

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)	CASE NO. 2006-00132
CONSTRUCTION OF A FLUE GAS)	
DESULFURIZATION SYSTEM ON)	
SPURLOCK POWER STATION UNIT 1)	

O R D E R

On March 27, 2006, East Kentucky Power Cooperative, Inc. ("EKPC") filed an application, pursuant to KRS 278.020(1), for a Certificate of Public Convenience and Necessity ("CPCN") to construct a flue gas desulfurization system ("Scrubber") on Spurlock Power Station Unit 1 ("Spurlock 1"). The proposed facilities and their estimated costs are as follows:

1.	Scrubber	\$ 84,000,000
2.	Wet Precipitator	20,000,000
3.	Electrical Upgrade	5,400,000
4.	Foundations	5,000,000
5.	Transformers	2,000,000
6.	Stack	8,500,000
7.	Contingency	<u>17,100,000</u>
TOTAL		\$142,000,000

Under KRS 278.020(1), the Commission can issue a CPCN only when the utility has demonstrated a need for a new service facility and the absence of wasteful duplication, measured in terms of productivity, efficiency, or unnecessary multiplicity of physical properties, resulting from the new facility.

EKPC intends to finance the proposed facilities by a long-term loan guaranteed by the Rural Utilities Service and issued by the Federal Financing Bank. Since this financing is subject to the supervision and control of an agency of the federal government, the financing is exempt from Commission jurisdiction pursuant to KRS 278.300(10).

Upon receipt of EKPC's application, the Commission initiated an investigation and issued a data request. EKPC responded to that data request. No requests for intervention were received, and the case now stands submitted for a decision.

EKPC states that the operating permit for Spurlock 1 allows sulfur dioxide ("SO₂") to be emitted at a rate of 6.0 pounds per million BTU heat input ("lbs/mmBTU"). However, under the Clean Air Act Amendments of 1990, coal-fired generating units were issued SO₂ emission allowances based on SO₂ emissions of 1.2 lbs/mmBTU. Currently, one emission allowance authorizes a utility to emit one ton of SO₂, but under the recently enacted Clean Air Interstate Rule ("CAIR"), two emission allowances will be required for each ton of SO₂ emitted starting in 2010, and 2.86 allowances for each ton of SO₂ emitted starting in 2015. To comply with the CAIR requirements, EKPC will have to either significantly reduce the level of SO₂ now emitted at Spurlock 1 or obtain significant quantities of additional SO₂ emission allowances.

The analyses provided by EKPC in this case provide a comparison of the following options for Spurlock 1:

- Using low-sulfur, Central Appalachian compliance coal, and purchasing additional allowances as needed;

- Using low-sulfur, Powder River Basin (“PRB”) compliance coal, and purchasing additional allowances as needed; and
- Burning high-sulfur, non-compliance coal, and constructing a Scrubber to reduce SO₂ emissions.

Based on its analyses, EKPC concluded that the most reasonable and cost-effective option is to construct a Scrubber at Spurlock 1 and burn high-sulfur coal.

EKPC’s analyses show that, on a 30-year net present value basis, the cost for burning PRB coal would be \$1,530,531,218, whereas the cost for building a Scrubber and burning a 75/25 blend of Central Appalachian and Northern Appalachian coal would be \$1,529,540,958. While burning PRB coal without a Scrubber would produce 0.8 lbs. SO₂/mmBTU, burning the blended Central Appalachian and Northern Appalachian coal without a Scrubber would produce an average of 5.0 lbs. SO₂/mmBTU. EKPC compared these two alternatives to its base case, which was the option of burning Central Appalachian compliance coal without a Scrubber which would produce 1.2 lbs. SO₂/mmBTU. On a 30-year net present value basis, the cost of the base case option would be \$1,735,954,084. Although there is only a minimal cost difference between utilizing PRB coal and installing a Scrubber to utilize high-sulfur coal, EKPC rejected the PRB coal due to the long transportation distances, the greater potential for shipment disruptions, and the higher risk of fire hazard due to the higher combustibility of PRB coal.

Based on the evidence of record and being otherwise sufficiently advised, the Commission finds that EKPC has properly analyzed the available options for reducing

SO₂ emissions at Spurlock 1. EKPC's 30-year price projections for coal and emission allowances were prepared by Energy Ventures Analysis, a recognized expert in this field. Considering the applicable SO₂ emissions limitations, EKPC's proposal to construct a Scrubber and burn high-sulfur Appalachian coal is reasonable, cost-effective, and will not result in wasteful duplication of utility facilities. Further, although EKPC does not need to have the Scrubber operational until 2010 in order to meet the requirements of CAIR, its analyses show that by being operational in 2009 the Scrubber will result in an annual savings of \$14 million compared to continuing to burn low-sulfur compliance coal as EKPC does now.

IT IS THEREFORE ORDERED that:

1. EKPC is granted a Certificate of Public Convenience and Necessity to proceed with the proposed construction project as set forth in the plans and specifications of record herein.
2. EKPC shall notify the Commission in writing 7 days prior to the actual commencement of the proposed construction and when 50 percent of the proposed construction is completed.

Done at Frankfort, Kentucky, this 11th day of August, 2006.

By the Commission

ATTEST:


Executive Director