

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN INVESTIGATION OF EAST KENTUCKY	)	CASE NO.
POWER COOPERATIVE, INC.'S NEED FOR	)	2010-00238
THE SMITH 1 GENERATING FACILITY	)	

O R D E R

On June 22, 2010, on its own motion pursuant to KRS 278.260, the Commission initiated this investigation regarding East Kentucky Power Cooperative, Inc.'s ("EKPC") need for the Smith 1 generating station ("Smith 1"), a 278 MW coal-fired, base load generating unit. Smith 1 was previously authorized by a Commission Order issued August 29, 2006 in Case No. 2005-00053.<sup>1</sup> At the time the investigation was established, Smith 1 was under construction in Clark County, Kentucky.

In its June 22, 2010 Order, the Commission stated that it does not typically revisit issues of need that have already been adjudicated, but that, in this instance, unique facts and circumstances were presented that justified a review of Smith 1. Those factors included the significant passage of time since the approval of Smith 1 without EKPC obtaining all necessary permits for its construction and operation, a substantial escalation in the estimated cost of Smith 1, and issues raised by three retail customers in a separate complaint case challenging Smith 1 on grounds that it was not needed and was not the least-cost means for obtaining base load capacity.

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<sup>1</sup> Case No. 2005-00053, Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity, and a Site Compatibility Certificate, for the Construction of a 278 MW (Nominal) Circulating Fluidized Bed Coal Fired Unit and Five 90 MW (Nominal) Combustion Turbines in Clark County, Kentucky (Ky. PSC, Aug. 29, 2006).

Based on those issues, the Commission opened this case to review EKPC's current projected need for additional base load generating capacity, whether Smith 1 remains the least costly option available to meet a need for additional base load capacity, and the impact to EKPC's financial integrity and its future electric rates. In particular, our investigation sought to determine the respective financial impacts from either constructing Smith 1 or pursuing an alternative option if additional base load capacity is needed.

At the time this case was opened, issues concerning the need for Smith 1 had already been raised in Case Nos. 2009-00426<sup>2</sup> and 2009-00476,<sup>3</sup> and those issues were consolidated, for administrative efficiency, into this investigation. In addition to EKPC, the parties to this proceeding are: Gallatin Steel Company; the Office of the Attorney General, by and through his Office of Rate Intervention; and three retail customers, Wendell Berry, Dr. John Patterson, and Fr. John Rausch.

#### PROCEDURAL POSTURE

The June 22, 2010 Order initiating this investigation also established a procedural schedule for the processing of this case. That schedule required EKPC to file testimony and provided for, among other things, two rounds of data requests. EKPC requested and was granted extensions of time to delay the filing of its testimony so it could first finalize its 2010 load forecast and to allow the parties an opportunity to

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<sup>2</sup> Case No. 2009-00426, Dr. John Patterson, Fr. John Rausch, Wendell Berry, Sierra Club, Kentucky Environmental Foundation and Kentuckians for the Commonwealth v. East Kentucky Power Cooperative, Inc. (Ky. PSC Jun. 22, 2010).

<sup>3</sup> Case No. 2009-00476, Application of East Kentucky Power Cooperative, Inc. for Approval of the Issuance of \$900,000,000 of Secured Private Placement Debt and Up to \$21,435,000 of Unsecured Debt (Ky. PSC Jun. 22, 2010).

engage in settlement discussions. The parties ultimately notified the Commission of the filing of a unanimous settlement agreement, along with a motion for approval of that settlement and dismissal of this investigation as settled. Contemporaneously with the filing of the settlement agreement, EKPC filed its prepared testimony addressing the issues set forth in the Commission's June 22, 2010 Order. Two rounds of discovery were conducted subsequent to the filing of the settlement agreement and EKPC's testimony. The formal hearing, which was a combined hearing for both this proceeding and Case No. 2010-00449, was held as scheduled on February 8, 2011.<sup>4</sup>

### BACKGROUND

The roots of this investigation go back over six years ago. On January 31, 2005, EKPC applied to the Commission for a Certificate of Public Convenience and Necessity ("CPCN") to construct Smith 1.<sup>5</sup> After conducting an investigation and hearing, the Commission granted EKPC the authority to construct Smith 1 based on finding that EKPC's load projections were reasonable, there was a demonstrated need for additional base load generation, and Smith 1 would be the least-cost option to meet the need for generation.

Included in EKPC's load projections were the generation needs of Warren Rural Electric Cooperative Corporation ("Warren RECC"), a distribution cooperative in Kentucky that had historically purchased its generation from the Tennessee Valley

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<sup>4</sup> Case No. 2010-00449, Application of East Kentucky Power Cooperative, Inc. for an Order Approving the Establishment of a Regulatory Asset for the Amount Expended on its Smith 1 Generating Unit (Ky. PSC Dec. 16, 2010).

<sup>5</sup> Case No. 2005-00053, East Kentucky Power Cooperative, Inc. (Ky. PSC, Aug. 29, 2006).

Authority ("TVA"). Warren RECC had decided in 2004 to switch its power supply from TVA to EKPC, but it subsequently reversed that decision on December 8, 2006.

As a result of Warren RECC's decision to retain TVA as its supplier, the Commission initiated an investigation of EKPC's continued need for the additional generating facilities that were then approved but not yet constructed, including Smith 1.<sup>6</sup> That investigation was concluded upon the Commission finding, among other things, that Smith 1 was needed to serve EKPC's growing native load. Based on this finding, the Commission authorized EKPC to retain the previously issued CPCN authorizing the construction of Smith 1.

#### SETTLEMENT AGREEMENT

In support of their motion for approval of the settlement agreement, the parties state that it addresses all of the issues raised by the Commission in this case, as well as other issues that were not part of the case. Although the parties "recognize that the Commission has both the authority and discretion to engage in any type of review of the issues for investigation it deems appropriate," they nonetheless are of the belief that the settlement agreement addresses all of the issues identified by the Commission in a meaningful and comprehensive fashion.

EKPC has also filed a motion requesting the Commission accept its relinquishment of the CPCN for Smith 1 and set aside the Commission's previous grant of that CPCN. For the following reasons, the Commission will approve the settlement and dismiss the matter as settled.

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<sup>6</sup> Case No. 2006-00564, An Investigation into East Kentucky Power Cooperative, Inc's Continued Need for Certificated Generation (Ky. PSC, May 11, 2007).

The significant provisions of the settlement agreement provide for EKPC's agreement to abandon the construction of Smith 1 and surrender the Smith 1 CPCN. As a result of its agreement to cancel construction of Smith 1, EKPC would need to file an application to establish a regulatory asset for the sunk costs of Smith 1. In exchange for this agreement by EKPC, the other parties agreed to not oppose EKPC's request for Commission approval of a regulatory asset allowing EKPC to recover its costs incurred for the construction of Smith 1.<sup>7</sup> In addition, EKPC agreed to withdraw its application for certain environmental permits with the Energy and Environment Cabinet and U.S. Army Corps of Engineers. In return, the Sierra Club, Kentuckians for the Commonwealth, and Kentucky Environmental Foundation ("Environmental Groups") agreed to dismiss several administrative and court actions pending against EKPC at both the state and federal level.<sup>8</sup>

As part of the settlement agreement, EKPC also agreed to initiate a collaborative to evaluate and assess EKPC's energy diversification portfolio. In addition to the parties to this proceeding, the collaborative would be comprised of one representative of each of EKPC's 16 member systems and the Environmental Groups. EKPC would chair the collaborative with one representative from the Environmental Groups acting as vice-chair. The primary purpose of the collaborative would be to evaluate and recommend

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<sup>7</sup> On November 18, 2010, EKPC filed its application in Case No. 2010-00449 for authorization to establish a regulatory asset for the amount expended on Smith 1.

<sup>8</sup> The Environmental Groups are not parties to this investigation and the pending litigation involving EKPC and the Environmental Groups is beyond the scope of the Commission's jurisdiction. Accordingly, this Order addresses only those issues which are the subject of this investigation and within the Commission's authority.

actions to expand deployment of renewable energy and demand-side management (“DSM”).

### 2010 LOAD FORECAST

EKPC’s decision to cancel the construction of Smith 1 was based on its 2010 load forecast, which was conducted over the summer of 2010 and approved by EKPC’s Board of Directors in November 2010. This new forecast does not support an immediate need for base load generation. In particular, the 2010 load forecast indicates that EKPC’s total energy requirements are projected to increase by 1.6 percent annually over the 20-year forecast period. This reflects a significant downward trend in EKPC’s load growth; energy sales grew by an average annual rate of 4.2 percent from 1999 to 2004, but declined to 1.2 percent annually from 2004 to 2009. The primary factor behind the decrease in projected load growth was due to the severe economic recession which began in late 2007 and which has caused EKPC’s peak load to decrease by more than 10 percent since 2008. The full extent of the recession is reflected in the 2010 load forecast, including the high unemployment level in EKPC’s territory, which is not expected to return to pre-recession levels for nearly 10 years, reduction in personal income level, and a severe decline in the automotive industry.<sup>9</sup> As a result, EKPC’s 20-year projections developed in 2010 for customer growth and energy usage were lower than the projections in its 2006 and 2008 load forecasts.<sup>10</sup>

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<sup>9</sup> According to the 2010 Load Forecast, “EKPC member systems serve many satellite industrial and commercial customers that produce parts for Toyota, and as a result of the aforementioned circumstances, were negatively impacted.” EKPC’s Response to Commission Staff’s Post Hearing Data Requests, Item 8 at 35.

<sup>10</sup> EKPC completes a load forecast every two years as required by Rural Utilities Service.

Seven cases comparing power supply options were developed based on the 2010 load forecast. The seven cases are: (1) construct Smith 1 as planned; (2) delay construction of Smith 1 for two years; (3) delay construction of Smith 1 for four years; (4) cancel Smith 1 and build a combined cycle unit in the optimal time frame; (5) cancel Smith 1 and rely on increased DSM efforts and renewable generation resources; (6) cancel Smith 1 and rely on a purchase power agreement until 2022, and then construct combined cycle generation; and (7) cancel Smith 1, sell Smith 1 at book value to an independent power producer and enter into a long-term purchase power agreement with the same entity. The seven cases were developed based on EKPC's peak capacity requirements and its expected energy requirements. Based on the assumption that EKPC's average monthly load is a rough indicator of base load capacity needs, the 2010 load forecast indicates that EKPC would not need additional base load capacity until approximately 2018.

EKPC also conducted a financial forecasting model for each of the seven power supply cases. The process incorporates the use of financial statements, including a statement of operations, cash flow, and balance sheet. Actual, budgeted, and forecasted data were used to project future financial positions. The financial situation produced by the forecasted financial statements will change from year to year. EKPC evaluates these changes in financial positions in light of creditor standards, company goals, and general business standards to determine the financial viability of its organization in that year.

Revenue requirements were determined for each case for the 20-year forecasted period and accumulated on a present value basis. A Times Interest Earned Ratio level

of 1.50 was used to determine the revenue requirements. Other assumptions included a discount rate of 7.52 percent based on EKPC's cost of capital, the enactment of CO<sub>2</sub> legislation, and residual values of all new plant investment during the 20-year period at net book value.

The base case, or Case 1, completing the construction of Smith 1 as planned, assumed the initial Smith 1 investment to be \$819 million, which was the most recent cost estimate prepared jointly by Stanley Consultant and EKPC. The results of the financial forecasting model showed that Smith 1 was no longer the least-cost option. Case 4, constructing a combined cycle gas turbine, and Case 6, entering into a short-term purchase power agreement and then constructing a combined cycle unit, produced the greatest savings from the base case at \$308 million and \$404 million, respectively. The forecasted savings resulted mainly from the capital cost of a combined cycle unit as compared to the capital cost of Smith 1 and the low cost of natural gas.

#### DISCUSSION

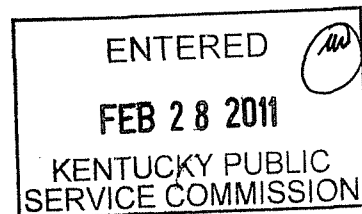
Having reviewed the record and being otherwise sufficiently advised, the Commission finds EKPC's 2010 load forecast to be reasonable. The methodology utilized by EKPC in the 2010 load forecast was the same methodology used by EKPC in developing its 2006 and 2008 load forecasts. Moreover, assumptions relating to hourly load forecast, annual energy forecast, seasonal peaks forecast, normal weather, and use of electric heat and electric water heating remain unchanged from the prior load forecasts. Based on EKPC's 2010 load forecast, the Commission finds that EKPC no longer has a need for additional base load generation until 2018 and, within that time frame, completion of Smith 1 is no longer the least-cost power supply option.



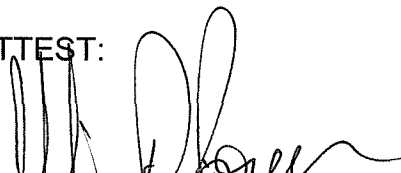
IT IS THEREFORE ORDERED that:

1. The provisions of the settlement agreement among the parties to this case that relate to the issues raised in this investigation are approved as reasonable.
2. EKPC's request to relinquish its CPCN for Smith 1 is approved.
3. This investigation is closed and shall be removed from the Commission's docket.

By the Commission



ATTEST:

  
Executive Director

Anthony S Campbell  
President & CEO  
East Kentucky Power Cooperative, Inc.  
4775 Lexington Road  
P. O. Box 707  
Winchester, KY 40392-0707

Michael R Campbell  
Campbell & Rogers  
154 Flemingsburg Road  
Morehead, KENTUCKY 40351

Lawrence W Cook  
Assistant Attorney General  
Office of the Attorney General Utility & Rate  
1024 Capital Center Drive  
Suite 200  
Frankfort, KENTUCKY 40601-8204

Mark David Goss  
Frost, Brown, Todd, LLC  
250 West Main Street  
Suite 2700  
Lexington, KENTUCKY 40507

Honorable Michael L Kurtz  
Attorney at Law  
Boehm, Kurtz & Lowry  
36 East Seventh Street  
Suite 1510  
Cincinnati, OHIO 45202

Robert Ukeiley  
435R Chestnut Street, Suite 1  
Berea, KENTUCKY 40403