

UNITED STATES OF AMERICA 129 FERC ¶ 62,201
FEDERAL ENERGY REGULATORY COMMISSION

Appalachian Power Company

Project No. 2210-169

ORDER ISSUING NEW LICENSE

(December 15, 2009)

Article 408. Roanoke Logperch Enhancement Measures. The licensee shall, in consultation with the U.S. Fish and Wildlife Service (FWS) and the Virginia Department of Game and Inland Fisheries (Virginia DGIF), develop projects related to the recovery of the Roanoke logperch (*Percina rex*) in the upper Roanoke Watershed. These projects shall include activities related to habitat restoration and/or reintroduction of the species.

The licensee will meet annually (by February 28th) with FWS and the Virginia DGIF to identify projects to be completed for the following calendar year. Once identified, the proposed projects will be filed for Commission approval. The projects identified in the annual report to the Commission will be consistent with the types of measures and other activities described by the Commission in its Settlement Policy (*Settlements in Hydropower Licensing Proceedings under Part I of the Federal Power Act*, 116 FERC ¶ 61,270 (2006)). The licensee shall include, with its proposal, details regarding the projects, a schedule for implementing the projects, criteria for evaluating their success, and a map identifying their locations. The proposal also shall include the record of correspondence with the resource agencies, including: (a) copies of letters, emails, and phone logs; and (b) a summary of the annual meeting.

The Commission reserves the right to require changes to the annual proposal. Implementation of the proposed measure(s) shall not begin until the licensee is notified by the Commission that the measure(s) are approved. Upon Commission approval, the licensee shall implement the measures in its proposal, including any changes required by the Commission.

Beginning May 1, 2016, and every 5 years thereafter, the licensee shall file for Commission approval, a report describing the projects completed during the previous five calendar years. The report shall: (a) identify the projects completed; (b) describe the effectiveness of the efforts, including the criteria used for determining their success; (c) identify what projects might be planned for the next reporting period; and (d) include any recommendations for changes to the measures required by this article.

The licensee shall prepare the 5-year report in consultation with FWS and the Virginia DGIF. The report shall include documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how their comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the measures required by this article based on the results of the report. Implementation of the measures shall not begin until the licensee is notified by the Commission that the measures are approved. Upon Commission approval, the licensee shall implement the measures, including any changes required by the Commission.

APPALACHIAN POWER COMPANY
SMITH MOUNTAIN PROJECT NO. 2210

ROANOKE LOGPERCH PLAN

JULY 2008

INTRODUCTION

The purpose of the Roanoke Logperch Plan (Plan) is to outline how Appalachian Power Company (Appalachian) intends to cooperate in the enhancement of logperch habitat that may have been lost or affected by the construction of the Smith Mountain Project (Project). The U.S. Fish and Wildlife Service (USFWS) states in its letter to the Federal Energy Regulatory Commission (FERC) dated March 3, 2008 that the Project is not currently adversely affecting any federally listed species or adversely modifying critical habitat and no further Section 7 consultation is required. However, USFWS believes that the construction of the project has contributed to the species degradation. As such, Appalachian has prepared this plan to describe Appalachian's proposed actions under the new license to help recover this species and its habitat.

BACKGROUND

Appalachian conducted a study of the Roanoke logperch as part of the relicensing efforts for the Project. Agency comments on the Roanoke Logperch Study were provided by Virginia Department of Game and Inland Fisheries (VDGIF letter dated January 30, 2008) and from USFWS (letter dated March 3, 2008). Comments were also provided by Franklin County by letter dated April 17, 2007. The USFWS states that the Project is not currently adversely affecting federally listed species or adversely modifying critical habitat. However, both agencies believe there is a clear nexus between the construction of the dams and reservoirs and the listing of the Roanoke logperch. According to the VDGIF, the Smith Mountain and Leesville dams and reservoirs have displaced over 85 miles of what they believe was former habitat in the center of the Roanoke logperch range including portions of the Roanoke, Pigg and Blackwater Rivers, and Gills Creek. The agencies also believe that the Project serves to physically and genetically isolate logperch populations in the upper Roanoke, Pigg and middle Roanoke Rivers. Because of this, the agencies are recommending that Appalachian assist in measures to help recover this species and its habitat.

MEASURES TO RECOVER SPECIES AND HABITAT

To assist with recovery of the Roanoke logperch, Appalachian is proposing the following under its new license:

1. Appalachian will become an active partner with the USFWS and VDGIF in the development, funding and completion of projects related to the recovery

of the Roanoke logperch in the upper Roanoke River watershed. These projects will include habitat restoration and reintroduction of the species. In 2007, the FWS completed a Roanoke logperch 5-year status review (http://ecos.fws.gov/docs/five_year_review/doc113.pdf). This document identifies several measures to restore logperch habitat and recover this species. In addition, the letter from the USFWS dated June 10, 2008 to the Commission and the VDGIF's letter dated July 9, 2008 to Appalachian details potential projects to be considered. Copies of these letters are included in Appendix A of this plan and will be used when consulting with VDGIF and USFWS regarding proposed projects. A map of the Upper Roanoke River Watershed is also located in Appendix A.

2. Appalachian will meet annually by February 28th with USFWS and VDGIF to identify projects to be completed for the following year. Consultation will begin in 2010 for implementation starting in 2011. Once identified, the proposed projects will be forwarded to the Commission for review and approval. Included in the proposal will be details regarding the project, criteria for evaluating its success and a map detailing the location of the projects.
3. A report detailing the recovery efforts will be filed with the FERC every five years. The report will include a list of projects completed during the previous five year period and consultation with USFWS and VDGIF regarding the effectiveness of these efforts. This report will: (a) include a list of projects completed and a description of the effectiveness of those efforts including the criteria used for determining the success of the habitat enhancement efforts; (b) identify what, if any, projects may be planned for the next reporting period; and (c) any recommendations for changes to the plan that require Commission review and approval.
4. Appalachian will provide matching funds each year to be used for stream restoration and stocking projects that would benefit Roanoke logperch in the upper Roanoke River watershed. Funds may be used to provide the 25% landowner cost-share money in stream restoration projects (LIP,BMP, CREP, etc.) within the upper Roanoke River watershed or funds may be appropriated towards supporting the reintroduction of logperch or other watershed restoration projects in the upper Roanoke River watershed as may be identified by a committee of VDGIF , USFWS and Appalachian.

COSTS ASSOCIATED WITH IMPLEMENTATION OF PLAN

Appalachian is anticipating that the costs associated with the development, funding and completion of projects related to the recovery of the Roanoke logperch will be \$50,000 per year. Appalachian will provide these funds each year. Funds may be accumulated

over several years in order to complete larger projects as identified by the committee of VDGIF, USFWS and Appalachian.

Appendix A

June 10, 2008 letter from U.S. Fish and Wildlife Service containing potential Roanoke Logperch Restoration Measures

July 9, 2008 letter from Virginia Department of Game and Inland Fisheries containing potential Roanoke Logperch Restoration Measures

Map of Upper Roanoke River Watershed



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Ecological Services
6669 Short Lane
Gloucester, VA 23061

June 10, 2008

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Attn: Allan Creamer

Re: Appalachian Power Company
Smith Mountain Project
No. 2210 – Application for New
License

Dear Ms. Bose:

This letter regards the U.S. Fish and Wildlife Service's (Service) review of the Appalachian Power Company (AEP) Application for New License that was submitted to the Federal Energy Regulatory Commission (FERC) by cover letter dated March 26, 2008. Our comments herein are limited to the Roanoke Logperch (*Percina rex*) Plan dated March 2008 (Plan) that is located on the last two pages of Volume VII of the Application for New License. These comments address the Roanoke Logperch Plan only. This letter constitutes the comments of the U.S. Fish and Wildlife Service (Service) and is submitted in accordance with provisions of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Second page, item # 1, last sentence: The Service recommends broadening the language in this sentence to allow AEP, the Virginia Department of Game and Inland Fisheries (VDGIF), and the Service more flexibility in assigning funds for Roanoke logperch recovery. While “. . . habitat restoration and reintroduction of the species” are important, they should be two of many options to assist with recovery. The Service recommends that the last sentence of item #1 be replaced with the following text:

These projects may include, but will not necessarily be limited to, habitat restoration, reintroduction, population augmentation, research, watershed planning, and habitat monitoring.

The following information on ongoing projects was provided in our March 3, 2008 letter to you. We have included it in italics:

Individual Recovery Projects in Need of Funding

The Service and/or partners are currently working on numerous efforts to recover the Roanoke logperch. Funding assistance is needed with all of the recovery actions listed below (not listed in any order of preference):

- o The Service and partners are currently planning to reintroduce logperch to suitable habitat where they are not currently found. These populations will be monitored for a minimum of five years. These efforts could greatly expand the range of the logperch and help recover the species. Estimated Cost: \$200,000 over 5 years.*
- o The Virginia Department of Game and Inland Fisheries currently employs a full-time biologist who is working to restore stream habitat in the upper Roanoke River to benefit the Roanoke logperch and water quality. Funding is needed to employ another biologist over the next 10 years to expand the restoration of logperch habitat in the Upper Roanoke River watershed. Estimated Cost: \$750,000 over 10 years.*
- o The Service is currently working on the demolition of Wasena Dam on the mainstem Roanoke River in Roanoke, Virginia. The project involves the removal of 255 linear feet of abandoned 60-inch sewer line and casement impounding the Roanoke River. The purpose of the project is to restore fish passage and habitat for the Roanoke logperch. Estimated Funds Needed: \$1 million*
- o Funding is currently needed to provide the 25% landowner cost share for ongoing stream restoration efforts. This could greatly increase land enrollment to clean up the Upper Roanoke River watershed. Estimated Cost: \$25,000 per year over the life of the license adjusted for the cumulative consumer price index.*
- o The Service and partners are currently working to identify and reduce major sources of sedimentation in the Pigg River. To identify these sources, we plan to contract with a consulting firm and establish permanent water quality monitoring stations at strategic locations in the Pigg River and tributaries. Remediation of sediment sources will follow. Estimated Cost: \$350,000 over 5 years.*
- o Efforts are currently underway to remove Power Dam on the Pigg River. Removal of the dam would re-connect up and downstream Roanoke logperch populations and promote recovery. Dam removal would provide water quality benefits and have a beneficial economic impact on Franklin County. An Environmental Assessment is currently being prepared and dam destruction should occur soon thereafter. Dam failure is a possibility and would have significant financial implications if it were to occur. Funding is needed to help*

complete the environmental review process, remove the dam, and monitor Roanoke logperch locations, post-removal. Estimated Funds Needed: \$500,000

- o *The Environmental Protection Agency and Virginia Department of Environmental Quality have completed a bacterial Total Maximum Daily Load (TMDL) document for the Pigg River, and Snow, Story, and Old Womans Creeks in Franklin and Pittsylvania Counties, Virginia (<http://www.deq.virginia.gov/tmdl/apptmdls/epa/epapigg.pdf>). TMDL implementation is currently underway to reduce bacterial sources to these waterways. Estimated Cost: \$700,000 per year for 5 years.*

The Service would be glad to provide additional information on any of the above recovery initiatives.

The Service continues to solicit funding for these projects and others that are currently in the planning stages. All costs are estimated and most of these projects could be completed over time with smaller annual contributions.

Second page, item # 2: The Service recommends that the following sentence be added to item # 2:

Projects selected for funding during a given year will be determined by mutual agreement of a three-party committee (Committee) comprised of one representative from AEP, VDGIF, and USFWS.

Second page, last paragraph: In the last paragraph of the Plan, AEP states the following:

“Appalachian is anticipating that the costs associated with the development, funding, and completion of projects related to the recovery of the Roanoke logperch will be \$50,000 per year.”

To avoid confusion, the Service recommends that the following text be added to this paragraph:

Provision of funding by AEP will be initiated the year in which the new license is approved by FERC and provided annually thereafter for the life of the license. Funding will be adjusted annually for inflation, etc. based on the consumer price index.

There may be projects supported by the Committee that would require annual funding in excess of \$50,000. In other years, while it is not anticipated, there could be funding in excess of what could be spent during any given year. In addition to the text above, the Service recommends that the following sentence be added to the last paragraph on the second page:

Funds may be withheld by the Committee during any given year, for expenditures in future years.

The Service and partners would welcome the financial assistance of AEP with these and additional projects to support the recovery of the Roanoke logperch. Annual contributions of \$50,000 per year would greatly support these efforts. If you have questions, please contact William Hester at (804) 693-6694, extension 134.

Sincerely,

Karen L. Mayne
Supervisor
Virginia Field Office

cc: AEP, Roanoke, VA (Teresa Rogers)
AEP, Columbus, OH (John Magalski)
VDGIF, Forest, VA (Bud LaRoche & Scott Smith)



COMMONWEALTH OF VIRGINIA

L. Preston Bryant, Jr.
Secretary of Natural Resources

Department of Game and Inland Fisheries
1132 Thomas Jefferson Road
Forest, Virginia 24551-2269

Robert W. Duncan
Director

July 9, 2008

Teresa P. Rogers
Process Supervisor I
AEP-Appalachian Power Company
Hydro Generation
P. O. Box 2021
Roanoke, VA 24022-2121

Re: Appalachian Power Company
Smith Mountain Project No. 2210
Request for Comments on the Roanoke Logperch Management Plan

Dear Ms. Rogers:

Thank you for the opportunity to comment on the Roanoke Logperch (*Percina rex*) Plan for the Smith Mountain Project dated March 2008. We have reviewed the June 10, 2008 comments submitted by the U. S. Fish and Wildlife service and support their comments, however, we would like to make several more specific comments regarding the plan and these recommendations are outlined below.

MEASURES TO RECOVER SPECIES AND HABITAT

Item #1 – We agree with the USFWS recommendation to broaden the potential list of projects as outlined in their letter, however, we would also like to include population monitoring and trend analysis, range assessment and potential habitat evaluation to their list. In terms of more specifics regarding habitat restoration, we would recommend that basin wide restoration needs surveys be completed on the following watershed by order of priority.

1. Goose Creek
2. Otter River
3. Pigg River
4. N. Fork Roanoke River
5. S. Fork Roanoke River
6. Falling River
7. Blackwater River

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Teresa P. Rogers

July 9, 2008

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These surveys would determine what percent of each basin is in need of restoration and what restoration efforts would be required. It is anticipated that once survey efforts have been completed the following restoration projects would be implemented where necessary.

- Streambank rehabilitation/shaping
- Riparian revegetation
- Channel engineering
- Livestock fencing
- Alternate livestock water source development
- Livestock crossings
- Nutrient management

The USFWS included reintroductions in their list of potential projects to be implemented within the management plan. We envision that reintroduction projects within the management plan may be to assist with propagation culture efforts currently being conducted and would certainly include reintroduction monitoring efforts to determine the success of the program. A reintroduction program would be considered a success if a viable population is established in a stream which consists of multiple natural year classes. Our initial recommendation is that reintroduction projects could be conducted on the following rivers in the upper Roanoke River basin if suitable habitat is found.

- Blackwater River
- Falling River
- Staunton River (Roanoke River mainstem below Leesville Dam to Brookneal, VA)

The USFWS also listed population augmentation as a potential project to be accomplished under the management plan. We anticipate that such projects would be determined based on results of the basin wide restoration surveys as recommended in Item #1 above. In streams that have limited Roanoke logperch populations, it may be prudent to augment the populations after the population limiting factors have been addressed such as habitat restoration.

The USFWS also recommends that research be considered as potential projects within the management plan. We are in agreement with this need. We anticipate that as populations are reintroduced or augmented, there may be success or failure and research could be key to determining why success or failure occurred and could greatly improve the chances of success with future reintroductions or augmentations.

Item #2 – We are in agreement with the USFWS recommendation to add a sentence regarding project selection to be determined by mutual agreement of the three-party committee comprised of AEP, VDGIF and USFWS.

Teresa P. Rogers
July 9, 2008
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COSTS ASSOCIATED WITH IMPLEMENTATION OF PLAN

We are in agreement with the USFWS in regard to the funding to be initiated the year in which the new license is approved by the FERC and provided annually thereafter for the life of the license. We also agree that the annually funding should be tied to the Consumer Price Index (CPI) each year. We also support the concept of being able to roll any unspent funds over into the next year as it may be necessary to "bank" funds to complete more expensive projects in any given year.

Please give me a call if you have any questions regarding these comments.

Sincerely,

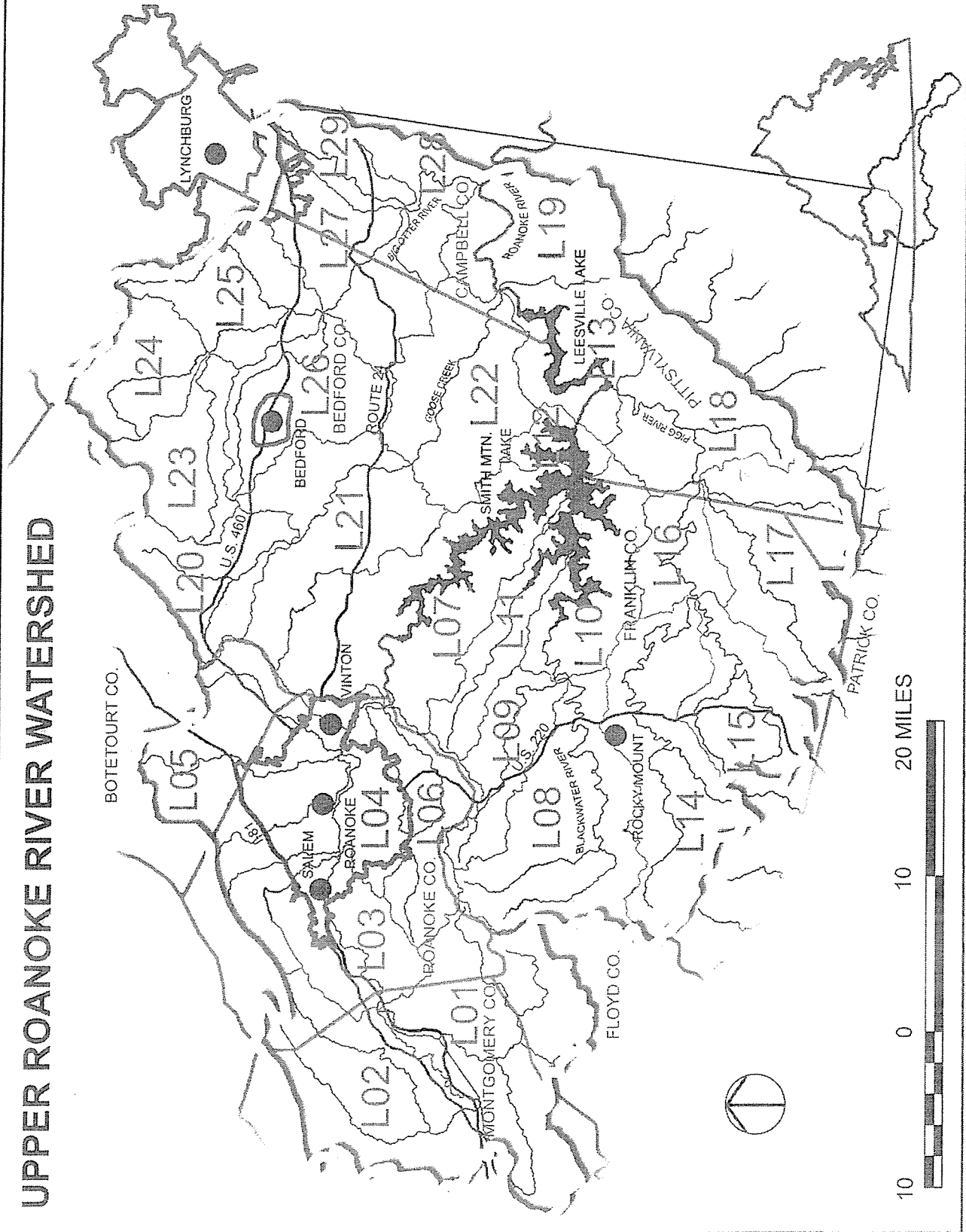
/S/ A. L. LaRoche, III

Arthur L. LaRoche, III
Regional Fisheries Manager










ALL/all

cc: R. Fernald - VDGIF
W. Hester - USFWS
F. Leckie - VDGIF
S. Smith - VDGIF

UPPER ROANOKE RIVER WATERSHED



LEGEND

-  UPPER ROANOKE RIVER WATERSHED
-  ROANOKE RIVER WATERSHED
-  LAKES
-  URBAN AREAS
-  MAJOR TOWNS/CITIES
-  MAJOR ROADS
-  COUNTY BOUNDARIES
-  MAJOR STREAMS
-  SUBWATERSHEDS



UPPER
ROANOKE
RIVER
ROUNDTABLE

