

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF EAST KENTUCKY	)	
POWER COOPERATIVE, INC. FOR	)	
APPROVAL OF A POWER PURCHASE	)	CASE NO. 2000-079
AGREEMENT WITH KENTUCKY	)	
PIONEER ENERGY, L.L.C.	)	

O R D E R

East Kentucky Power Cooperative, Inc. (“East Kentucky”) filed an application on February 21, 2000 for approval of a 20-year power purchase agreement (“Agreement”) with Kentucky Pioneer Energy, L.L.C. (“Pioneer”). The Attorney General’s Office (“AG”) and Pioneer requested and were granted full intervention.

Pioneer is a Delaware limited liability company and is wholly owned by 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 (“combined cycle”) in Trapp, Clark County, Kentucky. Pioneer intends to operate as an Exempt Wholesale Generator, subject to the regulatory jurisdiction of the Federal Energy Regulatory Commission.

The Agreement provides that Pioneer will sell the total output of the combined cycle facility to East Kentucky at a fixed rate per kilowatt hour, subject to an annual adjustment based on an independent index. The Agreement has an initial term of 20 years with options for East Kentucky to extend the term for two successive 10-year periods. The combined cycle facility will be built at East Kentucky’s J.K. Smith

generating station, on 300 acres to be leased to Pioneer under the terms of a separate agreement. The combined cycle facility was originally planned to be 400 MW, but was revised upward to 540 MW when Pioneer was unable to obtain a 400 MW “state-of-the-art” turbine due to the current high demand for such units. Although the larger unit will result in slightly higher costs to East Kentucky, the costs will still be lower than those of alternative power sources.

Pioneer estimates the total project to cost \$470 million and to be commercially operable 36 months after financing is arranged. Pioneer will operate the facility as a base load unit with a relatively high rate of availability. East Kentucky is obligated to purchase the entire output, up to the agreed upon rate of availability. In the event that the facility is unable to achieve its availability rate for any calendar quarter and East Kentucky needs energy to make up the shortfall, Pioneer is obligated to reimburse East Kentucky to the extent the average wholesale market price of energy is higher than under the Agreement.

The primary fuel for the gasification process will be an equal mix of coal and municipal solid waste, although the mix can be varied up to 100 percent coal. Pioneer intends to exclusively use Kentucky coal and anticipates entering into a long-term coal contract. Pioneer indicated it is receptive to utilizing Kentucky solid waste to the extent reasonable and practicable. If the coal gasification process is inoperable, the turbine can be run on natural gas. There are three gas pipelines in close vicinity to the J.K. Smith site, and East Kentucky has the right to direct Pioneer to operate on natural gas when there is a need to maintain safe, adequate, continuous, and economic electric service to East Kentucky’s customers.

East Kentucky's need for additional generating capacity was originally based on its 1996 Power Requirements Study ("PRS") and confirmed by the more recent data in its 1998 PRS. East Kentucky's analysis demonstrated that the Pioneer project has the lowest cost of any alternative source of power, and that the most economical option is to retain 440 MW of the output and sell 100 MW on a long-term basis to another utility. To achieve this optimal scenario, East Kentucky has negotiated a 10-year firm sale of 100 MW from the Pioneer project to an out-of-state utility.

East Kentucky provided a scenario analysis which showed that with the Pioneer project and a 100 MW sale of its output, additional combustion turbines ("CT") will be needed in 2002 and 2006. Another analysis showed that if East Kentucky retains the total Pioneer output, additional CTs will be needed in 2002 and 2007. However, on a net present value basis, it will cost East Kentucky approximately \$29 million less to sell the 100 MW for 10 years and construct a CT in 2006, rather than retaining the 100 MW and delaying the CT to 2007.

In addition, retaining 100 percent of the Pioneer project will exacerbate East Kentucky's problem of having excess generation during off-peak, night-time periods causing operational difficulties with must-run generating units. The sale of 100 MW from Pioneer will significantly reduce the amount of off-peak energy that East Kentucky will need to sell when the market is flush with low-priced energy.

Both East Kentucky and Pioneer have responded to numerous data requests and all parties participated in informal conferences at the Commission's offices on May 19, 2000 and June 22, 2000, and a telephone conference on June 27, 2000. The AG had requested a formal hearing but, based on responses to data requests and the revised

Amendment No. 2 to the Agreement, the request was withdrawn and the hearing was cancelled.

After consideration of the evidence of record and being otherwise sufficiently advised, the Commission finds that East Kentucky is in need of additional capacity to serve its forecasted loads. East Kentucky's agreement to purchase for 20 years the entire 540 MW output of the Pioneer project is reasonable and is the least cost supply alternative available. In addition, East Kentucky's 10-year, firm sale of 100 MW of the Pioneer output will result in a lower cost than retaining that energy, will alleviate operational problems with must-run generation during off-peak, night-time periods, and is reasonable.

IT IS THEREFORE ORDERED that:

1. East Kentucky's agreement to purchase the 540 MW output of the combined cycle Pioneer project, as modified by revised Amendment No. 2, and the 10-year, firm sale of 100 MW of the Pioneer output are approved.

2. Within 20 days of the date of this Order, East Kentucky shall file signed copies of revised Amendment No. 2 to the Agreement.

Done at Frankfort, Kentucky, this 11<sup>th</sup> day of July, 2000.

By the Commission

ATTEST:

*W. H. Fowler*  
Deputy Executive Director

