

123 FERC ¶ 61,146  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;  
Sudeen G. Kelly, Marc Spitzer,  
Philip D. Moeller, and Jon Wellinghoff.

Arkansas Electric Cooperative Corporation

Docket No. HB73-93-15-003

ORDER DENYING REHEARING

(Issued May 15, 2008)

1. By orders issued February 26, 2008,<sup>1</sup> Commission staff assessed annual charges to be paid by the City of North Little Rock (City) and Arkansas Electric Cooperative Corporation (Arkansas Electric) for the headwater benefits received by their hydroelectric projects on the main stem of the Lower Arkansas River from the regulation of stream flows by U.S. Army Corps of Engineers' (Corps) headwater projects in the Lower Arkansas River Basin. Arkansas Electric seeks rehearing of the order assessing its annual charges. For the reasons discussed below, we are denying rehearing.

**Background**

2. Section 10 (f) of the Federal Power Act (FPA)<sup>2</sup> authorizes the Commission to assess annual charges to be paid by the owners of non-federal hydropower projects that benefit from the construction of federal headwater projects. The benefits received are in the form of increased energy production resulting from the regulation of river flows by headwater storage projects. Headwater benefits are determined in accordance with the Commission's regulations at 18 C.F.R., Part 11, Subpart B (2007).

3. In September 2007, Commission staff completed a study of headwater benefits in the Lower Arkansas River Basin for the period January 1, 1995, through December 31, 2004, and issued a revised draft report. The study found that the City's Murray Lock and Dam (L&D) 7 Project No. 3449 and Arkansas Electric's L&D 9, L&D 13, and Dam

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<sup>1</sup> *City of North Little Rock*, 122 FERC ¶ 62,178 (2008) and *Arkansas Electric Cooperative Corporation*, 122 FERC ¶ 62,179 (2008).

<sup>2</sup> 16 U.S.C. § 803(f) (2000).

No. 2 Projects Nos. 3044, 3043, and 3033, respectively, benefit from the regulation of stream flows by 29 headwater projects owned by the Corps. In determining energy gains resulting from these upstream operations, staff used a modified flow duration analysis applied to regulated flows (those occurring with operation of the storage projects) and unregulated flows (those that would have occurred without operation of the storage projects), computed from aggregated storage changes upstream of the beneficiary projects.

4. Following comments from Arkansas Electric, staff revised the energy gains that it had calculated in the draft report and furnished its revised calculations to Arkansas Electric in a spreadsheet on January 8, 2008.<sup>3</sup> These revisions are reflected in staff's February 2008 order. Staff determined that average annual energy gains were zero at L&D 9, 1,913 Megawatt hours (MWh) at L&D 13, and 14,625 MWh at Dam No. 2. Staff directed Arkansas Electric to pay a balance due of \$1,882,686 for the period 1995 through 2007. Of this amount, \$388,257 was attributable to gains received by L&D 13 for the entire period and \$1,494,429 to gains received by Dam No. 2 for the period 2000-2007, that project having not been in operation before 2000.<sup>4</sup>

5. On rehearing, Arkansas Electric contends that staff overstated the headwater benefits energy gains attributed to Dam No. 2 due to an apparent modeling error. It asserts that staff appears to have compared modeled regulated energy gains with modeled unregulated energy gains instead of comparing actual energy generated with modeled unregulated energy gains. Arkansas Electric states that this error resulted in overestimating energy gains by approximately 300 MWh, leading to an overassessment of approximately \$500,000 for the period 2000 through 2004.

### **Discussion**

6. Arkansas Electric somewhat misstates staff's comparison. Staff did not compare modeled regulated energy gains and modeled unregulated energy gains. Rather, it compared generation that the model attributes to regulated flows with generation that the model attributes to unregulated flows. This comparison produces the energy gains that the model would attribute to operation of the storage projects. Arkansas Electric's point, nevertheless, is that, in making its comparison, staff should have used the actual energy generated by Dam No. 2, not energy derived from modeled regulated flows.

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<sup>3</sup> E-mail from Vedula Sarma, Office of Energy Projects, to Mark Crisp, which is available in the Commission's public files under Docket No. HB73-93-15-000.

<sup>4</sup> *Arkansas Electric Cooperative Corporation*, 122 FERC ¶ 62,179 at p. 64,381 (Table 4).

7. Arkansas Electric's argument is based on a misunderstanding of staff's methodology, which did indeed consider actual generation at Dam No. 2. Using actual flow data, staff calculated the flows that would have occurred had the storage projects not been constructed. Applying the model, staff determined the average daily energy that would be produced at Dam No. 2 with regulated flows, 1,244.695 MWh, and with unregulated flows, 1,191.143 MWh. The difference between these figures, 53.552 MWh, constitutes the modeled average daily energy gains at Dam No. 2 attributable to operation of the storage facilities.<sup>5</sup>

8. Arkansas Electric is correct that the modeled generation under regulated flows, 1,244.695 MWh, did not represent the actual average daily generation at Dam No. 2, which was in fact 930.300 MWh. This difference results from the model's assumption that Dam No. 2 would be operated continuously at full capacity, whereas actual operations would have experienced outages of individual units, as well as scheduled and unscheduled shutdowns for maintenance. However, staff took this into consideration and adjusted its energy gains determination to reflect actual generation by calculating an energy normalization factor that represents the ratio of the actual energy produced (930.300 MWh) to the modeled energy attributable to regulated flows (1,244.695 MWh). Staff then applied this factor, 0.747, to the modeled average daily energy gains, 53.552 MWh, resulting in an adjusted average daily energy gains figure of 40.025 MWh.<sup>6</sup> Multiplying this figure by 365, staff determined the average annual energy gains of 14,625.102 MWh that were attributable to operation of the storage projects. Staff used this adjusted energy gains figure (40.025 MWh), not the higher modeled energy gains figure (53.552 MWh), in determining Arkansas Electric's assessment attributable to Dam No. 2 for the period 2000-2004.

9. A direct comparison of actual generation under regulated flows with modeled generation under unregulated flows, as Arkansas Electric advocates, would not be apt, since the actual generation figures reflect outages of generating units and maintenance shutdowns, while modeled generation figures assume continuous full operation. Nevertheless, the record demonstrates that staff adjusted its results to account for actual generation at Dam No. 2.

10. Arkansas Electric asserts that staff's assessment is inconsistent with the requirements of FPA section 10(f) and the Commission's regulations. It also argues that

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<sup>5</sup> These figures and those cited in the following paragraph appear in the spreadsheets attached to staff's January 8, 2008 e-mail.

<sup>6</sup> Applying the normalization factor (0.747) to the modeled energy generation under regulated conditions (1,244.695 MWh) results in a generation of 929.787 MWh; which is within 0.006 percent of the actual reported generation (930.300 MWh) at Dam No. 2.

the decision “is not supported by substantial evidence, and the Commission failed to give reasoned consideration to each of the pertinent factors in balancing the needs of the regulated parties with relevant public interests.” However, Arkansas Electric supplies no argument in support of these general allegations. In respect to the quoted material, Arkansas Electric cites *City of Kaukauna, Wisconsin v. FERC*, 214 F.3d 888 at 894-95 (7<sup>th</sup> Cir. 2000). However, the quoted material simply recites the standards that the court in that proceeding cited as applicable for its review of Commission decisions. Arkansas Electric makes no attempt to show why those standards were not met here. Given that staff adjusted the findings of its model to account for the actual generation produced at Dam No. 2, we can see no substance to any of these contentions.

The Commission orders:

The request filed March 27, 2008, by Arkansas Electric Cooperative Corporation for rehearing of the Commission staff’s order of February 26, 2008, in this proceeding is denied.

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.