UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Nora Mead Brownell, and Suedeen G. Kelly.

City of Hamilton, Ohio Docket No. HB20-95-2-011

ORDER DENYING REHEARING

(Issued July 25, 2005)

1. The City of Hamilton, Ohio (Hamilton) seeks rehearing of an order of Commission staff, issued March 24, 2005,[1] determining headwater benefits attributable to Hamilton's Greenup Project No. 2614, on the Ohio River, and assessing charges for those benefits. For the reasons stated below, we are denying rehearing.

Background

2. Section 10(f) of the Federal Power Act (FPA)[2] directs the Commission to assess owners of licensed and unlicensed projects for headwater benefits received by those projects from any upstream storage reservoir or other headwater improvement constructed by the United States or by a licensee, in order to reimburse the owners of those headwater developments. The benefits received are in the form of increased energy production as a result of regulated river flows by the headwater projects. When the United States is the owner of the headwater improvement, the amount of the assessed charges is to be paid into the Treasury of the United States.

3. The Commission staff first completed a study determining headwater benefits for the Ohio River Basin in 1987. This study, which covered a study period of 1975 through 1984, resulted in final headwater benefits assessments for the period 1939 through 1982

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[1] *Hamilton, City of*, 110 FERC ¶ 62,308 (2005).

[2] 16 U.S.C. § 803(f).

and interim assessments beginning with calendar year 1983.[3] Hamilton has been making annual payments for the benefits attributable to the Greenup Project since 1983.

4. Commission staff subsequently initiated a new study to reflect headwater and non-headwater projects that had come on line since the 1987 study period. This study was completed in January 2002, and, on May 16, 2002, staff issued a headwater benefits determination draft report for the study period, 1983 through 1993. The report finalized the headwater benefit assessments for that period, summarized interim annual assessments for the years 1994 through 2001, and established new interim assessments from the year 2002 onward. Staff requested comments from the affected project owners, and Hamilton filed comments on September 13, 2002. In a December 1, 2004 response to the comments of Hamilton and other downstream project beneficiaries, staff revised the assessments and requested comments on those revisions. On February 11, 2005, Hamilton filed comments in response.

5. On March 24, 2005, Commission staff issued orders determining headwater benefits and assessing charges for the owners of the downstream projects in the basin.[4] The orders finalized headwater benefits for each downstream licensee for the period 1983 through 2001 and set interim assessments from 2002 onward. Staff determined that the Greenup Project benefited from the regulation of 46 U.S. Army Corps of Engineers headwater storage projects in the basin during the study period. In addition to the payments Hamilton had already made, staff assessed Hamilton $152,339 for headwater benefits for the period 1983-1993, $102,108 for headwater benefits for the period 1994-2001, and $74,397 for its share of the costs of conducting the study, for a total balance

[3] *See Public Service Company of Indiana et al.*, 43 FERC ¶ 62,376 (1988), and staff's December 2004 response to comments at 7. Under the Commission's regulations, at 18 C.F.R. § 11.10(c)(11) and (12) (2005), a final charge represents the final determination of the charge owed for headwater benefits for the period for which headwater benefits are assessed, and an interim charge applies to a specified period of headwater benefits pending determination of a final charge for that period.

[4] Staff issued an order for each of the 10 licensees of the 13 downstream projects that benefited from headwater regulation. The orders are found at 110 FERC ¶¶ 62,305 through 62,314.

due of $328,844.[5] Staff also assessed Hamilton $52,351 in annual interim headwater benefits beginning with calendar year 2002.

Discussion

6. On rehearing, Hamilton criticizes several aspects of the staff's order. In particular, Hamilton objects to use of the study period data to determine any final assessments, or any assessments at all for years following the study period.

Finalization of 1994-2001 assessments

7. Although the 2002 study determined final assessments for 1983 through 1993 and interim assessments from 1994 onward, staff decided, in each of the orders determining headwater benefits, to finalize the assessments for the period 1994 through 2001. In altering its previous intention, staff stated in the orders that a review of flow data at selected United States Geological Survey (USGS) gaging stations on the Ohio and Kanawha Rivers indicated that the average daily flows during the study period 1983-1993 and during the assessment period 1994-2001 remained essentially the same. Staff decided to make the assessments for the 1994-2001 period final to save the beneficiaries study costs of finalizing those assessments in the future.

8. Hamilton asserts that there is no evidence in the record to support a determination of final benefits for the 1994-2001 period. It states that the information on which staff relied in the study pertains only to the period 1983-1993 and that downstream licensees had no opportunity to review the data or analyses that would support a finding that the flows for the study period and for the 1994-2001 period were essentially the same. Hamilton asserts that staff's initial intention to establish only interim assessments for 1994-2001 implied that a more thorough investigation would be undertaken for that period in the future. It argues that, if staff had considered the study sufficient to establish final assessments for 1994-2001, it should have made that determination in the study itself.

9. Six projects came on line after the 1987 headwater benefits study period and were included in the 2002 assessment determination. Hamilton points out that five of these projects were not on line for the full term of the 1983-1993 study period, and that one of them, the Belleville Project, did not come on line until 1999, after the new study period

[5] Hamilton had already made payments of $406,670 for the 1983-1993 period and $295,760 for the 1994-2001 period, as interim assessment payments pursuant to the 1987 study.

was over.[6] Hamilton argues that final assessments are inappropriate for the 1994-2001 period because further study of these projects could result in different assessments. Hamilton cites *Payments for Benefits From Headwater Improvements "(Order No. 453)"*,[7] the Commission's final rule that established procedures for determining and assessing headwater benefits payments, as indicating that an assessment should not be finalized absent an investigation for the period in question. Moreover, Hamilton notes, *Order No. 453* states that the building of a new downstream project would constitute a change in the development of a basin warranting a new investigation to examine what effect the change would have on the amount of energy gains received downstream and to determine if a new final charge should be established.[8]

10. The Commission's regulations provide that a final charge may be established both retroactively, to finalize an interim charge, or prospectively.[9] Thus, the regulations contemplate that a final assessment may be established for a period that has not actually been studied.[10] Commission staff has, on other occasions, established final assessments for years beyond the period studied in an investigation.[11] The staff's action in this proceeding is not inconsistent, in this respect, with Commission regulations or past practice.

11. Contrary to Hamilton's contention, we did not state, in *Order No. 453*, that assessments could not be finalized in situations such as the present one. The language in

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[6] Hamilton identifies the four projects that were not on line for the full 1983-1993 study period as the Townsend (1987), Stonewall Jackson (1988), Yatesville (1988), and New Martinsville (1988) Projects. Belleville, Townsend, and New Martinsville are downstream projects; Stonewall Jackson and Yatesville are headwater projects.

[7] *Payments for Benefits from Headwater Improvements (Order No. 453)*, FERC Stats. & Regs., (Regulations Preambles 1986-1990) ¶ 30,703 at 30,312 (1986).

[8] *Id*. at 30,306.

[9] 18 C.F.R. § 11.10(c)(11) (2005).

[10] In *Order No. 453*, at n.30, we stated that the term "final charge" "is used to apply to all charges, other than costs of determinations, that are final for a specified period of headwater benefits, including periods in the future."

[11] *See, e.g., Alabama Power Company*, 88 FERC ¶ 62,204 (1999), in which Commission staff conducted a study of energy gains in the Alabama River Basin from 1983 through 1994 and determined final assessments from 1983 through 1998.

Order No. 453 that Hamilton cites in this respect simply provides that, if a party objects to a preliminary assessment of a final charge developed through an investigation of limited scope, the Commission may expand the investigation to ensure an accurate charge rather than issue an order and bill at that time. Here, staff did not provide merely a preliminary assessment of the charges for the 1994-2001 period, and we are confident, for the reasons indicated below, that the scope of staff's investigation was sufficient to determine an accurate final charge.[12] Further, while investigations generally are initiated when there has been some change in a previously stable river basin, such as a new project commencing operations,[13] it will not always be practical to institute a new investigation whenever a single new project comes on line, particularly where, as here, new projects continued to come on line over a period of several years.[14] The addition of new projects during a study period does not preclude the finalization of assessments.

12. Hamilton's position, essentially, is that the introduction of new projects in the river basin during (and, in one case, after) the study period must have altered flow conditions and energy gains to the extent that data from the study period cannot be extrapolated reliably for the 1994-2001 period. We do not believe that this conclusion is warranted. Staff's investigation considered data regarding the operations of all of the projects that were already operating or that came on line during the study period, even if the data for a few of these projects did not cover the entire period. Staff's review of flow data provided by the USGS gages indicates that the addition of the most recent projects to the basin did not cause average daily flows to change significantly from the earlier period to the later one.[15] Although Hamilton criticizes staff's reliance on this information, it does not actually dispute staff's finding or submit information suggesting that the finding

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[12] The Commission's regulations, at 18 C.F.R. § 11.15(d)(3) (2005), provide for investigations to be of sufficient scope to establish a "reasonably accurate final charge."

[13] *Order No. 453* at 30,311.

[14] Section 11.15(d)(2) of the regulations provides that the Commission may, for good cause shown by a party or on its own motion, initiate a new investigation of a river basin to determine whether, because of any change in the hydrology, project development, or other characteristics of the river basin that affects headwater benefits, it should establish a new final charge to replace a final charge previously established under section 11.17(b)(5).

[15] For example, information from the USGS gage at Greenup Dam showed the average daily flow for the 1983-1993 period to be 85,100 cubic feet per second (cfs) and for the 1994-2001 period to be 82,800 cfs.

is unsupportable.[16] Moreover, the projects that came on line after the beginning of the study period do not regulate river flow because they operate as run-of-river, and therefore they would not be expected to alter the energy gains received by existing downstream projects.

13. Following the commencement of operations of several projects during the study period, no additional projects came on line until 1999, late in the 1994-2001 assessment period. The evidence indicates that changes in the river basin between 1994 and 2001 were not significant enough to affect the accuracy of charges assessed for that period. Under the circumstances, we think staff was justified in determining that no further investigation would be needed before making the 1994-2001 assessments final, especially in light of the savings to beneficiaries from eliminating the costs of conducting a further study of the 1994-2001 period to finalize those benefits.[17]

Increase in post-1993 assessments

14. Hamilton claims that staff erred in using the study data to determine benefits and assessments for any years after 1993. Emphasizing again that new projects came on line during and after the 1983-1993 study period, and that significant changes in assessments might result from further study, Hamilton argues that the data of the 1983-1993 study period are stale and should not have been used to represent energy gains during the 1994-2001 period or for years beginning with 2002. Hamilton argues that staff erred in increasing Hamilton's assessments for the years following the study period and insists that, until a new study is conducted reflecting more data from the new projects, its post-1993 annual assessments should remain at the level determined in the 1987 report.

15. All of the six "new" projects except the Belleville Project were on line for at least five years of the study period and furnished at least some data for the 2002 study. Hamilton is in effect arguing that, since the data from the 1983-1993 study period reflect

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[16] Data from USGS gages are publicly available at the USGS website, found at http://water.usgs.gov.

[17] No other downstream beneficiary objected to the 1994-2001 assessments being finalized, and the orders determining final assessments for those licensees are now final. If we were to modify staff's order for the Greenup Project and make Hamilton's 1994-2001 assessments interim, staff would have to initiate another investigation to finalize those assessments. Since Hamilton would be the only beneficiary for which benefits would have to be reevaluated and assessments finalized, Hamilton would be responsible for the entire costs of that investigation.

only a few years of operations for the more recently-added projects, those data should be rejected as a basis for post-1993 assessments in favor of data that are no more recent than 1982 and do not reflect those recently-added projects at all. We fail to see the logic in this argument.[18]

Finalization of assessments for the study period

16. Hamilton argues that assessments for the 1983-1993 period should not be considered final until sufficient data is collected and analyzed for all six new projects. It notes our approval in *Public Service Company of New Hampshire "(Public Service)"* of staff's choice of a study period during which there was "no significant change in the factors affecting electric generation and water regulation in the basin."[19] Hamilton argues that such static conditions do not exist in the present proceeding, and it criticizes staff for failing to selecting a study period within which 10 years of data for all six of these projects could be collected. Hamilton contends that, because only a few years of data could be collected for some of the projects, the data do not cover a period sufficient to normalize data variances from year to year.

17. In *Public Service*, we stated that, in measuring energy gains, a 10- to 15-year period is usually selected, because such a period will usually provide a good representation of river flow and power plant generation.[20] Certainly it is preferable that no significant changes occur in a basin during a study period, but the addition of projects to a river basin during a study period does not, per se, discredit the results of a study. Since new projects may come on line in a river basin from time to time, as indeed has occurred in the Ohio River Basin, it might not always be possible to establish an extensive study period that reflects complete stability. Nor have we insisted on the collection and analysis of 10 to 15 years worth of data in all instances; Commission staff has sometimes established study periods of considerably less than 10 years.[21]

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[18] Hamilton's criticisms of the 2002 study's limitations are especially inapt as to the post-2001 interim assessments, since interim assessments, by their nature, may be modified based on the results of a future study that uses later data.

[19] 61 FERC ¶ 61,256 at 61,937 (1992).

[20] *Id*. at 61,937.

[21] *See Allegheny Hydro No. 8 & 9, L.P.*, 101 FERC ¶ 62,159 (2002), in which staff's investigation covered a five-year study period.

18. In the present proceeding, the 2002 study included the analysis of 11 years of data, and most of the projects studied were in operation for the full 11 years. The operations of all projects except the Belleville Project were studied for at least a few years. Moreover, as noted, all of the projects that came on line during or after the study period operate in a run-of-river mode and do not affect the regulation of river flows. We believe that there was sufficient stability in the river basin during the study period to ensure the representativeness of the study and to warrant the finalization of the assessments for the study period.

Explanation of variances between the 1987 and 2002 studies

19. Hamilton states that, in its September 2002 comments, it identified significant variances between the results of the 1987 study and those of the 2002 study. In response to Hamilton's concerns about those variances, which resulted in a significant increase in Hamilton's annual assessments, staff indicated that the variances could be attributable to the difference in models, rating curves, or travel times between the two studies. Hamilton argues that identifying a possible cause of the variances is not sufficient. It contends that the Commission should direct staff to reevaluate its modeling, data, and results to determine the actual cause of the variances, to ensure that they are not attributable to errors in the staff's calculations and modeling.

20. In its response to Hamilton's comments, staff noted that the 1987 study determined the energy gains of seven downstream projects from the regulation of 55 federal reservoirs. Staff explained that the Commission's Headwater Benefits Energy Gains (HWBEG) model could, at that time, handle only 30 reservoirs at once. Therefore, the Ohio River Basin was split into two groups of reservoirs, with a sequence of modeling of the two groups that is set out in the response to comments but that is too detailed to warrant restating here. By the time the 2002 study was conducted, it was possible to model all 58 federal reservoirs in one run.[22] By avoiding the modeling of the reservoirs in two batches, the HWBEG model used in the 2002 study is more reliable and stable than the earlier model. In short, the discrepancy in results between the two studies appears due primarily to an improvement in modeling. The fact that modeling has

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[22] This figure includes the three new upstream reservoirs that had come on line since the 1987 study.

become more sophisticated and reliable does not suggest that the staff's later study is less accurate than the earlier one.[23] We see no need for staff to reevaluate its analysis.

Level of interim assessments

21. The Commission's regulations provide that interim charges are to be 100 percent of the estimated final charge, when the Commission has completed an investigation of the project for which it is assessed, or 80 percent of the estimated final charge, when the Commission has not completed such an investigation.[24] The staff's order adopted the final report's recommendation that interim assessments should be established at 100 percent of estimated final charges.

22. Hamilton contests the establishment of interim charges at this level, on the ground that the 2002 study, while completed, does not adequately reflect projects that came on line after initiation of the study period and therefore does not represent conditions in the Ohio River Basin from 1994 onward.[25] Hamilton argues that the Commission has set interim assessments at less than 100 percent in other proceedings, even though an investigation had been completed, where power projects in the investigated basin had been in operation less than five years during the study period or where other changes in basin conditions were expected to take place in the near future. Hamilton asserts that, in any event, the 2002 study could not be considered complete beyond 1993, since it examined data only for the 1983-1993 period. Hamilton urges the Commission to

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[23] Staff also added that the shapes and number of rating curves in the two studies were different, and that travel times in the 2002 study reflect normal flows. A rating curve of a hydroelectric plant reflects the relationship between flow and the amount of generation. Travel time refers to the time flow takes to go from one location to another on a stream. "Normal flows" refers to flows that do not reflect flood or drought conditions. While those conditions did not occur during the study period for the 2002 study, this may not have been the case during the study period for the 1987 study.

[24] 18 C.F.R. § 11.17(b)(1)(ii) (2005).

[25] In connection with this argument, Hamilton, citing section 5.14, table 5.13, of the 2002 report, states that, in addition to the six projects already mentioned, another seven projects were scheduled to commence construction in the Ohio River Basin beginning in 1999.

reassess staff's annual interim assessment for 1994 through 2001 and for 2002 onward based on 80 percent of the final charges.[26]

23. The regulations state that interim assessments at the 100 percent level are appropriate when an investigation has been completed for the project for which charges are being assessed. There is no question that an investigation was undertaken and completed for the Greenup Project. That the investigation analyzed data only for the period 1983 through 1993 is not relevant to determining the percentage level of interim assessments for subsequent years. The regulations do not require that that interim assessments for a particular period be set at 100 percent only if an investigation has been completed for that same period.[27]

24. The fact that some projects had not been online for the entire study period does not convince us that interim assessments should be established at 80 percent of final charges. The proceedings cited by Hamilton in support of a lower assessment level are distinguishable from the present proceeding. In *Allegheny Hydro No. 8 & 9, L.P.*, all of the projects for which benefits were assessed had been in operation for less than five years, and staff concluded that determination of a true average of annual energy gains was not feasible in those circumstances.[28] Here, only a few of the projects had not been in operation for the entire 11-year study period. In *South Carolina Electric & Gas Company*, staff noted that one of the three headwater projects might convert its operations to pump storage and that the Secretary of the Army, pursuant to congressional authorization, might conduct a basin-wide water resources management study of the river basin to investigate whether changes or storage reallocations might be warranted in the operation of the three headwater storage projects.[29] No operational changes of that magnitude have occurred in the Ohio River Basin following the study period. We affirm staff's decision to establish interim charges at 100 percent of final charges.

[26] As to the 1994-2001 period, this request assumes that we would grant Hamilton's request to redesignate the 1994-2001 charges as interim rather than final.

[27] Indeed, completion of an investigation for a particular period would generally produce final, not interim, assessments for that period. Therefore, if the regulation's provision for a 100 percent interim assessment were limited to periods in which an investigation were completed, the provision would rarely be applied.

[28] 101 FERC ¶ 62,159 at P 16 (2002).

[29] 100 FERC ¶ 62,125 at P 17 (2002).

Objection to lump sum payment

25. Hamilton states that the balance due of $328,844 represents about 18 percent of its annual operating and maintenance budget of $1.854 million for 2005 at the Greenup Project. Hamilton argues that payment of this balance in a single year would be a severe economic burden. It requests that we allow it five years within which to remit the total balance due, without penalty, or, in the alternative, amortize the amount due and include it in Hamilton's interim assessments until the next Ohio River Basin headwater benefits study is completed.

26. Upon initiation of a new headwater benefits investigation, a licensee has the responsibility to anticipate that an interim assessment may increase when finalized and that a lump sum payment may become due for the adjusted assessment. In this proceeding, staff notified the downstream beneficiaries in February 1995 that it had initiated a new study, and the beneficiaries were informed of staff's initial determination of new assessments in the May 2002 draft report. Hamilton thus has had about 3 years to prepare for paying the balance due.[30] Hamilton's position is not different from that of other licensees that have faced an increase when interim assessments were finalized in other headwater benefits proceedings.

27. Section 11.20 of the Commission's regulations provides that annual charges must be paid no later than 45 days after rendition of a bill by the Commission. The regulations do not provide for deferring or amortizing payments. However, Department of the Treasury regulations, at 31 C.F.R. § 901.8, provide that, if a debtor is financially unable to pay a debt in one lump sum, an agency may accept payment in regular installments. In that circumstance, the regulation provides that agencies should obtain from debtors financial statements and a legally-enforceable written agreement specifying the terms of the arrangement.

28. By letters of May 9, May 31, and June 15, 2005, Hamilton made a separate request for payment of the headwater benefits assessment in three annual installments. We will deny Hamilton's rehearing request for deferral of the payment because the separate request is currently pending before the Office of the Executive Director.

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[30] In response to Hamilton's comments on the 2002 draft report, staff in fact reduced the assessments determined in the report.

Allocation of study costs

29. Hamilton challenges staff's allocation of the costs of conducting the 2002 study in proportion to the average annual energy gains received. It claims that this method is inherently unfair, since the costs of the study are not related in any way to the size of the projects or the amount of energy gains realized. Hamilton argues that these costs should be borne equally by the nine projects identified by the study as sharing the costs.

30. Section 10(f) of the FPA provides that affected licensees shall pay to the United States the cost of making a headwater benefits determination as fixed by the Commission. Section 11.17(c)(1)[31] of the Commission's regulations provides that downstream project owners are to pay the costs of making any investigation and study. As Hamilton notes, the regulation does not specify how those costs are to be allocated or require any particular method of apportionment. Commission staff has consistently allocated study costs in proportion to energy gains received.[32] Hamilton presents no convincing argument for reversing that policy or for deviating from it here. Since some projects receive greater benefits from headwater operation than do others, we see no unfairness in requiring those projects to pay a proportionately higher cost of determining the benefits they receive.

The Commission orders:

The request filed April 25, 2005, by the City of Hamilton, Ohio, for rehearing of the March 24, 2005 Order of Commission staff determining headwater benefits and assessing charges for Hamilton's Greenup Project is denied.

By the Commission.

(S E A L)

Linda Mitry,
Deputy Secretary.

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[31] 18 C.F.R. § 11.17(c)(1) (2005).

[32] *See, e.g., Public Service Company of New Hampshire*, 96 FERC ¶ 62,115 at 64,263 (2001), *Southern California Edison Company*, 75 FERC ¶ 62,052 at 64,075 (1996).