COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN INVESTIGATION INTO EAST KENTUCKY POWER COOPERATIVE, INC.'S CONTINUED NEED FOR CERTIFICATED GENERATION	)))	CASE NO. 2006-00564

O R D E R

This matter is before the Commission as an investigation into the continued need of East Kentucky Power Cooperative, Inc. ("EKPC") for certificated generation in light of the decision by Warren Rural Electric Cooperative Corporation ("Warren") to terminate a power supply agreement with EKPC.

BACKGROUND

EKPC is a generating and transmission cooperative which is organized under KRS Chapter 279 and currently provides service to 16 electric distribution cooperatives in Kentucky. On May 27, 2004, EKPC executed a Special Membership Agreement with Warren, which had historically purchased its power supply from the Tennessee Valley Authority ("TVA"). Because TVA is not subject to the Commission's regulatory jurisdiction, the Commission had no authority to review the reasonableness of the decision by Warren to become a member of EKPC. Under the terms of the power supply agreement, EKPC was obligated to provide electric service to Warren commencing on April 1, 2008, upon the termination of Warren's power supply contract with TVA. Warren was to become EKPC's 17th distribution cooperative.

To facilitate the entry of Warren into the EKPC system, EKPC proposed to construct a 97-mile transmission line to carry the Warren load.[1] Additionally, EKPC proposed to construct two base load generation units (one in Mason County and one in Clark County) and five peaking generation units. The generation units are the subject of this investigation.

On December 8, 2006, Warren decided to renounce the power supply agreement it had entered into with EKPC and to remain within the TVA system. The loss of Warren's load in the midst of EKPC's ambitious construction program and deteriorating financial condition led the Commission to conclude that this proceeding was necessary to determine that EKPC's certificated generation was still needed and in the public interest.

PROCEDURAL HISTORY

This investigation was commenced on January 5, 2007, on the Commission's own motion. The Attorney General and Gallatin Steel were made parties to this proceeding as part of that Order. The Commission also established a procedural schedule in this proceeding and an amendment thereto that provided for three rounds of discovery upon EKPC, to which EKPC timely responded, and for a hearing on March 6, 2007.

[1] The final disposition of the certificate for the Warren transmission line is currently before the Commission. Though EKPC was granted a certificate to construct the transmission line, Warren's decision has led EKPC to the conclusion that they have no further need for the certificate. See Case No. 2005-00207, The Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity to Construct a 161 kV Transmission Line in Barren, Warren, Butler and Ohio Counties, Kentucky, Informal Conference Memo, dated April 23, 2007.

The Cumberland Chapter of the Sierra Club moved for intervention on February 12, 2007. That motion was denied from the bench on March 6, 2007 and by Order entered March 21, 2007. The Sierra Club filed a motion for rehearing of the denial of the intervention motion, which was also denied by Order entered April 19, 2007.

The scope of this proceeding was set forth in the Commission's January 5, 2007 Order, which stated:

> The scope of this proceeding will be limited to EKPC's continued need for the certificated generation. The Commission has previously found the certificated projects to be the most reasonable and lowest-cost options for provisioning EKPC's distribution cooperatives with the power they require both now and in the future.

Evidence was taken at a public hearing held at the Commission's offices on March 6, 2007. In an Order entered on March 14, 2007, a deadline for filing briefs was established. On March 16, 2007, EKPC filed responses to requests for information arising out of the March 6, 2007 hearing. The record is now complete and stands submitted to the Commission for decision.

STATUTORY AUTHORITY

The Commission's authority to determine whether there is a continued need for the certificated generation that EKPC plans to construct derives from KRS 278.260(1), which confers upon the Commission the authority to conduct an investigation as to whether "any regulation, measurement, practice or act affecting or relating to the service of the utility or any service in connection therewith is unreasonable, unsafe, insufficient or unjustly discriminatory. . . ." Likewise, KRS 278.280(1) provides the statutory criteria for conducting this investigation:

> Whenever the Commission. . .finds that the rules, regulations, practices, equipment, appliances, facilities or service of any utility subject to its jurisdiction, or the method of manufacture, distribution, transmission, storage or supply employed by such utility, are unjust, unreasonable, unsafe, improper, inadequate or insufficient, the commission shall determine the just, reasonable, safe, proper, adequate or sufficient rules, regulations, practices, equipment, appliances, facilities, service or methods to be observed, furnished, constructed, enforced or employed, and shall fix the same by its order, rule or regulation.

See also Kentucky Utilities Co. v. Public Service Commission, 252 S.W.2d 885, 890 (Ky. 1952).

DISCUSSION

EKPC's currently certificated, but incomplete, generation assets include: (1) a 278 MW Circulating Fluidized Bed ("CFB") unit in Mason County designated as Spurlock No. 4;[2] (2) a 278 MW CFB unit in Clark County designated as Smith No. 1;[3] and (3) five 90 MW combustion turbine ("CTs") units in Clark County designated as CTs 8-12.[4] The present investigation was precipitated by the termination of a power supply agreement by Warren on or about December 8, 2006, and the resulting loss of Warren's anticipated load from the EKPC system. Despite losing the Warren load, EKPC

[2] Case No. 2004-00423, 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 in Mason County, Kentucky.

[3] 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.

[4] See id.

estimates that it will need 774 MW of additional generating capacity by 2011 to meet its native load requirements and 12 percent reserve margins.[5]

SPURLOCK NO. 4

The certificate for Spurlock No. 4 was issued by the Commission on September 19, 2005, in an Order providing that, "under the terms of the membership agreement, [EKPC] is obligated to provide electric service to [Warren] commencing April 1, 2008, upon the termination of [Warren]'s current supply contract with TVA."[6] Construction on Spurlock No. 4 began in June of 2006, and the unit is scheduled to come online in April of 2009.[7] As of the date of the hearing in this proceeding, the engineering on Spurlock No. 4 was 95 percent complete, and 24 of 25 contracts had been awarded.[8] As of November 30, 2006, over $210 million had been expended on Spurlock No. 4.[9] In light of Warren's decision to terminate the power supply agreement, EKPC asserts that Spurlock No. 4 is "a critical resource for meeting EKPC's member system load requirements and overcoming the current capacity deficit."[10] EKPC also asserts that, by completing Spurlock No. 4, it will avoid the need to purchase more

[5] See EKPC Brief, filed April 10 ("EKPC Brief") at 8 (citing EKPC Response to Supplemental Data Request, Response 2 and EKPC Response to Initial Data Request, Response 14(a).

[6] Case No. 2004-00423, Order dated Sept. 13, 2005 at 3.

[7] See EKPC Response to Initial Data Request, Item No. 1(a); EKPC Brief at 7.

[8] See id.

[9] See id.

[10] EKPC Response to Supplemental Data Request, Item No. 2.

costly power from the market without building generation resulting in excess generation capacity.[11]

The Commission accepts EKPC's justifications for the continued need of the Spurlock No. 4 unit despite the termination of the power supply agreement by Warren. Although Spurlock No. 4 will not serve the load of a new cooperative when it comes online, there is sufficient evidence within the record to demonstrate that the addition of this generation unit to EKPC's fleet will serve EKPC's native load, ease demand for more expensive purchased power, and improve the overall system reliability.[12] Accordingly, EKPC should be permitted to continue with the construction of the Spurlock No. 4 unit as originally certificated.

SMITH NO. 1

The certificate for the Smith No. 1 unit was awarded on August 29, 2006, upon the finding that the unit would "provide base load capacity needed to meet the growing demand of EKPC's 16-member cooperatives."[13] EKPC asserts that growing demand in its native base load continues to be the principal purpose behind Smith No. 1.[14] It also asserts that completion of the Smith No. 1 unit will forestall a need to

[11] See James Lamb Testimony at 2.

[12] The Commission takes note that a forced outage of the Spurlock No. 1 unit in July 2004 required EKPC to purchase significant amounts of replacement power. This event and EKPC's delay in bringing the Gilbert unit, also in Mason County, into base rates have contributed heavily to the significant decline in EKPC's overall financial condition.

[13] Case No. 2005-00053, Order dated August 29, 2006 at 2.

[14] See EKPC Response to Supplemental Data Request, Item No. 3.

add capacity from an additional 278 MW CFB base load unit until the winter of 2017.[15]

EKPC has not yet obtained either an air permit or a supplemental environmental impact statement necessary to satisfy the Rural Utilities Service's ("RUS") environmental analysis requirements for Smith No. 1.[16] Despite this, construction is scheduled to begin on Smith No. 1 in September of 2007.[17] At this point, engineering on Smith No. 1 is 30 percent complete.[18] Nine of 27 contracts totaling approximately $318 million have been awarded.[19] Of this, EKPC has actually spent approximately $37.1 million and has additional commitments of approximately $11.5 million.[20] EKPC estimates that the cost of canceling Smith No. 1 would be approximately $50 million.[21] Delaying construction on Smith No. 1 would likely result in increased material and labor costs and increased purchased power expenditures.[22]

---

[15] See EKPC Response to Initial Data Request, Item No. 8.

[16] See EKPC Response to Initial Data Request, Item No. 1(b).

[17] See id.

[18] See id.

[19] See id.

[20] See EKPC Response to Third Data Request, Item No. 3.

[21] See id.

[22] See EKPC Response to Supplemental Data Request, Item No. 5. EKPC estimates that material prices could escalate by up to 30 percent over a 5-year period and labor costs are expected to rise at an annual rate of approximately 3 percent. However, the difference in net present value of delaying Smith No. 1 for completion until 2018 is only estimated to be $62 million. See EKPC Response to Third Data Request, Item No. 5.

EKPC originally forecasted an online date for Smith No. 1 in August of 2010,[23] but this date has now slipped to June of 2011.[24] The delay of in-service dates lessens the likelihood that EKPC will overbuild its generation fleet with excess capacity. Although EKPC steadfastly denies that construction of Smith No. 1 on the present time frame will result in the build-out of excess generation,[25] it points out that Smith No. 1 will produce power at a rate below current spot prices.[26] The less costly power generated from Smith No. 1 will be sold to EKPC's members. Only more costly power – if available – would be used for off-system sales.[27] EKPC also contends that without Smith No. 1 coming on-line as currently scheduled, EKPC will face greater exposure to reliability risks to the system due to the decreasing availability of firm transmission service and potential delivery disruptions resulting from [independent system operator] actions.[28] Because it does not anticipate having any excess generation capacity, EKPC has not entered into any off-system power supply agreements, nor does it foresee the

[23] See EKPC Response to Initial Data Request, Item No. 1(b).

[24] See James Lamb Testimony, Answer 10, n 1; EKPC Brief at 9.

[25] See EKPC Response to Third Data Request, Item No. 8.

[26] See EKPC Response to Third Data Request, Item No. 7(c).

[27] See id.

[28] See James Lamb testimony at 13.

need to market excess power.[29] EKPC does, however, utilize the services of an affiliate, ACES Power Marketing, to facilitate off-system purchases and sales.[30]

Again, there is sufficient evidence within the record to demonstrate that the addition of this generation unit to EKPC's fleet, as with the Spurlock No. 4 unit, is needed to serve EKPC's growing native load, ease demand for more expensive purchased power, and improve the overall system reliability. Smith No. 1 is unique, however, in that physical construction has not yet begun and the unit still largely exists only on paper. Thus, the Commission would not authorize the construction to go forward unless it is satisfied that doing so is also consistent with the public interest.

With regard to the Smith No. 1 unit, there are two alternatives to consider. The Commission might order EKPC to purposefully delay the construction of Smith No. 1 to guarantee that its native load requirements are sufficient to support the addition of the generating unit. This course of action, however, would result in the levying of significant contractual penalties on EKPC and increase its exposure to escalating costs for labor and materials in the future. On the other hand, the Commission might allow EKPC to proceed with construction of the Smith No. 1 unit and run the risk that EKPC's native load growth might not grow as quickly as forecasted – potentially resulting in EKPC having excess generation capacity. While neither situation is ideal, the latter position is clearly preferred under the specific facts of this case. In the long run, EKPC's ratepayers and the public interest at large will be best served by allowing EKPC to

[29] See EKPC Response to Third Data Request, Item No. 8.

[30] See EKPC Response to Initial Data Request, Item No. 4; James Lamb Testimony, Answer 18.

complete the construction of Smith No. 1 and avoid unnecessary penalties and cost escalations associated with a lengthy delay. Any risk of reaching a situation where EKPC has excess generation capacity should be mitigated by EKPC's careful development and implementation of a mechanism for making off-system sales. Accordingly, EKPC will be permitted to continue with the construction of the Smith No. 1 unit as originally certificated but should develop and implement an appropriate plan for facilitating off-system sales if the opportunity arises.

CTS 8-12

The certificates for CTs 8-12 were awarded on August 29, 2006, upon the finding that the units "will provide peaking capacity and will partially replace a purchase power contract, which expired in 2005, for peaking capacity of 150 MW in the winter and 75 MW in the summer. Two of the proposed CTs will provide the future peaking requirements, including reserves, for EKPC's newest distribution cooperative member, [Warren]."[31] With the subsequent cancellation of the Warren power supply agreement, the rationale for the remaining two CTs has changed to simply serving native base and peak loads and to meeting reserve targets.[32]

The five certificated CTs are for General Electric ("GE") model LMS 100 simple cycle combined gas turbine generators.[33] The original contract was signed in March of 2005 and required a "full notice to proceed" statement from EKPC no later than

[31] Case No. 2005-00053, Order dated August 29, 2006 at 2.

[32] EKPC Response to Supplemental Data Request, Item No. 4.

[33] See EKPC Response to Initial Data Request, Item No. 1(c).

September 1, 2005.[34] When EKPC failed to timely secure NEPA compliance from RUS for the Smith site, it was forced to alternatively seek a certificate of site compatibility from the Commission under KRS 278.216. This was granted on August 29, 2006.[35] Following Warren's termination of the power supply agreement in December 2006, EKPC declined to purchase three of the CTs and began to renegotiate a contract with GE for only two of the CTs.[36] The total cost of CTs 8-9 grew from an original price of approximately $94 million to a total price of approximately $140 million.[37] This price escalation has most recently resulted in EKPC considering whether to purchase GE model 7EA CTs,[38] priced at approximately $33 million per unit, rather than the more efficient and more expensive LMS 100s.[39] Under the new arrangement, EKPC would likely be required to tender $30 million to GE on or before September 1, 2007.[40] It would also need to seek a revision to its air permit.[41] EKPC anticipates that CTs 8-9 will enter service during the second quarter of 2009 – well ahead of the 2010-2011 winter

[34] See id.

[35] See Case No. 2005-00053, Order dated August 29, 2006.

[36] See EKPC Response to Initial Data Request, Item No. 1(c).

[37] See EKPC Response to Third Data Request, Item No. 1(c).

[38] EKPC's CTs 1-7 at the Smith Station are also GE model 7EA CTs, giving EKPC a better understanding of their economic and operational characteristics.

[39] See EKPC Response to Third Data Request, Item No. 1(c).

[40] See id.

[41] See id.

peak.[42] Through December 31, 2006, EKPC has expended approximately $4.6 million for engineering work on the two CTs.[43]

The Commission is confronted with essentially the same question with regard to CTs 8-9 as with the Smith No. 1 unit. While there is a chance that EKPC's native load growth will not grow as expected, thereby obviating the need for peaking generation, the totality of circumstances falls in favor of allowing the construction to proceed. While it could be more cost-effective to purchase peaking power, it is more likely in this particular case that delaying CTs 8-9 will result in substantial contractual penalties and inhibit EKPC from more efficiently and economically dispatching its generation units. Furthermore, it is not possible to accurately determine whether interim purchases of peaking power will offer any long-term savings to EKPC, given the many variables (i.e., weather, fuel prices) associated with entering into the spot market for power. On the basis of the information presented in the record, the Commission will accept EKPC's rationale for keeping the certificates for CT No. 8 and CT No. 9 and will allow the construction to proceed as certificated. Should EKPC decide to switch the model of the peaking units to be constructed (e.g., from LMS 100s to 7EAs), it is reminded that such action would require Commission approval.

EKPC also appears to have settled on the disposition of CTs 10-12. It now agrees that the certificates for CTs 10-12 should be rescinded.[44] EKPC states that it will likely seek a new Certificate of Public Convenience and Necessity for CTs 10-12

[42] See id.; EKPC Brief at 11.

[43] See EKPC Response to Initial Data Request, Item No. 1(c).

[44] See James Lamb testimony, Answer 17.

sometime around 2011, with deliveries of one CT scheduled for each year between 2012 and 2014.[45] EKPC anticipates that it will thereby avoid having "excess capacity above the projected total requirements."[46] The Commission agrees that the final three certificated CTs are not needed at this time. Accordingly, it accepts EKPC's surrendering of the certificates issued on August 29, 2006 for CTs 10-12.

IT IS THEREFORE ORDERED that:

1. EKPC shall retain the Certificates of Public Convenience and Necessity for the Spurlock No. 4 unit, the Smith No. 1 unit, and the Smith CTs 8-9.

2. EKPC's surrender of the Certificates of Public Convenience and Necessity for the Smith CTs 10-12 is accepted and said certificates are heretofore deemed null and void.

3. This investigation is closed and this case shall be removed from the Commission's docket.

4. This is a final and appealable Order.

Done at Frankfort, Kentucky, this11th day of May, 2007.

By the Commission

ATTEST:

Executive Director

[45] See EKPC Response to Initial Data Request, Item No. 3.

[46] See id.