

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF EAST KENTUCKY)
POWER COOPERATIVE, INC. FOR A)
CERTIFICATE OF PUBLIC CONVENIENCE)
AND NECESSITY FOR THE CONSTRUCTION) CASE NO. 2007-00168
OF MODIFICATIONS TO THE WATER INTAKE)
SYSTEM AT COOPER POWER STATION IN)
PULASKI COUNTY, KENTUCKY)

O R D E R

BACKGROUND

On May 11, 2007, the Commission granted East Kentucky Power Cooperative, Inc. ("EKPC") a Certificate of Public Convenience and Necessity ("CPCN") to construct modifications to the water intake system at its Cooper Power Station ("Cooper Station") in Pulaski County, Kentucky. Specifically, the Commission approved the construction of seven 10,000 gpm vertical turbine pumps on barges connected with flexible piping to the Unit 1 cooling system and a cooling tower connected to Unit 2 with make-up water supplied from the barge-mounted pumps that provide cooling for Unit 1. The estimated cost of the construction was \$24,045,411. The modifications were necessitated by the emergency draw-down of Lake Cumberland due to repairs at the Wolf Creek Dam. EKPC supported its application for the CPCN by stating that if the lake level is reduced below the Cooper Station's current water intake level by the Army Corps of Engineers ("Army Corps"), EKPC would be required to purchase replacement power at market

prices that far exceed the Cooper Station's generation costs unless the requested modifications were made.

Initially, EKPC stated it would place three of the barge-mounted pumps into service during the summer of 2007 and would have the remainder of the project operational by December 2007.¹ In August 2007, the Commission learned that EKPC planned to delay the in-service date for the cooling tower phase of the project from December 2007 to at least May 2008 and add an additional 10,000 gpm vertical turbine pump.

PROCEDURE

On September 13, 2007, the Commission reopened this case and established a procedural schedule. A subsequent Order set the matter for public hearing on October 3, 2007. On September 18, 2007, Kentucky Industrial Utility Customers, Inc. requested full intervenor status, which the Commission granted by its Order dated September 21, 2007. The Attorney General ("AG") had previously requested full intervenor status on May 1, 2007, which was granted by the Commission's Order dated May 11, 2007.

CURRENT CONSTRUCTION STATUS AT COOPER STATION

In its October 1, 2007 testimony, EKPC provided a status report on the ongoing modifications at Cooper Station:

As of September 2007 EKPC has placed four 10,000 gpm barge-mounted pumps into service to provide supplemental cooling water for Units 1 and 2 during the summer. EKPC has also revised its plans, by adding an eighth barge mounted pump, as a backup for maintenance purposes. The cooling tower basin, which acts as the tower foundation,

¹ EKPC Application, Exhibit 7, at 2-3.

is virtually complete. Long lead time equipment items are on order for delivery in the fall of 2007, or are available by redirecting them from other EKPC generation construction projects. The remaining 10,000 gpm pumps and barges are on order, with delivery consistent with a December 2007 in-service date.²

At the hearing, EKPC stated that, at an October 2, 2007 meeting of its Fuel and Power Supply Committee, it was reported that the preliminary work for the cooling tower, including the cement foundation, had been “99 percent completed.”³ The necessary components for erecting the cooling tower, including the mechanical draft fans and motors, were scheduled to be delivered to the work site by early November 2007.⁴

DELAY IN CONSTRUCTING THE COOPER STATION COOLING TOWER

EKPC made the decision to delay the construction of the cooling tower portion of the water intake modifications at Cooper Station in response to a press release issued by the Army Corps on July 27, 2007, which “held out the possibility” that the Army Corps would not lower the level of Lake Cumberland to 650 feet, as it had previously warned it might have to do in its February 19, 2007 letter.⁵ EKPC testified that on August 2, 2007, staff at the Cooper Station determined to delay the erection of the cooling tower for an initial period of 30 days, because EKPC wanted time to meet with the Army Corps and discuss its assessment of the ongoing repairs at the Wolf Creek Dam before going

² Pre-filed Testimony of John Twitchell at 2-3.

³ Transcript of October 3, 2007 Hearing (hereinafter “Hearing Transcript”) at 104.

⁴ EKPC’s Response to Commission Staff’s First Data Request, Item 1.

⁵ *Id.* at 32-33.

forward with the construction.⁶ In early September 2007, the Cooper Station management team, along with other EKPC officials determined to continue the construction delay.⁷ At that time, EKPC believed that the Army Corps might withdraw its directive for water users to prepare for the lake level to be dropped to 650 feet or that it might delay the preparedness date from December 31, 2007 to a later date.⁸ EKPC believed that such a decision might allow it to avoid or delay the additional \$10 million investment in the cooling tower, but stated that such a decision would not have been made without consulting the Commission.⁹

At the hearing, EKPC stated that it is no longer optimistic that the Army Corps might quickly render a decision regarding future lake levels that would relieve EKPC from its obligation to construct the cooling tower.¹⁰ Rather, EKPC was awaiting a report on the status of the repairs to the Wolf Creek Dam which it hoped would provide sufficient information to allow the Army Corps to extend the preparedness date for Lake Cumberland water users past December 2007, allowing EKPC to begin construction in January 2008.¹¹ EKPC testified it was awaiting further clarification from the Army Corps regarding whether it would or would not lower Lake Cumberland to 650 feet by the end

⁶ *Id.* at 33.

⁷ *Id.* at 33-34.

⁸ Pre-filed Testimony of John Twitchell at 4.

⁹ *Id.*

¹⁰ Hearing Transcript at 34-35.

¹¹ *Id.* at 35.

of 2007.¹² EKPC stated that if it did not get a “clear decision” from the Army Corps by the end of October 2007, then it would move forward with erecting the cooling tower.

EKPC further testified that, assuming it made the decision to go forward with the construction, it wanted to begin erecting the cooling tower at the beginning of January 2008, with an in-service date of May 1, 2008.¹³ EKPC stated that delaying the final in-service date for the cooling tower from December 31, 2007 to May 1, 2008 would not result in any deration of the Cooper Station, because the colder water temperatures in Lake Cumberland during the winter and spring of 2008 will allow the eight 10,000 gpm pumps to properly cool both Cooper Unit 1 and Cooper Unit 2.¹⁴ Deration of the Cooper Station is a substantial financial concern for EKPC and its ratepayers, because the average cost of replacement power would be approximately \$146,000 per day during the period that the derated conditions at Cooper Station exist.¹⁵

On October 24, 2007, the Army Corps released its Draft Environmental Impact Statement (“EIS”), “Wolf Creek Dam/Lake Cumberland Emergency Measures In Response to Seepage,” which is available online at:

http://www.lrn.usace.army.mil/WolfCreek/pdf/WOL_Emergency_DEIS.pdf

In its EIS, the Army Corps concludes that:

The recommended plan for future interim operation during the time of seepage repairs is to continue to operate the

¹² *Id.* at 101.

¹³ *Id.* at 58. See also Pre-filed Testimony of John Twitchell at 3-4.

¹⁴ Hearing Transcript at 36-37. See also Pre-filed Testimony of John Twitchell at 3.

¹⁵ EKPC’s Response to Commission Staff’s First Data Request, Item 13(c).

Cumberland Reservoir system in accordance to the Interim Operating Plan and to target a pool elevation of 680 ft at Lake Cumberland unless and until the Corps determines that a different pool elevation level is more appropriate.¹⁶

There is no discussion in the EIS regarding when or how the Army Corps would make such a determination regarding a different lake level. In another section of the EIS, the Army Corps states that, "due to the uncertainty and dynamics of the situation it may be necessary to lower the lake even further at some future date."¹⁷

On November 6, 2007, EKPC filed its post-hearing brief in this matter. In it, EKPC reports that it held a conference call with Army Corps officials on November 1, 2007.¹⁸ At that meeting the Army Corps officials stated their determination not to withdraw their recommendation for water withdrawal users to prepare for a lake level of 650 feet by December 31, 2007.¹⁹

Citing the Army Corps' reaffirmation of its previous directive for EKPC to modify its water intake structures, EKPC states that it intends to go forward with erecting the cooling tower at Cooper Station beginning on or about December 1, 2007, with a completion date of May 2008.²⁰ EKPC requests that the Commission amend its May 11, 2007 CPCN to allow it to go forward with its revised plans, including the extension of

¹⁶ Army Corps EIS at 2-3.

¹⁷ *Id.* at 5.

¹⁸ EKPC Brief at 3.

¹⁹ *Id.*

²⁰ *Id.*

time to begin and complete the cooling tower for Unit 2 and the addition of an eighth barge-mounted pump to the seven originally approved by the Commission.²¹

COOLING TOWER

The Commission finds that the grounds for EKPC's decision to delay the erection of the cooling tower were reasonable, given the financial conditions facing EKPC and the relationship of the cooling tower costs to EKPC's ongoing fiscal challenges. The Commission notes that EKPC is currently before the Commission for a general rate increase in Case No. 2006-00472²² and has been granted interim rate relief in that proceeding as a result of a material impairment of its credit condition. The Commission understands the company's desire to be especially cautious in its expenditures. However, in the present case, the cost of building the cooling tower to ensure that the Cooper Station will operate at full capacity is not a discretionary expenditure. Rather, constructing the cooling tower is necessary to assure electric grid reliability in southern Kentucky²³ and is an important safeguard to reduce EKPC's risk of having to purchase market power at significantly higher prices. On the basis of the evidence of record, the Commission finds that the CPCN issued on May 11, 2007 should be revised to ensure that the cooling tower is in service no later than May 1, 2008.

²¹ *Id.* at 3-4.

²² Case No. 2006-00472, General Adjustment of Electric Rates of East Kentucky Power Cooperative, Inc.

²³ Hearing Transcript at 43.

ADDITIONAL BARGE-MOUNTED PUMP

The Commission's May 11, 2007 Order approved EKPC's request to build and operate seven 10,000 gpm water pumps to supplement the cooling system at the Cooper Station. However, EKPC testified that it "revised its plans, by adding an eighth barge mounted pump, as a backup for maintenance purposes."²⁴ At the hearing, EKPC stated further that, "the eighth pump was a reliability consideration that would allow us to take a pump out of service for maintenance or, should we have a pump failure, then we would not - we would still be very close to full load operation with the plant." EKPC also testified that the original work plan for the Cooper Station project included a total of eight barge-mounted pumps — four to be installed by September 5, 2007, and four additional pumps to be installed in the period between December 21-28, 2007.²⁵

The Commission finds that an eighth barge-mounted pump was not specifically authorized by the May 11, 2007 CPCN. The Commission also finds that having a redundant pump at the Cooper Station during this interim period before the cooling tower is operational is a reasonable reliability measure and does not constitute a wasteful duplication of facilities. Therefore, we will revise the CPCN issued on May 11, 2007 to include an eighth barge-mounted pump.

RISK ASSESSMENT

While being supportive of the findings made by the Commission herein, the AG's comments also suggest that we should require EKPC to "establish a formal program or process to identify, evaluate and address any and all foreseeable risks" confronting

²⁴ Pre-filed Testimony of John Twitchell at 2.

²⁵ AG's Exhibit 1, Item 9 at 3.

EKPC.²⁶ In support, the AG cites the threatened loss of Rural Utilities Service funding resulting from EKPC's apparent failure to secure the requisite environmental approval prior to commencing construction of the improvements to the Cooper Station.²⁷ The AG further suggests that such a program should involve members of EKPC's engineering, operations, legal, and financial staff – all working under the direction of a member of EKPC's board of directors.

We find that, as a matter of law, EKPC should be operated for the mutual benefit of its members and patrons.²⁸ Inherent in this is the notion that EKPC's directors and officers will act in good faith and due diligence with regard to the interests of their members and patrons – duties which include the identification, evaluation, and mitigation of material risks. Because the General Assembly has expressly codified this standard of care for electric cooperative corporations, we are hesitant to additionally dictate how EKPC should comply with its statutory obligations, which, to some degree, are broader than the scope of the Commission's jurisdiction over rates and services. The Commission will not require EKPC to formally adopt a program or process to assess its future risks as Kentucky law already imposes upon EKPC a duty to make such assessments as part of its ordinary course of business.

The Commission does agree with the AG's suggestion that EKPC be ordered to file monthly status reports on the progress of the cooling tower construction in the record of this matter. The Commission agrees with the AG that as EKPC is already

²⁶ AG's comments, filed November 16, 2007, at 6.

²⁷ *Id.* at 5.

²⁸ See KRS 279.095.

generating monthly construction progress reports, the requirement to file such reports into the record of this matter will not impose an undue burden on EKPC. The monthly reports shall contain a description of the work completed, the completion level of the project expressed as a percentage, an estimate of the number of work days required for completion, and a description of any significant delays or problems associated with completing the construction by May 1, 2008.

CONCLUSION

For the foregoing reasons, the Commission will modify the May 11, 2007 CPCN to allow EKPC to delay erection of the cooling tower for Unit 2 at its Cooper Station with a new in-service date of no later than May 1, 2008. Any deviation from this timeframe should be brought to the Commission's attention immediately in the form of a motion to amend said CPCN. The Commission also grants EKPC's request to modify the CPCN to allow EKPC to purchase, install, and operate one additional barge-mounted pump at the Cooper Station.

IT IS THEREFORE ORDERED that:

1. The CPCN issued to EKPC on May 11, 2007 is modified to the extent that:
 - a. EKPC shall complete all construction in time to make the Cooper Station cooling tower operational on or before May 1, 2008. Any deviation from this timeframe shall be brought to the Commission's attention immediately, as described in the findings above.
 - b. EKPC is authorized to purchase, install, and operate one additional 10,000 gpm barge-mounted vertical turbine pump at the Cooper Station, for a total of eight such pumps.

2. On or before January 15, 2008; February 15, 2008; March 15, 2008; and April 15, 2008, EKPC shall file construction progress reports with the Commission which shall contain, at a minimum, the following information:

a. A narrative description of the progress of the erection of the cooling tower.

b. The completion level of the project, expressed as a percentage.

c. The estimated number of work days required to complete the project, including a current estimation of whether the project will be completed on or before May 1, 2008, and, if not, the date that the project is currently expected to be completed.

d. A description of any significant construction delays or known problems associated with completing the construction on or before May 1, 2008.

3. On or before May 2, 2008, EKPC shall file a status report with the Commission confirming whether the cooling tower at Unit 2 is fully operational, and, if not, state the additional steps that must be taken by EKPC to make the cooling tower operational and the estimated number of days necessary to execute those steps.

Done at Frankfort, Kentucky, this 21st day of November, 2007.

By the Commission

ATTEST:



Executive Director