

132 FERC ¶ 61,236
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Marc Spitzer, Philip D. Moeller,
John R. Norris, and Cheryl A. LaFleur.

Appalachian Power Company

Project No. 2210-192

ORDER ON REHEARING AND CLARIFICATION

(Issued September 16, 2010)

1. On December 15, 2009, the Director of the Office of Energy Projects (OEP) issued a new license to Appalachian Power Company (Appalachian Power)¹ under sections 4(e) and 15 of the Federal Power Act (FPA)² for the continued operation and maintenance of the Smith Mountain Pumped Storage Project (Smith Mountain Project), a 636-megawatt (MW) hydroelectric project located on the headwaters of the Roanoke River in Virginia. The Tri-County Relicensing Committee (Committee)³ filed a timely request for rehearing of the order. For the reasons discussed below, we grant rehearing in part and clarify the license in certain respects.

Background

2. The Commission issued the original 50-year license for the Smith Mountain Project in 1960. The project has two developments and is a combination pumped storage and conventional hydroelectric project. The 586-MW Smith Mountain pumped storage development (Smith Mountain development) consists of a dam, a 20,260-acre reservoir (Smith Mountain Lake), and a powerhouse with five generating units (two conventional units and three reversible pump/turbine units). The 50-MW conventional Leesville

¹ *Appalachian Power Co.*, 129 FERC ¶ 62,201 (2009) (license order).

² 16 U.S.C. §§ 797(e) and 808 (2006).

³ The Committee comprises the four county governments that border the project (Bedford, Franklin, Pittsylvania, and Campbell) and represents the counties for all relicensing issues.

development consists of a dam, a 3,260-acre reservoir (Leesville Lake), and a powerhouse containing two turbine-generating units. The project operates as a peaking facility, with generation occurring during peak usage periods. During off-peak periods, water passed through the Smith Mountain development to Leesville Lake is pumped back into Smith Mountain Lake to be used again for generation. The Leesville development is operated in an auto-cycling mode to provide an average weekly flow of 650 cubic feet per second (cfs) downstream in the Roanoke River. The original license for the project expired on March 31, 2010.

3. In March 2008, Appalachian Power filed its relicense application, which it prepared using the Commission's Integrated Licensing Process (ILP).⁴ Commission staff issued a draft environmental impact statement (EIS) in March 2009 and issued the final EIS in August 2009. On December 9, 2009, the Committee filed a motion asking to supplement the final EIS and including what it termed an offer of settlement.

4. On December 15, 2009, under delegated authority, OEP issued a new 30-year license to Appalachian Power, effective April 1, 2010. Under the new license, Appalachian Power will implement a number of resource management plans, including those for: (1) sedimentation and erosion monitoring; (2) water quality monitoring; (3) the federally endangered Roanoke logperch (*Percina rex*); (4) littoral zone aquatic habitat; (5) nuisance/ invasive aquatic vegetation; (6) recreation and shoreline management; (7) navigation aids; (8) floating debris on the lakes; and (9) cultural resources. Additionally, the license order approved Appalachian Power's proposal to modify the current project boundary by expanding it to include certain existing recreation facilities, as well as some parcels of land designated in its proposed *Recreation Management Plan* for future recreation.

5. With respect to the Committee's motion to supplement the EIS, the license order determined that, while the Committee contended that the filing provided new evidence, it simply reiterated the comments that the Committee had made in its previous filings, which had been generally addressed in the final EIS.⁵ Nonetheless, the Committee's

⁴ The ILP is set forth in Part 5 of the regulations, 18 C.F.R. Part 5 (2010).

⁵ The Committee actively participated in the relicensing process since Appalachian Power initiated pre-filing consultation October 2002. On October 6 and December 11, 2008, it filed a motion to intervene and comments in response to the Commission's August 7, 2008 notice of Appalachian Power's application; and on May 11, 2009, it filed comments on the draft EIS.

concerns were also addressed in the license order. The license order determined that any further delay in issuing the license in response to the Committee's December 9 filing was not warranted.

Procedural Issue

6. Appalachian Power filed a motion for leave to file an answer and an answer to the Committee's rehearing request. In response, the Committee filed an answer to Appalachian Power's motion, requesting that the Commission deny the motion. Rule 213(a)(2) of the Commission's regulations prohibits answers to requests for rehearing unless otherwise ordered by the decisional authority.⁶ The record of this proceeding contains sufficient information to make a reasoned decision on the merits. We will therefore deny Appalachian Power's motion and reject its answer.

Discussion

A. OEP's Delegated Authority

7. On rehearing, the Committee contends that OEP did not have the authority to issue the license because it was a contested proceeding, and the Commission's regulations only authorize OEP to act on uncontested license applications.⁷ It argues that the plain meaning of uncontested means "not disputed and not made the object of contention or competition."⁸ The Committee claims that, while it did not object to the issuance of a new license, it repeatedly objected to the sufficiency of the proposed license articles. The Committee requests that the Commission accordingly vacate the license order.

8. Section 375.301(c) of the Commission's regulations defines an "uncontested" proceeding for purposes of the delegation regulations as one where no one has filed a motion to intervene "in opposition to the pending matter."⁹ An intervention regarding the resolution of particular issues, such as a project's impact on environmental and

⁶ 18 C.F.R. § 385.213 (2010).

⁷ See 18 C.F.R. § 375.308(a)(1) (2010).

⁸ Request for Rehearing at 10 (citing *Webster Online Dictionary*, available at <http://webster-dictionary.org/definition/uncontested>.) It also cites to what it says is a definition of "contested" in section 385.602(h)(1) of the regulations, 18 C.F.R. § 385.602(h)(1) (2010). That section does not, however, define contested, and even if it did, it would apply by its terms only to offers of settlement.

⁹ 18 C.F.R. § 375.301(c) (2010).

recreation resources, is not equivalent to opposing issuance of a license.¹⁰ The Committee's intervention thus did not render the application contested, and OEP had the delegated authority to act in this matter.

B. Offer of Settlement

9. As noted, on December 6, 2009, the Committee filed a motion to supplement the final EIS and an "offer of settlement." On rehearing, the Committee contends that, since the license order does not expressly rule on the merits of the offer of settlement, it believes the offer remains pending before the Commission. It claims that its offer creates a better balance between developmental and non-developmental uses, and a more equitable distribution of costs related to mitigation of project impacts between Appalachian Power and the four counties that comprise the Committee. The Committee acknowledges that the offer of settlement is unilateral, but it asserts that the Commission's rules contemplate that offers will initiate comments and possibly spur negotiations. It states that the offer of settlement was intended to induce Appalachian Power to enter into negotiations prior to the issuance of the new license.

10. We deny rehearing on this issue. As explained in the license order, a pleading that purports to be an offer of settlement, but that is unilateral and is not supported by the licensee and/or the federal and state resource agencies is not a settlement of the issues pertaining to the project, and, therefore, cannot be viewed as a settlement agreement.¹¹

11. As to the Committee's hope that the filing of its offer would spur Appalachian Power to enter into negotiations with it prior to the issuance of the new license, one of the stated advantages of the Commission's ILP is to provide substantial encouragement to settlement agreements by ensuring early identification of issues and production of

¹⁰ See *Elkem Metals Co.*, 45 FERC ¶ 61,044, at 61,157 (1988); *Robert W. Shaw*, 19 FERC ¶ 61,153, at 61,293 (1982).

¹¹ See *Duke Energy Carolina LLC*, 123 FERC ¶ 61,069 (2008), *aff'd*, *Jackson County v. FERC*, 589 F.3d 1284 (D.C. Cir. 2009) (finding that Commission's characterization of unilateral "settlement" as a settlement in name only was not arbitrary or capricious). Because the document is not a settlement agreement, we reject the Committee's requests that the Commission either: (1) deem the offer of settlement uncontested, approve it by finding that it is fair and reasonable and in the public interest; and incorporate its provisions in the license (*see* 18 C.F.R. § 385.602(g)(3) (2010)); or (2) in the alternative, issue public notice of the settlement and set a date for a settlement conference to be facilitated by the Commission's Office of Dispute Resolution.

information useful to parties considering whether to engage in settlement negotiations.¹² As noted above, Appalachian Power initiated pre-filing consultation in 2002 and filed its relicense application in 2008. Thus, if the Committee had wanted to enter into an agreement with Appalachian Power, it had many years to do so. Instead, it waited until the eleventh hour to file what it characterized as a settlement agreement, but in fact was agreed to by no other entities and instead simply consisted of additional comments and arguments in support of its position. In fact, as the license order explained, the filing, with a few exceptions, presented information nearly identical to the information the Committee had proffered during the relicensing proceeding.

12. For the above reasons, we deny rehearing on this issue and dismiss the December 9, 2009 filing as an offer of settlement.

C. Comprehensive Development and Substantial Evidence

13. On rehearing, the Committee argues that the Smith Mountain license is not best adapted to a comprehensive plan of development, as required by section 10(a)(1) of the FPA. The Committee further argues that our comprehensive development findings are arbitrary and capricious because they are not supported by substantial evidence, as required by section 313(b) of the FPA.¹³

1. Comprehensive Plan

14. On rehearing, the Committee claims that the license order does not contain or constitute a “comprehensive plan,” within the meaning of FPA section 10(a)(1) because it fails to specify desirable future conditions for the beneficial uses during the term of the new license.

15. We deny rehearing on this issue. Section 10(a)(1) of the FPA¹⁴ requires that projects licensed by the Commission be best adapted to “a comprehensive plan for

¹² See *Hydroelectric Licensing Under the Federal Power Act*, FERC Stats. and Regs., Proposed Regulations 1999 - 2003 ¶ 32,568, at P 161 (2003) (adding that "...we see no evidence that suspending Commission actions in the licensing process is more likely to result in a settlement agreement. Rather, our experience indicates that the prospect of near-term Commission action in the form of a draft or final NEPA document, or a license order, is more likely to spur the parties to resolve their differences.").

¹³ 16 U.S.C. § 313(b) (2006). The Committee also cites to sections 556, 557, and 702 of the Administrative Procedures Act, 5 U.S.C. §§ 555, 557, and 702 (2006).

¹⁴ 16 U.S.C. § 803(a)(1) (2006).

improving or developing a waterway,” taking into account all beneficial uses of the waterway (e.g., waterpower development; protection, mitigation, and enhancement of fish and wildlife; irrigation; flood control; water supply; and recreation).

16. Section 10(a)(1) does not require the Commission to prepare a single comprehensive plan against which an application is measured. Nor does it require that the license order itself constitute a comprehensive plan. Rather, it requires the Commission to develop a record in the proceeding on all aspects of the beneficial public uses relating to the comprehensive development of the waterway or waterways involved,¹⁵ and that is what the Commission did in the Smith Mountain relicensing proceeding. An extensive record was developed, which contains information and analyses on relevant issues and resources, including: archaeological and historic resources, navigation aids, erosion, sedimentation, recreation, socioeconomics, debris management, native and exotic aquatic vegetation, littoral zone habitat, fishery resources (including fish spawning and rearing, as well as fish entrainment), instream flows, drought and flood management, non-project water withdrawals, water quality, and the endangered Roanoke logperch. Commission staff’s draft and final EISs reflect a thorough evaluation of the record as to the potential environmental effects on these resources of relicensing the project under various alternatives. Moreover, the license establishes a comprehensive set of operational and environmental measures that ensures that the project will be operated in a manner that appropriately balances developmental and non-developmental interests.

2. Post-Licensing Studies

17. Next, the Committee alleges that the license order does not comply with section 10(a)(1) of the FPA because it fails to make actual findings for each resource area

¹⁵ See *LaFlamme v. FERC*, 945 F.2d 1124, 1128 (9th. Cir. 1991) (affirming the Commission’s determination that it had satisfied the FPA’s requirements by considering the “comprehensive picture of the water system of which the project is a part, based in the record developed in each particular proceeding”). See also *City of Fort Smith, Arkansas*, 44 FERC ¶ 61,160, at 61,510 (1988), *aff’d*, *National Wildlife Federation v. FERC*, 912 F.2d 1471 (D.C. Cir. 1990), where the Commission stated that section 10(a)(1) does not require it:

to undertake a study of all actual and potential uses of a waterway so as to develop an immutable master plan. Rather, comprehensive development is a concept that evolves over time, reflecting different eras’ technical options, economic realities, and resource use priorities.

as to what future conditions will be over the next 30 years and instead improperly relies on post-licensing studies to monitor impacts and design possible mitigation measures.¹⁶ Citing *Confederated Tribes and Bands of Yakima Indian Nations v. FERC*¹⁷ in support of its position, it contends that section 10(a)(1), by requiring that the Commission explore all issues relevant to the public interest prior to relicensing, compels the Commission to forecast how the new license will impact specific project resources over the next 30 years.¹⁸ It acknowledges that post-licensing monitoring and adaptive management are appropriate tools, but that can be used only “as a means to assure license conditions are meeting previously established measureable objectives.”¹⁹

18. We deny rehearing on this issue. *Yakima* does not require the Commission to have perfect information before it acts.²⁰ The test is whether, given uncertainty, the Commission’s action meets the standard for judicial review, which requires that the Commission’s decision be supported by substantial evidence.²¹ As the court found in *United States Department of the Interior v. FERC*:²²

Yakima at most imposes on the Commission the duty to consider and study the environmental issue before granting a license. *Yakima* does not require any heightened degree of certainty for environmental facts, nor does it imply that all environmental concerns must be definitively resolved before

¹⁶ Specifically, the Committee contends that the Commission must make specific findings for the next 30 years regarding: (1) shoreline erosion; (2) accumulation of sediment and the resulting condition of navigation and public access; (3) accumulation of debris and its effects on navigation, recreation, and aesthetics; (4) the presence of non-native aquatic vegetation and its effects on beneficial uses such as navigation, recreation, and aquatic life; (4) public safety; (5) the navigability of the project waters; and (5) the Roanoke logperch and its habitat.

¹⁷ 746 F.2d 466 (9th Cir. 1984) (*Yakima*).

¹⁸ Request for Rehearing at 16.

¹⁹ Request for Rehearing at 15.

²⁰ See, e.g., *Idaho Power Co.*, 108 FERC ¶ 61,129, at P 41 (2004), *reh’g denied*, 110 FERC ¶ 61,242 (2005), *aff’d Idaho Rivers United v. FERC*, 189 Fed. Appx. 629, 2006 U.S. App. Lexis 17566 (9th Cir. 2006).

²¹ *Id.*

²² 952 F.2d 538, 546 (D.C. Cir. 1992).

a license is issued. Read this way, *Yakima* simply endorses the unstartling principles that an agency must establish a record to support its decisions and that a reviewing court, without substituting its own judgment, must be certain that the agency has considered all factors required by the statute.

19. While the draft and final EISs included a cumulative-effects analysis on erosion, sedimentation, water use, water quality, fisheries, and riparian habitat, it is not possible, as the Committee argues we must do, to precisely identify and quantify how the new license will impact specific project resources over the next 30 years. Nevertheless, the license does contain measures—many of them specific—for dealing with project effects and implementing project purposes. Moreover, our obligation under section 10(a)(1) continues throughout the term of the license.²³ Thus, we reserve in our licenses the authority to reopen the license at any time conditions warrant to address resources issues that may arise through the term of the license.²⁴ In addition, the consultation procedures included in the management plans required by this license allow for adjustments to adapt to unforeseen conditions or new technology.

20. The Committee alleges that the license order does not comply with section 10(a)(1) of the FPA because many of the post-licensing studies and plans improperly rely on the formation by third parties of technical review committees to assist in the implementation of various measures.²⁵ The Committee contends that the effectiveness of the studies and plans depends upon the committee members' willingness to commit to the technical committees for the next 30 years, and that, as far as it knows, no entity, other than Appalachian Power, has committed to participate.²⁶

21. We deny rehearing on this issue. As explained in the license order, the entities that comprise the committees will play an important consultation role in the plans' implementation and review during the license term, but it is the licensee's responsibility

²³ See, e.g., *S.D. Warren Co.*, 68 FERC ¶ 61,213, at 62,022 (1994).

²⁴ See *California v. FPC*, 345 F.2d 917, 925 (9th Cir. 1965). See also *Portland General Electric Co. v. FPC*, 328 F.2d 165, 175 (9th Cir. 1964).

²⁵ Various conditions of the license require the licensee to establish and consult with technical review committees in implementing plans. These conditions identify the governmental and non-governmental entities whose representatives comprise the committees.

²⁶ Specifically, the Committee points to the license conditions regarding navigation aids, aquatic vegetation control, and debris management.

to implement the plans. While the Commission cannot require other entities to participate in those committees, the license must consult with the identified entities either independently or through the entities' participation in the committee.²⁷

3. Specific Resource Issues

22. On rehearing, the Committee objects to the license conditions relating to erosion, sedimentation, debris management, aquatic vegetation management, public safety, aids to navigation, and the Roanoke logperch. The Committee argues that these conditions do not comply with the comprehensive development standard of section 10(a)(1) of the FPA and that the record developed in the relicensing proceeding is insufficient to support such a finding. It alleges that the license requirements that address these issues are arbitrary and capricious because they are not supported by substantial evidence. The Committee contends that in adopting these license conditions, the license order erred in failing to rebut each piece of evidence submitted by the Committee in support of its request for other, more comprehensive measures. The Committee claims that the license order is deficient because it "fails to make specific findings and rule on specific objections,"²⁸ and relies on incomplete or disputed evidence without adequate explanation.

23. We deny rehearing on this issue. The FPA recognizes the numerous beneficial public uses of the waterways and gives the Commission broad guidelines to apply in its hydroelectric licensing decisions. In deciding under what conditions to issue a license, our task is to fashion license conditions that will achieve what in our judgment is an optimal balance between and among the various developmental and environmental public interest uses of the affected waterway.²⁹ As explained above, the FPA does not require

²⁷ Indeed, giving affected stakeholders a role in the continuing implementation of a license (often called adaptive management) is a widely recognized and accepted practice that ensures that the Commission receives input from a broad spectrum of resource agency experts and other interested entities. *See Northwest Resource Information Center v. Northwest Power Planning Council*, 35 F.3d 1371, 1380, n. 18 (9th Cir. 1994), (citing Kai N. Lee & Jody Lawrence, *Adaptive Management: Learning From the Columbia River Basin Fish and Wildlife Program*, 16 *Env'tl. L.* 431, 442 (1986) (adaptive management "sets a scientifically sound course that . . . provides a framework within which measures can be evaluated systematically as they are carried out")).

²⁸ Request for Rehearing at 47.

²⁹ Section 4(e) of the FPA, 16 U.S.C. § 797(e) (2006), provides that in issuing licenses, the Commission shall give equal consideration to the power and development purposes for which licenses are issued, as well as to energy conservation, fish and

(continued...)

the Commission to have perfect information before taking a licensing action, or finding all environmental concerns to be definitively resolved before issuing a license.³⁰

24. As noted above, an extensive record was developed for this relicensing proceeding, including studies, analyses, and information on the resources at issue here. Commission staff's draft and final EISs reflect a thorough evaluation of the record as to the potential environmental effects on these resources of relicensing the project under various alternatives. There can be no doubt that the Commission had enough information to proceed and that its decisions were supported by substantial evidence. The license order considered all the germane factors and the record of the proceeding (e.g., the license order and the EISs) provided a reasoned explanation to support the license order's decisions. Contrary to the Committee's argument, that there is substantial evidence to support a particular decision does not mean that other evidence in the record, which could support a different conclusion, is not valid or must be refuted.

25. From the outset, the Committee submitted information and arguments to support its recommendations and proposed license conditions. These were addressed in both the draft and final EISs, and where Commission staff did not recommend adoption of a measure proposed by the Committee, it explained why.³¹ The substance of the Committee's arguments and recommended measures have changed little over time, and

wildlife, recreation, and other environmental resources. However, equal consideration does not mean equal treatment. *See State of California v. FERC*, 966 F.2d 1541, 1550 (9th Cir. 1992).

³⁰ *See, e.g., Idaho Power Company*, 108 FERC ¶ 61,129 at P 41.

³¹ *See, for example, Commission staff's response to the Committee's arguments that Appalachian Power should: (1) stabilize all reservoir shoreline, draft EIS at 50 and final EIS at 53; (2) conduct sediment content analysis and dredge more areas around the lake, draft EIS at 55-56 and final EIS at 58-60; (3) remove all debris, draft EIS at 200-201 and final EIS at 206; (4) conduct yearly full lake survey for non-native aggressive invasive vegetation and fund the entire treatment program, draft EIS at 136-137 and final EIS at 141-142; (5) provide funding to support fire and rescue programs, draft EIS 188-190 and final EIS at 193-196; and (6) provide navigational markers for all obstructions around the lake, draft EIS at 196-197 and final EIS 203. The Committee also raised various issues concerning the Roanoke logperch that were addressed in the draft EIS at 273-275 and in the final EIS at 286 and 288. Additionally, section 5.12 of the draft and final EIS discussed measures recommended by other entities that Commission staff did not recommend adopting.*

the Committee puts many of them forward again in its rehearing request, though it is not always clear what revisions to the various conditions the Committee seeks.

a. Erosion

26. On rehearing, the Committee objects to the requirements of Article 402 of the license regarding shoreline erosion. It states that the license order appears to find that shoreline stabilization should not be Appalachian Power's sole responsibility, but should be shared by property owners along the shore. The Committee contends that it is not clear that anyone will be responsible for stabilizing actively eroding shoreline over the term of the license, because Article 402 does not require Appalachian Power to undertake specific measures to protect eroding shoreline.

27. Under Article 402, Appalachian Power must monitor erosion in areas along the shores of Smith Mountain and Leesville lakes having a broad range of scarp heights.³² Following an initial survey of the locations to be monitored, Appalachian Power must prepare a report that: (a) documents the locations of the monitored sites; (b) compares the monitoring results with data collected in a survey conducted during the ILP; (c) assesses the effects of any erosion, including identifying any project-related effects; and (d) proposes actions and an implementation schedule to address any project-related effects. Every five years, Appalachian Power must monitor the sites and file an updated report.³³ In addition, Appalachian Power must develop two demonstration projects that use natural methods for stabilizing eroding shoreline, while also enhancing shoreline habitat,³⁴ and monitor the two sites to assess the effectiveness of the methods chosen.

28. The Committee is correct that the license order does not require Appalachian Power to assume all responsibility for stabilizing eroding shoreline along the lakes. Rather, under Article 402 of the license, Appalachian Power must monitor erosion along the shoreline to identify and remediate any erosion that is related to project operations. As the license order explains,³⁵ some erosion of the lakes' shorelines is expected to

³² Scarp is defined as a relatively continuous cliff or steep slope produced by erosion between two relatively level surfaces.

³³ We will modify Article 402 to require that the measures proposed in the reports to address project-related effects be approved by the Commission.

³⁴ Debris that becomes secured along the shoreline can provide erosion control as well as create stable habitat for various fish and macroinvertebrate.

³⁵ *Appalachian Power Co.*, 129 FERC ¶ 62,201 at P 59.

continue with continued project operation, and some loss of land will likely continue due to shoreline retreat. However, wind-driven waves are the predominant source of shoreline erosion at the project, with boat wakes being a secondary source.³⁶ Water level fluctuations due to project operation, although they may increase the shoreline's susceptibility to wave-based erosion, are not likely to be a significant source of erosion.

29. For the above reasons, we find that Appalachian Power's obligations regarding erosion required by the license are reasonable, and that it should not, as the Committee argues, be responsible for stabilizing all eroding shoreline along the lakes.³⁷ Moreover, standard Article 19 of the license reserves the Commission's authority to require additional erosion control measures should future conditions warrant.³⁸

b. Sedimentation

30. As the license order explains,³⁹ sediment has accumulated in Smith Mountain and Leesville Lakes and has decreased the lakes' storage volume to a minor extent: about six percent at Smith Mountain Lake and about eleven percent at Leesville Lake. Sediment accumulation is not uniform. While some sedimentation occurs in the main body of the reservoirs, most of the sediment is concentrated in inlets and coves where tributary rivers

³⁶ See *Duke Power Co.*, 33 FERC ¶ 61,321, at 61,624 (1985) (finding that erosion along a reservoir shoreline that is due to wind and wave action, steep terrain, and storm water runoff is not a result of project operation or maintenance).

³⁷ See *Eastern Niagara Public Power Coalition v. FERC*, 558 F.3d 564, 567 (D.C. Cir. 2009).

³⁸ See *Appalachian Power Co.*, 129 FERC at 64,605. That article provides:

In the construction, maintenance, or operation of the project, the Licensee shall be responsible for, and shall take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution. The Commission, upon request or upon its own motion, may order the Licensee to take such measures as the Commission finds to be necessary for these purposes, after notice and opportunity for hearing.

Thus, Article 402 is not, as the Committee alleges, inconsistent with standard Article 19 of the license, but rather complements it.

³⁹ *Appalachian Power Co.*, 129 FERC ¶ 62,201 at P 64.

and streams enter the lakes. The most significant source of sediment entering the lakes is from the cumulative effect of multiple developments or disturbances on individual land parcels draining to the same cove or bay area. Sedimentation originates from these disturbances, including those on construction sites, agricultural lands, and timber harvesting (all of which are outside of the project boundary). In areas where sedimentation occurs, it can affect recreational access.⁴⁰

31. Under Article 403 of the license, every five years Appalachian Power will survey locations identified as specific areas of concern for sediment accumulation. These sites include eleven river and tributary outlets into Smith Mountain Lake, two river outlets into Leesville Lake, and public access sites at both lakes where accumulated sediment has been reported. After completing each survey, Appalachian Power, in consultation with specified agencies and other entities, will prepare a report that, among other things: (1) details the survey results; (2) compares the results to previous survey data; (3) identifies the impacts of sediment deposits on public access sites; and (4) identifies any actions Appalachian Power proposes to take to address adverse impacts from sediment deposits at public recreation sites.

32. On rehearing, the Committee argues that the license does not require enough of the licensee regarding sedimentation control. Specifically, the Committee argues that Appalachian Power should be required to conduct sediment content analyses to evaluate the rates of sedimentation over time, identify the sources of the sediment, and develop sediment reduction strategies. In addition, it argues that we should require the licensee to dredge sediment where necessary to not only maintain access to public boat ramps and recreation sites, but also to areas around commercial marinas.

33. We disagree. With respect to requiring the licensee to perform sediment content analyses, the Committee has asked for such a requirement throughout the licensing proceeding. In its comments on the draft EIS, the Committee included a technical report by a consultant recommending a sediment core analysis to evaluate the rates of sedimentation over time, and to identify the sources of the sediment. As Commission staff concluded in the EIS, the cost of such an analysis would outweigh any potential benefits, and any information obtained would be related to management of lands outside the project boundary.⁴¹ The Committee has not provided any further information that

⁴⁰ Final EIS at 48-49 and 272-273.

⁴¹ Final EIS at D-37 to D-39. In addition, the final EIS questioned the value of such an analysis, explaining that: (1) investigating sedimentation rates and sources for deep waters of the lake would not provide useful information in addressing the sedimentation that concerns residents who live around the project reservoirs; (2) measuring concentrations of the radioactive isotopes may not provide any meaningful

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would warrant a finding that such an analysis would have a nexus to project effects or that the study would be needed to fulfill project purposes.⁴²

34. As to the Committee's argument that Appalachian Power be required to dredge areas around commercial marinas, the sedimentation problem is for the most part outside the control of Appalachian Power. Because Appalachian Power's project boundary consists of only the land below the 800- and 620-foot contours for the Smith Mountain and Leesville Lakes, respectively, a large percentage of the current problem originates because of non-project development adjacent to the project boundary. For example, extensive new home construction around Smith Mountain Lake, a significant portion of which is located on steep inclines, has resulted in many shoreline areas lacking groundcover all the way down to, and possibly including, the project boundary.⁴³ Ultimately, the responsibility for preventing sediment from entering the lakes by, among other things, controlling erosion in the watershed on the tributaries leading into the lake and on the property adjacent to the project lies with the local governmental entities and waterfront property owners.

35. For these reasons, the license requires Appalachian Power to remove sediments only where they interfere with project purposes, such as public recreation. The license requires Appalachian Power to provide public recreation facilities and public access to the project's waters. It is also responsible for ensuring the continuing availability of these recreation resources through the term of the license. As for commercial marinas, they are not project facilities, but rather are privately-owned establishments that do not

information on sedimentation rates; (3) estimating past sedimentation rates may not provide useful information in controlling future sedimentation; (4) using the proposed investigation of sources is not a proven technique; (5) differentiating between various sediments would not significantly affect the recommendations for watershed management; and (6) identifying geographic areas within the watershed would not be successful due to the region's bedrock and soils. *Id.*

⁴² We reject the Committee's contention that not requiring a sediment content analysis is inconsistent with standard Article 19 of the license (see n.38, *supra*). Article 19 requires the licensee to take reasonable measures to prevent stream sedimentation that is the result of project construction, operation, or maintenance. For the reasons stated above, the sedimentation problems at the lakes are not caused by project operations, so requiring the licensee to prevent sedimentation problems would be unreasonable.

⁴³ See *Appalachian Power Co.*, 112 FERC ¶ 61,026, at P 85-86 (2005) (order modifying and approving project's shoreline management plan).

fulfill a project purpose, and are allowed as non-project uses of the reservoir only because they do not interfere with project purposes. The Committee should not expect Appalachian Power to be financially responsible to remedy the results of the land use practices beyond its control.

36. For the above reasons, we deny rehearing on this issue. However, we are revising Article 403 to clarify that the licensee is responsible for sediment removal when sediment deposits interfere with project operation.

c. Debris Management

37. At times, there are large accumulations of floating debris on both Smith Mountain and Leesville Lakes. The debris largely consists of natural materials, but man-made material represents a portion of the debris. The free-floating debris accumulations can create a hazard for recreational users and detract from the aesthetic character of the reservoirs. Man-made debris has the potential to leak toxic materials into the watershed and to create adverse aesthetic impacts and recreational hazards. However, woody debris that has become attached to the shore provides numerous functions to the watershed, including habitat for fish and wildlife. Large woody debris can also provide shoreline protection functions by dissipating wave energy that can erode shoreline area.

38. Under the prior license, Appalachian Power coordinated debris removal on the lakes with the Tri-County Lake Administration Commission (Tri-County Commission)⁴⁴ and the Leesville Lake Association.⁴⁵ Appalachian Power uses a mechanical surface

⁴⁴ The Tri-County Commission is an administrative department that represents the three counties (Bedford, Franklin and Pittsylvania) surrounding Smith Mountain Lake. Its purpose is to carry out lake planning duties as assigned by the three counties' Boards of Supervisors. These duties may include, but are not limited to, issues regarding navigation markers, invasive species, and debris clean-up and coordination with Appalachian Power on lake-related issues. It is worthy of note that the Tri-County Commission, which the license gives as substantial responsibilities and opportunities for input as any similar body in any other license, is composed of three out of the four members of the Committee. Thus, with the exception of Campbell County, the Committee members will have a significant ongoing ability to ensure that many of the license conditions are carried out to their satisfaction.

⁴⁵ The Leesville Lake Association is a non-profit corporation formed to promote stewardship of Leesville Lake by assisting in: (1) monitoring and protecting water quality; (2) clean-up of waters and shorelines; (3) ensuring safe recreational use of the lake; (4) economic development; and (5) fostering optimum water levels.

skimmer to collect and haul debris to various shoreline locations. The skimmer generally operates from May through October each year. Lake users at Smith Mountain Lake request debris removal by contacting the Tri-County Commission, which communicates the request to Appalachian Power. Appalachian Power (itself or through a contractor) removes the debris and transports it to offload sites, from which it is hauled to a local landfill. The Tri-County Commission covers the associated hauling and landfill costs. On Leesville Lake, natural debris is stacked on shore and allowed to dry. Once dried, the material is either hauled away or burned on-site.

39. During periods of high inflows, the Tri-County Commission hires contractors to assist with removal efforts. Leesville Association also undertakes debris removal efforts. In addition to the efforts of the skimmer crew and contractors, organized volunteer clean-up events occur on Smith Mountain and Leesville Lakes each spring.

40. Article 411 of the license requires Appalachian Power to implement portions of its *Debris Management Plan*,⁴⁶ with certain modifications. The plan, as modified, requires Appalachian Power, from Memorial Day to Labor Day, to remove floating debris on an as-needed basis at public swimming beaches, project recreation facilities, and other areas (e.g., coves) as appropriate. In addition, from April through October, Appalachian Power must remove floating debris from the lakes on a regular schedule, which may be modified based on actual debris loading conditions. Debris removal will be limited to debris that presents a hazard to boating and that creates adverse aesthetic impacts.⁴⁷ Appalachian Power will continue to use its existing equipment, and in addition will use a contractor to assist in debris removal when necessary. Appalachian Power must also identify dedicated off-load and disposal sites for debris and obtain appropriate permission or ownership to ensure their continuing availability. If Appalachian Power is unable to obtain such sites, then it must identify alternative methods for removing debris from the debris-removal equipment for disposal.⁴⁸

⁴⁶ *Debris Management Plan*, filed July 15, 2008.

⁴⁷ Floating debris that is considered to be beneficial fish habitat will not be removed. Nor will Appalachian Power be responsible for removing debris that accumulates in and around private homes and businesses, but does not otherwise create a boating hazard or adverse aesthetic impacts.

⁴⁸ In addition, while debris diversion or collection devices are not feasible at this time, they may become feasible in the future, and Appalachian Power will therefore evaluate these measures during the term of the license. Under the plan, as modified, Appalachian Power will also provide education to the public regarding issues relating to

41. Appalachian Power must file an annual report that summarizes, for the preceding year: (1) the amount of debris it removed; (2) debris-removal efforts by others; (3) volunteer lake cleanup efforts; (4) education efforts; (5) proposed modifications to the plan; (6) description of any proposed actions that require Commission approval; and (7) documentation of consultation with the Debris Technical Review Committee.⁴⁹

42. On rehearing, the Committee contends that the license doesn't require enough of Appalachian Power. The Committee states that debris, natural and man-made, constantly enters the project reservoirs and creates navigational hazards for even the most experienced boaters. The project's waters are open to recreation throughout the year, and debris is highly correlated with high inflow events, and the basin's hydrologic record shows the highest inflow months are from January through April.⁵⁰ The Committee argues that debris removal is therefore needed during additional months of the year, especially after high-flow events. It points to a November 2009 storm as an example of the need for debris-removal measures other than between April and October.

43. Section 3.1 of the *Debris Management Plan*, required by Article 411, provides that Appalachian Power:

will continue to operate or provide for the operation of the existing skimmer and/or replacement equipment (debris removal equipment) as needed during the term of the license for the removal of floating debris during the months April through October on a regular schedule. *This schedule may be modified based on actual debris loading observed on either lake in consultation with [the Tri-County Commission] and [the Leesville Lake Association].* Scheduling of the debris removal equipment will be coordinated with [the Tri-County Commission] and the [Leesville Lake Association] in order to establish the most effective clean-up of debris for both lakes. [Emphasis added.]⁵¹

debris, and will file a report annually describing the previous year's actions relating to debris removal.

⁴⁹ The Debris Technical Review Committee will include representatives of the licensee, Tri-County Commission, Leesville Lake Association, Smith Mountain Lake Association, and Virginia Department of Game and Inland Fisheries.

⁵⁰ The Committee's Request for Rehearing at 27 (citing draft EIS at 63).

⁵¹ *Debris Management Plan*, n. 46, *supra*.

44. We agree with the Committee that there will be occasions during other times of the year, particularly during the high flow season of January through March, when Appalachian Power will need to remove debris. As noted above, while heavy recreational use generally occurs from April through October, boat fishing occurs throughout the year. Our reading of the above-quoted language is that the regular schedule may be modified during the April through October period, as well as extended to provide for debris removal outside the April through October window. We will modify Article 411 to make clear that Appalachian Power must address recreational hazards created by high flow events throughout the year, including not only the removal of floating debris immediately after the high flow event, but also removal of floating hazards created by dislodged debris on an ongoing basis after the event has occurred.

45. Similarly, public swimming beaches and project recreation facilities may be used by the public outside the Memorial Day to Labor Day window when Appalachian Power must control debris at these sites. We will therefore further modify Article 411 to require that Appalachian Power work with consulted entities to determine an appropriate schedule for monitoring and removing debris at public swimming beaches and project recreation facilities outside of the Memorial Day to Labor Day window.

46. The Committee also asserts that Appalachian Power's use of a single skimmer cannot effectively manage the debris load on the reservoirs. However, Appalachian Power's efforts are not limited to the use of a single skimmer. Article 411, as modified by this order, requires Appalachian Power to remove floating debris that creates a safety hazard or is aesthetically unpleasant. This obligation is not limited by the fact that Appalachian Power currently has only one skimmer. If additional equipment is needed for Appalachian Power to fulfill its obligations, then it will have to acquire such equipment, devise other removal methods, or hire an outside contractor to assist in the debris removal efforts.⁵² In fact, section 3.1 of the *Debris Management Plan* provides that Appalachian Power will annually establish a blanket contract with a contractor to assist in debris removal efforts when necessary.⁵³

⁵² The exact amount of debris that may enter the lake at any given time and the specific debris removal methods Appalachian Power will employ may vary, depending on the circumstances.

⁵³ Although section 3.1 of the plan states that Appalachian Power will "work with" the Tri-County Commission and the Leesville Lake Association to establish the contract, it is ultimately the licensee's responsibility to do so.

47. As noted above, Appalachian Power must file annual reports that include, among other things, proposed modifications to the plan and details of any proposed actions that require Commission approval.

48. The Committee states that the Tri-County Commission has been forced to take responsibility for much of the debris removal in the past and that it does not intend to do so through the new license term. It states that the Tri-County Commission has contributed to all the skimmer removal efforts by paying for the cost of the dumpsters and the disposal fees. In addition, the Tri-County Commission and the Leesville Lake Association are the entities that initially receive requests for debris removal, which are passed on to Appalachian Power.

49. The *Debris Management Plan* does not clearly identify who is responsible for disposal of the debris removed from the reservoirs, but clearly the licensee must not only remove the floating debris, but also must dispose of it properly. We will modify Article 411 to make this clear.⁵⁴

d. Aquatic Vegetation

50. Article 409 of the license requires Appalachian Power to implement its *Aquatic Vegetation Management Plan*, with several modifications. Under the plan, Appalachian Power will “manage and control non-native, aggressive invasive vegetation . . . to minimize impacts to fish, wildlife, habitats, and recreation.”⁵⁵ Appalachian Power will conduct a full-lake survey of the submerged aquatic vegetation at Smith Mountain Lake every five years and annual surveys of a lesser scope in the intervening four years.

51. Annually, Appalachian Power will survey all Beneficial Use Areas,⁵⁶ all areas previously identified with non-native, aggressive invasive aquatic vegetation, and other

⁵⁴ Similarly, in the event that the Tri-County Commission and the Leesville Lake Association (or any entity that would replace either or both) are unavailable to assist Appalachian Power in its debris removal efforts, then Appalachian Power would have to assume those duties.

⁵⁵ *Aquatic Vegetation Management Plan*, filed July 15, 2008, section 4.0.

⁵⁶ These areas include, public access ramps, the Smith Mountain Lake State Park (including beach), water withdrawals for public use, the Franklin County Park, designated water ski areas, sites set aside for future recreational uses, sensitive habitat areas for wildlife and fish, Impact Minimization Zones and Conservation/Environmental shoreline classifications identified in the project’s shoreline management plan, designated bank fishing and fishing pier areas, and commercial marinas and restaurants.

areas with non-native aquatic vegetation, as appropriate. Section 9.2 of the plan provides that:

These surveys will not only target areas more likely to become infested by non-native invasive species such as marinas, but also areas not likely to be noticed such as undeveloped shoreline at the State Park. These surveys will be conducted by on-water visual inspections and use of hydroacoustics, videography, throw rakes or other scientifically valid technique. A physical survey will also be conducted at each survey area to monitor changes in species presence and composition. In addition . . . Appalachian Power issued permits, resident reports . . . and . . . treatment data will be compiled and analyzed.

52. The annual surveys will be reviewed by the Aquatic Vegetation Technical Review Committee,⁵⁷ and, based on the results of the annual surveys, the Technical Review Committee can request additional surveys, if warranted.⁵⁸

53. Following each full-lake, five-year survey, Appalachian Power will prepare a report that includes: (1) results of the survey and of the past four yearly surveys; (2) updated vegetation maps; (3) a description of coordinated efforts to control non-native aggressive invasive aquatic vegetation during the preceding five years, including efforts in addition to those required by the license; (4) recommendations and proposed methods for controlling aquatic vegetation at the project; (5) any education efforts undertaken by Appalachian Power during the reporting period; and (6) documentation of consultation with the Aquatic Vegetation Technical Review Committee.

⁵⁷ The Technical Review Committee will include representatives from Appalachian Power, the Tri-County Commission, Smith Mountain and Leesville Lake Associations, and the Virginia Departments of Game and Inland Fisheries; Conservation and Recreation; Environmental Quality; and Agriculture and Consumer Services.

⁵⁸ See *Aquatic Vegetation Management Plan*, n. 55, *supra*, at section 9.0, which states that

If deemed necessary, this 5-year survey may be conducted more frequently. Reasons to perform this level of survey on a more frequent basis would include, but not be limited to, evidence of the major spread of a non-native, aggressive invasive [species].

54. In addition, Appalachian Power will establish a permitting program to issue permits to private entities for the control of aquatic vegetation within the Smith Mountain Project.

55. Under section 8.2 of the plan, if at any time the Virginia Department of Game and Inland Fisheries (Virginia DGIF) determines that hydrilla or other non-native aggressive invasive aquatic vegetation is significantly affecting fish and wildlife populations in the project area, Appalachian Power will cooperate with Virginia DGIF to identify and implement appropriate actions. As to who will bear the costs of these actions, section 8.2 provides that “the magnitude of potential actions required can not be identified at this time and therefore it is not feasible to clearly define Appalachian [Power]’s level of contribution to this effort.”⁵⁹

56. However, with respect to ensuring continued public access to the lake, the plan, as modified by Article 409, requires Appalachian Power to “control/treat invasive aquatic vegetation beds at public boat ramps and other public areas (e.g., county and state parks, swimming areas, etc.), where determined appropriate by the Aquatic Vegetation Technical Review Committee.”

57. On rehearing, the Committee reiterates its earlier arguments that the aquatic vegetation measures in Appalachian Power’s license are insufficient to control the spread of non-native aggressive invasive vegetation in Smith Mountain Lake over the license term. In particular, the Committee takes issue with the plan’s requirement for a full survey every five years, asserting that the final EIS and the license order did not explain why the Committee’s evidence is not sufficient to support a finding that annual full-lake surveys should be required under the new license. Moreover, the Committee argues that the licensee’s obligation to control non-native vegetation is too limited, and the cost of controlling aggressive invasive species should largely be the responsibility of Appalachian Power. The Committee also asserts that the measures required by this license (i.e., surveys and limited treatment) rely at least in part on an assumption that the Tri-County Commission will continue to its ongoing monitoring and treatment activities, and if the Tri-County Commission discontinues these activities, Smith Mountain Lake will become infested with non-native vegetation.

58. With respect to requiring a full-lake survey at five-year intervals, as explained in the final EIS, while staff did not disagree that annual full-lake surveys could be helpful,

⁵⁹ Section 8.2 states that, in addition to the requirements of the license, Appalachian Power is also willing to partner with the Commonwealth of Virginia and the Tri-County Commission on the control/removal of non-native aggressive invasive aquatic vegetation at other sites in the lake.

staff concluded that a full-lake survey every five years, with more limited surveys in the intervening years, should be adequate, especially given that, as noted above, the plan required by the license provides the flexibility to institute annual full-lake surveys in the future, if warranted.⁶⁰

59. Ideally, the first line of defense should be prevention, then early detection with rapid assessment and response. We believe that the limited yearly surveys will allow for early detection, and the consultation and reporting requirements of the plan will ensure a rapid assessment and, if warranted, implementation of treatment or control measures at public recreation sites and to protect fish and wildlife. However, there are multiple causes for the presence of invasive species in a lake, and Appalachian Power should not bear the costs and responsibility alone.⁶¹ It is but one of many entities that will need to cooperate to address, in a comprehensive manner, non-native aggressive invasive aquatic vegetation at Smith Mountain Lake, and the measures required by this license will ensure that Appalachian Power coordinates its efforts with other stakeholders, including federal, state and local government agencies and private landowners.

60. The Commission is hopeful that the local governments the Committee represents will continue to participate in managing invasive aquatic vegetation. If, however, the Tri-County Commission opts to discontinue its aquatic vegetation activities, which could exacerbate or promote the spread of problematic vegetation in areas that presently do not affect project purposes, additional measures may be warranted. Therefore, we will add the following language to Article 409 to reserve the Commission's authority to order Appalachian Power to implement any additional reasonable measures that may be necessary during the term of the license:

⁶⁰ See final EIS at D-15. The Committee cites to two other projects to support its proposition that yearly surveys are necessary. Specifically, it states that in 1989, 25 acres of hydrilla were identified in Lake Gaston. No action was taken. In 1991, just two years later, 560 acres of hydrilla were identified. On Lake Seminole in Georgia, hydrilla coverage increased 400 percent between 1983 and 1992. However, under the plan required by this license, if non-native, aggressive invasive species are found, then that location will be monitored annually, and measures will be implemented, as necessary.

⁶¹ Indeed, recognizing the high cost of, and the difficulty in, controlling non-native invasive aquatic vegetation throughout a lake, the Commission often requires its licensees to monitor non-native invasive aquatic vegetation and then to cooperate with appropriate agencies to implement reasonable control measures. See, e.g., *Rhineland Paper Co. v. FERC*, 405 F.3d 1 (D.C. Cir. 2005); *PCA Hydro, Inc.*, 111 FERC ¶ 61,191 at P 18-22 (2005).

If at any time during the term of the license, the Virginia Department of Game and Inland Fisheries or the Aquatic Vegetation Technical Review Committee demonstrates that invasive species are significantly affecting fish and wildlife population or recreation, respectively, and that additional surveys and/or control measures are needed, the Commission may direct Appalachian Power, after notice and opportunity for hearing, to undertake further reasonable measures to control non-native, aggressive invasive species in project waters.

e. **Smith Mountain Fire/Rescue Company**

61. The Committee argues that the license order failed to address the Committee's request that Appalachian Power contribute \$125,000 yearly to support fire and rescue operations of the Smith Mountain Fire/Rescue Company to compensate them for the work that it claims is related to the project.⁶² The Committee also asks that Appalachian Power be required to construct a pier for the mooring and servicing of the fire boats for the Smith Mountain Fire/Rescue Company.

62. The Committee argues that the local taxes Appalachian Power pays do not sufficiently compensate the counties for the services provided. According to the Committee, this is because Appalachian Power negotiated extremely low fixed tax assessments for its flowage easements in each county.

63. We deny rehearing on this issue. The Commission has rejected proposals to require licensees to pay for local personnel.⁶³ The general mandates of license articles and our regulations do not require a licensee to provide public safety services, nor do they require a licensee to compensate local jurisdictions for the costs of such services. Rather, local authorities are responsible for providing safety services.⁶⁴ As for the Committee's

⁶² The Committee states that the Smith Mountain Fire/Rescue Company provides the following services: structure, boat, and brush fire response; water rescue; body recoveries; missing person searches; emergency medical services near and on the water; removal of large floating debris that presents a hazard to navigation (e.g., logs, boats, billings, dead animals, barrels, large fuel tanks (e.g., 500 gallons), floating docks); haz-mat containment; and stand-by for public events.

⁶³ See, e.g., *County of Butte, California v. California Department of Water Resources (Butte County)*, 128 FERC ¶ 61,068, at P 17-21 and cases cited therein (2009), *reh'g denied*, 129 FERC ¶ 61,133, at P 19-23 (2009).

⁶⁴ See *Butte County*, 129 FERC ¶ 61,133 at P 19. In any event, the Commission is concerned with protecting resources through specific, enforceable provisions, rather than

(continued...)

contention that the local taxes Appalachian Power pays do not sufficiently compensate the counties for the services provided, that is a matter for state or local authorities.⁶⁵ The Commission is not a taxing authority.⁶⁶ We therefore deny rehearing on this issue.⁶⁷

requiring a licensee to provide funding for agency personnel, because the Commission would have no way of assuring that the activity paid for by the licensee would actually serve a project purpose or ameliorate a project effect. *Settlements in Hydropower Licensing Proceedings under Part 1 of the Federal Power Act*, 116 FERC ¶ 61,270, at P 24 (2006) (*Settlement Policy*). See *Avista Corporation*, 127 FERC ¶ 61,265, at P 196 (2009); *Public Utility District No. 2 of Grant County, Washington*, 123 FERC ¶ 61,049, at P 79 (2008).

⁶⁵ Based on the 2007 *Socioeconomic Study* conducted by Appalachian Power as part of the integrated pre-licensing process, project area businesses generated \$32.1 million in revenues in 2005, including property taxes paid on structures and lands in the project area, state and local sales and use taxes generated by spending by out-of-region visitors, other revenue generated at the local level, and a portion of state and federal aid paid to local jurisdictions. The same year, public expenditures associated with the project area totaled \$18.8 million, yielding a net fiscal effect of \$13.4 million. Franklin and Bedford Counties collected \$8,490,281 and \$3,495,738, respectively. *Socioeconomic Study* at 52.

⁶⁶ See *Butte County*, 129 FERC ¶ 61,133 at P 25.

⁶⁷ The Committee also seems to argue that, for safety reasons, the license should require a water management protocol that keeps the level of Smith Mountain Lake from falling below 792.0 National Geodetic Vertical Datum (NGVD). We disagree. Under the new license, the Smith Mountain development will operate as designed, with a 2-foot drawdown (i.e., water levels of Smith Mountain Lake will vary between 795.0 and 793.0 feet NGVD). However, during periods of low flow or drought, the lake level can fall below 793.00, and even below 792.0 feet NGVD. The Committee argues that 792.0 is the lowest level at which boat launch ramps and marina facilities are usable. However, adopting a protocol that would keep the lake level at or above 792.0 NGVD during low flow or drought periods would result in a violation of the project's water quality certification. Thus, we cannot incorporate the Committee's water management system into the license. Moreover, even if we could, we would not do so. As explained in detail in the final EIS (at 305-307), the required protocol strikes an appropriate balance of, among other things, recreation at Smith Mountain Lake and aquatic resources in the downstream Roanoke River.

f. Aids to Navigation

64. The *Aids to Navigation Management Plan*, which was modified and approved by Article 412, explains that there are two approaches for developing navigational aids on bodies of water. One is to identify a defined waterway navigable under various water levels. Another approach is to mark every obstruction on a body of water.⁶⁸ The existing navigation aids on Smith Mountain Lake consist of aspects of both approaches: there are defined navigable channels, as well as markers to identify obstructions outside the channels. Historically, the Tri-County Commission has overseen the system of navigation aids on Smith Mountain Lake.

65. As pertinent here, the modified *Aids to Navigation Management Plan* requires Appalachian Power to assume responsibility for marking and maintaining the aids to navigation within the defined navigable channel on Smith Mountain Lake, and to obtain approval of the navigation aids from the U.S. Coast Guard.⁶⁹ The Tri-County Commission, if it chooses, may continue to mark obstructions outside of the defined waterway designated by Appalachian Power.⁷⁰

66. The plan also requires that Appalachian Power conduct annual inspections and consult with the Aids to Navigation Technical Committee in developing recommendations and proposed solutions regarding maintenance of the channel navigational system.⁷¹

⁶⁸ See *Aids to Navigation Management Plan*, filed July 15, 2008, section 4.0.

⁶⁹ Smith Mountain Lake is considered navigable waters of the United States, and thus falls under the jurisdiction of the Coast Guard. See *State Water Control Board v. Hoffman*, 574 F.2d 191 (4th Cir. 1978). In addition, standard Article 25 of the license states that the licensee “shall construct, maintain, and operate at its own expense such lights and other signals for the protection of navigation as may be directed by . . . the Coast Guard” *Appalachian Power Co.*, 129 FERC ¶ 62,201 at 64,606.

⁷⁰ We note, however, if it does continue to do so, it falls under the jurisdiction of the Coast Guard and will need to comply with the Coast Guard’s regulations.

⁷¹ The Aids to Navigation Technical Committee will include representatives of the licensee, the Tri-County Commission, Virginia DGIF, the Coast Guard, the Leesville Lake Association, and the Smith Mountain Volunteer Marine Fire Department.

67. On rehearing, the Committee argues that the new license will not protect boating or overall safety of the project waters because it does not address the need for shoal hazard markers outside the designated waterway. It contends that navigational markers are necessary to provide boater safety on a lake as popular as Smith Mountain Lake.⁷² The Committee asserts that Appalachian Power's obligation under the new license should not be limited to maintaining the designated channel, but that it also should be responsible for marking obstructions even if they do not occur within the designated channel.

68. We disagree. Under Article 412, Appalachian Power is responsible for marking a defined navigation channel consistent with the Coast Guard's regulations, and it will obtain Coast Guard approval for markers for the main navigational channels. These main navigational channels are where the majority of public use occurs. Coves and tributaries that are outside the navigational channel, and used for the most part by homeowners accessing their docks, should not be included in the areas under Appalachian Power's responsibility. Indeed, the Coast Guard's regulations regarding aids to navigation state, in pertinent part:

The aids to navigation system is not intended to identify every shoal or obstruction to navigation which exists in the navigable waters of the United States, but rather provides for reasonable marking of marine features as resources permit. The primary objective of the aids to navigation system is to mark navigable channels and waterways, obstructions adjacent to these waterways, and obstructions in areas of general navigation which may not be anticipated. Other waters, even if navigable, are generally not marked.⁷³

The specific areas on the lakes that will come under Appalachian Power's purview will be determined in consultation with the Coast Guard.

g. Roanoke Logperch

69. Section 7(a)(2) of the Endangered Species Act of 1973 (ESA)⁷⁴ requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse

⁷² The Committee states that Smith Mountain Lake has more boating traffic than any other Virginia lake, and that usage has increased by more than 45 percent since 1995.

⁷³ 33 C.F.R. § 62.1 (2010).

⁷⁴ 16 U.S.C. § 1536(a)(2) (2006).

modification of designated critical habitat. The endangered Roanoke logperch (*Percina rex*) currently exists in isolated populations, in tributary streams that are, for the most part, not influenced by the operation of the project. However, a population of logperch in the Pigg River is located a short distance upstream of the project's operational zone of influence and individuals of the species may use habitat that is in that area. In addition, the Leesville development's auto-cycling mode of operation affects water levels in the lower reaches of Goose Creek, a tributary of the Roanoke River which also harbors a population of logperch.⁷⁵

70. In the final EIS, Commission staff determined that relicensing the Smith Mountain Project, with its recommended measures, is not likely to adversely affect the Roanoke logperch.⁷⁶ The U.S. Fish and Wildlife Service (FWS) concurred with this finding by letter filed May 6, 2009. On November 16, 2009, FWS filed additional information, explaining that the effects of relicensing the project, with the recommended measures, on Roanoke logperch that may enter the waters upstream or downstream of the project "are expected to be insignificant and discountable."⁷⁷

71. Consistent with the measures recommended by the resource agencies and Commission staff, Article 408 of the license requires Appalachian Power each year to consult with FWS and Virginia DGIF to develop projects related to the recovery of the Roanoke logperch in the upper Roanoke Watershed. These projects are to include activities related to habitat restoration and/or reintroduction of the species⁷⁸ and must be submitted for prior Commission approval. The proposed projects must include an implementation schedule, criteria for evaluating their success, and a map identifying their locations. The Commission reserves the right to require changes to the annual proposal.

72. Article 408 further requires that, every five years, the licensee shall file, for Commission approval, a report that: (1) describes the projects completed during the previous five calendar years; (2) describes the effectiveness of the efforts, including the criteria used for determining their success; (3) identifies what projects might be planned for the next reporting period; (4) includes any recommendations for changes to the

⁷⁵ See final EIS at 143.

⁷⁶ Final EIS at 6 and 143-150.

⁷⁷ See filing of November 10, 2009.

⁷⁸ The proposed projects must be consistent with the types of measures and other activities described by the Commission in its Settlement Policy. *Settlement Policy*, 116 FERC ¶ 61,270.

required measures; and (5) includes documentation of consultation with the agencies. The article reserves the Commission's right to require changes to the measures.

73. On rehearing, the Committee objects to the requirements of Article 408. It claims that the license is not clear as to whether Appalachian Power will be required to provide a firm, annual funding commitment of \$50,000 for logperch measures. In addition, it asserts that Article 408 is inadequate because it does not include specific measures for the Roanoke logperch and instead defers the identification of such measures to post-licensing.

74. With respect to the question of how much Appalachian Power must spend each year on logperch measures, the license does not establish a specific amount. While it is estimated that the cost to Appalachian Power will be approximately \$50,000 per year,⁷⁹ a licensee's obligation cannot be limited by a particular dollar figure. Rather, the Commission will take an independent look at the proposed measures and their costs to determine if the proposals are reasonable.⁸⁰ If a measure is required, it will be because the Commission has determined that the measure is required to meet the FPA's comprehensive development standard.⁸¹ As to the Committee's objection that Article 408 does not identify specific measures to be implemented, the approach taken by the license will provide Appalachian Power, FWS, and Virginia DGIF the flexibility to develop appropriate protection and enhancement measures for the Roanoke logperch through adaptive management.⁸²

75. More broadly, the Committee argues that the Commission erred in finding that relicensing the project is not likely to adversely affect the Roanoke logperch. The Committee contends that we should have entered into formal consultation with FWS, and that the analysis in the EIS used an improper standard. Rather than finding that the measures in the license would enhance baseline conditions for the logperch (i.e., marginal benefit), the Committee asserts that we must address whether the measures would contribute to the long-term survival and recovery of the species.

⁷⁹ Final EIS at 151, 251.

⁸⁰ See *Settlement Policy*, 116 FERC ¶ 61,270 at P 21.

⁸¹ *Id.*

⁸² With the consultation and reporting procedures in Article 408, the Commission will be able to adapt the logperch program to accommodate changed circumstances, unforeseen conditions, or new technology over the 30-year term of the license.

76. We deny rehearing on this issue. ESA and its implementing regulations require that we evaluate the potential environmental impacts of the proposed action on listed species. If we find that the proposed action is likely to adversely affect a listed species (i.e., jeopardize the continued existence of a listed species or result in the destruction or adverse modification of the species' critical habitat), then we must engage in formal consultation, and consider the factors proffered by the Committee.⁸³ If on the other hand we find, as we did here, that the proposed action is not likely to adversely affect the listed species, and if, as it did here, FWS concurs with this finding, then no further action is necessary.⁸⁴ Contrary to the Committee's arguments, there is no requirement in the statute or the implementing regulations to undertake formal consultation under the circumstances in this case.⁸⁵

E. Compliance with the National Environmental Policy Act (NEPA)

77. On rehearing, the Committee contends that the final EIS violates the requirements of NEPA⁸⁶ because it did not: (1) include the Committee's alternative environmental measures as a discrete alternative; and (2) provide adequate analysis of the new license's direct, indirect, and cumulative impacts on the environment because it did not quantify trends and end conditions over the next 30 years.

78. We deny rehearing on this issue. Section 102(2)(E) of NEPA⁸⁷ requires action agencies to take a "hard look" at the potential environmental consequences of their proposed action.⁸⁸ However, in carrying out their NEPA responsibilities, federal

⁸³ The cases the Committee relies on address situations where there is a finding that the proposed action is likely to adversely affect the listed species and the agency enters into formal consultation.

⁸⁴ See joint regulations implementing the provisions of ESA, 50 C.F.R. § 402.13(a) (2010).

⁸⁵ The Committee included in its rehearing request (presumably for informational purposes) a copy of a petition to FWS for rehearing of its May 1, 2009 written concurrence of the Commission's determination that the project is not likely to adversely affect the Roanoke logperch.

⁸⁶ 42 U.S.C. §§ 4231 *et seq.* (2006).

⁸⁷ 42 U.S.C. § 4332(2)(E) (2006).

⁸⁸ *Committee for Auto Responsibility v. Solomon*, 603 F.2d 992, 1002 (D.C. Cir. 1979), *cert. denied*, 445 U.S. 915 (1980).

agencies are governed by the rule of reason.⁸⁹ The range of alternatives that must be considered is a matter within an agency's discretion.⁹⁰ The discussion of alternatives need not be exhaustive and need only provide sufficient information to permit a reasoned choice of alternatives, i.e., "reasonable" alternatives.⁹¹ There is no requirement to examine each proposed mitigation or enhancement measure (or groups of such measures submitted by an entity) as a separate alternative or alternatives.⁹²

79. The final EIS analyzed the effects of continued project operation and recommended conditions for a new license for the project. In addition to Appalachian Power's proposed action, the final EIS considered three alternatives: (1) the proposed action with mandatory conditions (e.g., water quality certification conditions); (2) the proposed action with mandatory conditions and additional staff-recommended measures (staff alternative); and (3) no-action.

80. The staff alternative included Appalachian Power's proposals, with modifications, to implement measures for: (1) erosion and sedimentation; (2) water management; (3) water quality monitoring; (4) Roanoke logperch enhancement; (5) habitat management; (6) aquatic vegetation management; (7) recreation; (8) navigational aids; (9) debris management; (10) shoreline management; and (11) historic properties management.

81. The additional alternatives that the Committee argues we should have examined are essentially variations of the alternatives analyzed, and the approach advocated by the Committee would take the environmental analysis to a level of detail not required by

NEPA.⁹³ The final EIS discussed the Committee's proposed license articles and alternative mitigation measures in detail as they applied to the particular resource at issue. To the extent the final EIS did not specifically adopt certain measures recommended by

⁸⁹ *Natural Resources Defense Council v. Morton*, 458 F.2d 827, 837 (D.C. Cir. 1972).

⁹⁰ *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 551-52 (1976).

⁹¹ See section 102(2)(C)(iii) of NEPA, 42 U.S.C. § 4332(2)(C)(iii) (2006); and *North Carolina v. FPC*, 533 F.2d 702, 707 (D.C. Cir. 1976)(citing *NRDC v. Morton*, 458 F.2d 827 (D.C. Cir. 1972)).

⁹² *Idaho Power Co.*, 110 FERC ¶ 61,242 at P 80-85 (2005).

⁹³ If an alternative is not reasonable, it may be eliminated from further study. *Rochester Gas and Electric Corporation*, 100 FERC ¶ 61,113 (2002).

the Committee and others into the staff alternative, the reasons for not adopting those recommendations were discussed. As is our practice, individual recommendations were grouped into general alternatives for purposes of the analysis.⁹⁴ We conclude that the analytical approach taken in the EIS, which is the same approach the Commission has employed for decades, considered a sufficient range of reasonable alternatives and enabled us to make an informed decision.

82. As to the Committee's argument that the EIS analysis of the new license's direct, indirect, and cumulative impacts on the environment is inadequate because it failed to forecast trends and end conditions over the next 30 years, NEPA does not require such precision.⁹⁵ The adequacy of an EIS is determined by a "rule of reason," which requires only a "reasonably thorough discussion of the significant aspects of the probable environmental consequences."⁹⁶ We believe that standard has been met.⁹⁷

The Commission orders:

(A) The request for rehearing filed January 14, 2010, by the Tri-County AEP Relicensing Committee, is granted as set forth below, and is denied in all other respects.

(B) Appalachian Power's motion for leave to file an answer to the Tri-County AEP Relicensing Committee's request for rehearing is denied, and its answer is rejected.

(C) The Tri-County AEP Relicensing Committee's answer to Appalachian Power's motion is dismissed as moot.

(D) The first paragraph of license Article 402, *Erosion Monitoring Plan*, is revised by adding a new subparagraph (c) to read as follows:

⁹⁴ *Idaho Power Co.*, 110 FERC ¶ 61,242 at P 80-85.

⁹⁵ *Id.* at P 89-95.

⁹⁶ *Columbia Land Basin Protection Ass'n v. Schlesinger*, 643 F.2d 585, 592 (9th Cir. 1981), quoting *Trout Unlimited v. Morton*, 509 F.2d 1276, 1283 (9th Cir. 1974).

⁹⁷ Concerning speculative and unknown information, "NEPA does not require a 'crystal ball' inquiry An EIS is required to furnish only such information as appears to be reasonably necessary under the circumstances for evaluation of the project rather than to be so all-encompassing in scope that the task of preparing it would become either fruitless or well nigh impossible." *Natural Resources Defense Council v. Callaway*, 524 F.2d 79, 88 (2d Cir. 1975).

Article 402. Erosion Monitoring Plan. Within 90 days of the effective date of this license, the licensee shall file with the Commission, for approval, a final erosion monitoring plan that addresses erosion monitoring and remediation, as appropriate, at the Smith Mountain Project. The plan shall include the provisions of the proposed *Erosion Monitoring Plan*, filed July 15, 2008, with, at a minimum, the following revisions:

- (a) a provision to monitor shoreline locations that represent a full range of scarp heights;
- (b) monitoring to be conducted, and a report to be filed, every 5 years; and
- (c) a provision to file, for Commission approval, any measures proposed in the reports to address project-related effects of erosion.

(E) The first paragraph of license Article 403, *Sedimentation Monitoring Plan*, is revised by adding a new subparagraph to read as follows:

Article 403. Sedimentation Monitoring Plan. Within 90 days of the effective date of this license, the licensee shall file with the Commission, for approval, a final sedimentation monitoring plan that addresses sedimentation monitoring and remediation measures, as appropriate, at the Smith Mountain Project. The plan shall include the provisions of the proposed *Sedimentation Monitoring Plan*, filed July 15, 2008, with, at a minimum, the following revisions:

- (a) a provision to monitor and address any adverse effects of sedimentation on project operation;
- (b) the types of actions Appalachian Power would implement (e.g., methods for dredging), and under what conditions Appalachian Power would propose dredging at a project recreation site;
- (c) Craddock Creek, Mitchells Cove, and areas near Mariners Landing in the list of areas to be monitored under the plan; and
- (d) the deletion of section 2 (Formation of a Basin-wide Watershed Committee) from the plan.

(F) License Article 409, *Aquatic Vegetation Management Plan*, is revised by adding the following paragraph at the end of the article:

If at any time during the term of the license, the Virginia Department of Game and Inland Fisheries or the Aquatic Vegetation Technical Review Committee demonstrates that invasive species is significantly affecting fish and wildlife populations or recreation, respectively, and that additional surveys and/or control measures are needed, the Commission may direct,

Appalachian Power, after opportunity for public comment, to undertake further reasonable measures to control non-native, aggressive invasive species in project waters.

(G) License Article 411, *Debris Management*, is revised to read as follows:

Article 411. Debris Management. Upon the effective date of this license, the licensee shall implement sections 3, 4, and 5 of the *Debris Management Plan*, filed July 15, 2008, with the following modifications. The licensee shall be responsible for removing, and properly disposing of, debris from the project reservoirs that creates safety hazards, interferes with public access to public recreation facilities, or results in adverse aesthetic impacts, The licensee must address, throughout the year, recreational hazards created by floating debris resulting from high flow events, including not only the removal of floating debris immediately after the high flow event, but also removal of floating hazards created by dislodged debris on an ongoing basis after the event has occurred.

The licensee shall consult with the Debris Technical Review Committee and develop a procedure and schedule for monitoring and controlling debris at public swimming beaches, the project recreation facilities (i.e., the public recreation areas maintained by the Virginia Department of Game and Inland Fisheries and Appalachian Power), and other areas (e.g., coves), as appropriate. This monitoring and control program shall be in effect, at a minimum, from Memorial Day to Labor Day for purposes of removing debris on an as-needed basis.

The schedule in section 3.1 of the *Debris Management Plan* for removing floating debris on a regular basis during the months of April through October may be modified in consultation with the specified entities to provide for more frequent removal or for a longer removal period.

The approved *Debris Management Plan* may not be amended without prior Commission approval.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.