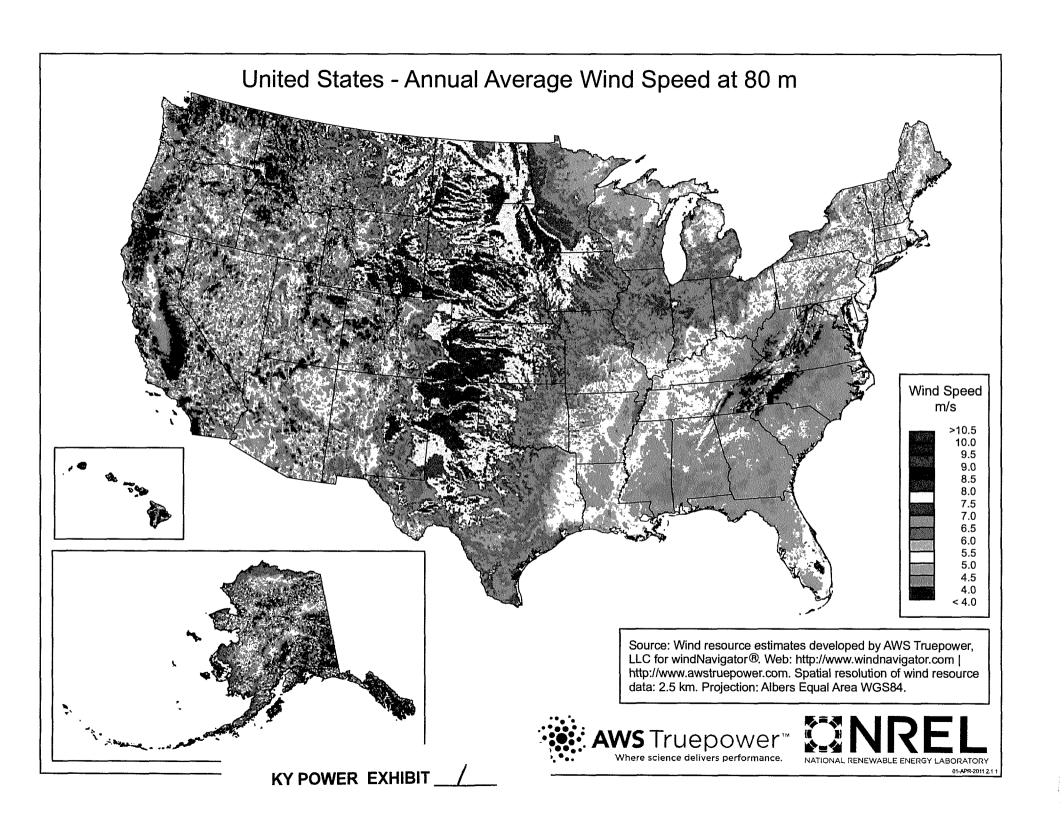
| 11:34:04 AM | Commissioner Breathitt cross ex | amination of Witness Coomes |
|-------------|------------------------------------|--|
| | Note: Harward, Sonya | Adking about 30 full time jobs and 200 timber and trucking jobshis |
| | , | estimate of 100 jobsclear up these differencesNot the same |
| | | numbersone is loss of jobs and one is creation of jobs. |
| 11:36:31 AM | Commissioner Breathitt | |
| | Note: Harward, Sonya | Referencing page 3 of Witness's Exhibit (full report). |
| 11:37:58 AM | Chairman Armstrong cross exam | nination of Witness Coomes |
| | Note: Harward, Sonya | Impact on the quality of life? |
| 11:39:45 AM | Chairman Armstrong | |
| | Note: Harward, Sonya | Asked about what kind of jobs this createswould area be likely to |
| | | have more steakhouses or McDonalds. |
| 11:40:50 AM | KIUC Atty. Kurts re-direct of Wit | |
| 11:44:50 AM | Witness Coomes dismissed from | the stand. |
| 11:45:03 AM | Break | |
| 11:45:27 AM | Session Paused | |
| 11:56:24 AM | Session Resumed | |
| 11:56:25 AM | Camera Lock Deactivated | |
| 11:56:28 AM | Witness Lane Kollen - KIUC | ŧ |
| | Note: Harward, Sonya | Confirmed that previously filed testimony is still accurate. |
| | Note: Harward, Sonya | Vice President and Principal, Kennedy and Associates |
| 11:57:32 AM | KY Power Atty. Gish cross exami | |
| 11:58:00 AM | KY Power Atty. Gish handed out | a copy of part of the REPA that is already in the record. |
| | Note: Harward, Sonya | Exhibit JFG-1 CONFIDENTIAL, page 33 -35 of 110 (pages labeled |
| | | 27-29) |
| 12:02:18 PM | KY Power Atty. Gish | |
| | Note: Harward, Sonya | Referencing Witness's Tesitmony, page 16, lines 6-11. |
| 12:05:58 PM | KY Power Atty. Gish, no further | · |
| 12:06:03 PM | Vice Chairman Gardner cross exa | amination of Witness Kollen |
| 12:07:12 PM | Vice Chairman Gardner | |
| | Note: Harward, Sonya | Discussing the break down of the different components concerning |
| | | how much is energy and how much is capacity, etc. |
| 12:11:19 PM | Vice Chairman Gardner | |
| 40.4400.04 | Note: Harward, Sonya | Page 6 of Witness's Direct Testimony, regarding off-system sales. |
| 12:14:20 PM | Vice Chairman Gardner | |
| | Note: Harward, Sonya | Why will this be must run per PJM? |
| 12:14:46 PM | No further questions for this with | |
| 12:14:56 PM | Witness Kollen dismissed from st | and. |
| 12:15:13 PM | Due dates determined. | |
| | Note: Harward, Sonya | 9/13, Post hearing requests 9/23, post hearing briefs |
| 12:16:07 PM | Hearing adjourned | |
| 12:16:12 PM | Session Pausèd | |
| 1:16:42 PM | Session Ended | |

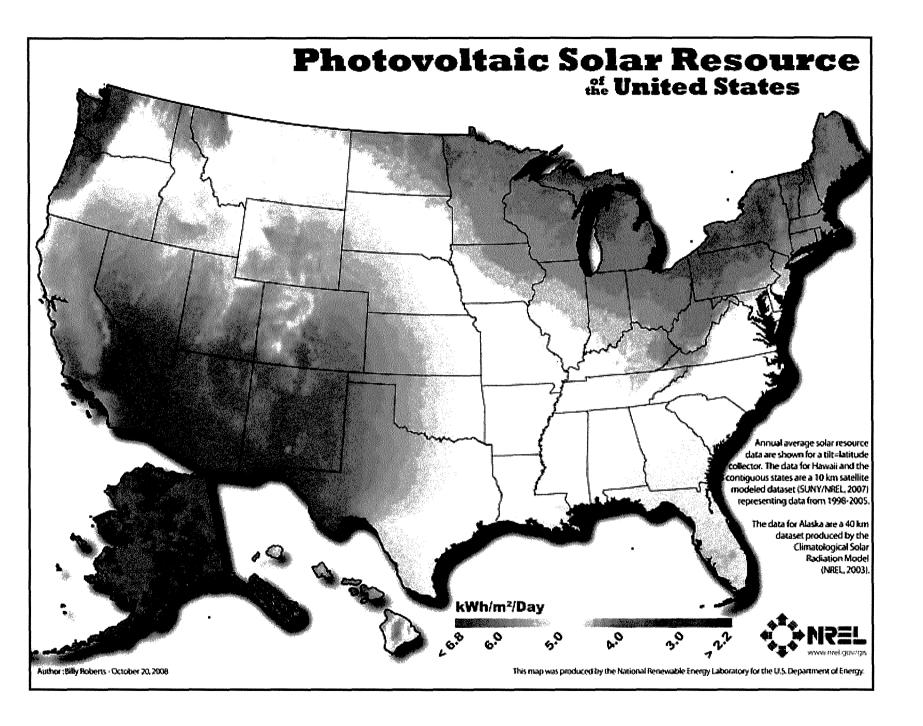


2013-00144_29-Aug2013

Kentucky Power Company

| Name: | Description: |
|----------------------|---|
| Exhibit 1 - KY Power | United States- Annual Average Wind Speed at 80 m |
| Exhibit 2 - KY Power | Photovoltaic Solar Resource of the United States |
| Exhibit 3 - KY Power | American Electric Power Service Corporation as agent for Kentucky Power Company Request for Proposals |







American Electric Power Service Corporation as agent for Kentucky Power Company

Request for Proposals

Up to 250 MW (nameplate) of LONG-TERM CAPACITY and ENERGY (PJM Resources only)

Capable of being on-line by June 1, 2015

Issued: March 28, 2013

Web Address: http://www.kentuckypower.com/go/rfp/

Proposals Due: June 11, 2013 (Columbus, OH)



Table of Contents

| | | Page |
|--|--|------|
| 1) Company Information | | 4 |
| 2) Introduction | | 4 |
| 3) RFP Questions | | 5 |
| 4) Scope | | 6 |
| 5) RFP Schedule | | 8 |
| 6) Proposal Submittal | | 9 |
| 7) Key Terms and Conditions | | 9 |
| 8) Proposal Content | | 10 |
| 9) Treatment of Proposals | | 10 |
| 10) RFP Proposal Evaluation | | 11 |
| 11) Confidentiality | | 12 |
| 12) Seller's Responsibility | | 12 |
| 13) Contacts | | 13 |
| | | |
| Appendices Appendix A - General Project Information | and the same of th | |
| | | |
| Appendix B - Operating Characteristics | •••••• | 17 |
| Appendix C - Proposal Requirements | | 19 |
| Appendix D - DSM / EE Proposal Requirements | | 22 |
| Appendix E - Seller's Credit-Related Information | ••••• | 24 |
| Appendix F - Confidentiality Agreement | | 25 |



Background

Kentucky Power Company (Company) is undertaking a process to determine the least, reasonable cost solution to replacing the impending generation loss anticipated with the retirement of its Big Sandy Unit 1 generation unit. Big Sandy Unit 1 is a 278 MW coal fired generating unit that went into service in 1963 and is currently scheduled for retirement in 2015. Big Sandy Unit 1 is located near Louisa, Kentucky and is within the PJM regional transmission organization.

The options available to the Company for the replacement of the Big Sandy Unit 1 generation capacity as a coal fired generation resource include:

- <u>BS1 Conversion</u>: converting Big Sandy Unit 1 to a natural gas fired generation unit (BS1 Conversion). The projected cost to convert Big Sandy Unit 1 will be developed by American Electric Power Service Corporation's (AEPSC) Projects, Controls & Construction group. (AEPSC Projects Group).
- PJM Capacity Resource Request for Proposals (RFP): issue an RFP for 250 MW of PJM Generation Capacity Resources.

The Company will use the proposals (Proposals) received as a result of the 250 MW RFP along with the BS1 Conversion cost estimate to determine the least, reasonable cost solution to replacing the Big Sandy Unit 1 capacity as a coal fired generating unit.

The evaluation of the RFP and BS1 Conversion is not a commitment to convert (BS1 Conversion) or purchase (RFP) and shall not bind the Company or any affiliates of the Company in any manner. The Company in its sole discretion will determine which direction, if any, it wishes to take with respect to replacing the Big Sandy Unit 1 coal fired generation capacity, energy, and ancillary services.

The management and evaluation of this RFP will be directed by select AEPSC personnel that have been categorized into two groups – a Development Group and an Evaluation Group. The Development Group will be responsible for the design, development, and management of the overall RFP process, while the Evaluation Group will be responsible for evaluating the RFP Proposals and the BS1 Conversion cost as provided by the AEPSC Projects Group. Members of the Development and Evaluation Groups are separate groups from the AEPSC Projects Group or any Affiliate of the Company that may wish to participate in this RFP.

AEPSC and the Company will ensure that the bids received in response to this RFP along with the BS1 Conversion cost are evaluated in a consistent, transparent, and impartial manner.



1. Company Information

- 1.1. American Electric Power (AEP) is one of the largest electric utilities in the United States, delivering electricity to more than 5.3 million customers in 11 states. AEP ranks among the nation's largest generators of electricity, owning nearly 38,000 megawatts of generating capacity in the U.S. AEP also owns the nation's largest electricity transmission system, a nearly 39,000-mile network that includes more 765 kilovolt extra-high voltage transmission lines than all other U.S. transmission systems combined. AEP's utility units operate as AEP Ohio, AEP Texas, Appalachian Power (in Virginia and West Virginia), AEP Appalachian Power (in Tennessee), Indiana Michigan Power, Kentucky Power, Public Service Company of Oklahoma, and Southwestern Electric Power Company (in Arkansas, Louisiana and Texas). AEP's headquarters are in Columbus, Ohio. More information about AEP can be accessed by visiting www.aep.com.
- 1.2. Kentucky Power Company provides service to approximately 173,000 customers in all or part of 20 eastern Kentucky counties and is headquartered in Frankfort, KY. The Company has approximately 1,233 miles of transmission lines and 11,242 miles of distribution lines. Its distribution operations are based in Ashland with service centers in Pikeville and Hazard. The Company also has area offices in Paintsville and Whitesburg. More information about the Company can be accessed by visiting www.kentuckypower.com.

2. Introduction

- 2.1. American Electric Power Service Corporation, a subsidiary of AEP is administering this Request for Proposals (RFP) on behalf of Kentucky Power Company (Company). AEPSC is requesting bids which will result in obtaining up to approximately 250 MW of PJM Generation Capacity Resources¹ (Resources).
- 2.2. Resources bid into this RFP must be capable of being on-line by June 1, 2015 and able to supply a "Bundled Product" that includes Capacity (MW), Energy (MWh), and Ancillary Services if available.
- 2.3. AEPSC is requesting Proposals from parties desiring to sell a Bundled Product through a Power Purchase Agreement (PPA), Tolling Agreement (TA), an Asset Purchase Agreement (APA), or Other Proposal (OTH) as further defined in this RFP.

In addition, AEPSC will be accepting Proposals from demand-side management (DSM) and cost-effective energy efficiency (EE) resources.

¹ PJM Generation Capacity Resource is a generation unit, or the right to capacity from a specified generation unit, that meets the requirements of Schedules 9 and 10 of the PJM Reliability Assurance Agreement. A Generation Resource may be an existing Generation Resource or a Planned Generation Resource.



- 2.4. Energy scheduled as a result of any PPA, TA, or OTH agreement shall be scheduled via a unilateral schedule in the PJM InSchedule system with a Sink at the Big Sandy Unit 1 Pnode as further described in Section 4.4.2 (Note: this scheduling requirement will enable the Company to utilize any proposed Resource in a manner similar to a Product produced from the Company's Big Sandy Unit Iresource. In addition, it will enable the Company to compare Proposals to the BS1 Conversion cost as referenced in the Background of this RFP).
- 2.5. For each Proposal, a Seller shall offer only one Base Proposal. Sellers are encouraged to provide the Company with a Base Proposal that reflects what it believes is their best pricing Proposal. At no point in the evaluation process will a Seller have the opportunity to unilaterally change its Proposal.
- 2.6. For each Base Proposal, a Seller is allowed to submit up to three alternatives (each an "Alternative Proposal"). Alternative Proposals may be for different bid sizes, term of contract (15 years or greater), or alternate contract terms and conditions. Proposals based on a different site, technology, contract type, or fuel supply arrangement from the Base Proposal must be submitted as a separate Proposal.
- 2.7. The Company will allow affiliates (Affiliates) of the Company to participate in this RFP. Affiliates will be required to follow all of the requirements of this RFP including the process outlined in Section 3 regarding questions. If an Affiliate's Proposal is offered, its Proposal (i) shall be submitted in the same format and under the same rules and (ii) shall be evaluated in the same manner as other Proposals submitted into this RFP.
- 2.8. The Company has established a web page (www.kentuckypower.com/go/rfp) at its website for this RFP. AEPSC and Kentucky Power Company reserve the right to amend this RFP at any time and at its sole discretion. Any amendments to this RFP will be posted at the Company web page.
- 2.9. This RFP is not a commitment to purchase and shall not bind the Company or any affiliates of the Company in any manner. The Company in their sole discretion will determine which Seller(s), if any, it wishes to engage in negotiations that may lead to a binding contract.

3. RFP Questions

- 3.1. Throughout the RFP process, interested parties may submit questions regarding this RFP to AEPSC via:
 - instructions located at the Company's website established for this RFP (www.kentuckypower.com/go/rfp) or
 - by emailing 2013KentuckyPowerRFP@aep.com.



3.2. Questions submitted as outlined in Section 3.1 above will be reviewed by AEPSC. Those questions (and answers) which AEPSC views in its sole discretion to be of benefit to other potential RFP participants will be posted on the Q&A portion of the website. Posted questions and answers will not identify the originator of the question.

4. Scope

The following sub-sections describe the scope of this RFP. All questions regarding the scope of this RFP should be submitted through the Company's website or RFP email address as outlined in Section 3.

- 4.1. <u>Product</u> the Company is seeking a low cost Bundled Product from PJM Generation Capacity Resources that includes the following.
 - 4.1.1. Capacity (MW)
 - 4.1.2. Energy (MWh)
 - 4.1.3. Ancillary Services (if available)
 - 4.1.4. Environmental Attributes² (if available)
- 4.2. Quantity the Company is seeking Proposals for up to 250 MW, however, may procure more or less than 250 MW, and may aggregate Bundled Products from multiple Sellers to meet its needs, or select no offers at all.
 - 4.2.1. Proposals shall have a minimum nameplate capacity size of 50 MW, with the exception of DSM / EE Proposals.
 - 4.2.2. DSM and EE Proposals shall have a minimum size of 1 MW.
- 4.3. <u>Delivery Period</u> The delivery of Capacity and Energy should begin no earlier than June 1, 2015.
 - 4.3.1. Delivery period start dates later than June 1, 2015 will be accepted, however, Seller will be required to supply to the Company the PJM Capacity value for the period between June 1, 2015 and the actual delivery start period.
 - 4.3.2. All Base Proposals, with the exception of DSM/EE Proposals, shall have a term of 15 years. Base Proposals with terms other than 15 years will be considered non-conforming and rejected from the RFP process. Sellers may provide terms of greater than 15 years within their Alternative Proposals.
 - 4.3.3. DSM / EE Proposals shall have a minimum term of 5 years.

4.4. Energy Delivery (for PPA, TA, and OTH Proposals)

- 4.4.1. The Company and the Seller(s) will bilaterally establish and confirm a contract in PJM's InSchedule system (Contract) related to any agreement between the Company and the Seller.
- 4.4.2. The Contract will have the following key attributes:

² Environmental Attributes include, but are not limited to any associated renewable energy credits (RECs) and any other current or future environmental attributes, including any greenhouse gas emission reductions associated with the quantity contracted from a facility.



- 4.4.2.1. the "Schedule Confirmation Type" will be "Unilateral Buyer," such that the Company will have unilateral schedule confirmation rights for all schedules between the parties;
- 4.4.2.2. the "Sink" will be the Point of Delivery as defined in the table below;

| Poin | t of Delivery |
|-----------------|---------------|
| Pnode ID name | BIGSANDY |
| Pnode ID number | 40243783 |
| Location | Louisa, KY |
| County | Lawrence |

4.4.2.3. the "Service Type" will be "Internal Bilateral Transaction".

4.5. Interconnection

- 4.5.1. The Point of Interconnection shall be the Facility's interconnection point with the PJM system.
- 4.5.2. All Proposals, at a minimum, must have completed the PJM Feasibility Study phase of the interconnection request process with PJM.
- 4.5.3. The Seller is responsible for all costs associated with transmission interconnections and system upgrades as required by PJM and the transmission operator.
- 4.5.4. The Seller is responsible for following the established PJM and transmission operator policies and procedures that are in effect regarding facility interconnection and operation associated with a utility's transmission system.
- 4.6. <u>Proposal Types</u> the Company is interested in executing a contract ("Supply Agreement") from one or more of the following proposal types
 - 4.6.1. Power Purchase Agreements ("PPA")
 - 4.6.2. Tolling Agreements ("TA") Seller pricing shall include the option of Seller providing the fuel, however, the Proposal shall also include an option where the Company will supply the fuel to the Resource.
 - 4.6.3. Asset Purchase Agreements ("APA") The Company will accept Proposals for assets that are currently in-service or will be in-service prior to June 1, 2015. The Company will not accept Proposals for partially built assets.
 - 4.6.4. Other Proposals ("OTH") Other Proposals are other power supplies or arrangements that do not fall into a PPA, TA, APA or DSM/EE category
 - 4.6.5. Demand-side management ("DSM") or Cost-effective energy efficiency resources ("EE")

4.7. Pricing

- 4.7.1. Seller shall use Appendix A and any other attachments as needed to fully articulate the pricing of its Proposal.
- 4.7.2. Seller shall provide a summary of its essential terms and conditions associated with Seller's Proposal and pricing.
- 4.7.3. Prices must be firm, representing best and final data and quoted in U.S. dollars.



- 4.7.4. If pricing involves escalation or indexing, the details of such pricing, including the specific indices or escalation rates, must be included for evaluation.
- 4.7.5. Pricing to include all Ancillary Service costs, taxes and other fees necessary for delivery of the Energy to the Point of Delivery as applicable.
- 4.7.6. All costs associated with interconnections and transmission, including any system upgrades, as required by PJM up to the Point of Delivery shall be included in the Seller's pricing where appropriate under current FERC orders and rulings.
- 4.7.7. DSM / EE Proposals: Seller shall fully describe in Appendix D or other attachment the pricing associated with its Proposal.

4.8. Ancillary Services

- 4.8.1. Under a Supply Agreement, the Company prefers to have the unrestricted right to utilize all Ancillary Services associated with generation being offered by the Seller. In addition, the Company desires to have the unrestricted rights to any future Ancillary Services defined by the industry and capable of being provided by the generation capacity being offered.
- 4.8.2. The Seller shall describe the Ancillary Service capability of the Facility (Regulation, Synchronized Reserve, Black Start Service, DA Scheduling Reserve, etc.)
- 4.8.3. All Ancillary Services must be provided in accordance with the requirements of PJM and the transmission operator.
- 4.8.4. The Ancillary Services that would be available to the Company should not be limited to those defined in this section.
- 4.8.5. In the case where the Company purchases only part of the generation capacity from a unit, system or facility, then the Company desires to have unrestricted rights to Ancillary Services on a prorated basis.
- 4.9. DSM / EE Proposals must be from resources located within the Company's service area.

5. RFP Schedule

- 5.1. The following schedule and deadlines apply to this RFP. AEPSC and the Company reserve the right to revise this schedule at any time and at its sole discretion. Any revisions to the schedule will be posted to the RFP website.
- 5.2. All Proposals must be complete in all material respects and be received no later than 4 p.m. EST on Tuesday, June 11th at the AEPSC Columbus, OH location as defined in Section 6 of this RFP.



| RFP Issued | Thursday, March 28, 2013 |
|------------------------------|--------------------------|
| Confidentiality Agreements | Friday, May 24, 2013 |
| Proposals Due Date | Tuesday, June 11, 2013 |
| RFP Short-List Identified | Friday, July 12, 2013 |
| Final Decision (Recommended) | tbd |

6. Proposal Submittal

One hard copy and one electronic copy on CD of the Proposal(s) shall be submitted by the Proposal Due Date as outlined in Section 5 of this RFP to:

American Electric Power Service Corporation Kentucky Power Company RFP Administrator 155 W. Nationwide Blvd Columbus, OH 43215

7. Key Terms and Conditions

For a Supply Agreement, the Seller's Proposal should include, where applicable to the Seller's Proposal, the following terms and conditions, among other things:

- 7.1. Seller will guarantee all pricing and terms that affect pricing such as but not limited to heat rate, fuel cost, operations and maintenance costs, as applicable.
- 7.2. Pricing shall include all pricing and terms for Capacity, associated Energy, and Ancillary Services.
- 7.3. Seller will guarantee the annual and seasonal availability.
- 7.4. Seller will be responsible for any and all compliance related costs and fines (environmental, NERC, FERC, PJM, etc) incurred due to the non-compliance of the asset(s) designated to supply Capacity, Energy, and Ancillary Services to the Company.
- 7.5. Seller shall be responsible for ALL reporting requirements under NERC, PJM, etc.
- 7.6. Seller shall be responsible for offering Company's Capacity, Energy and Ancillary Services into the PJM market.
- 7.7. For the sale of generation capacity and energy to the Company under a Supply Agreement, the Seller would be responsible for obtaining all necessary permits and providing all credits and allowances needed to comply with the permit requirements for the life of the agreement, where permits, credits and allowances are applicable for the product being sold.



7.8. Failure to obtain or comply with any environmental permit or governmental consent would not excuse nonperformance by Seller.

7.9. Financial Capability

- 7.9.1. Should the Company elect to enter into a Supply Agreement with a Seller who fails to meet its obligations at any point in time, the Company's customers may be exposed to the risk of higher costs. Therefore, Sellers will be required to demonstrate, in a manner acceptable to the Company, the Seller's ability to meet all financial obligations to the Company throughout the applicable development, construction and operations phases for the term of the Supply Agreement. Under no circumstances, should the Company's customers be exposed to increased costs relative to the cost defined in an agreement between the Seller and the Company.
- 7.9.2. Upon execution of a Supply Agreement, Seller will be required to provide Security in the form of an irrevocable standby letter of credit (LOC), cash, or a corporate guaranty from a credit worthy entity, to protect the Company's customers in the event of default by the Seller. The amount and terms of the Security will be subject to approval by the Company based upon the Company's standards.

8. Proposal Content

- 8.1. The Seller is encouraged to provide as much information as possible to aid in the evaluation of the offer. Seller shall use Appendix C as a reference of the material required to be submitted with Seller's Proposal.
- 8.2. The Company reserves the right to request additional information. Any failures to supply the information requested will be taken into consideration relative to the Company's internal evaluation of cost, risk, and value.
- 8.3. The Seller should also provide any additional information the Seller deems necessary or useful to the Company in making a definitive and final evaluation of the benefits of the Seller's Proposal without further interaction between the Company and the Seller.

9. Treatment of Proposals

- 9.1. The Company reserves the right, without qualification, to select or reject any or all Proposals and to waive any formality, technicality, requirement, or irregularity in the Proposals received.
- 9.2. The completed Appendices and any supplement information submitted by the Seller may be utilized in any filings with regulatory agencies related to this RFP.



- 9.3. The Company reserves the right to solicit additional Proposals, to modify the RFP or request additional information, as necessary, to complete its evaluation of the Proposals received.
- 9.4. Sellers who submit Proposals do so without recourse against the Company for either rejection by the Company or failure to execute an agreement for purchase of Capacity and/or energy for any reason.

10. RFP Proposal Evaluation

10.1. Initial Review

Proposals will be thoroughly reviewed and assessed to ensure that each meets ALL applicable content requirements as described in Section 8 – Proposal Content. Proposals that meet all the requirements (as applicable) of the RFP shall be considered conforming. Proposals will be deemed non-conforming if they do not meet all the requirements specified in the RFP and will be rejected. During the initial screening process, the Company reserves the right, but is not obligated, to contact Seller(s) to clarify Proposal terms or to request additional information.

10.2. Evaluation

The Company will use a multi-stage evaluation process to review Proposals. The evaluation process followed will depend on the number and nature of the Proposals received. The evaluation process will consider all applicable factors including, but not limited to, the following to determine the reasonableness of the Proposal and the projected least, reasonable cost:

- Terms of the proposal
- Exceptions to the terms and conditions as outlined in this RFP
- Proposal Pricing
- Impact of Proposal to Company's balance sheet and credit rating
- Seller's creditworthiness and experience
- Proposed date of commercial operation (on-line)
- Status of interconnection process with PJM
- Project capacity
- Regulatory considerations
- Development status of Seller's generation facility including, but not limited to, site chosen, permitting, and transmission;

At the conclusion of the evaluation process, a Short-list of Proposals will be identified for further evaluation and comparison to the BS1 Conversion cost as referenced in the Background section (page 3) of this RFP. If the Company determines that a Proposal(s) is in the best interest of the Company and its customers, the Company will enter into negotiations which may lead to the execution of a definitive agreement(s). Sellers of Proposals that are not selected to



- the Short-list will be notified that their Proposals were not selected to the Short-list.
- 10.3. Seller agrees to cooperate, to the fullest extent necessary, to obtain any and all State, Federal, or other regulatory approvals required for the effectiveness of a transaction.
- 10.4. Execution of any agreement shall also be dependent upon AEPSC and Kentucky Power Company obtaining sufficient assurance that the product purchased pursuant to the any agreement will be recognized for full recovery in the rates charged to its jurisdictional customers. The determination of what constitutes "sufficient assurance" shall be at the sole discretion and judgment of AEPSC and Kentucky Power Company.

11. Confidentiality

- 11.1. Attached as Appendix F is the Company's Form Confidentiality Agreement (CA). If Seller elects, they may complete the CA and forward electronically to 2013KentuckyPowerRFP@aep.com for execution by the Company.
- 11.2. AEPSC will take reasonable precautions and use reasonable efforts to maintain the confidentiality of all bids submitted. Sellers should clearly identify each page of information considered to be confidential or proprietary. AEPSC reserves the right to release any Proposals to agents or consultants for purposes of Proposal evaluation. AEPSC's disclosure policies and standards will automatically bind such agents or consultants. Regardless of the confidentiality, all such information may be subject to review by the appropriate state authority, or any other governmental authority or judicial body with jurisdiction relating to these matters and may be subject to legal discovery. Under such circumstances, AEPSC will make all reasonable efforts to protect Seller's confidential information.

12. Seller's Responsibilities

- 12.1. Proposals and bid pricing must be valid for at least 120 days after the Proposal Due Date, upon which time Proposals shall expire unless the Seller has been notified and selected as a Short-listed Seller or as a final award recipient.
- 12.2. It is the Seller's responsibility to submit all requested material by the deadlines specified in this RFP. The Seller should make its Proposal as comprehensive as possible so that the Company may make a definitive and final evaluation of the Proposal's benefits to its customers without further contact with the Seller.
- 12.3. Sellers are responsible for the timely completion of the project and are required to submit proof of their financial and technical wherewithal to ensure the successful completion of the project.



12.4. The Company shall not be liable for any expenses Sellers incur in connection with the preparation and submission of a Proposal and/or any subsequent negotiations. The Company will not reimburse Sellers for their expenses under any circumstances, regardless of whether the RFP process proceeds to a successful conclusion or is abandoned by the Company at its sole discretions.

13. Contacts

All correspondences and questions regarding this RFP must be:

- 1. directed to the "Questions" section of the website established for this RFP (www.kentuckypower.com/go/rfp) or
- 2. by emailing 2013KentuckyPowerRFP@aep.com.

NOTE: Sellers or parties interested in participating in this RFP shall not contact the Kentucky Power Company offices directly. ALL inquiries must be submitted via the two contact methods described above.



Appendix A

Company Information

| Seller (Company): | | | | | | |
|--|---------------------|--|----------------------|-----------------------|--|--|
| Contact Name: | | | | | | |
| Contact Title: | | | | | | |
| Address: | | | | | | |
| City: | Stat | e: | Zip Code: | | | |
| Work Phone: | | Cell Ph | ione: | | | |
| Email Address: | | | | | | |
| | Gener | al Project Info | rmation | | | |
| Project Name / Des | cription: | | | | | |
| Resource Type: | | | | | | |
| (e.g. NG Simple Cycle, | Combined Cycle, Pi | ulverized Coal, CFB, | , Wind, Hydro,DSM, E | E, etc.): | | |
| Fuel Type (Primary | • | | | | | |
| Project Location: | <u></u> | and the second s | | | | |
| Estimated On-line l | Date: | Expected | Annual Production | (MWh): | | |
| Project Capacity Values, MW | Nameplate Rating | Winter Rating | Summer Rating | PJM Capacity Value | | |
| Is proposed MW th | e entire facility c | apacity (Y / N); | | | | |
| If no, then how large is the entire facility (MW)? | | | | | | |
| PJM Interconnection Summary | | | | | | |
| Feasibility Study Complete (Y/N): PJM Queue #: | | | | | | |
| Interconnecting Utility / Location: | | | | | | |
| | | | | | | |



| Substation: | ostation: Interconnection Voltage: | | | |
|-----------------------|---|------------------------------|--|--------------------|
| PJM Interconnect | tion Status (describ | pe): | | |
| | D | 1 <i>T</i> /1 1 | | |
| PPA | TA Prop | osal Type (check OTH | DSM | EE |
| | | <u> </u> | 2011 | |
| Sellers shall provide | e a detailed written | Pricing description of all p | oricing formulas inc | cluding a detailed |
| escription of all su | <u>b-components</u> . As | noted in the RFP, t | he Company requir | es a Base |
| | eller elects to offer | | lude up to three oth Seller shall submit s | |
| ellers responsibilit | y to clearly articula | ate in this Appendix | es shall be used as a | |
| ne pricing compone | ent to the Seller's p | oroposal. | | |
| PA Proposals | | | | |
| roject Name: | | | | ČA: |
| · | | | | |
| 'erm: [|] to [] |] | | |
| Contract Quantity: | [] MW o | of Capacity and Ene | rgy | |
| Capacity Charge: [|] \$ / kw | -month, define any | annual price escala | ition |
| leat Rate: [|] Btu / kWh, pi | rovide heat rates at | all dispatch points | |
| ariable O&M: [|] \$ / MW | h, define any annu | al price escalation | |
| ndex and any adder | st Index Name) or s, escalation or adjovide the actual co | | / MMBtu, provide a ex to be used to pri to the facility. | |
| nergy Payment: [| 1.\$ / M | Wh. define any ann | ual price escalation | |

Other Operating Related Charges: [Define cost and parameters for charges]

Start-up Payment: [_____]: \$ / start



TA Proposals

| Project Name: |
|---|
| Term: [] to [] |
| Contract Quantity: [] MW of Capacity and Energy |
| Capacity Charge: [] \$ / kw-month, define any annual price escalation |
| Heat Rate: [] Btu / kWh, provide heat rates at all dispatch points |
| Variable O&M: [] \$ / MWh, define any annual price escalation |
| Fuel Cost: (Fuel Index Name) or [] \$ / MMBtu, provide a fuel price index and any adders, escalation or adjustments to the index to be used to price fuel delivered to the Facility, or provide the actual cost of fuel delivered to the Facility. For Tolling Agreements, Kentucky Power Company reserves the right to purchase and supply the fuel to the Facility itself. |
| Start-up Payment: []: \$ / start |
| Other Operating Related Charges: [Define cost and parameters for charges] |
| Asset Purchase Agreements |
| Project Name: |
| Nameplate Capacity: |
| Sale Price, \$M: [] |
| Proposed Asset Transfer Date: [] |

Other Proposals

For "Pricing Terms" for all non-PPA proposals, Bidder shall provide these terms on a separate sheet providing a complete detail of such terms.



Appendix B

Operating Characteristics

| Heat Rate – Summer (Btu /kwh at all loading | |
|---|--------------------|
| points allowed by the Proposal) | |
| Heat Rate – Winter (Btu /kwh at all loading | |
| points allowed by the Proposal) | |
| Summer Capacity – Max (MW) | |
| Summer Capacity – Min (MW) or at all | |
| loading points allowed by the Proposal | |
| Winter Capacity – Max (MW) | |
| Winter Capacity – Min (MW) or at all load | |
| points allowed by the Proposal | |
| Output (MW) in 10 minutes from Start | |
| Ramp Rate (MW / min) – Normal | |
| Ramp Rate (MW / min) – Maximum | |
| Start-up time (hot) to minimum capability | |
| Start-up time (hot) to maximum capability | 横 |
| Start-up time (warm) to minimum capability | \$ \$ \tag{\tau}\$ |
| Start-up time (warm) to maximum capability | 9 . 700 |
| Start-up time (cold) to minimum capability | |
| Start-up time (cold) to maximum capability | |
| Auxiliary Load (at all loading points allowed | |
| by the Proposal) | |
| Minimum run time | |
| Minimum down time | |
| Forced Outage Rate | |
| Scheduled Outage Rate | |
| Annual Availability (%) | |
| Production Constraints: | |
| | |
| | |
| | |
| | |
| | |
| | |
| Ancillary Services (describe): | |



Air Emissions

| Farinciana | Primary Fuel | | Secondary Fuel | |
|-------------------------------|--------------|-------------|----------------|-------------|
| Emissions | Lb/MWh | Tons / Year | Lb/MWh | Tons / Year |
| Sulfur Dioxide | | | | |
| Nitrogen Oxide | | | | |
| Carbon Monoxide | | | | |
| Carbon Dioxide | | | | |
| Mercury | | | | |
| Particulates (PM / PM 10) | | | | |
| Volatile Organic Compounds | | | | |

Please note assumption used in completing table above (example $-M\hat{W}h$):

Assumptions:



Appendix C

Proposal Requirements

- 1. An executive summary of the bid's characteristics and timeline, including any unique aspects and benefits.
- 2. Seller shall complete Appendix A as applicable.
- 3. Seller shall complete Appendix B as applicable.
- 4. Sellers with DSM/EE Proposals shall complete Appendix D. DSM/EE Proposal documents shall be limited to 30 pages. Additional information may be submitted electronically (eg. CD, memory stick).
- 5. Seller shall fully describe any exceptions it takes towards any terms and conditions as described in Section 7 or other parts of this RFP.
- 6. Experience and References
 - a. Provide a general description of the Seller's background and experience in utility scale power projects similar to its proposal, including any affiliated companies, holding companies, subsidiaries or predecessor companies presently or in the past engaged in developing energy power supply projects.
 - b. Provide three (3) or more references from projects where the bidder, or any of its affiliates, has completed the development and construction of a power project similar to the one proposed to the Companies. If the bidder has fewer than three projects, it shall provide as many references as possible.
- 7. Seller shall provide a comprehensive narrative of the development status of any new generation project intended to be used to meet Seller's obligations to the Company. Seller's narrative shall include the following.
 - a. Key project participants including owners, operators, engineer / contractors, fuel suppliers.
 - b. Status of engineering and design work.
 - c. A comprehensive development and construction schedule.
 - d. A listing of all required permits and governmental approvals and their status.
 - e. A listing of all required electric interconnection and or transmission agreements and their status.
 - f. A financing plan.
 - g. A summary of key contracts (fuel, construction, major equipment) to the extent that they exist.
- 8. Seller shall provide copies of all PJM Interconnection studies. In addition, Seller shall provide the following:



- a. Impedance of the generator step-up transformer.
- b. Transient and sub-transient characteristics of the generator.

9. Project Site

- a. Seller shall provide proof or status of ownership or control of site.
- b. Seller shall provide a summary describing whether the site has been assessed for environmental contamination, has any known environmental issues, and if a Phase 1 environmental assessment has been completed.
- c. Has the site been assessed for environmental contamination? Describe any known environmental issues?
- d. Describe status of all required permits.
- e. If the plant site is subject to site approval by a governmental authority, provide a description of the approval status including a copy of the application. If approval has been granted, provide a copy of the approval.

10. Legal Proceedings

- a. List all lawsuits, regulatory proceedings, or arbitration in which the bidder or its affiliates or predecessors have been or are engaged that could affect bidder's performance of its bid.
- b. Identify the parties involved in such lawsuits, proceedings, or arbitration, and the final resolution or present status of such matters.

11. Technology / Equipment

- a. Technology employed (combined cycle, pulverized coal, CFB, etc.)
- b. Provide details regarding the technology selected, major equipment manufacturer identified, status of equipment purchases.
- 12. Existing Facilities (including <u>Asset Purchase Agreements</u>) For existing facilities, at a minimum, provide the following information for each of the last 5 years of operating history;
 - a. Energy generated
 - b. Capacity factor
 - c. Number of start-ups
 - d. Average heat rate
 - e. On-Peak availability
 - f. Fixed O&M Costs
 - g. Variable O&M Costs
 - h. Capital expenditures



- 13. Sellers of assets (Asset Purchase Agreements) shall provide a description of the facility's major equipment
- 14. Seller shall provide a copy of air permit or permit application(s) if available.
- 15. Seller shall provide a summary of the timing and status of all permit applications including water withdrawal, wastewater disposal, fuel byproducts handling and disposal, etc.
- 16. Seller shall provide its operations plan describe the entity who will be performing operations and maintenance of the facility
- 17. Seller shall provide its fuel supply plan.
- 18. Subsidies Bidders must indicate if their proposal is dependent upon any existing state or federal tax credit or grant program and expiration of said program.
- 19. Maintenance Outages
 - a. Seller shall describe the required annual (routine) maintenance outage schedule and associated tasks.
 - b. Seller shall describe major outages schedules, general scope and frequency





Appendix D

DSM / EE - Proposal Requirements

| | Company II | nformation |
|-------------------------|------------|--|
| Seller (Company): | | |
| Contact Name: | | |
| Contact Title: | | |
| Address: | | |
| City: | State: | Zip Code: |
| Work Phone: | Се | ll Phone: |
| Email Address: | | |
| | | l documents shall be limited to 30 pages. mically (eg. CD, memory stick). ct Information |
| Project Name / Descript | cion: | |
| | | |
| | | |



Describe End-uses Impacts:

- Provide monthly projected peak and energy impacts over the Proposal Term
- Provide hourly reduction load shapes over the Proposal Term by end-use and aggregated for the Proposal
- Provide measure life and any degradation in peak and energy impacts over the Proposal Term

Measurement and Verification:

• Describe how program impacts will be measured and verified over the Proposal Term



Appendix E

Bidder's Credit-Related Information

| Full Legal Name of the Bidder: | | |
|--|--|--|
| Type of Organization (Corporation, Partnership, etc.): | | |
| Bidder's % Ownership in Proposed Project: | | |
| Full Legal Name(s) of Parent Corporation: | | |
| 1. | | |
| 2. | | |
| 3. | | |
| | | |
| Entity Providing Credit Support on Behalf of Bidder (if applicable): | | |
| Name: | | |
| Address: | | |
| City: | | |
| Zip Code: | | |
| Type of Relationship: | | |
| Current Senior Unsecured Debt Rating: | | |
| 1. S&P: | | |
| 2. Moodys: | | |
| | | |
| Bank References & Name of Institution: | | |
| Bank Contact: | | |
| Name: | | |
| Title: | | |
| Address: | | |
| City: | | |
| Zip Code: | | |
| Phone Number: | | |
| | | |
| Legal Proceedings: As a separate attachment, please list all lawsuits, regulatory proceedings, | | |
| or arbitration in which the Bidder or its affiliates or predecessors have been or are engaged that | | |
| could affect the Bidder's performance of its bid. Identify the parties involved in such lawsuits, | | |
| proceedings, or arbitration, and the final resolution or present status of such matters. | | |
| Discription of the Discription of the Asset Di | | |
| Financial Statements: Please provide copies of the Annual Reports for the three most recent | | |
| fiscal years and quarterly reports for the most recent quarter ended, if available. If available | | |
| electronically, please provide link: | | |



Appendix F

Mutual Confidentiality Agreement

Email to:

2013KentuckyPowerRFP@aep.com

American Electric Power Service Corporation

155 West Nationwide Boulevard

Suite 500

Columbus, OH 43215 Fax: (614) 583-1611

Due:

Friday, May 24, 2013

This Mutual Confidentiality Agreement ("Agreement") dated as of _______, 2013 ("Effective Date") is made and entered into by and between American Electric Power Service Corporation ("AEPSC"), as agent for Kentucky Power Company, and insert full legal name, a(n) insert state of formation insert type of company ("Bidder").

Recitals:

- I. Bidder is or is considering submitting a proposal (the "Proposal") in response to a Request for Proposals (the "RFP") issued by AEPSC for energy, capacity, and ancillary services as described in the RFP. If submitted, the Proposal will become the property of AEPSC and shall be held confidential under terms of the RFP.
- II. It may become desirable that AEPSC and Bidder exchange other confidential information pursuant to questions, responses or other communications that are not contained in the Proposal and which the parties desire to protect as confidential.
- III. In addition, if the Proposal, if submitted, is selected by AEPSC, then Bidder and AEPSC will negotiate about a proposed agreement between AEPSC and Bidder to implement the Proposal (the "Proposed Agreement"). Bidder and AEPSC want to keep all negotiations concerning the Proposed Agreement, including the Proposed Agreement itself and all drafts of the Proposed Agreement, confidential.
- **IV.** The parties are willing to exchange such confidential information pursuant to the terms of this Agreement.
- NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties agree as follows:



Section 1. Definitions.

- 1.1. (a) "Confidential Information" means any information that is disclosed by the Disclosing Party to the Receiving Party or its Representatives in connection with the RFP or any Proposed Agreement (collectively, the "Transaction"), whether before or after the date hereof and irrespective of the format in which the information is provided. For avoidance of doubt, "Confidential Information" includes:
 - (i) Written information or machine-readable data, including questions, responses or communications in connection with AEPSC's RFP or any Proposed Agreement, notes, reports, assessments, specifications, drawings, financial statements and projections, software and databases, customer information, sales and marketing strategies, and any other written information or machine-readable data;
 - (ii) Orally conveyed information, including but not limited to demonstrations that are directly related to written or other tangible Confidential Information;
 - (iii) Any hardware, including but not limited to samples, devices and any other physical embodiments delivered to the Receiving Party;
 - (iv) Any Evaluation Material; or
 - (v) The existence of this Agreement, the terms of this Agreement and any Proposed Agreement, including all drafts of the Proposed Agreement and all negotiations concerning the Proposed Agreement, that may arise stemming from the Bidder's Proposal.
 - (b) "Confidential Information" does not include information which:
 - (i) is, or subsequent to disclosure becomes, part of the public domain through no fault of the Receiving Party;
 - (ii) is lawfully disclosed to the Receiving Party by a third party which, to the knowledge of the Receiving Party, does not have a confidentiality obligation to the Disclosing Party;
 - (iii) was lawfully in the possession of the Receiving Party prior to disclosure by the Disclosing Party; or
 - (iv) is lawfully and independently developed by the Receiving Party without use of the Confidential Information disclosed by the Disclosing Party.
- **1.2.** "Disclosing Party" means the party disclosing Confidential Information.



- **1.3.** "Evaluation Material" means notes, reports or other documents which reflect, interpret, evaluate, include or are derived from the Confidential Information.
- **1.4.** "Receiving Party" means the party receiving Confidential Information.
- 1.5. "Representatives" means a party's employees, officers, directors, attorneys, accountants, consultants, advisors and agents (including potential lenders, equity partners, underwriters, or other parties involved in the Transaction for the party), and the party's affiliates and the employees, officers, directors, attorneys, accountants, consultants, advisors and agents thereof.
- Confidentiality. Except as provided in Section 5, the parties hereby agree Section 2. that the Confidential Information will be kept confidential during the term of this Agreement. The parties also agree that without the prior written consent of the Disclosing Party, the Confidential Information will not be disclosed by the Receiving Party, in whole or in part, to any other person except as provided herein. Each party shall use the same care in protecting the other's Confidential Information as it uses to protect its own confidential information, provided that neither party shall use less than reasonable efforts to protect the other's Confidential Information. Notwithstanding the foregoing, the Receiving Party may (a) disclose Confidential Information to its Representatives whose access is necessary to conduct the evaluations and negotiations in connection with the Transaction, or for supervisory, regulatory or similar purposes, and who have been informed of and have agreed to abide by the confidentiality restrictions contained in this Agreement and (b) make a limited number of copies of the Confidential Information in order for the Receiving Party to adequately use the Confidential Information subject to the terms and conditions of this Agreement. Each party agrees to be responsible for the actions, uses and disclosures of any of its Representatives in accordance with the terms and restrictions of this Agreement.
- Section 3. Ownership and Use of Confidential Information. All Confidential Information (except Evaluation Material) shall remain the property of the Disclosing Party. No license or other rights under any patents, trademarks, copyrights or other proprietary rights is granted or implied by the disclosure of the Confidential Information. Neither party shall use the Confidential Information for any purpose other than for evaluation of and negotiations relating to the Transaction.
- Section 4. Disposition of Confidential Information. The Receiving Party, upon written request from the Disclosing Party, shall promptly return or destroy all Confidential Information in its possession; provided, however, with respect to Evaluation Materials, the Receiving Party may at its discretion destroy such Evaluation Material. If requested by the Disclosing Party, the Receiving Party shall provide the Disclosing Party with a certification that all Confidential Information and Evaluation Material has either been returned or destroyed, as appropriate. Notwithstanding the foregoing, the Receiving Party may retain one copy of the Confidential Information solely for archival purposes and for the purpose of demonstrating compliance with this Agreement. The return or destruction of the



Confidential Information shall not extinguish any rights or obligations under this Agreement with respect to the Confidential Information.

Section 5. **Legally Required Disclosures.** If the Receiving Party or its Representatives become subject to a bona fide requirement or request by any regulatory, governmental, judicial or supervisory authority (by subpoena, oral deposition, interrogatories, request for production of documents, civil investigative demand, administrative order or otherwise), to disclose any of the Confidential Information, or if such disclosure is necessary in order to obtain or maintain regulatory or governmental approvals, applications or exemptions, the Receiving Party will provide the Disclosing Party with as much advance notice as and to the extent as permitted and practicable to afford the opportunity to seek an appropriate protective order or other appropriate remedy to prevent the disclosure. The Receiving Party or any of its Representatives being compelled to disclose such Confidential Information will reasonably cooperate with the Disclosing Party, at its expense, to enable the Disclosing Party to obtain a protective order or other reliable assurance that confidential treatment will be accorded the same (e.g. confidentiality agreement). If such protective order or other appropriate remedy (e.g. confidentiality agreement) is not obtained, the Receiving Party or any of its Representatives being compelled to disclose such Confidential Information may disclose the information without liability hereunder provided that the party may only furnish that portion of the Confidential Information which is legally required or necessary.

Section 6. Term. If the Bidder's Proposal and/or related negotiations do not result in a final agreement, then this Agreement is effective for two (2) years from the Effective Date stated above. If the negotiations result in a final agreement, then this Agreement is effective until two (2) years after the termination of the final agreement.

Section 7. No Warranties. The Disclosing Party makes no representations or warranties as to the reliability, accuracy or completeness of the Confidential Information. The Disclosing Party shall not be subject to any liability to the Receiving Party based on the Receiving Party's use of the Confidential Information.

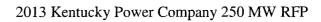
Section 8. Remedies. The parties acknowledge that improper or unauthorized use or disclosure of Confidential Information could cause irreparable harm to the Disclosing Party and that monetary damages would not be an adequate remedy for a breach of this Agreement. In the event of any breach or threatened breach of this Agreement, the non-breaching party shall be entitled to pursue injunctive and other equitable relief, and the breaching party agrees to waive any requirement for the posting of a bond in connection with such remedy. Such injunctive and equitable relief shall not be deemed to be the exclusive remedy for a breach of this Agreement, but shall be in addition to all other available remedies. In no event shall either party be liable to the other for any incidental, indirect, special, punitive or consequential damages (including without limitation damages for lost profits).



Section 9. Relationship of Parties. Neither party shall have any obligation to commence or continue discussions or negotiations, to exchange any Confidential Information, to reach or execute any agreement with the other party, to refrain from engaging at any time in any business whatsoever, or to refrain from entering into or continuing any discussions, negotiations or agreements at any time with any third party, until each party executes a definitive agreement. Until such definitive agreement is executed, neither party shall have any liability to the other party with respect to the Transaction except as set forth in this Agreement. Neither party shall have any liability to the other party in the event that, for any reason whatsoever, no such definitive agreement is executed.

Section 10. General.

- **10.1 Governing Law.** This Agreement shall be construed and enforced in accordance with the laws of the State of Kentucky.
- 10.2 Entire Agreement. This Agreement constitutes the entire Agreement between the parties, supersedes any prior understandings or representations relating to the confidential treatment of the Confidential Information, and shall not be modified except by a written agreement signed by both parties.
- 10.3 Assignability. This Agreement may not be assigned by either party without the prior written consent of the other party; provided, however, that AEPSC may assign this Agreement to one or more of its affiliated companies.
- 10.4 Severability. All provisions of this Agreement are severable, and the unenforceability of any of the provisions of this Agreement shall not affect the validity of enforceability of the remaining provisions of this Agreement.
- **10.5 No Waiver.** Failure of either party to insist upon strict performance of any of the terms and conditions shall not be deemed to be a waiver of those terms and conditions.
- 10.6 Counterparts and Faxed Signatures. This Agreement may be executed in counterparts, and in the absence of an original signature, faxed signatures will be considered the equivalent of an original signature.
- 10.7 Notices. Notices shall be in writing and shall be sent to the addresses listed below, either by personal delivery, by the U.S. Mail, overnight mail, fax or other similar means. All notices shall be effective upon receipt.

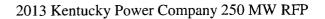




The parties have signed this Agreement effective as of the later signature date set forth below.

SIGNATURES ON FOLLOWING PAGE





[BIDDER: insert full legal name]



American Electric Power Service

Corporation, as agent for Kentucky Power Company

The parties have signed this Agreement effective as of the later signature date set forth below.

| Ву: | By: |
|-------------|-----------------|
| Print Name: | Print Name: |
| Title: | Title: |
| Date: | Date: |
| | |
| | Bidder Address: |
| | |
| | |
| | Attn: |
| | |