

FEDERAL ENERGY REGULATORY COMMISSION
Washington, DC 20426

DATE: March 17, 2008

MEMORANDUM TO: The Agency/Party Addressed

SUBJECT: Transmittal of Scoping Document for the Holtwood Project.

The Federal Energy Regulatory Commission (Commission or FERC) is conducting National Environmental Policy Act (NEPA) scoping on PPL Holtwood, LLC's (PPL Holtwood's or licensee's) proposal to increase the installed capacity of the Holtwood Project (FERC No. 1881-050). The Holtwood Project is a 107.2 megawatt (MW) project. On December 20, 2007, the licensee filed an application for an amendment of license to increase the installed capacity and provide improvements to existing upstream fish passage facilities. PPL Holtwood proposes to construct a new powerhouse, install new turbines, construct a new skimmer wall and larger forebay, and reconfigure the project facilities to enhance upstream fish passage through modification of existing facilities and excavations in the tailrace channel. The installed capacity of the project would increase from 107.2 megawatts to 195.5 megawatts¹ and the total hydraulic capacity of the project would increase from 31,500 cubic feet per second (cfs) to approximately 61,460 cfs. The project is located on the Susquehanna River in Lancaster and York counties, Pennsylvania.

The Commission staff will prepare an environmental impact statement (EIS) under NEPA that will be used by the Commission to identify impacts that could result from the licensee's proposal and measures that would help mitigate these impacts. To support and assist our environmental review, we are conducting scoping to ensure that all pertinent issues are identified and analyzed and that the environmental document is thorough and balanced.

We invite your participation in the scoping process and are circulating the attached Scoping Document 1 (SD1) to provide you with information concerning the plans to increase the installed capacity. We are also asking for your comments and suggestions on our preliminary list of issues and alternatives to be addressed in the EIS.

¹ The authorized capacity when the project was originally licensed on August 14, 1980 was 107.2 MW. Since that time, the runners on six units were replaced with newer, more efficient designs, the generators on three units were rewound to higher ratings, and the two water-driven exciters were retired. The net result of these modifications increased the capacity of the project from 107.2 MW to 108.44 MW. The proposed project modifications would further increase the capacity of the project from 108.44 MW to 195.5 MW.

We will hold two scoping meetings on April 17, 2008, to receive input on the appropriate scope of environmental analysis. A resource agency meeting will be held from 2:00 p.m. to 4:00 p.m. at the Holtwood Environmental Training Center. The public meeting will be held from 6:30 p.m. to 8:30 p.m. at the Travellodge Inn and Suites and Conference Center, 1492 Lititz Pike, Lancaster, PA 17601. The public and agencies may attend either or both meetings. The agency scoping meeting will focus on resource agency and non-governmental organization (NGO) concerns, while the public meeting is primarily for public input. Commission staff will also visit the proposed project site on April 17, 2008, meeting at 10:30 am at the security gate. The public and agencies are welcome to join us on the visit of the proposed project site. Information about these meetings and site visit is available in the attached SD1.

This Scoping Document is being distributed to the Commission's official mailing List (see Section 9.0). If you wish to be added to, or removed from, the Commission's official mailing list for the Holtwood Project, please send your request by email to efiling@ferc.gov or by mail to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street, N.E., Room 1A, Washington, D.C., 20426. All written or emailed requests must specify that you wish to be removed or added to the mailing list and must clearly identify the following on the first page: Holtwood Hydroelectric Project No. 1881-050.

Please review the Scoping Document, and if you wish to provide comments, follow the instructions in section 5.0. If you have any questions concerning the scoping process or the development of the EIS for this project, please contact Blake Condo by telephone at 202-502-8914 or e-mail at blake.condo@ferc.gov.

Enclosure: Scoping Document

cc: Mailing List
Public Files

PUBLIC

**Scoping Document
PPL Holtwood, LLC
Holtwood Hydroelectric Project
Project No. 1881-050**

SCOPING DOCUMENT

**HOLTWOOD HYDROELECTRIC PROJECT- PENNSYLVANIA
FERC Project No. 1881-050**



**Federal Energy Regulatory Commission
Office of Energy Projects
Washington, DC**

March 2008

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1.0 INTRODUCTION

The Federal Energy Regulatory Commission (Commission or FERC), under the authority of the Federal Power Act (FPA),² licenses and oversees the operation of non-federal hydroelectric projects in the United States. The Holtwood Hydroelectric Project was licensed on August 14, 1980, with an installed capacity of 107.2 megawatts (MW). The project is located on the Susquehanna River in Lancaster and York counties, Pennsylvania (see Figure 1).

Under the Commission's regulations at 18 CFR 4.201(b), a capacity-related amendment is one which increases the authorized installed capacity of the project by 2 MW or more and increases hydraulic capacity by 15 percent or more. An applicant for a capacity amendment must complete the three-stage pre-filing consultation process. For an existing project with greater than 5 MW of installed capacity, the applicant must file an application for amendment that conforms to the requirements under 18 CFR 4.51.

On December 20, 2007, PPL Holtwood, LLC (PPL Holtwood or licensee) filed an application for an amendment to its license to increase the installed capacity from 107.2 MW to 195.5 MW³ and to increase the hydraulic capacity from 31,500 cubic feet per second (cfs) to 61,460 cfs.

On January 28, 2008, Commission staff issued an additional information request and PPL Holtwood filed its response to the additional information request on February 20, 2008.

On February 21, 2008, the Commission issued a public notice accepting the application for amendment for filing and soliciting motions to intervene and comments, recommendations, terms and conditions, and fishway prescriptions.

² U.S.C. § 791(a)-825(r).

³ The authorized capacity when the project was originally licensed on August 14, 1980 was 107.2 MW. Since that time, the runners on six units were replaced with newer, more efficient designs, the generators on three units were rewound to higher ratings, and the two water-driven exciters were retired. The net result of these modifications increased the capacity of the project from 107.2 MW to 108.44 MW. The proposed project modifications would further increase the capacity of the project from 108.44 MW to 195.5 MW.

The National Environmental Policy Act of 1969 (NEPA),⁴ the Commission's regulations, and other applicable laws require that we independently evaluate the environmental effects of amending the project as proposed, as well as consider reasonable alternatives to the proposed action. The Commission will prepare an environmental impact statement (EIS) that describes and evaluates the probable effects, including an assessment of the site-specific and cumulative effects, if any, of the proposed action and alternatives. The EIS preparation will be supported by a scoping process to ensure all pertinent issues are identified and analyzed.

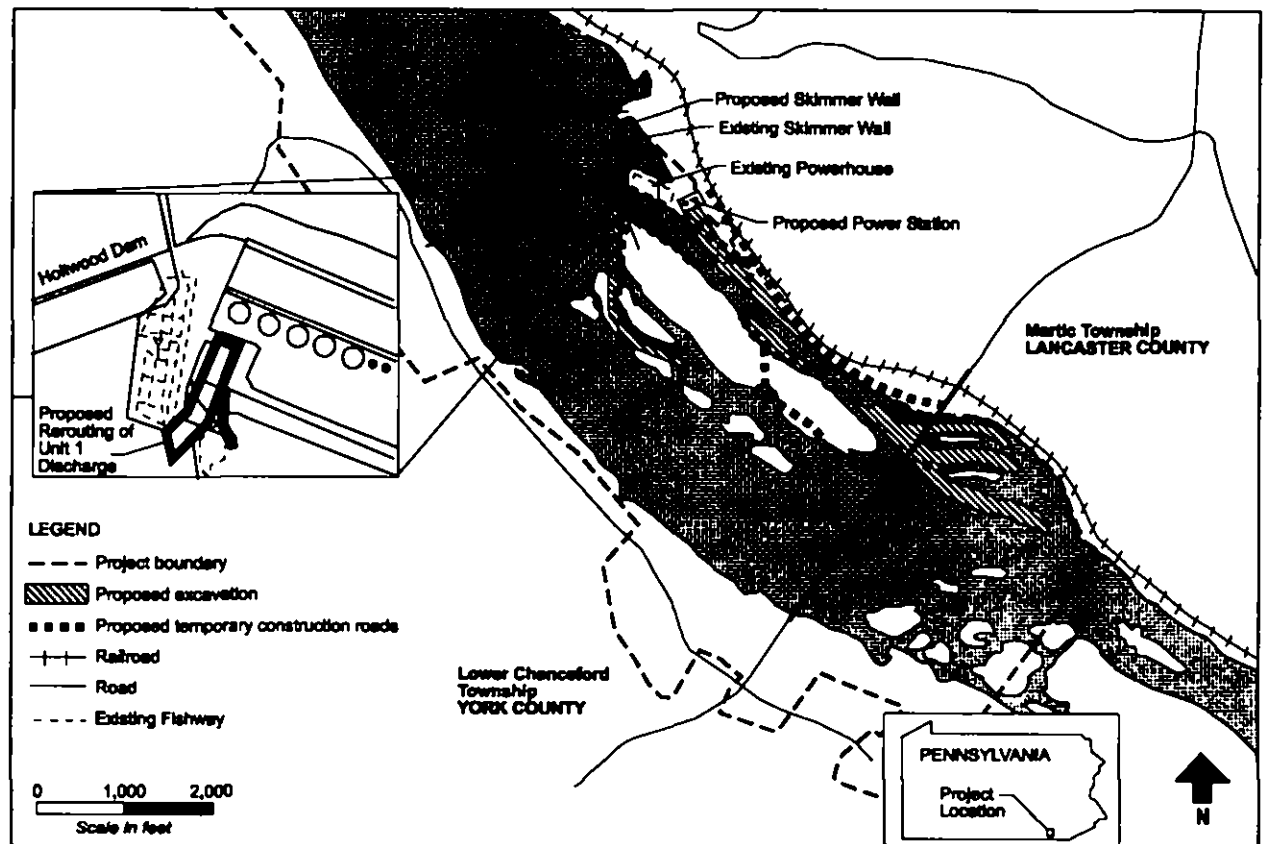


Figure 1. Holtwood Project, Location of Existing and Proposed Facilities.

⁴ National Environmental Policy Act of 1969, as amended (Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, Section 4 (b), Sept. 13, 1982).

2.0 SCOPING

This Scoping Document is intended to advise all participants as to the proposed scope of the EIS and to seek additional information pertinent to this analysis. This document contains (1) a description of the scoping process and schedule for the development of the EIS; (2) a description of the proposed action and alternatives; (3) a preliminary identification of environmental issues; (4) a request for comments and information; and (5) a proposed EIS outline.

2.1 Purpose of Scoping Under NEPA

Scoping is the process used to identify issues, concerns, and opportunities associated with a proposed action; the process, according to NEPA, should be conducted early in the planning stages of the project. The purposes of scoping are as follows:

- Invite participation of federal, state, and local resource agencies; Native American tribes; and individuals to identify significant environmental issues related to the proposed action.
- Determine the depth of analysis and significance of issues to be addressed in the EIS.
- Identify how the project would or would not contribute to cumulative effects in the project area.
- Identify reasonable alternatives to the project that we should evaluate.
- Solicit, from participants, available information on the resources at issue, including existing information.
- Determine the resource areas and potential issues that do not require detailed analysis during review of the project.

Following the comment period for this Scoping Document, all issues raised will be reviewed and decisions made about the level of analysis needed. If preliminary analysis shows that any issues presented in this Scoping Document have little potential for causing significant effects, the issue(s) will be identified and the reasons for not providing a more detailed analysis will be given in the EIS.

Commission staff will revise this Scoping Document, as necessary, to reflect comments received during the comment period and will then issue Scoping Document 2. If no substantial comments are received and no revisions to the Scoping Document are necessary, we will notify all participants by letter. The EIS will address comments and information received during scoping.

2.2 Scoping Meetings and Written Comments

We will hold two scoping meetings in the project area and invite all interested agencies, non-governmental organizations, Native American tribes, and individuals to attend one or more of the meetings and to assist staff in identifying the scope of environmental issues to be analyzed in the EIS. The times and locations of these meetings are as follows:

Afternoon Scoping Meeting

When: April 17, 2008
2:00- 4:00 p.m.

Where: Holtwood Environmental Center
9 New Village Road, Holtwood, PA 17532

Public Scoping Meeting

When: April 17, 2008
6:30–8:30 p.m.

Where: Travellodge Inn and Suites and Conference Center
1492 Lititz Pike, Lancaster, PA 17601

Scoping meetings will be recorded by a court reporter, and all statements (verbal and written) will become part of the Commission's public record for the project. Before each meeting, all individuals who attend, especially those individuals who intend to make statements, will be asked to sign in. Those individuals who speak at a scoping meeting will be asked to clearly identify themselves for the record before speaking. Interested parties who choose not to speak or are unable to attend the scoping meetings may provide written comments to the Commission, as described in Section 5.0.

We also will visit the project facilities at the Holtwood Project on April 17, 2008, and will meeting at the security gate at 10:30 a.m. Participants on the site visits will need to provide their own transportation.

3.0 PROPOSED ACTION AND ALTERNATIVES

In accordance with NEPA guidelines, the EIS will consider, at a minimum, the following alternatives: (1) the applicant's proposed action; (2) alternatives to the proposed action; and (3) the No-action Alternative.

3.1 Licensee's Proposed Action

PPL Holtwood proposes to increase the installed capacity of the Holtwood Project by constructing a new powerhouse with two turbine generator units (Units 18 and 19), replacing two existing water-driven exciters with two new generating units (Units 11 and 13) in the existing powerhouse, and refurbishing four generating units in the existing powerhouse (Units 1, 2, 4, and 7). The total installed capacity of the project would increase from 107.2 MW to 195.5 MW and the total hydraulic capacity of the project would increase from 31,500 cfs to approximately 61,460 cfs. PPL Holtwood also proposes to: (1) construct a new skimmer wall upstream of the powerhouses; (2) perform excavation in the forebay to replace deteriorating infrastructure and enable flows to enter the new generating units; (3) modify the existing fish lift; (4) reroute the discharge of Unit 1 in the existing powerhouse so that it discharges into the spillway channel, to enhance upstream fish passage; (5) excavate in the project tailrace and spillway to allow increased powerhouse discharges and enhance upstream fish passage; (6) implement additional measures to enhance migratory fish passage; (7) install dam crest control measures; (8) provide for minimum flows; and (9) perform studies and evaluations. PPL Holtwood requests the modification of license articles that are related to the above proposed design changes. PPL Holtwood also requests a 16-year extension of the current license term to September 1, 2030.

PPL Holtwood included in its license amendment application a "Consent Order and Agreement" (Agreement) between PPL Holtwood and the Pennsylvania Department of Environmental Protection (Pennsylvania DEP), dated November 21, 2007. The Agreement orders and PPL Holtwood agrees to the implementation of the various fish passage improvements at the project, as well as minimum flow provisions, which are also in the proposed Water Quality Certification conditions for the Holtwood Project.

3.2 Description of Proposed Construction Activities

PPL Holtwood proposes several modifications to the existing project that involve major construction and excavation of project lands. PPL Holtwood would construct a new 240-foot-wide by 130-foot-long powerhouse adjacent to the existing powerhouse on the Lancaster County side of the river in the area previously occupied by an 80 MW coal-fired generating station that was removed in 2000. The construction of the new powerhouse would require significant excavation of rock and soil upstream, downstream, and adjacent to the existing powerhouse. The new powerhouse would house two vertical Kaplan turbines rated at 40.3 MW each, for a total of 80.6 MW. The new powerhouse would have an intake and trashrack that is separate from the existing powerhouse.

Within the existing powerhouse, PPL Holtwood proposes to replace two retired water-driven exciters with two new turbine-generator units rated at 1.18 MW each, for a total of 2.36 MW. PPL Holtwood also proposes to modify units 1, 2, 4 and 7 by replacing the existing runners, resulting in an increase in capacity of 0.9 MW, 0.9 MW, 0.9 MW, and 1.4 MW, respectively, for a total increase of 4.1 MW.

Construction plans call for the excavation of the project tailrace to accommodate an additional 30,000 cfs of discharge through the new powerhouse while maintaining the 50.75 feet of net operating head on the existing and new units. PPL Holtwood proposes to reroute the discharge of Unit 1 to the east side of the spillway by adding an extension to the draft tube. A discharge channel would also be excavated downstream of the draft tube exit for a distance of approximately 140 feet to improve channel conveyance and reduce backwater on the unit.

PPL Holtwood plans to replace the existing skimmer wall with a new concrete skimmer wall and to excavate and expand the forebay area to provide the required flow area for the new generating units. The new skimmer wall would tie into the main dam at the same location as the existing skimmer wall and would run from the existing main dam upstream for approximately 60 feet to the Lancaster County shore along the same alignment as the existing skimmer wall. The most downstream skimmer wall pier would be built into the existing dam.

PPL Holtwood would modify the existing fish lift and install a new intake pipe designed to draw at least 650 cfs of water directly from the forebay through a screened entrance behind the new skimmer wall, to increase the amount of attraction flows for the fish lift by at least 300 cfs.

Proposed construction activities would also include (1) a new elevated roadway over the Norfolk-Southern railroad track along the Lancaster County shore for enhanced public access to the project tailrace and river corridor lands; (2) a new public parking area along the Lancaster shore and reconstruction of the tailrace fishing area; (3) enhanced parking along the township road in York County and the construction of improved trail access to the river below the dam; (4) extension of the boat ramp at the York Furnace boat launch to improve the ramps utility on a year-round basis; and (5) improvements to the Pequa Creek boat launch, including the replacement of the boat ramp that will be eliminated as a result of Pennsylvania Department of Transportation construction in the area.

3.3 Alternatives to the Applicant's Proposal

We will consider and assess all alternatives to the proposed action, including environmental measures not proposed by the PPL Holtwood. Modifications could include recommendations for protection, mitigation, and enhancement measures identified by resource agencies, Native American tribes, NGOs, the general public, and Commission staff.

3.4 Alternative Project Configurations

The staff will review and consider various alternative facility locations and designs and operational schemes identified by the applicant or proposed by staff or others, to the extent available information allows.

3.5 No Action

Under the No-action Alternative, PPL Holtwood would not increase the installed capacity or generation and would continue to operate the Holtwood Project under the terms and conditions of the existing license. There would be no disturbance of existing environmental conditions at the site. The No-action Alternative will serve as our baseline for comparing the effects of the applicant's proposal and other alternatives.

4.0 SCOPE OF CUMULATIVE EFFECTS ANALYSIS AND ENVIRONMENTAL ISSUES

According to the Council on Environmental Quality's regulations for implementing NEPA (50 CFR §1508.7), an action may cause cumulative effects on the environment if its effects overlap in space and/or time with the effects of other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over time, including hydropower and other land and water development activities.

4.1 Cumulative Effects

Based on information in the license application, agency comments, other filings related to the project, and preliminary staff analysis, we have preliminarily identified the resources that have the potential to be cumulatively affected by the increased capacity and improvement of fish passage at the Holtwood Project. Those resources are water quality and fisheries.

4.1.1 Geographic Scope

The geographic scope of the analysis defines the physical limits or boundaries of the proposed action's effects on the resources. Because the proposed action would affect the resources differently, the geographic scope for each resource may vary. For water quality, we propose that the geographic scope would extend from the upstream Safe Harbor Project downstream to Chesapeake Bay, because operations at Holtwood could affect river flows and operations at the downstream Conowingo Project, and in turn, flows in the 10 miles of river downstream of Conowingo to the Chesapeake Bay. For fisheries resources, the geographic scope of the analysis should extend from the Susquehanna River Basin upstream of the York Haven Project downstream to the Chesapeake Bay, because fish passage success at Holtwood would affect diadromous fish populations migrating from the Chesapeake Bay upstream to the basin above the York Haven Project.

4.1.2 Temporal Scope

The temporal scope of our cumulative effects analysis in the EIS will include past, present, and future actions and their possible cumulative effects on each resource. Based on the license term, the temporal scope will look 50 years into the future, concentrating on the effect of reasonably foreseeable future actions on the resources. The historical discussion will, by necessity, be limited to the amount of available information for each resource.

4.2 Resource Issues

In this section, we present a preliminary list of environmental issues to be addressed in the EIS. We identified the issues, which are listed by environmental resource area, through our review of the license application and the Commission's record for the Holtwood Project. This list is not intended to be exhaustive or final, but it is an initial listing of issues that have been raised and could be significant. After scoping is complete, we will review the list and determine the appropriate level of analysis needed to address each issue.

4.2.1 Geology and Soils

- Discussion of the geology in the vicinity of the dam and powerhouse.
- Effects of proposed construction on the geology and soils of the area.

4.2.2 Aquatic Resources

- Effects of proposed operations on spill frequencies and reservoir levels of Lake Aldred.
- Effects of proposed excavation of the existing tailrace race area on flow conveyance capacities and velocities.
- Effects of proposed operations on inflow to the downstream Conowingo impoundment.
- Effects of excavation for expansion of the forebay and excavation of the tailrace area on water quality.
- Effects of proposed reservoir operations on aquatic resources in Lake Aldred.
- Effects of proposed fish passage improvements on the efficiency and success of upstream and downstream fish passage at the project.
- Effects of increased entrainment of both resident and diadromous fishes as a result of increased flows passing through generating units instead of over the spillway.
- Effects of proposed project flow releases on aquatic resources in both the spillway and tailrace channels downstream of the project.

4.2.3 Terrestrial Resources

- Effects of proposed construction activities, including excavation in the tailrace, on the wildlife resources in the surrounding area.
- Effects of proposed construction activities and operations on wildlife species of special concern, including the Pennsylvania state-threatened osprey, red-bellied turtle, and rough green snake, and the state "at risk" prothonotary warbler.
- Effects of proposed construction activities and operations on plant species of special concern, including the Pennsylvania state endangered *Boltonia asteroides* and *Solidago simplex ssp. Randii var. racemosa*; the state-threatened *Ilex opaca*; and *Eupatorium godfreyanum* and *Hypericum stragulum*, both of tentatively undetermined status.
- Effects of proposed construction activities and operations on wetlands upstream and downstream of the Holtwood dam.

4.2.4 Threatened and Endangered Species

- Potential effects of construction activities and operations on threatened or endangered species in the area, if any. These species may include the threatened bald eagle and threatened bog turtle.

4.2.5 Recreational Resources

- Effects of project construction on public access to recreational opportunities at the project.
- Effects of proposed recreation facility enhancements on recreational opportunities at the project.
- Effects of proposed operations, including reservoir elevations and instream flow releases, on recreation opportunities at the project.
- Effects of proposed operations and fishery enhancements on angling opportunities at the project.
- Effects of the proposed operations on whitewater boating opportunities downstream of the project.

4.2.6 Land Use and Aesthetic Resources

- Effects of project construction, including the proposed forebay and tailrace excavation and temporary access roads, on land use and aesthetic resources.
- Effects of proposed project facilities on aesthetic resources.
- Effects of proposed operations, including reservoir elevations, on shoreline aesthetic resources.
- Effects of proposed Lands/Shore Management Plan on land use and aesthetic resources.

4.2.7 Cultural Resources

- Effects of proposed construction activities on cultural resources.
- Effects of proposed operations on cultural resources.

4.2.8 Developmental Resources

- Discussion of the economics of the large capital investment in relation to the potential power generation benefits.

5.0 REQUEST FOR INFORMATION

The Commission staff requests federal, state, and local resource agencies; Native American tribes; and other entities and individuals to forward to the Commission any information that will assist it in conducting an accurate and thorough analysis of the site-specific and cumulative effects of licensing the Holtwood Project. Types of information requested include, but are not limited to:

- information, quantified data, or professional opinions that may contribute to defining the geographical and temporal scope of the cumulative effects analysis and identifying significant environmental issues;
- identification of, and information from, any other environmental assessment, EIS, or similar documents of studies (previous, ongoing, or planned) relevant to the amendment of the license for the Holtwood Project;
- existing information and any data that may aid in describing the past and present actions and effects of the project and other developmental activities on water quality, fish and wildlife resources, cultural resources, recreation resources, socioeconomics, or land use;
- identification of any federal, state, or local resource plans and future project proposals that encompass the Holtwood Project area, with information on when they will be implemented, if known, including proposals to construct or operate water treatment facilities, recreational areas, or water diversions or to implement fishery management programs; and
- documentation that would support a conclusion that the proposed project amendment does or does not contribute to cumulative adverse or beneficial effects on resources (natural and social) and, therefore, should be excluded from further study or included for further consideration of cumulative effects.

The requested information and scoping comments should be submitted in writing to the Commission no later than May 2, 2008. All correspondence must clearly show at the top of the first page: "Holtwood Hydroelectric Project, FERC No. 1881-050." All information and comments should be sent to:

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

Scoping comments may be filed electronically via the Internet in lieu of paper. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's web site (<http://www.ferc.gov>) under the "eFiling" link. The Commission strongly encourages electronic filings. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, (202) 502-8659. You may register online at <http://www.ferc.gov/docs-filing/csubscriptions.asp> to be notified via email of new filings and issuances

related to this or other pending projects. For assistance please contact FERC Online Support.

All filings sent to the Secretary of the Commission should contain an original and eight copies. Failure to file an original and eight copies may result in appropriate staff not receiving the benefit of your comments in a timely manner. Scoping comments may be filed electronically via the Internet in lieu of paper. See 18 CFR 385.2001 (a)(1)(iii) and the instructions on the Commission's website at www.ferc.gov under the "e-Filing" link. The Commission strongly encourages electronic filings.

Intervenors—those on the Commission's service list for this proceeding (parties)—are reminded of the Commission's Rules of Practice and Procedure, requiring parties filing documents with the Commission to serve a copy of the document to each person whose name appears on the official service list. Intervenors can get the most recent version of the service list online at www.ferc.gov/docs-filing/service-list.asp.

Any questions concerning the scoping or preparation of the EIS for this proposed action should be sent to Blake Condo at the Commission, Office of Energy Projects, by telephone at (202) 502-8914 or by e-mail at blake.condo@ferc.gov.

6.0 EIS PREPARATION SCHEDULE

The tentative schedule for preparing the Holtwood Project EIS is as follows:

Issue Scoping Document for comments	March 2008
Notice of the availability of the draft EIS	July 2008
Notice of the availability of the final EIS	October 2008
Ready for Commission's decision on the application	December 2008

7.0 PROPOSED EIS OUTLINE

The preliminary outline for the July 2008 Holtwood Project draft EIS is as follows:

EXECUTIVE SUMMARY

1.0 INTRODUCTION

- 1.1 Application
- 1.2 Purpose of Action and Need for Power

- 1.2.1 Purpose of Action
- 1.2.2 Need for Power
- 1.3 Statutory and Regulatory Requirements
 - 1.3.1 Federal Power Act
 - 1.3.2 Clean Water Act
 - 1.3.3 Endangered Species Act (ESA)
 - 1.3.4 Coastal Zone Management Act
 - 1.3.5 National Historic Preservation Act (NHPA)
 - 1.3.6 Wild and Scenic Rivers Act
- 1.4 Public Review and Consultation
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2.0 PROPOSED ACTION AND ALTERNATIVES

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 - 2.1.1 Existing Project Facilities
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- 2.2 Applicant's Proposal
 - 2.2.1 Proposed Project Facilities
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 - 2.2.5 Modifications to Applicant's Proposal—Mandatory Conditions
- 2.3 Staff Alternative
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- 2.5 Other Alternatives
- 2.6 Alternatives Considered by Eliminated from Further Analysis

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- 3.1 General Setting
- 3.2 Scope of Cumulative Effects
- 3.3 No-action Alternative

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- 4.1 Power and Economic Benefits of the Project
- 4.2 Comparison of Alternatives
- 4.3 Cost of Environmental Measures
- 4.4 Greenhouse Gases

5.0 CONCLUSIONS AND RECOMMENDATIONS

- 5.1 Comparison of Alternatives
- 5.2 Comprehensive Development and Recommended Alternative
- 5.3 Unavoidable Adverse Impacts
- 5.4 Summary of State and Federal Resource Agencies Recommendations

6.0 LITERATURE CITED

7.0 LIST OF PREPARERS

8.0 LIST OF RECIPIENTS

APPENDICES

8.0 DISTRIBUTION LIST

Lisa H. Tucker, Partner
Kirkpatrick & Lockhart Preston
Gates Ellis LLP
1601 K Street NW
Washington, DC

John M. Cincilla, Manager
PPL Companies
2 N 9 th Street
Allentown, PA 18101-1139

Andrew Tittler,
Attorney-Advisor
Office of the Solicitor,
Northeast Region
U.S. Department of the
Interior
One Gateway Center,
Suite 612
Newton, Massachusetts
02458

Alexander R. Hoar
U.S. Fish and Wildlife Service
300 Westgate Center Drive
Hadley, Massachusetts 01035-9589.

Larry Miller
U.S. Fish and Wildlife Service
Mid-Atlantic Fishery Resources
Office
P.O. Box 67000
Harrisburg, PA 17106-7000

David Densmore
US Fish and Wildlife Service
Pennsylvania Field Office
315 S. Allen St., Suite 322
State College, PA 16801

Kevin Colburn, National Stewardship
Director
American Whitewater
1035 Van Buren Street
Missoula, MT 59802

Michael Hendricks
PA Fish and Boat Commission
Bureau of Fisheries
450 Robinson Lane
Bellefonte, PA 16823

Richard McLean,
Senior Project Manager
MD Department of Natural
Resources
Tawes State Office Building
580 Taylor Ave., B-3
Annapolis, MD 21401

Andrew Dehoff
Susquehanna River Basin
Commission
1721 North Front Street
Harrisburg, PA 17102-2391

Michael G. Brownell, Chief
Susquehanna River Basin
Commission
1721 North Front Street
Harrisburg, PA 17102-2391

Andrew L. Shiels
PA Fish and Boat Commission
Division of Fish Production Services
1735 Shiloh Road
State College, PA 16801

E. James Tabor, Chief
Coastal Zone Management Office
P.O. Box 8555
Harrisburg, PA 17105-8555

Section Chief
Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Federal Energy Regulatory
Commission,
Regional Engineer
New York Regional Office
19 W 34 th Street Rm 400
New York, New York 10001-3006

County of Lancaster
P.O. Box 83480
Lancaster, PA 17608-3480

National Marine Fisheries Service
Regional Director
Northeast Regional Office-
DOC/NOAA
1 Blackburn Dr
Gloucester, PA 01930-2237

PA Department of
Conservation/Natural Resources
P.O. Box 2063
Harrisburg, PA 17105-2063

PA Department of Environmental
Protection
Director
P.O. Box 8460
Harrisburg, PA 17105-8555

Larry G. Williamson
PA Department of Environmental
Protection
Office of the Secretary
Rachel Carson State Office Building
400 Market Street
Harrisburg, PA 17101

James S. Spontak,
Southcentral Region Program
Manager
PA Department of Environmental
Protection
909 Elmerton Avenue
Harrisburg, PA 17110

PA Game Commission
2001 Elmerton Ave
Harrisburg, PA 17110-9762

PA Office of Attorney General
16 th Floor
Strawberry Square
Harrisburg, PA 17120

US Coast Guard
MSO Philadelphia
1 Washington Ave
Philadelphia, PA 19147-4335

Cynthia Wilkerson
US National Park Service
200 Chestnut St
Philadelphia, PA 19106-2912

Upper Chesapeake Watershed
Association
138 W Lanvale St
Baltimore, MD 21217-4120

County of York
York County Courthouse
28 E Market St
York, PA 17401-1501

David Sutherland, Chair
Fish Passage Workgroup
US Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Joseph DaVia
US Army Corps of Engineers
P.O. Box 1715
Baltimore, MD 21203

Sara Deuling
American Rivers
355 N. 21st St.; Suite 309
Camp Hill, PA 17011

Liana Vitali
Chesapeake Research Consortium
410 Severn Avenue, Suite 109
Annapolis, MD 2140