

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN INVESTIGATION OF EAST KENTUCKY)	
POWER COOPERATIVE, INC.'S NEED)	
FOR THE GILBERT UNIT AND THE)	CASE NO. 2003-00030
KENTUCKY PIONEER ENERGY, LLC)	
PURCHASE POWER AGREEMENT)	
THE APPLICATION OF EAST KENTUCKY)	
POWER COOPERATIVE, INC. FOR APPROVAL)	CASE NO. 2000-00079
TO PURCHASE POWER AGREEMENT)	

O R D E R

The Commission initiated this investigation on January 30, 2003 to determine whether East Kentucky Power Cooperative, Inc.'s ("East Kentucky") decision in 2001 to construct a new base load generating unit, known as the Gilbert Unit, has eliminated its need for an earlier agreement to purchase the output of a base load generating unit to be constructed by Kentucky Pioneer Energy, LLC ("Pioneer"). Also identified for investigation was the commercial feasibility of the generating unit to be constructed by Pioneer. The parties to this case are East Kentucky, Pioneer, the Office of the Attorney General, Gallatin Steel, and Charles T. Walters.

HISTORY

East Kentucky / Pioneer

On February 21, 2000, East Kentucky filed an application, which was docketed as Case No. 2000-00079, requesting approval of a 20-year Power Purchase Agreement ("Agreement") with Pioneer. Pioneer is a wholly owned subsidiary of Global Energy,

Inc., an international independent power producer. Pioneer was formed to construct, own, and operate a 540 MW integrated gasification combined cycle power plant (“Pioneer Project”) at East Kentucky’s J. K. Smith Generating Station in Clark County, Kentucky. East Kentucky also signed a separate agreement to lease a portion of the land at the J. K. Smith site to Pioneer for 50 years. The Agreement provides that Pioneer will sell the total output of the Pioneer Project to East Kentucky at a fixed rate per kilowatt hour, subject to an annual adjustment. The initial term of the Agreement is 20 years, with two 10-year renewal options available to East Kentucky.

The Pioneer Project intends to utilize the British Gas/Lurgi gasification process. The fuel for this process will be an equal mix of coal and municipal solid waste. The municipal solid waste is to be processed into pellets known as refuse-derived fuel. The fuel mix for the process can be varied up to 100 percent coal. In the event the gasification process is inoperable, the power generating facilities can be run on natural gas. To protect East Kentucky, the Agreement imposes financial penalties on Pioneer if the Pioneer Project does not meet relatively high output levels and higher cost replacement power must be purchased. The Agreement also limits Pioneer’s cost recovery if the power generating facilities are operated on natural gas. In addition, East Kentucky attempted to limit its risk exposure by investing no capital and tying its payment obligation to the energy produced by the Pioneer Project.

East Kentucky filed an analysis of its projections of future load and its supply resource options. That analysis showed the need for additional base load generation by 2004 and Pioneer being the least-cost available alternative. However, due to operating constraints on its system, East Kentucky proposed to sell 100 MW of the Pioneer

Project to another utility for 10 years. Although the coal gasification process is more expensive than a typical pulverized coal facility, Pioneer expected to be able to operate at a lower cost because it would not be gasifying 100 percent coal. By adding significant amounts of solid waste to the gasification process, Pioneer's operating cost would be greatly subsidized by the tipping fees it expected to receive for taking municipal waste from states in the northeast. Based on the Commission's findings that East Kentucky had a need for additional base load generating capacity, and that the Pioneer Project was the least-cost available option, the Pioneer Agreement was approved by Order dated July 11, 2000.

East Kentucky / Gilbert Unit

By March 2001, Pioneer had not yet secured financing for the Pioneer Project. Due to East Kentucky's need for additional base load generating capacity by 2004, and the uncertainty of the Pioneer Project to meet that need, East Kentucky filed an application, docketed as Case No. 2001-00053, to build the Gilbert Unit. This was East Kentucky's second lowest cost option for new generating capacity behind the Pioneer Project. The Gilbert Unit, a 268 MW fluidized circulating bed coal generating facility, was proposed to be built at East Kentucky's existing Spurlock Generating Station in Maysville, Kentucky. The Commission approved this alternative generating project on September 26, 2001. Since the construction schedule for the Gilbert Unit was almost 4 years, East Kentucky immediately proceeded to commence construction. Despite granting East Kentucky unconditional approval to construct the Gilbert Unit, the Commission noted that if Pioneer could secure financing by mid-2002, it might be less costly to cancel the Gilbert Unit and proceed with the Pioneer Project.

CURRENT INVESTIGATION

By January 2003, East Kentucky was still constructing the Gilbert Unit, the Pioneer Project still had not secured financing, and East Kentucky had not terminated the Pioneer Agreement. After opening this investigation, the Commission gathered some initial information from East Kentucky and held an informal conference on March 12, 2003. At the conference, East Kentucky acknowledged that, with the Gilbert Unit, it no longer needed the Pioneer Project to meet its forecasted base load needs until 2011, but maintained that the Pioneer Project could be substituted for the combustion turbines that it projected to be needed in the second half of this decade. Although base load generation is significantly more expensive than peaking generation, East Kentucky asserted that the pricing under the Pioneer Agreement was so favorable that it would be economically advantageous to buy from Pioneer to meet its peak load needs and sell the excess off-system in lieu of constructing new combustion turbines.

An Order was then issued on June 13, 2003 finding that the basis upon which the Pioneer Agreement had been approved was no longer valid, i.e., East Kentucky no longer had a need for the base load capacity from the Pioneer Project. That Order also contained the following findings:

- a. The Gilbert Unit had financially passed the point of economic cancellation;
- b. Economics aside, canceling the Gilbert Unit was not feasible since the Pioneer Project had not secured financing;
- c. East Kentucky projected a need for only peaking capacity in the 2006-2009 time frame with a new base load unit projected in 2011; and
- d. East Kentucky would have to demonstrate that substituting the base load Pioneer Project for needed peaking capacity in the second half of this decade was reasonable and cost-effective.

The June 13, 2003 Order also reopened Case No. 2000-00079, in which the Pioneer Agreement was approved, and consolidated it with the investigation to eliminate any potential procedural problems if the evidence persuaded the Commission to withdraw its prior approval.

A hearing was then scheduled, which was held on February 5, 2004. Two of the major issues explored at the hearing were whether the Pioneer Agreement was still valid and enforceable and Pioneer's timetable for obtaining a zoning variance from the Winchester-Clark County Planning Commission ("Planning Commission"). East Kentucky asserted that the Pioneer Agreement was unenforceable due to Pioneer's delay in securing financing and achieving commercial operation for the Pioneer Project. On the other hand, Pioneer asserted that the Agreement was still valid and only required minor amendments to reflect certain changed circumstances.

The need for the Pioneer Project to obtain a zoning variance from the Planning Commission arises from the statutory requirements for siting a merchant electric generating facility. The Pioneer Project is to be operated as a merchant generating plant and it was required to obtain a construction certificate from the State Board on Electric Generation and Transmission Siting ("Siting Board"). The Siting Board issued the requisite construction certificate upon the condition that Pioneer comply with the zoning regulations of the Planning Commission prior to commencing construction.¹ Pioneer has been aware of this requirement since a ruling by the Siting Board on

¹ Case No. 2002-00312, The Application of Kentucky Pioneer Energy, LLC For a Construction Certificate Pursuant to KRS 278.704(1) to Construct a Merchant Electric Generating Facility, Order dated November 10, 2003.

April 16, 2003. At the hearing, Pioneer stated it would file its zoning application within 2-3 weeks thereafter.

After extensive proceedings at the February 5, 2004 hearing, East Kentucky and Pioneer requested that these cases be held in abeyance until June 1, 2004 to allow them sufficient time to renegotiate the Agreement, to allow Pioneer to apply for a zoning variance, and to allow East Kentucky to complete a reassessment of its future power needs. The Commission agreed, and directed that status reports be filed by June 1, 2004. An Order confirming this decision was entered on February 13, 2004.

East Kentucky's June 1, 2004 status report states that it has provided Pioneer a list of eight due-diligence requirements that Pioneer must meet before any amendments to the Agreement would be submitted for approval by East Kentucky's Board of Directors. East Kentucky states that it has not yet been provided with sufficient information by Pioneer to determine that the type of coal gasification process being proposed by Pioneer is feasible. As to amending the existing Pioneer Agreement, East Kentucky states that Pioneer has requested consideration of gasifying 100 percent coal, rather than a coal/solid waste mix, at a considerably higher energy price than in the existing Pioneer Agreement.

East Kentucky's status report also states that Pioneer has revised its financing plan. Although Pioneer initially intended to be financed with a mix of debt and equity, it now proposes to utilize a leveraged lease arrangement whereby Pioneer would have no equity investment in the Pioneer Project. Further, East Kentucky stated that it was now projecting a need for significant quantities of additional base load generation, that it had

issued a request for proposals for power, and that it would analyze any proposed amendments to the Pioneer Agreement in light of its other supply alternatives.

Pioneer also filed a status report on June 1, 2004 which stated, for the first time, that it cannot file an application for zoning approval absent written authorization from the property owner, East Kentucky, and that East Kentucky is withholding such approval until Pioneer satisfies the due-diligence requirements and the Pioneer Agreement is amended.

Pioneer subsequently filed, on June 16, 2004, a letter stating that it was working with East Kentucky to amend the Pioneer Agreement to provide for: (1) operating and pricing on 100 percent coal; (2) construction to commence by the end of August 2004; and (3) a commercial operation date of April 2008. The following day, East Kentucky filed a letter stating that it would no longer pursue any restructuring or amendments to the Pioneer Agreement due to the risks and uncertainties surrounding the Pioneer Project. On October 6, 2004, East Kentucky filed another letter stating that it was exercising its option to terminate the Pioneer Agreement due to Pioneer's failure thereunder to obtain financing and achieve commercial operation by the specified dates.

Based on the evidence of record and being otherwise sufficiently advised, the Commission finds that the Pioneer Agreement was approved on July 11, 2000 because it was the lowest-cost option then available for East Kentucky to meet its need for additional power. Although integrated gasification combined cycle generation is typically more expensive than other types of generation, the Pioneer Project was projected to be significantly less expensive due to a proposed fuel mix of coal and solid waste.

Since then, however, additional evidence has been presented that supports our finding that there are serious risks that the Pioneer Project will not be able to meet the contracted-for levels of reliability or power prices. East Kentucky retained a consultant in 2002 to review the gasification technology and fuel mix to be utilized at the Pioneer Project. That consultant concluded in June 2002 that, “additional development work is required to enable the technology to be applied in the manner envisioned by the [Pioneer] project.”² In response to this identified risk, East Kentucky insisted that Pioneer satisfy numerous due-diligence measures relating to the performance and economics of the Pioneer Project.³ None of these measures has been satisfied by Pioneer.

Due to the economic and operational risks, it is no longer reasonable to rely upon the economic analyses that have been presented in support of the Pioneer Project. Those analyses assumed levels of reliability and power prices that are not reliable. Consequently, the Commission cannot reasonably consider the Pioneer Project as a substitute for the peaking power needed by East Kentucky.

Thus, the Commission finds that our prior approval of the Pioneer Agreement must be withdrawn. East Kentucky and the Commission had great hope that the Pioneer Project would generate relatively low-cost electricity from Kentucky coal, with minimal environmental impact. While we still have that hope, it is clear that there are substantial economic and operational risks that must first be addressed by Pioneer.

² East Kentucky response to Commission information request, filed February 13, 2003, Item No. 9, p. 2 of 3.

³ East Kentucky Status Report, filed on June 1, 2004.

The Commission recognizes the significant level of effort and work that has been expended to date by East Kentucky and Pioneer, and we applaud that effort. We encourage Pioneer to refine its technology and business plan so that it will be in a position to bid on future solicitations for power in Kentucky.

IT IS THEREFORE ORDERED that the Commission's prior approval of East Kentucky's Agreement to purchase the 540 MW output of the Pioneer Project is withdrawn and the Order granting that approval, entered on July 11, 2000 in Case No. 2000-00079, is rescinded.

Done at Frankfort, Kentucky, this 18th day of October, 2004.

By the Commission

ATTEST:



Executive Director

Case No. 2003-00030
Case No. 2000-00079