COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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; (4) DEFERRAL OF COSTS INCURRED IN CONNECTION WITH THE COMPANY’S EFFORTS TO MEET FEDERAL CLEAN AIR ACT AND RELATED REQUIREMENTS; AND (5) ALL OTHER REQUIRED APPROVALS AND RELIEF

CASE NO. 2012-00578

ORDER

On December 19, 2012, Kentucky Power Company (“Kentucky Power”) filed an Application seeking a Certificate of Public Convenience and Necessity (“CPCN”), pursuant to KRS 278.020, in connection with the proposed transfer of an undivided 50 percent interest in the Mitchell Generating Station (“Mitchell Station”) and related assets currently owned by an affiliate, Ohio Power Company (“Ohio Power”). The 1,560-MW Mitchell Station is located in Moundsville, West Virginia, and is comprised of two coal-fired units. Kentucky Power also requests authorization pursuant to KRS 278.300 to assume certain liabilities in connection with the transfer. Kentucky Power further seeks authority to accumulate and defer for review and recovery in its next base rate case
approximately $28 million of costs associated with Kentucky Power's efforts to meet the Federal Clean Air Act and other environmental requirements with respect to Big Sandy Unit 2.

The following parties were granted full intervention in this matter: (1) the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention ("AG"); (2) Kentucky Industrial Utility Customers, Inc. ("KIUC"); and (3) Alexander DeSha, Tom Vierheller, Beverly May, and the Sierra Club (collectively "Sierra Club"). On January 25, 2013, the Commission issued an Order establishing a procedural schedule for the processing of this matter. The procedural schedule provided for two rounds of discovery on Kentucky Power, an opportunity to file intervenor testimony, discovery on intervenor testimony, and an opportunity for Kentucky Power to file rebuttal testimony.

The Commission conducted a public meeting for the purpose of taking public comments on Kentucky Power's Application in Louisa, Kentucky, on May 14, 2013, and in Hazard and Whitesburg, Kentucky, on May 15, 2013. A formal hearing was scheduled to begin on May 29, 2013, at the Commission's offices in Frankfort, Kentucky, but was continued until July 10, 2013, so that the record could be more fully developed and to allow further discussion among the parties with respect to a possible settlement.

On July 2, 2013, Kentucky Power filed a non-unanimous Stipulation and Settlement Agreement ("Stipulation") entered into by and among Kentucky Power, KIUC, and Sierra Club. Kentucky Power also filed supplemental testimony in support of the Stipulation, which set forth the terms of the Stipulation and an explanation of why
the Stipulation should be approved as fair, just, and reasonable. The Stipulation also contained, as exhibits, certain new and revised tariffs to implement the terms of the Stipulation. The new proposed tariffs were the Asset Transfer Riders and the Purchase Power Adjustment. The first is Tariff Asset Transfer Rider ("Tariff A.T.R."), which permits Kentucky Power to recover a portion of the non-fuel costs associated with the Mitchell acquisition during the period between January 1, 2014, and the date the base rates established in Kentucky Power's next base rate case become effective. The second is Tariff Asset Transfer Rider-2, which would replace Tariff A.T.R. upon Kentucky Power's next base rate case and allows Kentucky Power to recover its Big Sandy Station retirement costs. If Big Sandy Unit 2 is retired or can no longer be economically operated, the Purchase Power Adjustment would allow Kentucky Power to recover any incremental power costs associated with forced outages of other Kentucky Power generating units that are not otherwise recoverable through the fuel adjustment clause. This provision is intended to protect Kentucky Power from any incremental purchased power cost in the event Big Sandy Unit 2 is retired or can no longer be economically operated. The provision benefits ratepayers by exerting downward pressure on the company's capital costs which allows Kentucky Power to stay out longer between base rate cases.

KENTUCKY POWER'S SCRUBBER STUDY

Beginning in 2004, Kentucky Power, in collaboration with AEP Service Corporation ("AEPSC"),¹ began an investigation into the measures necessary to allow Big Sandy Unit 2 to continue to operate in compliance with the Federal Clean Air Act and other environmental requirements. Among the environmental requirements addressed in the investigation were the former Cross-State Air Pollution Rule, the Clean Air Interstate Rule, the former Electric Generating Unit Maximum Achievable Control Technology Rule, the Mercury and Air Toxics Standard ("MATS") Rule, and the requirements imposed by the 2007 New Source Review ("NSR") Consent Decree.²

As part of the investigation, Kentucky Power engaged an architect/engineer to perform engineering, design, and feasibility studies in connection with the investigation. The architect/engineer, with input from a team of AEPSC engineers and managers, defined the scope of the project, prepared work plans, and developed a budgetary cost estimate and schedule for implementation. Preliminary environmental permitting work also began. Finally, because Kentucky Power was investigating the use of a wet flue gas desulfurization unit ("WFGD"), a WFGD supplier was engaged to begin conceptual engineering of a WFGD unit.³

In 2006, Kentucky Power stated that it suspended, but did not cancel, the investigation into retrofitting Big Sandy Unit 2. According to Kentucky Power, the suspension was driven by the conclusion that the WFGD was not the most economic

¹ AEPSC is a service company that provides management and professional services to American Electric Power and its utility operating companies, including Kentucky Power.

² Application, page 23, paragraph 65.

³ Id., paragraph 66.
means of addressing the environmental requirements for the continued operation of Big Sandy Unit 2 due to the decreased projected price spread between low- and higher-sulfur coals. At the time of suspension, the investigation and related expenditures for which deferral is sought in this proceeding totaled approximately $15.2 million, of which $1.69 million was related to a landfill needed in conjunction with the WFGD.4

Kentucky Power states that it reinitiated its investigation in October 2011, following further investigation into the least-cost alternative for meeting Kentucky Power’s capacity and energy needs in light of the environmental requirements affecting Big Sandy Unit 2. Kentucky Power maintains that this work was a continuation of the work that began in 2004 and was suspended in 2006. At no time during the suspension period did Kentucky Power seek authority to accumulate and defer for future recovery the investigation costs.

As part of the continued investigation, Kentucky Power evaluated the available flue gas desulfurization (“FGD”) technologies and concluded that the most suitable was a dry FGD (“DFGD”) technology. Kentucky Power undertook engineering and other activities to support Kentucky Power’s application in Case No. 2011-00401.5,6 The cost incurred by Kentucky Power in conducting this more recent investigation was approximately $12.9 million. The investigation’s overall cost totaled $28,113,304.

---

4 Id., page 24, paragraph 67.


6 Application, page 24, paragraph 68.
On May 31, 2012, the Commission granted Kentucky Power’s motion for leave to withdraw without prejudice its application in Case No. 2011-00401 to permit Kentucky Power to reevaluate the continued operation of the Big Sandy generating station in light of the 2007 NSR Consent Decree, the Cross-State Air Pollution Rule, the MATS Rule, and other environmental standards.

**PROPOSED MITCHELL ACQUISITION**

Kentucky Power is a privately owned electric utility that generates, transmits, distributes and sells electricity to approximately 173,000 customers in all or parts of 20 counties in eastern Kentucky. Kentucky Power is a subsidiary of American Electric Company ("AEP"), a public utility holding company. Kentucky Power, along with three other operating utility companies, is also a member of the AEP East System, which provides electric service to retail customers in seven states.

Kentucky Power states that as a result of current and evolving environmental requirements, as well as the termination of the AEP Interconnection Agreement ("Pool 71d., Case No. 2011-00401, Ky. PSC May 31, 2012.

---


8 As a subsidiary of AEP, Kentucky Power is a member of the integrated AEP System. Subsequent to its merger in 2000 with Central and South West Corporation, AEP has operations in Arkansas, Indiana, Kentucky, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia, and West Virginia.

9 The subsidiaries are Appalachian Power Company, Indiana & Michigan Power Company and Ohio Power Company.
Agreement\textsuperscript{10}, it faces important choices about how to obtain sufficient resources and base load generation to meet the capacity and energy needs of its customers over the long term. At this crossroad, and as promised last year when Kentucky Power withdrew its application to retrofit Big Sandy Unit 2,\textsuperscript{11} Kentucky Power has conducted in-depth analyses of reasonable portfolio alternatives to determine the best path to ensure adequate and reliable capacity and energy for its customers relative to the unit disposition of Big Sandy Unit 2. Kentucky Power states that its comprehensive economic analysis demonstrated that the proposed acquisition of an undivided 50 percent interest in the Mitchell Station is the least-cost and best alternative.

According to Kentucky Power, the Mitchell units are of a similar size, design, and capacity to Big Sandy Unit 2, and thus represent technology with which Kentucky Power and the Commission are already familiar. Kentucky Power maintains that the Mitchell units are appropriately sized to meet its needs, and are environmentally controlled units...

\textsuperscript{10} The Pool Agreement, which created the AEP East System, is a tariff that contains rates and terms of service for the wholesale sale of power and is subject to regulation by the Federal Energy Regulatory Commission ("FERC"). The Pool Agreement governs the use of generating facilities and the allocation of their costs among the four AEP member operating companies. This agreement requires that the various members of the system are to be planned and operated as a single integrated system. Thus, the member operating companies share generating capacity and either make or receive capacity-related payments pursuant to FERC-approved rates. Under the terms of the Pool Agreement, each operating company must provide adequate generating facilities to meet its firm load requirements; capacity costs are allocated to each operating company based on a formula referred to as the "Member Load Ratio," and payment of a carrying charge, referred to as a capacity settlement payment, must be made to equalize the cost responsibility for existing generating capacity. The provisions of the Pool Agreement require a capacity "deficit" company to pay under a FERC tariff a capacity settlement charge to capacity "surplus" companies, with the payment based on the embedded costs of capacity of the surplus companies. On December 17, 2010, each of the members of the Pool Agreement, including Kentucky Power, provided notice to the other Pool Agreement members to terminate the Pool Agreement on January 1, 2014. The decision to terminate the Pool Agreement was due to certain cumulative changes in the structure of the electric industry, including evolving environmental regulations, introduction of open access to transmission facilities, the advent of regional transmission organizations, movement toward industry deregulation, an increased emphasis on demand-side management, and expanding competition. Once the Pool Agreement is effectively terminated, Kentucky Power will essentially operate as a stand-alone utility.

\textsuperscript{11} Case No. 2011-00401, Kentucky Power's Motion for Leave to Withdraw Application Without Prejudice, filed May 30, 2012.
already equipped with both FGD and selective catalytic reduction ("SCR") systems. The Mitchell units are proposed to be transferred at their net book value ("NBV"), which Kentucky Power states is less than the cost of retrofitting Big Sandy Unit 2.

The proposed transfer will consist of a series of near-simultaneous transactions that are scheduled to take place on or about December 31, 2013, and are intended to be accomplished without incurring unintended tax consequences.

Under the corporate restructuring plan approved by the Public Utilities Commission of Ohio, Ohio Power will enter into a Corporate Separation Transaction whereby it will divest its generation assets, including the Mitchell Generating Station, to AEP Generation Resources Inc. ("AEP Generating Resources"). Immediately upon the closing of the Corporate Separation Transaction, it is proposed that a 50 percent undivided interest in the Mitchell Generating Station (including related assets and assumed liabilities) will be transferred in a near-simultaneous series of transactions to NEWCO Kentucky,¹² which is a yet-to-be formed corporation to be organized under the laws of the State of Delaware for the limited purpose of effectuating the proposed transfer of the subject assets and liabilities to Kentucky Power. In the final step, NEWCO Kentucky, a wholly owned subsidiary of AEP Generation Resources, will merge with Kentucky Power, with Kentucky Power being the surviving entity and owning the proposed 50 percent undivided interest in the Mitchell Generating Station. The contemplated merger will take place in accordance with the terms and conditions of the

¹² Application, paragraph 64, page 22. Kentucky Power requested that the Commission enter an Order declaring that the merger of NEWCO Kentucky and Kentucky Power is not subject to the requirements of KRS 278.020(5) or KRS 278.020(6) on or before February 15, 2013. On February 15, 2013, the Commission issued an Order that approval is not required pursuant to KRS 278.020(5) and KRS 278.20(6) for the merger of NEWCO Kentucky and Kentucky Power.
Form of Agreement and Plan of Merger of Kentucky Power Company and NEWCO Kentucky.

Mitchell Station Unit 1 has an average annual capacity rating of 770 MW. Unit 2 has an average annual capacity rating of 790 MW. As stated earlier, both units are equipped with FGD and SCR systems, which, according to Kentucky Power, bring the Mitchell units into compliance with the 2007 Consent Decree and the MATS rule. The proposed Mitchell transfer is scheduled to close on December 31, 2013, based on a projected NBV of $536 million, or $687 per kW.

Along with the undivided 50 percent interest in the Mitchell generating station, a like share of all related equipment and facilities associated with the Mitchell generating station is proposed to be transferred to Kentucky Power, including the appurtenant interconnection facilities, the associated real property, inventories, leases, permits, emission allowances, equipment, machinery, and the other assets described in the Form of the Asset Contribution Agreement between AEP Generation Resources and NEWCO Kentucky ("Asset Contribution Agreement"). Collectively, the undivided 50 percent interest in the Mitchell Station and related assets to be transferred to Kentucky Power constitute the transferred assets ("Transferred Assets"). Excluded from the definition of Transferred Assets are the assets described in the Asset Contribution Agreement.14

13 Application, Exhibit 1, page 9, Article II, Transfer of Assets, Section 2.01 of the Application, filed Dec. 19, 2012.

14 Application, Exhibit 1, page 11, Article II, Excluded Assets, Section 2.02 of the Application, filed Dec. 19, 2012.
In conjunction with the transfer of the Transferred Assets, Kentucky Power will assume an undivided 50 percent interest in the liabilities described in the Asset Contribution Agreement between AEP Generation Resources Inc. and NEWCO Kentucky (collectively the "Assumed Liabilities"). Excluded from Assumed Liabilities are those liabilities described in the Asset Contribution Agreement.

The Transferred Assets and Assumed Liabilities will be transferred to Kentucky Power though a series of near-simultaneous transactions ("Transfer and Assumption Transaction"). At the conclusion of the Transfer and Assumption Transaction, Kentucky Power will own the Transferred Assets and be subject to the Assumed Liabilities.

The remaining undivided 50 percent interest in the Mitchell Station will be transferred to NEWCO Appalachian. This undivided 50 percent interest in the Mitchell Station will then be transferred to Appalachian Power Company ("APCo") in a series of near-simultaneous transactions that parallel those by which the other undivided 50 percent interest in the Mitchell Station will be transferred to Kentucky Power. APCo is required to seek approval from the West Virginia Public Service Commission and the Virginia State Corporation Commission to acquire its half interest of the Mitchell Station.

---

15 Application, page 7, paragraph 14 and Exhibit 1, page 11, Article II, Assumed Liabilities, Section 2.03 of the Application, filed Dec. 19, 2012.

16 Application, page 7, paragraph 14 and Exhibit 1, page 12, Article II, Excluded Liabilities, Section 2.04 of the Application, filed Dec. 19, 2012.

17 Application, page 10, footnote 9.

18 On July 31, 2013, the Virginia State Corporation Commission issued an Order in Case No. PUE-12-00141 denying APCo's request to acquire the remaining 50 percent undivided interest in the Mitchell Station. As of the date of the instant Order, the West Virginia Public Service Commission has not yet ruled upon APCo's request for the acquisition of a 50 percent undivided interest in the Mitchell Station, Case No. 12-1655.
There are other agreements associated with the transfer and assumption of the Mitchell plant, one of which is the Mitchell Plant Operating Agreement ("Operating Agreement"). Under the Operating Agreement, APCo is to operate and maintain the Mitchell generating station in accordance with good utility practices. The Operating Agreement also provides Kentucky Power with the right to call on at any and all times its pro rata share of the available output of the Mitchell generating station. The monthly Mitchell Station's operating and maintenance costs are apportioned between APCo and Kentucky Power in accordance with their respective ownership interests. The Operating Agreement also provides for an Operating Committee, made up of representatives of APCo, Kentucky Power, and AEPSC as agent, to review and approve annual budgets, capital expenditures, and other matters regarding the operation of the Mitchell generating station. Finally, the Operating Agreement governs other aspects of the operation of the Mitchell Station, as well as relations among the parties to the agreement.19

In addition to the Operating Agreement,20 the transfer of ownership of the Mitchell generating station will involve the assumption by APCo (in its role as operator of the plant) of the rights and obligations under various executory contracts necessary for the operation of Mitchell. These contracts include contracts for supplies of coal, transportation of coal, consumables for the operation of environmental control facilities (e.g., limestone, urea, and trona), and other matters. All of these contracts are existing

19 Application, Exhibit 3, Rate Schedule No. 303, Mitchell Plant Operating Agreement, Appalachian Power Company, Kentucky Power Company, and American Electric Power Service Corporation, as Agent.

20 Id., footnote 11. The Mitchell Plant Operating Agreement is a mechanism to fairly allocate Kentucky Power's ratable expenses in connection with its ownership of a 50 percent undivided interest in the Mitchell generating station; it is not an assumption of liability by Kentucky Power.
and necessary for the operation of the Mitchell Station, are significant in number, and may be subject to change prior to the transfer.\textsuperscript{21} Under the Operating Agreement, Kentucky Power will reimburse APCo for Kentucky Power's pro rata share of the expenses under the contracts assumed by APCo.\textsuperscript{22}

Another agreement associated with the Mitchell acquisition is the Bridge Agreement. The Bridge Agreement is an interim agreement among APCo, Indiana & Michigan Power Company ("I&M"), Ohio Power, Kentucky Power, AEP Generation Resources, and AEPSC, as agent, and governs the treatment of purchases and sales made on behalf of the parties before, but that extend beyond, the termination of the Pool Agreement. In addition, the Bridge Agreement addresses the manner in which APCo, I&M, Ohio Power, and Kentucky Power will meet their collective obligation under the PJM Reliability Assurance Agreement through May 31, 2015 (PJM planning year 2014/2015).\textsuperscript{23}

Lastly, in connection with the termination of the Pool Agreement at the end of 2013, a Power Coordination Agreement was entered into among APCo, I&M, and Kentucky Power. Unlike the Pool Agreement, the Power Coordination Agreement does not require generation to be planned on a system-wide basis. APCo, I&M, and Kentucky Power each individually will be required to have sufficient generation to meet their respective load and reserve obligations. Parties to the Power Coordination Agreement are not precluded from jointly owning units with, or buying capacity from or

\textsuperscript{21} Id., Exhibit 4, the contracts include coal, gypsum sale, hydrated line, limestone, trona, urea, urea transportation, railcar lease, and construction, operation, and maintenance of fly ash impoundment.

\textsuperscript{22} Id., page 12, paragraph 28.

\textsuperscript{23} Id., page 13, paragraph 29.
selling capacity to, other parties to the agreement, through separate agreements. Consequently, there are no capacity equalization payments required under the Power Coordination Agreement.\textsuperscript{24} Kentucky Power states that Commission approval is not required for the Bridge Agreement, the Power Coordination Agreement, or the Mitchell Plant Operating Agreement, which upon acceptance by FERC, will be FERC-filed rate schedules under Section 205 of the Federal Power Act. Kentucky Power also states that following the execution of these agreements, Kentucky Power plans to file with the Commission executed copies of Agreement and Plan of Merger of Kentucky Power and NEWCO Kentucky and the Mitchell Plant Operating Agreement among APCo, Kentucky Power, and AEPSC as agent.

\textbf{ECONOMIC ANALYSIS OF PROPOSED MITCHELL ACQUISITION}

The purpose of this proceeding is to determine the least-cost option and best alternative for Kentucky Power to meet necessary capacity and energy requirements for its customers. In the Application, Kentucky Power provided six options for consideration.

Option 1: Retrofit Big Sandy Unit 2.

Option 1A: Retrofit Big Sandy Unit 2 with DFGD technology by approximately June 2017 (and, subsequently, require Coal Combustion Residuals ("CCR") and Rule 316(b)-related equipment by 2019); and Retire Big Sandy Unit 1 by June 2015 replacing this unit with capacity and energy from a 20 percent (312 MW) ownership interest of Mitchell Units 1 and 2 on January 1, 2014.

Option 1B: Same as Option 1A, except assume additional capacity and energy required to replace Big Sandy 1 is purchased from projected available PJM markets for 10 years in lieu of a Mitchell unit ownership transfer; then assume a new-build combined cycle ("CC"), or simple-cycle combustion turbine ("CT") facility.

\textsuperscript{24} \textit{Id.}, paragraph 30.
Option 2: Retire & Replace Big Sandy Unit 2 with a (Brownfield) CC.

Option 2A: Retire Big Sandy Unit 2 (and Unit 1) by January 2016 (and April 2015), respectively, and replace Unit 2 capacity and energy with a nominally-rated 762-MW (918-MW for peaking purposes with duct-firing) new-build natural gas CC facility, to be located at the Big Sandy site, by June 2017, with additional capacity and energy required to replace Big Sandy Unit 1 from a 20 percent (312 MW) ownership interest of Mitchell Units 1 and 2 on January 1, 2014.

Option 2B: Same as Option 2A except, assume additional capacity and energy to replace Big Sandy Unit 1 is purchased from projected available PJM markets for 10 years in lieu of a Mitchell unit ownership transfers; then assume a new-build CC, or CT(s).

Option 3: Retire & Replace Big Sandy Unit 2 with a CC-Repowered Big Sandy Unit 1.

Option 3A: Retire Big Sandy Unit 2 by January 2016 and replace it with the repowering of Big Sandy Unit 1 as a nominally-rated 745-MW (802-MW for peaking purposes with duct-firing) natural gas CC unit by June 2017, with additional capacity and energy required to replace Big Sandy Unit 1 from a 20 percent (312 MW) ownership interest of Mitchell Units 1 & 2 on January 1, 2014.

Option 3B: Same as Option 3A except, assume additional capacity and energy to replace Big Sandy 1 is purchased from projected available PJM markets for 10 years in lieu of a Mitchell unit ownership transfer; then assume a new-build CC, or CT(s).

Option 4: Retire & Replace Big Sandy Units 2 (and Unit 1) with Market Purchases.

Option 4A: Retire Big Sandy Units 1 & 2 by June 2015, and replace both units with capacity and energy purchased from projected available PJM markets for an interim period of 5 years (through 2020), then assume a larger-tranche (700-800 MW) new-build CC and/or CT(s) capacity replacement.

Option 4B: Same as Option 4A except, assume replacement capacity and energy purchases from projected available PJM markets for an interim period of 10 years (through 2025) before a (~700-800 MW) new-build CC and/or CT(s).
Option 5: Retire Big Sandy Unit 2 and Preserve Big Sandy Unit 1 as a Converted Natural Gas-Fired Unit.

Option 5A: Retire Big Sandy Unit 2 by June 2015 replacing it with capacity and energy from a 50 percent (780-MW) ownership interest of Mitchell Units 1 and 2 on January 1, 2014; while converting Big Sandy Unit 1 to burn natural gas by July 2015.

Option 5B: Same as Option 5A except, assume capacity and energy purchased from projected available PJM markets for an interim period of 5 years (through 2020), then assume (~700-800 MW) new-build CC and/or CT(s), in lieu of a 50 percent Mitchell transfer.

Option 6: Retire Big Sandy Unit 2 (and Unit 1) with 50 percent Mitchell Asset Transfer and Market Purchases.

Retire both Big Sandy Units 1 & 2 by June 2015, and replace with capacity and energy from a 50 percent ownership interest of Mitchell Units 1 and 2, plus additional (~250 MW) capacity and energy purchased from available projected PJM markets for a period of 10 years, then assume new-build CC, or CT(s).

In analyzing the least-cost option, Kentucky Power conducted a comprehensive analysis utilizing Strategist, an economic software modeling tool. The Strategist simulation modules used were Load Forecast Adjustment ("LFA"), Generation and Fuel ("GAF"), and PROVIEW. The LFA module simulates the peak demand and energy requirements and also models any demand-side management programs that may impact peak demand and energy requirements. The peak demand and energy requirement data is transferred from the LFA to the GAF module. The GAF module uses a probabilistic generating unit dispatch algorithm to simulate the dispatch of a utility's generating resources and estimates the energy production and related variable cost incurred in meeting those peak demand and energy requirements. The GAF module simulates a utility's ability to purchase or sell energy from or into a market when it is economic to do so, on user-defined long-term market pricing profiles. The
PROVIEW resource optimization module's dynamic programming optimization algorithm is used to create a decision tree of alternatives to determine the utility's optimal overall capacity and energy-resource plan over the user-defined study period, such as the 30-year study period assumed in this matter. In developing a decision tree, PROVIEW determines the recovery of each resource's capital cost and energy-production cost in order to determine an overall revenue requirement for that resource and the plan as a whole.25

PROVIEW determines the cumulative present worth ("CPW") of the revenue requirements for each branch of the decision tree. PROVIEW then uses that CPW to determine which branch of the decision tree is the least-cost optimal resource plan for the utility over the user-defined study.26

The Strategist modeling process determined that Option 6 and Option 5A, both incorporating the ownership transfer of 50 percent of the Mitchell facility, were the least-cost alternatives,27 with Option 5A being the lowest cost option.28

**DISCUSSION OF PROPOSED MITCHELL ACQUISITION**

Because the Commission was presented with a non-unanimous Stipulation, we must first address the position of the parties with respect to Kentucky Power's proposal to acquire an undivided 50 percent interest in the Mitchell Station.

---

25 Application, Direct Testimony of Mark A. Becker, pages 3-4 and MAB-Exhibit 23, page 1 of 1.
26 Id., pages 4-5.
27 Application, Direct Testimony of Scott C. Weaver, page 44 and SCW-Exhibit 5.
28 Id., SCW-Exhibit 5.
KENTUCKY POWER’S ARGUMENTS

Kentucky Power contends that, based upon its robust economic analyses, the proposed acquisition of the Mitchell Station was the least-cost option when compared to a wide range of available, real-world alternatives for Kentucky Power to meet its long-term capacity and energy obligations in light of known and emerging environmental requirements.

Kentucky Power evaluated the alternative of retrofitting Big Sandy Unit 2 with DFGD technology against options that included the following: (1) retiring Big Sandy Unit 2 and replacing it with the Mitchell purchase; (2) retire and replace Big Sandy Unit 2 with a new 762 MW CC natural gas unit; (3) retire and replace Big Sandy Unit 2 by repowering Big Sandy Unit 1 as a 745 MW natural gas-fired CC unit; (4) retire and replace both Big Sandy units with capacity and energy purchased from projected available PJM markets for an interim period of five years and then construct a 700-800 MW CC or combustion turbine (“CT”) natural gas unit; (5) retire and replace Big Sandy Unit 2 with capacity and energy purchased from projected available PJM markets for an interim period of five years then construct a 700-800 MW CC or CT natural gas unit; and (6) retire and replace both Big Sandy units with capacity and energy from a 50 percent ownership interest of the Mitchell Station, plus additional capacity and energy purchased from available projected PJM markets for a period of ten years then construct a CC or CT natural gas unit. Kentucky Power noted that the focus of its evaluation was to determine the lowest cost option to meet environmental requirements applicable to Big Sandy Unit 2. The evaluations also included, as subsets of most of the options, alternatives for the disposition of Big Sandy Unit 1.

29 This alternative also included the conversion of Big Sandy Unit 1 to burn natural gas.
In performing the Strategist economic modeling, the total revenue requirement for each of the 11 alternatives over a 30-year period is calculated, discounted back to 2011 dollars, and reflected on a CPW basis. Rather than concentrating on the absolute CPW results, the economic modeling focused on a comparative view of the alternative options’ results, which, according to Kentucky Power, would identify the relative least-cost option among the 11 alternative scenarios. The economic modeling, which took into account long-term forecasts of Kentucky Power’s energy sales and peak demand, long-term forecast of generation related commodity prices, and capital costs, demonstrated that the Mitchell acquisition, as Option 5a, was the least-cost alternative by a significant margin when compared against all five commodity pricing scenarios. The next closest option was Option 6: retire and replace Big Sandy Units 1 and 2 with the proposed Mitchell acquisition and market purchases for a ten-year period followed by construction of a new gas-fired generation unit. Option 6 was still $156 million more expensive, on a CPW basis, than the option of retiring Big Sandy Unit 2 and replacing it with Mitchell and repowering Big Sandy Unit 1. When compared against the Big Sandy Unit 2 retrofit alternative, the proposed Mitchell acquisition is less expensive by a $469-$663 million margin, on a CPW basis. Likewise, the alternative to construct a brownfield new natural gas CC unit is $327-$526 million, on a CPW basis, more expensive than the Mitchell transfer. The repowering Big Sandy Unit 1 alternative would cost $402-$598 million more than the Mitchell proposal. Lastly, the market purchase option is $376-$401 million more than the Mitchell transfer.

The relative CPW of all other options compared to the proposed Mitchell acquisition alternative is summarized as follows:
<table>
<thead>
<tr>
<th>Option</th>
<th>Big Sandy Unit 2 Replacement</th>
<th>Big Sandy Unit 1 Replacement</th>
<th>CPW vs. Option 5A (In Millions of Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>Retrofit with DFGD</td>
<td>20 Percent Mitchell</td>
<td>$626</td>
</tr>
<tr>
<td>1B</td>
<td>Retrofit with DFGD</td>
<td>PJM Market (10 Yrs)</td>
<td>$819</td>
</tr>
<tr>
<td>2A</td>
<td>Retrofit with NGCC</td>
<td>20 Percent Mitchell</td>
<td>$483</td>
</tr>
<tr>
<td>2B</td>
<td>Retrofit with NGCC</td>
<td>PJM Market (10 Yrs)</td>
<td>$682</td>
</tr>
<tr>
<td>3A</td>
<td>BS1 Repower</td>
<td>20 Percent Mitchell</td>
<td>$558</td>
</tr>
<tr>
<td>3B</td>
<td>BS1 Repower</td>
<td>PJM Market (10 Yrs)</td>
<td>$754</td>
</tr>
<tr>
<td>4A</td>
<td>PJM Market (5 Yrs)</td>
<td>PJM Market (5 Yrs)</td>
<td>$532</td>
</tr>
<tr>
<td>4B</td>
<td>PJM Market (10 Yrs)</td>
<td>PJM Market (10 Yrs)</td>
<td>$557</td>
</tr>
<tr>
<td>5A</td>
<td>50 Percent Mitchell</td>
<td>Natural Gas Conversion</td>
<td>$0</td>
</tr>
<tr>
<td>5B</td>
<td>PJM Market (5 Yrs)</td>
<td>Natural Gas Conversion</td>
<td>$379</td>
</tr>
<tr>
<td>6</td>
<td>50 Percent Mitchell</td>
<td>PJM Market (10 Yrs)</td>
<td>$156</td>
</tr>
</tbody>
</table>

Kentucky Power noted that it also conducted a break-even analysis to determine how much reduction in capital cost for a new CC unit would be needed in order to make the company indifferent to acquiring Mitchell. The break-even analysis showed that the cost of a new-build CC would have to decline by $587 million, or $613/kW, to achieve the point of economic indifference with the Mitchell option. When comparing against both the Mitchell acquisition and the repowering of Big Sandy Unit 1, the cost of a new-build CC unit would have to decrease by $448/kW before reaching the economic break-even point. When the break-even analysis is applied to compare the cost of an existing CC facility, the purchase price would need to be at most $310/kW to be competitive with the proposed Mitchell acquisition combined with the repowering of Big Sandy Unit 1.

Kentucky Power conducted other sensitivity analyses to confirm that the Mitchell transfer and the repowering of Big Sandy Unit 1 was the least-cost option. Other sensitivity analyses included the modeling of additional costs associated with the installation of a baghouse fabric filter, which could potentially be needed to meet the new MATS requirements; the construction of a new CC unit in 2017, plus the conversion of Big Sandy Unit 1 to natural gas combined with a lower natural gas price
forecast; and the early retirement of the Mitchell Station by 2035, rather than the retirement in 2041 as modeled. The results from these sensitivity runs showed that the proposed Mitchell option is still the least-cost option by $274 million, $377-$560 million, and $250 million, respectively.

Kentucky Power asserted that a request for proposals ("RFP") would not have established a fair market value benchmark for the Mitchell Station because the company had already publicly announced the price at which it would be willing to acquire the Mitchell assets. Thus, any solicitation would have been perceived by the bidding community as artificial, less than genuine, and an attempt to obtain market intelligence. Rather, Kentucky Power argued that its economic modeling and the evidence of record established that the fair market value of the Mitchell Station exceeded its NBV. Kentucky Power maintained that its utilization of Strategist, which is a widely used and sophisticated modeling tool for resource planning and unit disposition, provided the best, most appropriate, and transparent method for determining the fair market value of a base load plant such as the Mitchell Station. Kentucky Power contends that its Strategist modeling effectively considered a market proxy option through the alternative, which assumed the retirement and replacement of Big Sandy Unit 2 with a new build CC option.

Kentucky Power believes that it is very reasonable to assume that a long-term, competitive power-purchase agreement solicitation to replace the capacity and energy supplied by Big Sandy Unit 2 would likely be offered or priced at the cost of a new-build CC in response to such a request for proposal. Because its economic analysis examined all performance and cost attributes of a new-build CC replacement and
utilized the projected net book value of the Mitchell assets, Kentucky Power concluded that the equivalent market replacement value would have exceeded Mitchell's NBV. Kentucky Power's conclusion is based upon the significant difference between the CPW of the Mitchell transfer, coupled with the conversion of Big Sandy Unit 1 to natural gas and the various sub-options of the market proxy alternative. Those range from $483 million when compared with the sub-option of the CC new-build and a 20 percent purchase of the Mitchell Station to $682 million when compared to the sub-option of the CC new-build and purchasing the remaining capacity from the PJM market for a ten-year interim period, and then building a new CC or CT natural gas unit. Such a significant difference in CPW is highly indicative of the fact that the starting point of the Strategist analysis, the NBV of the Mitchell assets, is less than market.

Moreover, Kentucky Power argues that its stacking analysis of the conforming responses to the Big Sandy Unit 1 RFP also demonstrates that the NBV of the Mitchell Station is less than its fair market value. Because the generation bid into the Big Sandy Unit 1 RFP could be substituted for the Mitchell proposal, an analysis of the CPW of the Big Sandy Unit 1 RFP conforming bids' costs to CPW of the Mitchell proposal's costs would provide evidence of the relationship between the NBV and the fair market value of the Mitchell Station. Kentucky Power stated that it performed such an analysis by first creating a substitute for the Mitchell acquisition by combining, or stacking, the least-cost conforming Big Sandy Unit 1 RFP bids and then comparing, by utilizing Strategist modeling, the CPW of the substitute generation stack's costs against the CPW of the Mitchell acquisition costs. The results of this stacking analysis indicate

---

30 As required by the Commission's Order entered May 28, 2013, Kentucky Power filed a summary of the responses to its RFP for power to replace Big Sandy Unit 1.
that the CPW of the costs of the substitute stack generation exceeded, by $110 million, the CPW of the costs of the Mitchell acquisition, including the assumption that Big Sandy Unit 1 would be converted to natural gas. Kentucky Power pointed out that KIUC agreed that the Big Sandy Unit 1 RFP responses were indicative of the availability of generation resources and their pricing to results that might be obtained in the case of an RFP for 800 MW.

Lastly, Kentucky Power puts forth that the fair market value of the Mitchell assets exceeding their NBV was independently confirmed at the evidentiary hearing in this matter.\footnote{Post-Hearing Brief of Kentucky Power Company, p. 84; see also, Post-Hearing Brief of Kentucky Industrial Utility Customers, Inc., p. 12-13.} KIUC noted that AEP was required to conduct an impairment analysis of the Mitchell Station, which was triggered by the anticipated termination of the Pool Agreement and the Ohio Power-related corporate separation and electric security plan proceedings conducted by the Public Utility Commission of Ohio. The results of the impairment analysis, as reviewed by AEP's external auditors, indicated that the book cost\footnote{Book cost of the Mitchell Station is its original cost less accumulated depreciation.} of the Mitchell Station was less than its fair market value. Under cross-examination at the hearing, a KIUC witness confirmed that the fair market value of the Mitchell Station exceeded its NBV, even though the impairment analysis utilized more conservative assumptions than those employed in Kentucky Power's Strategist modeling.\footnote{Post-Hearing Brief of Kentucky Industrial Utility Customers, Inc., p. 13.}
KIUC'S AND SIERRA CLUB'S ARGUMENTS

In its post-hearing brief, KIUC agrees with Kentucky Power's position that the company's economic analysis sufficiently determined that the proposed Mitchell acquisition and conversion of Big Sandy Unit 1 to natural gas was the least-cost option by a significant margin. Sierra Club also agrees with Kentucky Power's analysis that the Big Sandy Unit 2 retrofit alternative was more expensive than the proposed Mitchell acquisition.

AG'S ARGUMENTS

The AG argues that Kentucky Power failed to satisfy its burden of proof. In particular, the AG contends that Kentucky Power did not demonstrate that its plan to acquire the Mitchell Station was based upon prudent and independent decision-making analyses, noting that the results of the economic modeling could not be independently reproduced and that the modeling itself was self-serving and contained questionable data assumptions. The AG also contends that Kentucky Power failed to issue an RFP to assess alternatives for the disposition of Big Sandy Unit 2, and in contravention of what the AG asserted was the Commission's clear indication that an RFP is the "preferred" benchmarking tool to determine least-cost generation and planning decisions. The AG also cites to the Virginia State Corporation Commission's denial of APCo's request to acquire the remaining 50 percent interest of the Mitchell Station. The AG noted that the Virginia State Corporation Commission denial was based on a finding that APCo failed to provide compelling evidence regarding market alternatives and, therefore, had failed to satisfy Virginia's least-cost test as applied to affiliate transactions. The AG contends that Kentucky Power has likewise failed to present...
credible and independently verifiable evidence in the instant matter establishing that the Mitchell acquisition is the least-cost alternative.

PUBLIC COMMENTS

This case has generated significant interest from the local public and many comments and efforts on behalf of the region most affected by the situation at the Big Sandy plant. Representative Rocky Adkins, House Majority Floor Leader, and Michael T. Hogan, Lawrence County Attorney, were especially vocal and eloquent in their advocacy of the plan to install a pollution control system at the Big Sandy Unit 2, rather than retiring Big Sandy Unit 2 and replacing that capacity and energy with the acquisition of the Mitchell Station, as Kentucky Power has proposed in this case.

Representative Adkins wrote several letters and spoke at both the public meeting in Louisa, Kentucky, on May 14, 2013 and the formal hearings at the Commission's offices on May 29, 2013 and July 10, 2013. He argued that Kentucky Power's original rate impact estimate of 31 percent resulting from scrubbing Big Sandy Unit 2, as compared to an estimated rate impact of 8 percent associated with the proposed Mitchell acquisition, was faulty.\textsuperscript{34} Representative Adkins contends that the rate impact differential between the two options has narrowed based upon the evidence presented in this matter and in Kentucky Power's pending rate case. Because of this, he recommends that the Commission reconsider the option of scrubbing Big Sandy Unit 2 and keep that unit operational, which would preserve good paying jobs, preserve property tax revenues, and preserve coal sales.

\textsuperscript{34} Based upon our analysis of the information in the record, the rate impact associated with the retrofitting of Big Sandy Unit 2 would have been approximately 26 percent based upon the company's 2012 jurisdictional revenues. The rate impact associated with the proposed Mitchell acquisition is approximately 14 percent based upon Kentucky Power's 2012 jurisdictional revenues. The difference between the two in real dollars is $59,392,000, an average of $343.31 per year per customer.
Mr. Hogan points out that the closure of Big Sandy Unit 2 would not only result in the loss of 150 well-paying jobs, but also the loss of approximately $980,000 annually in franchise tax paid by Kentucky Power. The loss of jobs and tax revenues would impact public safety and welfare, as well as public education. Mr. Hogan contends that the economic impact of Kentucky Power’s decision to retire Big Sandy Unit 2 should be considered when evaluating the options proposed by Kentucky Power.

The Commission greatly appreciates the participation of elected officials and affected customers in this important process. We note that the scrubber issue has been extensively reviewed in Case No. 2011-00401 and to a lesser extent in Case No. 2013-00144 involving Kentucky Power’s request to enter into a purchase power agreement for the purchase of biomass renewable power. Kentucky Power has been investigating Big Sandy Unit 2 environmental compliance since 2004 and entered into the 2007 Consent Decree ultimately agreeing to either retrofit, repower, refuel, or retire Big Sandy Unit 2 by the end of 2015. Kentucky Power then made a formal filing with the Commission to retrofit Big Sandy Unit 2 in 2011, at a cost of more than $940 million, only to withdraw its application after the evidentiary record had been completed. Thus, the decision before the Commission in this case is limited to whether the acquisition of the Mitchell Station is the lowest cost compared to other options, including the scrubber installation at Big Sandy Unit 2. Kentucky Power, by withdrawing its application in Case No. 2011-00401, made the decision not to scrub Big Sandy Unit 2, and because of the

---

consent decree and the economic analysis showing that scrubbing Big Sandy Unit 2 is not the lowest cost option, will retire the unit.

As discussed in more detail below, the framework of our analysis in the instant case is guided by KRS Chapter 278. The legal standard that the Commission must apply to this case is whether there is a need for the proposed Mitchell acquisition and whether that proposal would result in wasteful duplication of facilities. Thus, arguments on economic benefits to specific areas of Kentucky Power’s service territory are beyond the scope of the Commission’s jurisdiction.

LEGAL STANDARD

No utility may construct or acquire any facility to be used in providing utility service to the public until it has obtained a CPCN from this Commission.36 To obtain a CPCN, the utility must demonstrate a need for such facilities and an absence of wasteful duplication.37

"Need" requires:

[A] showing of a substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed or operated.

[T]he inadequacy must be due either to a substantial deficiency of service facilities, beyond what could be supplied by normal improvements in the ordinary course of business; or to indifference, poor management or disregard of the rights of consumers, persisting over such a period of time as to establish an inability or unwillingness to render adequate service.38

36 KRS 278.020(1).
38 Id. at 890.
"Wasteful duplication" is defined as "an excess of capacity over need" and "an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties."\(^{39}\) To demonstrate that a proposed facility does not result in wasteful duplication, we have held that the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed.\(^{40}\) Selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication.\(^{41}\) All relevant factors must be balanced.\(^{42}\) The Commission has long recognized that the principle of least-cost is one of the fundamental foundations utilized when setting rates that are fair, just, and reasonable and that this principle is embedded in KRS 278.020(1).\(^{43}\)

The Commission fully recognizes the unique situation that Kentucky Power is faced with: the decision to replace a significant portion of not only its base load generating capacity but that of its base load energy as well. The complexity of the situation is heightened by the fact that the Pool Agreement is scheduled to terminate on January 1, 2014. Kentucky Power along with several other AEP affiliates jointly operated their systems under the Pool Agreement, which allowed Kentucky Power

\(^{39}\) Id.


access to low cost capacity and energy for over five decades. Upon the termination of the Pool Agreement, Kentucky Power will operate in effect as a stand-alone utility and will be required to conduct resource planning to meet its load requirements without the benefit of the low-cost capacity and energy provided under the Pool Agreement. Kentucky Power’s decision is constrained further by the potential additional costs imposed by more stringent environmental regulations.

Against this backdrop, and based on our comprehensive review of the extensive record, we find that Kentucky Power has established that the proposed Mitchell acquisition is needed to address the disposition of the nearly 1078 MW Big Sandy Generating Station because the station can no longer operate as it is currently configured and be in compliance with stringent federal environmental regulations. Based on Kentucky Power’s analyses, the cost of retrofitting the Big Sandy Station would not be economically justified resulting in the company’s decision to retire Big Sandy Unit 2 by June 2015. In the absence of the Mitchell capacity and energy, Kentucky Power would be energy deficit by 268 Gwh beginning in January 2014 with a negative 66.26 percent reserve margin, or 937 MW short, beginning the 2015/2016 PJM planning year.

The Commission further finds that the record is sufficient to demonstrate that the proposed Mitchell acquisition represents the least-cost resources to meet Kentucky Power’s capacity and energy needs resulting from the decision to retire Big Sandy Unit 2. Contrary to the AG’s assertion that an RFP is the Commission’s “preferred” benchmarking tool to determine market alternatives for the proposed Mitchell acquisition, the Commission has previously accepted economic analyses in lieu of
RFPs when justified by the circumstances. As Kentucky Power points out, the Commission in Case No. 2003-00252 specifically found that an RFP was not required by the Union Light, Heat and Power Company ("ULH&P") to determine the reasonableness of ULH&P's proposal to acquire certain generating units from its parent company. The Commission further found that ULH&P's market analysis, which was conducted by a retained consulting firm, of the generating capacity that was the subject of the proposed transaction was reasonable. As we succinctly stated in the ULH&P matter:

The Commission recognizes the AG's concerns and acknowledges that utilities under its jurisdiction typically conduct an RFP as part of the process of selecting new supply resources. We believe that such a process has benefitted Kentucky's utilities and its ratepayers and that it will continue to benefit them in the future. However, in this instance, given the uniqueness of the proposed transaction, we are not persuaded that undertaking an RFP process would benefit ULH&P or its ratepayers. Attempting to acquire an entire generation fleet through a single transaction is unprecedented in the electric utility industry. Given the level of uncertainty that exists in the electric industry today, there are several arguments in favor of relying on factors other than the market or financial strength of the firms that make up that market. Furthermore, based on ICF's market analysis, the facilities included in the transaction are being offered at an attractive price.45

Our ruling in the ULH&P matter is squarely on point in this instance. Like ULH&P in the case cited above, Kentucky Power finds itself in an unenviable and unique situation of having to replace nearly 1100 MW of its generation capacity, or

44 Case No. 2003-00252, Application of the Union Light, Heat and Power Company for a Certificate of Public Convenience and Necessity to Acquire Certain Generation Resources and Related Property; for Approval of Certain Purchase Power Agreements; for Approval of Certain Accounting Treatment; and for Approval of Deviation from Requirements of KRS 278.2207 and 278.2213(6) (Ky. PSC Dec. 5, 2003).

45 Id. at 11.
approximately 73 percent of its generation portfolio. The electric industry is as uncertain today, as it was in the early 2000s, and perhaps even more uncertain in light of more stringent environmental regulatory requirements, combined with shale gas development that has driven down the price of natural gas. Lastly, as the evidentiary record indicates, based upon the indicative offers from the Big Sandy Unit 1 RFP, the Mitchell units are being offered at a reasonable price of approximately $687 per kW, based on a projected NBV of $536 million. In comparison, Louisville Gas and Electric Company and Kentucky Utilities Company are constructing a 640-MW natural gas CC combustion turbine at a proposed price of $583 million, or approximately $910 per kW.46

Based on all these factors, we find that the absence of an RFP in this matter was not fatal to Kentucky Power's ability to establish the reasonableness of the proposed Mitchell acquisition. As in the ULH&P matter, we find that Kentucky Power had other means of determining whether the proposed acquisition is reasonable. In particular, Kentucky Power utilized Strategist,47 a highly sophisticated and industry-wide accepted economic modeling software tool, to conduct a robust and comprehensive economic analysis of the Mitchell acquisition.

Significantly, Kentucky Power's economic modeling took into account a wide range of reasonable alternatives, including a market proxy alternative that consisted of retiring and replacing the Big Sandy Station with a new-build CC natural gas unit which provided a reasonable means of determining the relationship between the NBV of the


47 ULH&P utilized Strategist in performing economic modeling analysis of its proposed generation acquisition in Case No. 2002-00252.
Mitchell assets and its fair market value. The evidentiary record contained other means through which one could quantitatively assess the reasonableness of the proposed Mitchell acquisition; for example, Kentucky Power's stacking analysis of the Big Sandy Unit 1 RFP indicative responses and the impairment analysis.

Lastly, the Commission finds that Kentucky Power's comprehensive economic analysis sufficiently supports the company's conclusion that the Mitchell acquisition is the least-cost alternative and would not result in wasteful duplication. We note that the economic analysis evaluated various resource options to address the mandatory environmental standards applicable to Big Sandy Units 1 and 2 over a 30-year study period. Options included the Mitchell transfer, retrofitting Big Sandy Unit 2, constructing a new gas unit, converting Big Sandy Unit 1 to gas, and purchasing power from the market. The modeling assumed Kentucky Power as a stand-alone utility and relied upon inputs related to price forecasts for coal, natural gas, market prices for on- and off-peak energy, market capacity, emissions allowances, and carbon. In addition to a base commodity price scenario, Kentucky Power also used four additional pricing scenarios to reflect the effects of higher fuel costs, lower fuel costs, an earlier carbon-pricing date, and no carbon pricing. The economic analysis showed that the Mitchell proposal, combined with the conversion of Big Sandy Unit 1 to gas, was the least-cost alternative by a wide margin. Sensitivity and break-even analyses also demonstrated that the Mitchell acquisition is the least-cost option. Accordingly, we conclude that the proposed Mitchell acquisition represents the least-cost alternative to meeting Kentucky Power's capacity and energy needs and would not result in wasteful duplication of facilities.
DISCUSSION OF NON-UNANIMOUS STIPULATION

Finding that the Mitchell proposal is needed and represents the least-cost alternative, we now address the reasonableness of the Stipulation reached by Kentucky Power, KIUC, and Sierra Club (collectively “Stipulating Parties”). The Stipulation is attached as Appendix A to this Order. The Stipulating Parties contend that the Stipulation is fair, just, and reasonable in that it offers benefits that otherwise would not be achievable in a fully litigated proceeding while recognizing and acknowledging that the Mitchell acquisition is the least-cost alternative. Kentucky Power contends that the Stipulation is in the public interest because it provides the Commission, the company’s ratepayers, and Kentucky Power with the benefits of a regulated owned asset model while avoiding the volatility and increased risk attendant with a market-based alternative. Kentucky Power asserts that the Stipulation provides substantial rate benefits to its customers, noting that the company has agreed to limit the recovery of the Mitchell related non-fuel costs, including its return on and of its investment in the Mitchell assets, to $44 million annually for a 17-month period and that the recovery of such costs would be through an Asset Tariff Rider surcharge. Kentucky Power also agreed to maintain its current base rates through at least May 31, 2015 and to withdraw its pending base rate case. In the absence of the Stipulation, the increase in Kentucky Power’s stand-alone Mitchell-related annual revenue requirement would be approximately $138 million. The limited recovery under the Stipulation would result in

48 Stipulation, paragraph 4.
49 Stipulation, paragraph 3.
50 Post-Hearing Brief of Kentucky Power, p. 50.
Kentucky Power's customers saving $133 million over the 17-month base-rate-freeze period.\(^{51}\) KIUC concurs, arguing that the 13.98 percent total rate increase\(^{52}\) associated with the Mitchell acquisition is reasonable and manageable, particularly when compared with the 23.9 percent rate increase associated with the pending rate case\(^{53}\) and the 25.59 percent rate increase which would have occurred if the scrubber retrofit on Big Sandy Unit 2 had been pursued.\(^{54}\) In addition, Kentucky Power points out that the Stipulation recognizes that the Mitchell Station will be included in the economic dispatch of Kentucky Power's generation resources, and that Mitchell-related fuel costs will be included in the calculation of any charges or credits under the company's fuel adjustment clause. Because Mitchell fuel costs are anticipated to be lower than the fuel costs for the Big Sandy Station, the Mitchell acquisition would result in annual fuel savings of approximately $16.75 million to the benefit of Kentucky Power's customers.\(^{55}\)

The Stipulating Parties point out that the Stipulation also provides protection against unreasonably higher costs due to unanticipated greenhouse gas regulation. The significance of this provision is highlighted by the fact that on June 25, 2013, President Obama issued his Climate Action Plan and Presidential Memorandum directing the Environmental Protection Agency to "issue proposed carbon pollution standards, regulations, or guidelines, as appropriate, for modified, reconstructed, and

---

\(^{51}\) Id.

\(^{52}\) This total rate increase comprises a 5.33 percent increase during the 17-month rate freeze period and an 8.21 percent increase when Big Sandy Unit 2 is retired in mid-2015.


\(^{54}\) Kentucky Power's Response to Commission Staff's Fifth Data Request, Item No. 10.

\(^{55}\) Stipulation, paragraph 2.
existing power plants by no later than June 1, 2014. Under Paragraph 21 of the Stipulation, Kentucky Power is required to file, as part of its future integrated resource plans, an economic analysis of all generating unit costs, including the costs of complying with greenhouse gas emission regulation; Kentucky Power explicitly recognizes the right of the Commission or any parties to challenge the company’s rates on the grounds that they are unreasonable due to the Mitchell Station’s no longer being the least-cost generation resource due to environmental requirements relating to greenhouse gas emission regulation; Kentucky Power explicitly recognizes the Commission’s authority to retire for ratemaking purposes the company’s interest in the Mitchell Station in such an event; and Kentucky Power will recover its remaining investment in the Mitchell Station over a period determined by the Commission at a debt-only return.

The Stipulating Parties contend that the Stipulation provides other tangible benefits that could not otherwise be achieved through a litigated process. These benefits include (1) Kentucky Power agrees to shareholder contributions of $100,000 annually in each of the next five years for economic development and job training in Lawrence and contiguous Kentucky counties to mitigate the economic impact of the closure of Big Sandy Unit 2; (2) Kentucky Power agrees to increase its shareholder contribution to the Home Energy Assistance ("HEA") Program by 20 percent from $0.125 per meter per month to $0.15 per meter per month, which increases the amount

---


57 Stipulation, paragraph 10.
of shareholder HEA contributions by $43,500 to an annual total of $522,000;\(^{58}\) (3) Kentucky Power agrees to institute a new two-year Demand-Side Management ("DSM") program to help fund energy management programs for schools that are mandated by KRS 160.325 to participate in the Kentucky Energy Efficiency Program – $75,000 in 2014 and $50,000 in 2015;\(^{59}\) (4) Kentucky Power commits to increase its DSM expenditures from the current $3 million annual amount to $6 million in 2016 and to maintain the expenditure level at $6 million through at least 2018;\(^{60}\) (5) Kentucky Power agrees to increase the amount of qualified interruptible load programs that can receive credit to 75 MW for industrial customers;\(^{61}\) and (6) Kentucky Power agrees to issue a non-binding RFP for 100 MW of wind power for the purpose of incorporating the results of the RFP when it files its next Integrated Resource Plan filing in December 2013.\(^{62}\)

Having reviewed the non-unanimous Stipulation and being otherwise sufficiently advised, the Commission finds that it is in effect an offer by Kentucky Power to amend its application by requesting authority to acquire a 50 percent interest in the Mitchell Station on terms more favorable than those originally proposed. The Commission finds that the acquisition of 50 percent of the Mitchell Station is Kentucky Power's lowest-cost option and the provisions of the non-unanimous Stipulation provide additional, substantial benefits to ratepayers that could not otherwise be obtained. Therefore, we find the Stipulation to be reasonable and we will approve it subject to the following

\(^{58}\) Stipulation, paragraph 11.

\(^{59}\) Stipulation, paragraph 12.

\(^{60}\) Id.

\(^{61}\) Stipulation, paragraph 9.

\(^{62}\) Stipulation, paragraph 19.
modifications. In addition to our finding that the Mitchell acquisition is the least-cost alternative to address the unit disposition of Big Sandy Unit 2, the Commission believes that the benefits achieved through the Stipulation, as modified, would provide Kentucky Power's customers with rate savings and tangible financial commitments. Regarding the provision to fund school energy managers,\(^\text{63}\) the Commission finds that this provision should be modified to make clear that Kentucky Power's shareholder contribution would be incremental funding for the school energy manager program, which could be for new school energy manager(s) or additional funds for existing school managers, and that the funding would be limited to those schools in Lawrence and contiguous Kentucky counties impacted by KRS 160.325.

Concerning the provision in which Kentucky Power agrees to maintain a minimum level of DSM spending of at least $6 million after 2018,\(^\text{64}\) the Commission finds that this provision is ambiguous and should be modified to clearly specify Kentucky Power's commitment to seek prior Commission approval should the company desire to spend less than $6 million on DSM or energy-efficiency programs after 2018.

With respect to Kentucky Power's agreement to provide shareholder contribution for economic development support for Lawrence County and the counties contiguous to Lawrence county, we find that the amount of $100,000 per year for five years, with a carve-out of $33,000 set aside for job training, with a preference on weatherization and energy-efficiency-related jobs,\(^\text{65}\) to be insufficient to mitigate the significant negative economic impact that the closure of Big Sandy Unit 2 would have on this region. We,

\(^\text{63}\) Stipulation, paragraph 12.
\(^\text{64}\) Id.
\(^\text{65}\) Stipulation, paragraph 10.
therefore, find that the provision should be modified to increase the shareholder contribution to $200,000 per year for five years toward economic development support for Lawrence county and the contiguous counties thereto. We also find that the amount set aside for job training should not be carved out of the total annual contribution but should instead be in addition to the $200,000 annual shareholder contribution for an annual contribution from Kentucky Power shareholders of $233,000 per year for five years. The shareholder funds designated for job training should also be placed in an account for the benefit of the two colleges in the Kentucky Community and Technical College System located in Kentucky Power's system, Ashland Community and Technical College and Big Sandy Community and Technical College, for the express purpose of utilizing the two colleges to work with local economic officials, local industrial authorities, local workforce investment boards, and chambers of commerce on a regular basis to retain or attract business as well as to provide career counseling, assessments, and retraining of displaced workers. The two colleges would also be able to utilize their workforce solution divisions to provide specific training for industry, such as weatherization and energy-efficiency job training.

The Stipulation also provides that Kentucky Power be authorized to accumulate and defer for review the $28,113,304 in costs incurred by the company from 2004 through 2012 associated with Kentucky Power's ongoing efforts to meet Federal Clean Air Act and other environmental requirements with respect to Big Sandy Unit 2 ("Scrubber Study Costs").66 Kentucky Power contends that this provision is reasonable because those costs were a necessary part of a major multi-year capital asset project that would have been included in the capital cost of the project if the retrofit of Big

66 Stipulation, paragraph 8.
Sandy Unit 2 had proven the least-cost alternative. Kentucky Power also contends that the full span of the study was necessary for the company to reach the least-cost option for the environmental issues facing Big Sandy Unit 2, and that it was only in the eighth and final year that the company was able to reduce the capital cost by $412 million, which reflects the difference between the capital cost of retrofitting Big Sandy Unit 2 with a DFGD and the capital cost of the Mitchell acquisition.

While studies or evaluations relating to major multi-year capital asset projects are generally considered necessary and recovery of the cost of such studies and evaluations through rates is generally considered reasonable, given the uniqueness of the situation as presented herein, the Commission finds that this provision of the Stipulation is not reasonable and should be stricken. We note that the proposed Mitchell acquisition will result in a 5.33 percent rate increase to Kentucky Power's customers during the 17-month period in which Kentucky Power's base rates are frozen at the current level. Upon the retirement of Big Sandy Unit 2 in mid-2015, Kentucky Power's projects that its ratepayers will see an additional increase of approximately 8.21 percent to their rates when Kentucky Power will seek to recover, among other things, the undepreciated costs associated with the retirement of Big Sandy Unit 2, as well as the coa-related retirement costs of Big Sandy Unit 1. The Commission finds that the potential imposition of the $28 million Scrubber Study Costs, in addition to the costs associated with the Mitchell acquisition, is not reasonable, particularly when the Scrubber Study Costs, although spanning a significant period of time, did not result in a formal Kentucky Power proposal upon which the Commission rendered a decision based on its merits. The Commission likewise finds the potential imposition of the
Scrubber Study Costs on ratepayers not reasonable due to the fact that a study of this magnitude did not result in the addition of a scrubber or other pollution control facilities at Big Sandy Unit 2.

**DISCUSSION OF ASSUMPTION OF LIABILITIES**

As part of the Mitchell acquisition, Kentucky Power requests authority pursuant to KRS 278.300 to assume an undivided 50 percent interest in the liabilities associated with the Mitchell Station as of December 31, 2013. Kentucky Power contends that its assumption of these liabilities comports with KRS 278.300. Kentucky Power asserts that assuming the liabilities as part of its efforts to obtain the necessary capacity and energy to continue to provide retail electric is for a lawful object within the corporate purposes of the company. Kentucky Power also asserts that such assumption is both necessary for and consistent with its provision of public utility service to the public because, in the absence of the Mitchell acquisition, Kentucky Power would not be able to provide the capacity and energy to meet its customers' needs at the lowest possible price. Lastly, Kentucky Power contends that the assumption of liabilities will not impair its ability to provide public utility service, noting that any liabilities assumed would reduce the transfer price of the Mitchell Station.

The Commission finds that Kentucky Power's request to assume an undivided 50 percent interest in the liabilities associated with the Mitchell acquisition is for lawful objects within the corporate purposes of Kentucky Power, is necessary and appropriate for and consistent with the proper performance by Kentucky Power of its service to the public, will not impair its ability to perform that service, is reasonable, necessary, and appropriate for such purposes, and should be approved. In arriving at this decision, the
Commission relied upon the testimony of witnesses for Kentucky Power who indicated that no environmental liabilities are known at this time as a result of environmental retrofits to the Mitchell Station. Additionally, the Commission relied upon Kentucky Power's testimony that because of prior maintenance and upgrades to the Mitchell Station, there are no known liabilities or repairs needed at the current time, and with only normal maintenance the Commission can expect the Mitchell Station to be operational in 2040.

**MISCELLANEOUS ISSUES**

1. **Reporting Requirement**

   Given the age of the Mitchell units and the ever changing landscape of environmental requirements, we will require Kentucky Power to file annual reports providing the Commission with detailed updates on the performance of the Mitchell Station and the company's assessment of any potential changes in environmental regulations that would impact the Mitchell Station. The annual reports shall include, at a minimum, a discussion and evaluation of the performance of each of the two Mitchell units, unplanned system outages, heat rate, budgeted and actual capital expenditures for the prior year and budgeted capital expenditures for the reporting year, budgeted and actual operation and maintenance ("O&M") expenditures for the prior year and budgeted O&M expenses for the reporting year, and a discussion of potential environmental regulations that may impact the Mitchell Station.

2. **Mitchell Plant Operating Agreement**

   On August 5, 2013, Kentucky Power filed supplemental responses to Commission Staff's post-hearing data requests, which advised that the Virginia
Corporation Commission had recently issued an order denying the transfer of a 50 percent undivided interest in the Mitchell Station to APCo.\(^6^7\) Kentucky Power noted in that supplemental response that the instant Application is independent of any action by either the Virginia or West Virginia commissions because Kentucky Power continues to require both the capacity and energy available to it through the Mitchell acquisition and because the Mitchell acquisition continues to represent the least-cost alternative to address the company's needs.

Kentucky Power advises that if the remaining 50 percent undivided interest in the Mitchell Station is not ultimately transferred to APCo, that interest will likely remain with AEP Generation Resources. Under those circumstances, Kentucky Power states that a revised Mitchell Plant Operating Agreement will be filed with FERC providing that Kentucky Power will operate the Mitchell Station on behalf of itself and AEP Generating Resources. The revised operating agreement will continue to reflect the costs attendant to Kentucky Power's ownership and operation of the undivided 50 percent interest in the Mitchell Station.

Should APCo fail to obtain the remaining undivided 50 percent interest of the Mitchell Station and the Mitchell Plant Operating Agreement is revised and filed with FERC to reflect Kentucky Power's status as operator of the Mitchell Station, Kentucky Power should provide the Commission a copy of the FERC application and apprise the Commission of FERC's final decision on the application.

\(^6^7\) See Case No. PUE-2012-00141, Application of Appalachian Power Company for Approval of Transactions to Acquire Interests in the Amos and Mitchell Generation Plants and to Merge with Wheeling Power Company (VSCC, July 31, 2013).
3. **Net Book Value**

   In the event the Public Service Commission of West Virginia ("West Virginia PSC") approves APCo's request to acquire the remaining 50 percent undivided interest in the Mitchell Station at a NBV that is lower than the $536 million projected in the instant matter, Kentucky Power’s authority to acquire the Mitchell Station will be limited to the NBV as determined by the West Virginia PSC.

4. **Off-System Sales**

   The Stipulation also provides that Kentucky Power will set and maintain the System Sales Adjustment Factor to 0.0000 mills/kWh until new base rates are established.\(^{68}\) Currently, customers receive a credit, or pay a charge, equal to 60 percent of the difference between Kentucky Power's net system sales revenues for a particular month and the amount specified for that month in the Tariff System Sales Clause. Pursuant to the Stipulation, customers will receive the benefit of the full $15,290,363 built into current base rates even if the monthly off-system sales fall short of the tariff amount and Kentucky Power will retain all of the excess amounts when off-system sales exceed the amount in base rates. This modification will continue until new base rates are established in Kentucky Power's next base rate case.

   As we stated earlier, Kentucky Power is in the midst of a unique transformation of its operations, having to consider the disposition of a significant portion of its generation portfolio. This case is just one step towards how Kentucky Power will propose to reconstitute its generation assets. As has been mentioned in this matter, we anticipate Kentucky Power to file a certificate case for the repowering of Big Sandy Unit 1.

---

\(^{68}\) Stipulation, paragraph 7.
Kentucky Power has requested approval of a renewable energy purchase agreement and that case is currently pending before the Commission. The final resolution of the disposition of Big Sandy Unit 1 and Case No. 2013-00144 will bring more clarity to Kentucky Power's capacity and energy needs. Accordingly, the Commission will closely scrutinize Kentucky Power's treatment of its off-system sales and any associated mechanism proposed in the company's next base rate case.

IT IS THEREFORE ORDERED that:

1. Kentucky Power's request to acquire an undivided 50 percent interest in the Mitchell Generating Station and to assume an undivided 50 percent interest in the liabilities associated with the Mitchell acquisition is approved subject to the provisions of the Stipulation set forth in Appendix A and Kentucky Power's acceptance of the modifications to the Stipulation set forth in Appendix B.

2. The Stipulation, including the tariffs proposed to implement the terms of the Stipulation, is approved subject to Kentucky Power's acceptance of the modifications to the Stipulation set forth in Appendix B.

3. Kentucky Power's request for a deviation from KRS 278.2207(2) is denied as moot.

4. Within seven days from the date of this Order, the President of Kentucky Power shall file written notice with the Commission indicating whether Kentucky Power accepts and agrees to be bound by the modifications to the Stipulation as set forth in Appendix B.

---

69 Case No. 2013-00144, Application of Kentucky Power Company for Approval of the Terms and Conditions of the Renewable Energy Purchase Agreement for Biomass Energy Resources 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 (filed April 10, 2013).
5. Should APCo fail to obtain ownership of the remaining undivided 50 percent interest of the Mitchell Station and a revised Mitchell Plant Operating Agreement is filed with FERC to reflect Kentucky Power's status as operator of the Mitchell Station, Kentucky Power shall file a copy of the FERC application and apprise the Commission of FERC's final decision on the application.

6. Kentucky Power shall file annual status reports concerning the performance of the Mitchell Station as discussed herein no later than March 1, 2014, and on the same date each year thereafter until the Commission orders otherwise.

7. In the event the West Virginia PSC approves APCo's request to acquire the remaining 50 percent undivided interest in the Mitchell Station at a NBV that is lower than the $536 million NBV proposed in the instant matter, Kentucky Power's authority to acquire the Mitchell Station shall be limited to the NBV as found by the West Virginia PSC.

8. Within seven days after the closing of the Mitchell transaction, Kentucky Power shall file written notification to the Commission detailing the status of the transaction.

9. Within 20 days after the date of closing the Mitchell transaction, Kentucky Power shall file with the Commission its tariff sheets as approved herein, showing their date of issue and that they were issued by authority of this Order.

10. Any documents filed pursuant to ordering paragraphs 8 and 9 of this Order shall reference the number of this case and shall be retained in the utility's general correspondence file.
Nothing contained herein shall be construed as a finding of value for any purpose or as a warranty on the part of the Commonwealth of Kentucky or any agency thereof as to the securities authorized herein.

By the Commission

ENTERED
OCT 07 2013
KENTUCKY PUBLIC SERVICE COMMISSION

ATTEST:

[Signature]
Executive Director

Case No. 2012-00578
APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2012-00578 DATED OCT 07 2013
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

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; (4) DEFERRAL OF COSTS INCURRED IN CONNECTION WITH THE COMPANY’S EFFORTS TO MEET FEDERAL CLEAN AIR ACT AND RELATED REQUIREMENTS; AND (5) ALL OTHER REQUIRED APPROVALS AND RELIEF

STIPULATION AND SETTLEMENT AGREEMENT

This Stipulation and Settlement Agreement, made and entered into this __ day of July, 2013, by and among Kentucky Power Company ("Kentucky Power" or "Company"); Kentucky Industrial Utility Customers, Inc. ("KIUC"); and Sierra Club, Alexander Desha, Tom Vierheller, and Beverly May ("Sierra Club"): 
WITNESSETH:

WHEREAS, on December 19, 2012 Kentucky Power filed a verified application pursuant to KRS 278.020, 807 KAR 5:001, Section 9 (now 807 KAR 5:001, Section 15), KRS 278.300, and 807 KAR 5:001, Section 11 (now 807 KAR 5:001, Section 17). In its application, styled In the Matter of: 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 Mitchell Generating Station; (3) Declaratory Rulings;^{1} (4) Deferral Of Costs Incurred In Connection With The Company's Efforts To Meet Federal Clean Air Act And Related Requirements; And (5) For All Other Required Approvals And Relief, Case No. 2012-00578 ("Transfer Application.") In the Transfer Application, the Company sought approval for all approvals necessary to effectuate the transfer of a fifty percent undivided interest in Ohio Power Company's Mitchell Generating Station, including the assumption of certain liabilities. In addition, the Company sought the authority, in accordance with Financial Accounting Standards Board Standards Codification 980-340-25-1, to accumulate and defer for review and recovery in its next base rate proceeding certain costs incurred from 2004 through 2012 in connection with the Company's ongoing efforts to meet Federal Clean Air Act and other environmental requirements with respect to Big Sandy Unit 2; and

WHEREAS, KIUC, Sierra Club, and the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention ("Attorney General") (collectively the

---

^{1} On February 15, 2013 the Commission issued a declaratory order stating that prior approval pursuant to KRS 278.020(5) and KRS 278.020(6) is not required for the merger of Kentucky Power and NEWCO Kentucky.
“Intervenors”) filed motions for full intervention in P.S.C. Case No. 2012-00578. The Public Service Commission of Kentucky (“Commission”) granted each of the intervention motions; and

WHEREAS, Sierra Club and KIUC filed written testimony raising issues regarding Kentucky Power’s Transfer Application; and

WHEREAS, Kentucky Power and the Intervenors have had a full opportunity for discovery, including the filing of written data requests and responses; and

WHEREAS, Kentucky Power offered the Intervenors, along with Commission Staff, the opportunity to meet and review the issues presented by Kentucky Power’s application in this proceeding and for purposes of settlement; and

WHEREAS, during May 2013 representatives of Kentucky Power and the Intervenors, along with Commission Staff, met to review the issues and discuss settlement of the Transfer Application; and

WHEREAS, on May 28, 2013 Kentucky Power, along with Sierra Club and KIUC (“Settling Intervenors”), entered into a Memorandum of Understanding Regarding Stipulation and Settlement Agreement memorializing the basis for settling the issues in this proceeding; and

WHEREAS, Kentucky Power and the Settling Intervenors have reviewed the issues raised in P.S.C. Case No. 2012-0578, and have reached a settlement of the case, including the issues raised therein; and

WHEREAS, the Attorney General declined to enter into a settlement of the issues and thus there is not a unanimous settlement of the proceedings in Case No. 2012-00578; and

3
WHEREAS, Kentucky Power and the Settling Intervenors execute this Stipulation and Settlement Agreement ("Settlement Agreement") for purposes of submitting it to the Public Service Commission of Kentucky for approval, and for such further approvals as are required to implement its provisions; and

WHEREAS, Kentucky Power and the Settling Intervenors believe that the relief, rates, and approvals provided for by this Settlement Agreement are in accordance with the requirements of Chapter 278; and

WHEREAS, the adoption of this Settlement Agreement will limit the need for the Commission and the parties to expend considerable resources in the litigation of this proceeding,

NOW THEREFORE, for and in consideration of the mutual premises set forth above, and the agreements and covenants set forth herein, Kentucky Power and the Settling Intervenors hereby agree:

1. On December 31, 2013, fifty percent of Mitchell Units 1 and 2 (including associated assets and liabilities) are to be transferred to Kentucky Power Company in the manner described in the Transfer Application. The transfer will be at actual net book value as of December 31, 2013, including all Accumulated Deferred Income Tax benefits, with no off-set to negate the transfer of those tax benefits to Kentucky ratepayers, in a manner consistent with the accounts and accounting entries shown on RKW-Exhibit 2 and RKW-Exhibit 3 (the net book value is currently estimated to be approximately $536 million), and the calculation of the "Mitchell Plant Revenue Requirement" amounts shown on RKW-Exhibit 4 and the underlying workpapers for RKW-Exhibit 4. Such transfer shall be deemed a prudent component of rate base in future proceedings. The Company will use current Ohio Power Company depreciation rates
for Mitchell Units 1 and 2 until such rates are changed in the Base Rate Case, as that proceeding
is defined in Paragraph 3. The Company shall propose depreciation rates that reflect a 2040
retirement date for the Mitchell units in the Base Rate Case.

2. Mitchell-related fuel costs shall be included in the calculation of charges or
credits under Kentucky Power Company's Fuel Adjustment Clause. The Mitchell units will be
included in the economic dispatch of Kentucky Power Company's generation resources.
Because of the anticipated lower fuel costs of Mitchell Units 1 and 2 vis-à-vis the anticipated
fuel costs of the Big Sandy units, the transfer of the Mitchell units to Kentucky Power is
expected to provide Kentucky Power customers with the benefit of reduced fuel costs of
approximately $2.50/MWh. Based on 2012 jurisdictional kWh sales of 6.7 GWh, the benefits
are estimated to total $16.75 million annually.

3. Upon approval by the Commission of this Stipulation and Settlement Agreement,
the Company shall withdraw any pending base rate case.\(^2\) The Company agrees to maintain
current base rates at least through May 31, 2015, subject to Paragraph 16 of this Settlement
Agreement. In addition, the Company agrees to file a base rate proceeding ("Base Rate Case")
no later than December 29, 2014 utilizing a September 30, 2014 test year. The Company agrees
to propose combining, using the C.I.P.-T.O.D. rate design, the C.I.P.-T.O.D. and Q.P. tariff
classes in the Base Rate Case. The Company agrees to remove all coal-related operating
expenses related to Big Sandy 1, and all operating expenses related to Big Sandy Unit 2 from the
cost of service study in the Base Rate Case. The Company further agrees to remove all coal-
related plant and other capitalized costs, e.g., fuel inventories, materials and supplies inventories,

\(^2\) Kentucky Power Company on May 17, 2013 filed its Notice of Intent to file an Application For General
Adjustment of its Rates (Case No. 2013-00197). On June 28, 2013 the Company filed its Application seeking a
23.39% adjustment in its revenues (with the transmission adjustment).
etc., related to Big Sandy Unit 1, and all plant and other capitalized costs, e.g., fuel inventories, materials and supplies inventories, etc., related to Big Sandy Unit 2, from the cost of service study in the Base Rate Case, and instead recover these costs in the manner set forth in Paragraph 14 of this Settlement Agreement.

4. Effective January 1, 2014, the Company will implement an Asset Transfer Rider pursuant to the Tariff Asset Transfer Rider attached hereto as EXHIBIT 1. The Asset Transfer Rider is designed to collect $44 million annually, with a true-up mechanism to ensure no over or under recovery. The charges payable under the Asset Transfer Rider are initially determined by first allocating the $44 million revenue requirement between residential and all other customers based upon their respective percentage of total revenues as of the twelve month period ended September 30, 2013. The Asset Transfer Rider charges will be calculated as a percentage of total revenues for the residential class, and as a percentage of non-fuel revenues for all other customers. The Asset Transfer Rider will remain in place until the Commission sets new base rates for the Company that include the Mitchell units. After new base rates are established, the Asset Transfer Rider will be reset to remove the $44 million by substituting Asset Transfer Rider-2 (Tariff A.T.R.-2), attached hereto as EXHIBIT 1-A, which thereafter will be used to recover the Big Sandy 1 and Big Sandy 2 retirement costs as described in Paragraph 14.

5. Effective January 1, 2014, the monthly Environmental Surcharge factor (Tariff E.S.) will be fixed and maintained at 0.00% until new base rates are set by the Commission. The revised Tariff E.S. is attached hereto as EXHIBIT 2.

6. When base rates are set in the Base Rate Case, all costs associated with the Mitchell Units 1 and 2 Flue Gas Desulfurization (FGD) equipment will be recovered through the
environmental surcharge (Tariff E.S.) approved in the Base Rate Case, and excluded from base rates in the Base Rate Case. This collection mechanism shall continue at least until the Commission sets new base rates for a period commencing after June 30, 2020 that include these costs. The charges payable under the Environmental Surcharge to be submitted for approval in the Base Rate Case will be determined by first allocating the revenue requirement between full requirements wholesale customers and retail customers in the same manner that it is presently allocated. The retail share of the revenue requirement will then be allocated between residential and non-residential retail customers based upon their respective total revenues. The Environmental Surcharge will be implemented as a percentage of total revenues for the residential class and as a percentage of non-fuel revenues for all other customers.

7. Effective January 1, 2014, the Company will set and maintain the System Sales Adjustment Factor (Tariff S.S.C.) to 0.0000 mills/kWh until new base rates are set by the Commission. The revised Tariff S.S.C. is attached hereto as **EXHIBIT 3**. Calendar year off-system sales margins above $15,290,363, the level in current base rates, will be retained by the Company until new base rates are set.

8. The Company shall be authorized in accordance with Financial Accounting Standards Board Standards Codification 980-340-25-1 to accumulate and defer for review and recovery in the Base Rate Case the $28,113,304 of costs incurred from 2004 through 2012 in connection with the Company’s ongoing efforts to meet Federal Clean Air Act and other environmental requirements with respect to Big Sandy Unit 2. The Company shall be authorized to amortize and recover the regulatory asset over a five-year period commencing with the implementation of the base rates established in the Base Rate Case. The Company will be
authorized to apply carrying costs to the unamortized regulatory asset at a long-term debt rate of 6.48%.

9. Effective June 1, 2015, the availability of service under Tariff C.S.-I.R.P. shall increase to 75,000 kW in accordance with the revised Tariff C.S.-I.R.P. attached hereto as Exhibit 4. Further, the revised Tariff C.S.-I.R.P. provides that effective June 1, 2015 credits under Tariff C.S.-I.R.P. of $3.68/kW/month will be provided for interruptible load that qualifies under PJM’s rules as capacity for the purposes of the Company’s FRR obligation. This interruptible service will be consistent with PJM’s Limited Demand Response, Emergency – Capacity Only Program, subject to any limitations on the availability of that Program by PJM. If insufficient MWs are available for PJM enrollment by Kentucky Power, the revised Tariff C.S.-I.R.P. provides that Company shall offer to substitute one of the other PJM Emergency Demand Response Programs that is available. To be eligible for the credit, customers must be able to provide interruptible load (not involving behind the meter diesel generation) of at least one MW at a single site and commit to a minimum 4-year contract term. Any such credits will be collected through the newly-established Purchase Power Adjustment to be implemented pursuant to Paragraph 15 of this Settlement Agreement.

10. The Company agrees to provide economic development support for Lawrence County, Kentucky and the Kentucky counties contiguous thereto in the total amount of $100,000 per year for five years. Of this annual amount, $33,000 will be set aside for job training, with a preference for training for weatherization and energy efficiency-related jobs. The $100,000 annual contribution shall not be recoverable from Kentucky Power customers.
11. The Company agrees to increase its contribution to the Home Energy Assistance Program to 15 cents per residential meter per month. Such amounts shall not be recoverable from customers.

12. The Company agrees to institute a new two-year Demand-Side Management ("DSM") program to help fund energy management programs for schools affected by KRS 160.325. The annual DSM funding level for this program will be $75,000 in 2014 and $50,000 in 2015. Further, Kentucky Power agrees to increase its aggregate annual spending on cost-effective DSM and energy efficiency measures through Commission-approved DSM programs to $4 million in 2014; $5 million in 2015; and $6 million in 2016, 2017, and 2018. The Company also will seek to maintain a minimum spending level of $6 million for Commission-approved cost-effective DSM and energy efficiency measures in years after 2018. The Sierra Club may participate in the Company’s DSM collaborative and receive the Company’s periodic reports and evaluations of its DSM programs.

13. The Company shall file with the Commission an application pursuant to KRS 278.020 for Certificate of Public Convenience of Necessity to convert the 268 MW Big Sandy Unit 1 to natural gas, and will exercise its option to terminate its March 28, 2013 Request for Proposals. All parties to this Settlement Agreement agree they will not move to intervene to challenge the Company’s filing for the required Certificate of Public Convenience and Necessity to convert Big Sandy Unit 1 to natural gas, provided the cost to convert is approximately $60 million.

14. The Company shall be authorized to recover the coal-related retirement costs of Big Sandy Unit 1, the retirement costs of Big Sandy Unit 2, and other site-related retirement
costs that will not continue in use. The costs shall be recovered on a levelized basis, including a weighted average cost of capital (WACC) carrying cost, over a 25 year period beginning when base rates are set in the Base Rate Case. The term “Retirement Costs” as used in this agreement are defined as and shall include the net book value, materials and supplies that cannot be used economically at other plants owned by Kentucky Power, and removal costs and salvage credits, net of related ADIT. Related ADIT shall include the tax benefits from tax abandonment losses. The Company will use its best efforts to minimize the cost of dismantling and to maximize salvage credits. Such retirement costs will be recovered in the Asset Transfer Rider-2.

15. Beginning January 1, 2014, no outage associated with Big Sandy Unit 2, including that due to its retirement, shall be treated as a forced outage for purposes of the Fuel Adjustment Clause. After Big Sandy Unit 2 is retired or can no longer be economically operated, the Company shall be authorized to recover incremental purchased power costs associated with forced outages of other Kentucky Power plants, not otherwise recoverable through the Fuel Adjustment Clause, pursuant to the Purchase Power Adjustment attached hereto as Exhibit 5. Customers shall at all times be entitled to the least cost energy produced by generation owned, leased or purchased by the Company consistent with economic dispatch principles.

16. The retirement of Big Sandy Unit 2 prior to May 31, 2015, shall be considered a Force Majeure Event and the Company shall have the right to seek emergency rate relief from the Commission to prevent its credit or operations from being materially impaired or damaged under KRS 278.190 (2) consistent with the Commission’s orders and precedent governing such relief. Such emergency rate relief shall be limited to $24 million annually ($2 million per month
for each remaining month through May 2015). For purposes of this provision, Big Sandy Unit 2 shall be deemed retired upon review of the retirement as required under the PJM tariff.

17. The Company agrees to continue to procure coal for the Mitchell units with no bias against coal produced in Kentucky.

18. The Company agrees to continue to work during the conversion of Big Sandy Unit 1 to use local labor sources, in connection with the conversion, when technically practical.

19. The Company agrees to issue a non-binding Request For Proposals for 100 MW of wind power for the purpose of incorporating the results of the RFP in its Integrated Resource Plan that will be filed in December 2013.

20. The Company’s application in Case No. 2013-00144 (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 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) is to be decided separately by the Commission.

21. Kentucky Power and the Settling Intervenors agree:

(a) Any party can contest the reasonableness of the ongoing costs of environmental compliance in future proceedings. The Company acknowledges the authority of the Commission, upon its own motion, or upon application by the parties (including the Attorney General, Sierra Club, and KIUC), to determine following a full due process hearing that Mitchell Units 1 and 2 are no longer the least cost generation resource for the ratepayers of the Company.
due to federal, state or local environmental laws or regulations imposing on Mitchell Units 1 and 2 costs or operational requirements associated with or related to greenhouse gas emissions, and to order upon such determination that Mitchell Units 1 and 2 shall be retired for Kentucky ratemaking purposes. Nothing in this Stipulation and Settlement Agreement shall bar the Commission or the parties (including the Attorney General, Sierra Club, and KIUC) from proceeding pursuant to KRS 278.260 to challenge the Company’s rates on the ground the rates are unreasonable or unjustly discriminatory because Mitchell Units 1 and 2 are no longer the least cost generation resource for the ratepayers of the Company due to federal, state or local environmental laws or regulations imposing on Mitchell Units 1 and 2 costs or operational requirements associated with or related to greenhouse gas emissions. The Company and Settling Intervenors further agree to work collaboratively with the Kentucky and West Virginia Environmental Protection Agencies to attempt to reasonably address the potential regulation of carbon and its impact on Kentucky Power customers.

(b) Any costs resulting from federal, state or local environmental requirements relating to greenhouse gas emissions will be collected through the Environmental Surcharge or a similarly-structured surcharge mechanism consistent with the allocation specified in Paragraph 6.

(c) If Mitchell Units 1 or 2 are retired for Kentucky ratemaking purposes pursuant to Paragraph 21(a) or retired early as the result of federal, state or local environmental requirements relating to greenhouse gas emissions, the Company agrees to collect the Retirement Costs with a debt-only carrying cost. The recovery period and mechanism shall be approved by the Commission. Retirement Costs shall be as defined in Paragraph 14. The Company further agrees to include an economic analysis of all generating unit costs, including the costs of
complying with greenhouse gas emission regulation, in future Integrated Resource Plans. This Stipulation and Settlement Agreement does not bar any party from advocating any position it deems appropriate in a future Integrated Resource Plan docket, or any other future proceeding.

22. Filing Of Settlement Agreement With The Commission And Request For Approval.

Following the execution of this Settlement Agreement, Kentucky Power and the Settling Intervenors shall file this Settlement Agreement with the Commission along with a joint request to the Commission for consideration and approval of this Settlement Agreement.

23. Good Faith And Best Efforts To Seek Approval.

(a) This Settlement Agreement is subject to approval by the Commission.

(b) Kentucky Power and the Settling Intervenors shall act in good faith and use their best efforts to recommend to the Commission that this Settlement Agreement be approved in its entirety and without modification, and that the rates and charges set forth herein be implemented.

(c) Kentucky Power and certain Intervenors filed testimony in this case and Kentucky Power filed rebuttal testimony. Kentucky Power also filed testimony in support of this Settlement Agreement. For purposes of any hearing with respect to this Settlement Agreement or the Application in Case No. 2012-00578, the Settling Intervenors and Kentucky Power waive all cross-examination of the other parties' witnesses except for supporting this Settlement Agreement, unless the Commission disapproves this Settlement Agreement.
(d) Kentucky Power and the Settling Intervenors further agree to support the reasonableness of this Settlement Agreement before the Commission, and to cause their counsel to do the same, including in connection with any appeal from the Commission’s approval, implementation, or enforcement of this Settlement Agreement.

(e) No party to this Settlement Agreement shall file judicial or administrative challenges to any Order of the Commission approving the Settlement Agreement in its entirety and without modification.

24. **Failure Of Commission To Approve Settlement Agreement.**

If the Commission does not accept and approve this Settlement Agreement in its entirety and without modification, this Settlement Agreement shall be void and withdrawn by Kentucky Power and the Settling Intervenors from further consideration by the Commission and none of the parties to this Settlement Agreement shall be bound by any of the provisions herein.

25. **Continuing Commission Jurisdiction.**

This Settlement Agreement shall in no way be deemed to divest the Commission of jurisdiction under Chapter 278 of the Kentucky Revised Statutes.

26. **Effect of Settlement Agreement.**

This Settlement Agreement shall inure to the benefit of and be binding upon the parties to this Settlement Agreement, their successors and assigns. In the event that the Company or either of the Settling Intervenors believes a Party to this Settlement Agreement has breached any of its obligations set forth herein, the Party alleging breach shall provide the allegedly breaching Party
written notice and a 30-day opportunity to cure the alleged breach. The Parties agree that any breach of this agreement shall result in irreparable injury, for which the non-breaching party is without adequate remedy at law. Accordingly, the parties to this Stipulation and Settlement Agreement further agree that equitable relief, including specific performance or injunctive, is the sole remedy in the event of an uncured breach, and that no Party shall be liable for monetary damages in the event of breach. The Parties expressly waive and forego the right to money damages for any breach of any of the obligations set forth in this Settlement Agreement.

27. **Complete Agreement.**

This Settlement Agreement constitutes the complete agreement and understanding among the parties to this Settlement Agreement, and any and all oral statements, representations or agreements made prior hereto or contained contemporaneously herewith shall be null and void and shall be deemed to have been merged into this Settlement Agreement.

28. **Independent Analysis.**

The terms of this Settlement Agreement are based upon the independent analysis of the parties to this Settlement Agreement, are the product of compromise and negotiation, and reflect a fair, just and reasonable resolution of the issues herein.

29. **Settlement Agreement And Negotiations Are Not An Admission.**

(a) This Settlement Agreement shall not be deemed to constitute an admission by any party to this Settlement Agreement that any computation, formula, allegation, assertion or contention made by any other party in these proceedings is true or valid. Nothing in this Settlement Agreement shall be used or construed for any purpose to imply, suggest or otherwise
indicate that the results produced through the compromise reflected herein represent fully the objectives of Kentucky Power or the Settling Intervenors.

(b) Neither the terms of this Settlement Agreement nor any statements made or matters raised during the settlement negotiations shall be admissible in any proceeding, or binding on any of the parties to this Settlement Agreement, or be construed against any of the parties to this Settlement Agreement, except that in the event of litigation or proceedings involving the approval, implementation or enforcement of this Agreement, the terms of this Settlement Agreement shall be admissible. This Settlement Agreement shall not have any precedential value in this or any other jurisdiction.

30. **Consultation With Counsel**

The parties to this Settlement Agreement warrant that they have informed, advised, and consulted with their respective counsel with regard to the contents and significance of this Settlement Agreement and are relying upon such advice in entering into this agreement.

31. **Authority To Bind.**

Each of the signatories to this Settlement Agreement hereby warrant they are authorized to sign this agreement upon behalf of, and bind, their respective parties.

32. **Construction Of Agreement.**

This Settlement Agreement is a product of negotiation among all parties to this Settlement Agreement, and no provision of this Settlement Agreement shall be construed in favor of or against any party hereto. This Settlement Agreement is submitted for purposes of this case only. Except as otherwise provided in this Settlement Agreement, this Settlement
Agreement is not to be deemed binding upon the parties hereto in any other proceeding, nor is it to be offered or relied upon in any other proceeding involving Kentucky Power or any other utility.

33. This Settlement Agreement may be executed in multiple counterparts.

IN WITNESS WHEREOF, this Stipulation and Settlement Agreement has been agreed to as of this 20th day of July, 2013.
KENTUCKY POWER COMPANY

By: [Signature]

Mark R. Overstreet

Its: Attorney
SIERRA CLUB, ALEXANDER DESHA, TOM VIERHELLER, AND BEVERLY MAY

By: Shannon W. Fisk

Their: Attorney
KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

By: Michael L. Kurtz

Its: Attorney
APPLICABLE.


RATES

1. Pursuant to the final order of the Kentucky Public Service Commission in Case No. 2012-00578 and the Stipulation and Settlement Agreement dated June __, 2013 as filed and approved by the Commission, Kentucky Power Company is to recover from retail ratepayers $4 million annually beginning January 1, 2014 and ending when the Commission sets new base rates for the Company that include Mitche Units 1 and 2.

2. The allocation of the $44 million revenue requirement between residential and all other customers shall be based upon their respective contribution to total retail revenues for the twelve month period ended September 30, 2013, according to the following formula:

\[
\text{Residential Allocation RA}(m) = \frac{44,000,000}{12} \times \text{KY Residential Retail Revenue RR}(b) \\
\text{All Other Allocation OA}(m) = \frac{44,000,000}{12} \times \text{KY All Other Classes Retail Revenue OR}(b)
\]

Where:
- \((m)\) = the expense month;
- \((b)\) = twelve month period ended September 30, 2013.

3. The Residential Asset Transfer Adjustment shall provide for monthly adjustments based on a percent of total revenues, according to the following formula:

\[
\text{Residential Asset Transfer Adjustment Factor} = \frac{\text{Net Monthly Residential Allocation NRA}(m)}{\text{Residential Retail Revenue RR}(m)}
\]

Where:
- Net Monthly Residential Allocation NRA\((m)\) = Monthly Residential Allocation RA\((m)\), net of Over/(Under) Recovery Adjustment;
- Residential Retail Revenue RR\((m)\) = Monthly Retail Revenue for all KY residential classes for the expense month \((m)\).

4. The All Other Classes Asset Transfer Adjustment shall provide for monthly adjustments based on a percent of non-fuel revenues, according to the following formula:

\[
\text{All Other Classes Asset Transfer Adjustment Factor} = \frac{\text{Net Monthly All Other Allocation NOA}(m)}{\text{All Other Classes Non-Fuel Retail Revenue ONR}(m)}
\]

Where:
- Net Monthly All Other Allocation NOA\((m)\) = Monthly All Other Allocation OA\((m)\), net of Over/(Under) Recovery Adjustment;
- All Other Classes Non-Fuel Retail Revenue ONR\((m)\) = Monthly Non-Fuel Retail Revenue for all classes other than residential for the expense month \((m)\).

1. The monthly asset transfer rider adjustments shall be filed with the Commission ten (10) days before it is scheduled to go into effect, along with all the necessary supporting data to justify the amount of the adjustments, which shall include data, and information as may be required by the Commission.

2. Copies of all documents required to be filed with the Commission shall be open and made available for public inspection at the office of the Public Service Commission pursuant to the provisions of KRS61.870 to 61.884.
APPLICABLE.


RATE.

1. Pursuant to the final order of the Kentucky Public Service Commission in Case No. 2012-00575 and the Stipulation and Settlement Agreement dated June __, 2013 as filed and approved by the Commission, Kentucky Power Company is to recover from retail ratepayers the coal-related retirement costs of Big Sandy Unit 1, the retirement costs of Big Sandy Unit 2 and other site-related retirement costs that will not continue in use on a levelized basis over a 25 year period beginning when new base rates are set for the Company that include Mitchell Units 1 and 2.

2. The allocation of the levelized revenue requirement (LRR) between residential and all other customers shall be based upon their respective contribution to total retail revenues for the most recent calendar twelve month period, according to the following formula:

   Residential Allocation RA(m) = \frac{\text{LRR(m)}}{\text{KY Residential Retail Revenue RR(b)}} \times \frac{\text{KY Retail Revenue R(b)}}{\text{KY Retail Revenue R(b)}}

   All Other Allocation OA(m) = \frac{\text{LRR(m)}}{\text{KY All Other Classes Retail Revenue OR(b)}} \times \frac{\text{KY Retail Revenue R(b)}}{\text{KY Retail Revenue R(b)}}

   Where:
   
   \text{(m)} = \text{the expense month;}
   
   \text{(b)} = \text{Most recent available twelve calendar-month period ended December 31.}

3. The Residential Asset Transfer Adjustment shall provide for monthly adjustments based on a percent of total revenues, according to the following formula:

   \text{Residential Asset Transfer Adjustment Factor} = \frac{\text{Net Monthly Residential Allocation NRA(m)}}{\text{Residential Retail Revenue RR(m)}}

   Where:
   
   \text{Net Monthly Residential Allocation NRA(m)} = \text{Monthly Residential Allocation RA(m), net of Over/(Under) Recovery Adjustment;}

   \text{Residential Retail Revenue RR(m)} = \text{Monthly Retail Revenue for all KY residential classes for the expense month (m).}

(Cont’d on Sheet No. 36-2)
RATE (Cont’d)

1. The All Other Classes Asset Transfer Adjustment shall provide for monthly adjustments based on a percent of non-fuel revenues, according to the following formula:

\[
\text{All Other Classes Asset Transfer Adjustment Factor} = \frac{\text{Net Monthly All Other Allocation NOA(m)}}{\text{All Other Classes Non-Fuel Retail Revenue ONR(m)}}
\]

Where:

\[
\text{Net Monthly All Other Allocation NOA(m)} = \text{Monthly All Other Allocation OA(m), net of Over/(Under) Recovery Adjustment;}
\]

\[
\text{All Other Classes Non-Fuel Retail Revenue ONR(m)} = \text{Monthly Non-Fuel Retail Revenue for all classes other than residential for the expense month (m).}
\]

2. The monthly asset transfer rider adjustments shall be filed with the Commission ten (10) days before it is scheduled to go into effect, along with all the necessary supporting data to justify the amount of the adjustments, which shall include data, and information as may be required by the Commission.

3. Copies of all documents required to be filed with the Commission shall be open and made available for public inspection at the office of the Public Service Commission pursuant to the provisions of KRS 61.870 to 61.884.
TARIFF E.S.
(Environmental Surcharge)

APPLICABLE.


RATe.

In accordance with the Stipulation and Settlement Agreement approved by the Commission by its Order dated ______, 2013 in Case No. 2012-00578, the Monthly Environmental Surcharge Factor will be fixed and maintained at 0.00% until new base rates are first established by Commission after the effective date of this tariff without regard to the calculation of the Monthly Environmental Surcharge Factor under paragraphs 1 through 4 below. Coincident with the first establishment of new base rates after the effective date of this tariff, the retail share of the revenue requirement associated with this tariff will then be allocated between residential and non-residential retail customers based upon their respective total revenues. The Environmental Surcharge will be implemented as a percentage of total revenues for the residential class and as a percentage of non-fuel revenues for all other customers.

1. The environmental surcharge shall provide for monthly adjustments based on a percent of revenues, equal to the difference between the environmental compliance costs in the base period as provided in Paragraph 3 below and in the current period according to the following formula:

   \[
   \text{Monthly Environmental Surcharge Factor} = \frac{\text{Net KY Retail } E(m)}{\text{KY Retail R(m)}}
   \]

   Where:
   
   \[
   \text{Net KY Retail } E(m) = \text{Monthly E(m) allocated to Kentucky Retail Customers, net of Over/(Under) Recovery Adjustment; Allocation based on Percentage of Kentucky Retail Revenues to Total Company Revenues in the Expense Month.}
   \]

   \[
   \text{(For purposes of this formula, Total Company Revenues do not include Non-Physical Revenues.)}
   \]

   \[
   \text{KY Retail R(m)} = \text{Kentucky Retail Revenues for the Expense Month.}
   \]

2. Monthly Environmental Surcharge Gross Revenue Requirement, E(m)

   \[
   E(m) = \text{CRR - BRR}
   \]

   Where:
   
   \[
   \text{CRR} = \text{Current Period Revenue Requirement for the Expense Month.}
   \]

   \[
   \text{BRR} = \text{Base Period Revenue Requirement.}
   \]

3. Base Period Revenue Requirement, BRR

   \[
   \text{BRR} = \text{The Following Monthly Amounts:}
   \]

<table>
<thead>
<tr>
<th>Billing Month</th>
<th>Base Net Environmental Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>JANUARY</td>
<td>$3,991,163</td>
</tr>
<tr>
<td>FEBRUARY</td>
<td>3,590,810</td>
</tr>
<tr>
<td>MARCH</td>
<td>3,651,374</td>
</tr>
<tr>
<td>APRIL</td>
<td>3,647,040</td>
</tr>
<tr>
<td>MAY</td>
<td>3,922,590</td>
</tr>
<tr>
<td>JUNE</td>
<td>3,627,274</td>
</tr>
<tr>
<td>JULY</td>
<td>3,805,325</td>
</tr>
<tr>
<td>AUGUST</td>
<td>4,088,830</td>
</tr>
<tr>
<td>SEPTEMBER</td>
<td>3,740,010</td>
</tr>
<tr>
<td>OCTOBER</td>
<td>3,260,302</td>
</tr>
<tr>
<td>NOVEMBER</td>
<td>2,786,040</td>
</tr>
<tr>
<td>DECEMBER</td>
<td>4,074,321</td>
</tr>
</tbody>
</table>

   \[
   \text{Total: $44,185,079}
   \]

(Continued on Sheet 29-3)

DATE OF ISSUE  XXXXXXXXXX  DATE EFFECTIVE  Service rendered on and after January 1, 2014

ISSUED BY  LILA P. MUNSEY  MANAGER REGULATORY SERVICES  FRANKFORT, KENTUCKY

NAME  TITLE  ADDRESS

Issued by authority of an Order of the Public Service Commission in Case No. 2012-00578 dated XXXXXXX
EXHIBIT 3
TARIFF S. S. C.  
(System Sales Clause)


RATE.

In accordance with the Stipulation and Settlement Agreement approved by the Commission by its Order dated ______, 2013 in Case No. 2012-00578, the System Sales Adjustment Factor will be fixed and maintained at 0.0000 mills/kWh until new base rates are first established by Commission after the effective date of this tariff without regard to the calculation of the Monthly System Sales Adjustment Factor under paragraphs 1 through 7 below.

1. When the monthly net revenues from system sales are above or below the monthly base net revenues from system sales, as provided in paragraph 3 below, an additional credit or charge equal to the product of the KWHs and a system sales adjustment factor (A) shall be made, where “A”, calculated to the nearest 0.0001 mill per kilowatt-hour, is defined as set forth below.

   System Sales Adjustment Factor (A) = (Tm - Tb)/Sm

In the above formulas “T” is Kentucky Power Company’s (KPCo) monthly net revenues from system sales in the current (m) and base (b) periods, and “S” is the KWH sales in the current (m) period, all defined below.

The net revenue from American Electric Power (AEP) System sales to non-associated companies that are shared by AEP Member Companies, including KPCo, in proportion to their Member Load Ratio and as reported in the Federal Energy Regulatory Commission’s Uniform System of Accounts under Account 447, Sales for Resale, shall consist of and be derived as follows:

   a. KPCo’s Member Load Ratio share of total revenues from system sales as recorded in Account 447, less b. and c. below.

   b. KPCo’s Member Load Ratio share of total out-of-pocket costs incurred in supplying the power and energy for the sales in a. above.

The out-of-pocket costs include all operating, maintenance, tax, transmission losses and other expenses that would not have been incurred if the power and energy had not been supplied for such sales, including demand and energy charges for power and energy supplied by Third Parties.

   c. KPCo’s environmental costs allocated to non-associated utilities in the Company’s Environmental Surcharge Report.

(Cont’d on Sheet No. 19-2)
TARIFF C.S.-I.R.P.
(Contract Service - Interruptible Power)

AVAILABILITY OF SERVICE.

Available for service to customers who contract for service under one of the Company’s interruptible service options. The Company reserves the right to limit the total contract capacity for all customers served under this Tariff to 60,000 kW.

Loads of new customers locating within the Company’s service area or load expansions by existing customers may be offered interruptible service as part of an economic development incentive. Such interruptible service shall not be counted toward the limitation on total interruptible power contract capacity, as specified above, and will not result in a change to the limitation on total interruptible power contract capacity.

CONDITIONS OF SERVICE.

The Company will offer eligible customers the option to receive interruptible power service. This interruptible service will be consistent with PJM’s Limited Demand Response, Emergency - Capacity Only Program, subject to any limitations on the availability of that Program by PJM. If insufficient MWs are available for PJM enrollment by Kentucky Power, the Company shall offer to substitute one of the other PJM Emergency Demand Response Programs that is available. To be eligible for the credit, customers must be able to provide interruptible load (not including behind the meter diesel generation) of at least one (1) MW at a single site and commit to a minimum four (4) year contract term. The contract shall provide that 90 days prior to each contract anniversary date, the customer shall re-nominate the amount of interruptible load for the upcoming contract year, except that the cumulative reductions over the life of the contract shall not exceed 20% of the original interruptible load nominated under the contract. If no re-nomination is received at least 90 days prior to the contract anniversary date, the prior year’s interruptible load shall apply for the forthcoming contract year.

Upon receipt of a request from the Customer for interruptible service, the Company will provide the Customer with a written offer containing the rates and related terms and conditions of service under which such service will be provided by the Company. If the parties reach an agreement based upon the offer provided to the Customer by the Company, such written contract will be filed with the Commission. The contract shall provide full disclosure of all rates, terms and conditions of service under this Tariff, and any and all agreements related thereto, subject to the designation of the terms and conditions of the contract as confidential, as set forth herein.

The Customer shall provide reasonable evidence to the Company that the Customer’s electric service can be interrupted in accordance with the provisions of the written agreement including, but not limited to, the specific steps to be taken and equipment to be curtailed upon a request for interruption.

The Customer shall contract for capacity sufficient to meet normal maximum interruptible power requirements, but in no event will the interruptible amount contracted for be less than 1,000 kW at any delivery point.

RATE. (Tariff Code 321)

Credits under this tariff of $3.68/kW/month will be provided for interruptible load that qualifies under PJM’s rules as capacity for the purpose of the Company’s FRR obligation.

Charges for service under this Tariff will be set forth in the written agreement between the Company and the Customer and will reflect the firm service rates otherwise available to the Customer.

FUEL ADJUSTMENT CLAUSE.

Bills computed according to the rates set forth herein will be increased or decreased by a Fuel Adjustment Factor per KWH calculated in compliance with the Fuel Adjustment Clause contained in Sheet Nos. 5-1 and 5-2 of this Tariff Schedule.

(Cont’d on Sheet No. 12-2)
TARIFF C.S.-I.R.P.
(Contract Service - Interruptible Power) (Cont'd.)

SYSTEM SALES CLAUSE.

Bills computed according to the rates set forth herein will be increased or decreased by a System Sales Factor per KWH calculated in compliance with the System Sales Clause contained in Sheet Nos. 19-1 and 19-2 of this Tariff Schedule.

DEMAND-SIDE MANAGEMENT ADJUSTMENT CLAUSE.

Bills computed according to the rates set forth herein will be increased or decreased by a Demand-Side Management Adjustment Clause Factor per KWH calculated in compliance with the Demand-Side Management Adjustment Clause contained in Sheet Nos. 22-1 and 22-2 of this Tariff Schedule, unless the Customer is an industrial who has elected to opt-out in accordance with the terms pursuant to the Commission's Order in Case No. 95-427.

ENVIRONMENTAL SURCHARGE.

Bills computed according to the rates set forth herein will be increased or decreased by an Environmental Surcharge Adjustment based on a percent of revenue in compliance with the Environmental Surcharge contained in Sheet Nos. 29-1 through 29-5 of this Tariff Schedule.

CAPACITY CHARGE.

Bills computed according to the rates set forth herein will be increased by a Capacity Charge Factor per KWH calculated in compliance with the Capacity Charge Tariff contained in Sheet No. 28-1 of this Tariff Schedule.

DELAYED PAYMENT CHARGE.

This tariff is due and payable in full on or before the due date stated on the bill. On all accounts not so paid, an additional charge of 5% of the unpaid balance will be made.

TERM OF CONTRACT

The length of the agreement and the terms and conditions of service will be stated in the agreement between the Company and the Customer.

CONFIDENTIALITY

All terms and conditions of any written contract under this Tariff shall be protected from disclosure as confidential, proprietary, trade secrets, if either the Customer or the Company requests a Commission determination of confidentiality pursuant to 807 KAR:001, Section 7 and the request is granted.
TARIFF P.P.A.
(Purchase Power Adjustment)

APPLICABLE.

RATE.

1. The purchase power adjustment shall provide for monthly adjustments based on a percent of revenues, equal to the net costs of any power purchases in the current period according to the following formula:

\[
\text{Monthly Purchase Power Adjustment Factor} = \frac{\text{Net KY Retail P(m)}}{\text{KY Retail R(m)}}
\]

Where:
\[
\text{Net KY Retail P(m)} = \text{Monthly P(m) allocated to Kentucky Retail Customers, net of Over/(Under) Recovery Adjustment; Allocation based on Percentage of Kentucky Retail Revenues to Total Company Revenues in the Expense Month (m). (For purposes of this formula, Total Company Revenues include only Retail and Full-Requirements Wholesale revenues.)}
\]

\[
\text{KY Retail R(m)} = \text{Kentucky Retail Revenues for the Expense Month (m).}
\]

2. The net costs of any power purchased shall exclude costs recovered through the Fuel Adjustment Clause and shall be computed as the sum of the following items:

a. \(\text{PPAm} = \) The cost of power purchased by the Company through new Purchase Power Agreements (PPAs). All new PPAs shall be approved by the Commission to the extent required by KRS 278.300.

b. \(\text{RP(m)} = \) The cost of fuel related substitute generation less the cost of fuel which would have been used in plants suffering forced generation or transmission outages.

c. \(\text{CSIRP(m)} = \) The cost of any credits provided to customers under Tariff C.S.-I.R.P for interruptible service.

\[
\text{Monthly P(m)} = \text{PPAm} + \text{RP(m)} + \text{CSIRP(m)}
\]

3. The monthly purchase power adjustment shall be filed with the Commission ten (10) days before it is scheduled to go into effect, along with all the necessary supporting data to justify the amount of the adjustment, which shall include data, and information as may be required by the Commission.

4. Copies of all documents required to be filed with the Commission shall be open and made available for public inspection at the office of the Public Service Commission pursuant to the provisions of KRS61.870 to 61.884.
MODIFICATIONS TO NON-UNANIMOUS STIPULATION

1. Paragraph 8 of the Stipulation allowing Kentucky Power to accumulate and defer for review and recovery in a future base rate case the $28,113,304 Scrubber Study Costs shall be stricken and removed from the Stipulation.

2. Paragraph 10 of the Stipulation concerning Kentucky Power’s commitment to provide shareholder contribution for economic development support for Lawrence County and the counties contiguous to Lawrence county shall be modified to reflect an increase in shareholder contribution from $100,000 to $200,000 per year for five years. The amount set aside for job training should not be carved out of the total annual contribution but should instead be in addition to the $200,000 annual shareholder contribution for a total annual contribution from Kentucky Power shareholders of $233,000 per year for five years. The shareholder funds designated for job training should also be placed in an account for the benefit of the two colleges in the Kentucky Community and Technical College System located in Kentucky Power’s system, Ashland Community and Technical College and Big Sandy Community and Technical College, for the express purpose of utilizing the two colleges to work with local economic officials, local industrial authorities, local workforce investment boards, and chambers of commerce on a regular basis to retain or attract business as well as to provide career counseling, assessments, and retraining of displaced workers. The two colleges would also be able to utilize their workforce solution divisions to provide specific training for industry, such as weatherization and energy efficiency job training.

3. That portion of Paragraph 12 of the Stipulation dealing with Kentucky Power’s commitment to contribute shareholder funds to assist energy management programs for schools affected by KRS 160.325 shall be modified to make clear that Kentucky Power’s shareholder contribution would be incremental funding for the school energy manager program, which could be for new school energy manager(s) or additional funds for existing school managers, and that the funding would be limited to those schools in Lawrence and contiguous Kentucky counties impacted by KRS 160.325.

4. That portion of Paragraph 12 of the Stipulation concerning Kentucky Power’s commitment to maintain a minimum level of DSM spending of at least $6 million after 2018 shall be modified to clearly specify Kentucky Power’s commitment to seek prior Commission approval should Kentucky Power desire to spend less than $6 million on DSM or energy efficiency programs after 2018.