FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC 20426

DATE: July 15, 2004

MEMORANDUM TO: The Agency/Party Addressed

SUBJECT: Scoping of environmental issues for a new license for the Mystic Lake Hydroelectric Project No. 2301-019, Montana.

The Federal Energy Regulatory Commission (Commission) is reviewing a Pre-Application Document for a new license for PPL Montana's Mystic Lake Hydroelectric Project located on West Rosebud Creek in Stillwater and Carbon Counties, Montana.

The Commission intends to prepare an Environmental Assessment (EA) which will be used by the Commission to determine whether, and under what conditions, to issue a new license for the project. To support and assist our environmental review, we are beginning the public scoping process to ensure that all pertinent issues are identified and analyzed and that the EA 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 on the Mystic Lake Project. We solicit your comments and suggestions on SD1, which contains our preliminary list of issues and alternatives to be addressed in the EA.

We will hold two scoping meetings to solicit your comments on SD1 and on the project in general. A daytime meeting will be held August 11, 2004, from 8:30 am to 2:00 pm at the Elks Club in Red Lodge, Montana. An evening meeting will be held August 12, 2004, from 7:00 pm to 10:00 pm at the City of Columbus firehall, in Columbus, Montana. We invite all interested agencies, Indian tribes, non-governmental organizations, and individuals to attend one or both of these meetings. We will also hold a site visit at the project on August 10, 2004 from 8:00 am to 4:00 pm. Further information on our site visit and scoping meetings is available in the attached SD1.

Please review SD1 and, if you wish to provide comments, follow the instructions in section 3.0. If you have any questions about SD1, the scoping process, or how Commission staff will develop the EA for this project, please contact Steve Hocking at (202) 502-8753 or steve.hocking@ferc.gov. Additional information about the

Commission's licensing process and the Mystic Lake Project may be obtained from our website www.ferc.gov or PPL Montana's website www.mysticlakeproject.com.

Enclosure: Scoping Document 1
cc: Mailing List

SCOPING DOCUMENT 1

MYSTIC LAKE HYDROELECTRIC PROJECT
MONTANA

FERC Project No. 2301-019

Federal Energy Regulatory Commission
Office of Energy Projects
Washington D.C.

July 2004

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1.0 INTRODUCTION

The Federal Energy Regulatory Commission (Commission or FERC), under the authority of the Federal Power Act (FPA),[1] may issue licenses for terms ranging from 30 to 50 years for the construction, operation, and maintenance of non-federal hydroelectric projects. On July 1, 2004, PPL Montana, using the Integrated Licensing Process, filed a Pre-Application Document for a new license for the existing Mystic Lake Hydroelectric Project No. 2301-019.[2] The Mystic Lake Project is located on West Rosebud Creek, in Stillwater and Carbon Counties, Montana (Figure 1). The project occupies 575.6 acres of U.S. Forest Service lands within the Custer National Forest.

The Mystic Lake Project is operated as a base load or peaking facility depending on water availability, electrical demand, and license constraints. Project operations are tailored for the primary purposes of energy production, summer recreation, minimum flows to the bypassed reach, and flow moderation in West Rosebud Creek to benefit fish and wildlife resources. A detailed description of the project is provided in Section 4.0 of this document.

The National Environmental Policy Act of 1969 (NEPA),[3] the Commission's regulations, and other applicable laws require Commission staff to independently evaluate the environmental effects of licensing the Mystic Lake Project and to consider reasonable alternatives to PPL Montana's proposed action. At this time, Commission staff intend to prepare a "single EA" for this project (i.e. no draft EA will be issued). The EA will describe and evaluate the probable effects, including any site-specific and cumulative effects, of the proposed action and alternatives.

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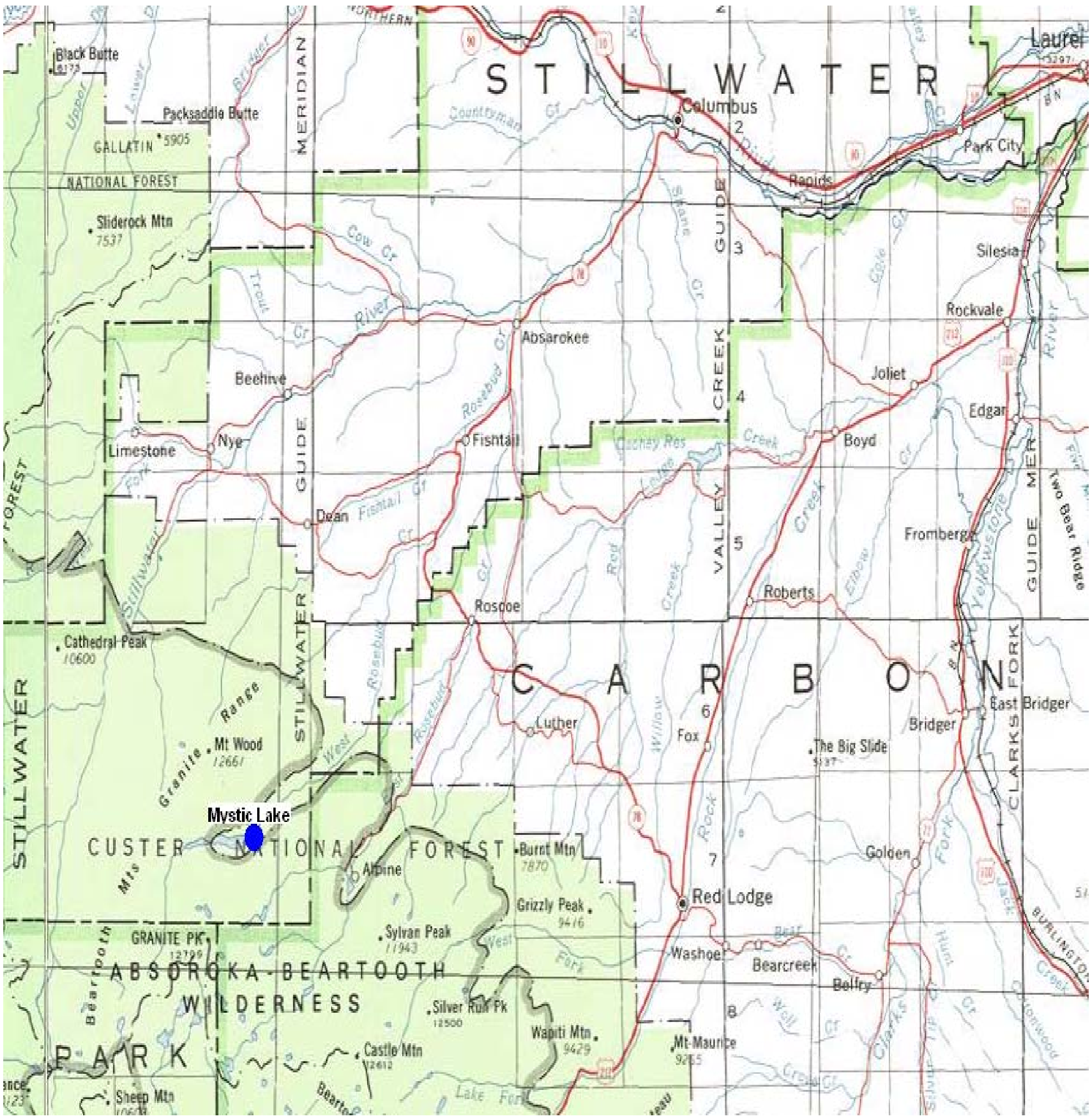
[1] 16 U.S.C. § 791(a) - 825(r).

[2] The current license for the Mystic Lake Project was issued October 5, 1976, and expires December 31, 2009.

[3] 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, Sept. 13, 1982).



STILLWATER
CARBON
Laurel
Columbus
Park City
Rapids
Silesia
Rockvale
Joliet
Edgar
Boyd
Absarokee
Beehive
Nye
Limestone
Fishtail
Dean
Roscoe
Luther
Fox
Roberts
Fromberg
Bridger
East Bridger
The Big Slide
Golden
Red Lodge
Washoe
Bearcreek
Belfry
Mt Maurice
Black Butte
Packsaddle Butte
GALLATIN NATIONAL FOREST
Sliderock Mtn
Cathedral Peak
Mt Wood
Mystic Lake
CUSTER NATIONAL FOREST
Alpine
Burnt Mtn
Grizzly Peak
Sylvan Peak
GRANITE PK
ABSAROKA-BEARTOOTH WILDERNESS
Silver Run Pk
Wapiti Mtn
Castle Mtn
Sheep Mtn
PARK
MERIDIAN
STILLWATER GUIDE
VALLEY CREEK GUIDE
CLARKS FORK GUIDE MER
Two Bear Ridge
Granite Range
Stillwater
Cow Cr
Trout Cr
Rosebud Cr
Fishtail Cr
Red Lodge Creek
Cooney Res
Elbow Cr
Rock Cr
Willow Cr
Yellowstone River
Clarks Fork

2.0 SCOPING

2.1 Purposes of Scoping

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

- invite federal, state, and local resource agencies, Indian tribes, non-governmental organizations and the public to identify significant environmental and socioeconomic issues related to the proposed project;
- determine the depth of analysis and significance of issues to be addressed in Commission staff's EA;
- identify how the project would or would not contribute to cumulative impacts in the project area;
- identify reasonable alternatives to the proposed action that should be evaluated in Commission staff's EA;
- solicit available information on resources at the project;
- eliminate from detailed study issues and resources that do not require detailed analysis during review of the project; and
- encourage statements from experts and the public on issues that should be analyzed in Commission staff's EA, including points of view in opposition to, or in support of, Commission staff's views.

If preliminary analysis shows that any issues presented in this SD1 have little potential for causing significant impacts, the issues will be identified and the reasons for not providing a more detailed analysis will be given in the EA.

Based on Commission staff's review of the proposed project at this time, we do not intend to issue a second scoping document for the Mystic Lake Project.

2.2 Scoping Meetings and Written Comments

Commission staff will hold two scoping meetings in the project area. A daytime meeting will focus on soliciting comments from resource agencies, Indian tribes, and non-governmental organizations. An evening meeting will focus on soliciting comments from the public. All interested resource agencies, Indian tribes, non-governmental organizations, and individuals are invited to attend one or both of the meetings.

Daytime Scoping Meeting

When: August 11, 2004; from 8:30 am to 2:00 pm
Where: The Elks Club: 114 N. Broadway, Red Lodge, Montana.

Evening Scoping Meeting

When: August 12, 2004; from 7:00 pm to 10:00 pm
Where: City of Columbus firehall: 944 East Pike Ave, Columbus, Montana.

Commission staff and PPL Montana will also have a site visit at the project on August 10, 2004, from 8:00 am to 4:00 pm. Meet at the Mystic Lake powerhouse parking lot. We will tour the Mystic Lake powerhouse and view the dam and lake. Persons wishing to view the dam and lake must hike a 3-mile primitive trail from the powerhouse to the lake that gains 1,130 feet in elevation.

Scoping meetings will be recorded by a court reporter and all statements, oral and written, will become part of the Commission's official public record for this project. Before each meeting, all individuals who attend, especially those who intend to make statements, will be asked to sign in and clearly identify themselves for the record before speaking.

Individuals who choose not to speak, or are unable to attend the scoping meetings, may provide written comments to the Commission as described in the next section.

3.0 INFORMATION REQUESTED

Commission staff request resource agencies, Indian tribes, non-governmental organizations, and individuals to send us any information that will assist us in conducting an accurate and thorough analysis of the site-specific and cumulative effects of licensing the Mystic Lake Project. The types of information we seek include, but are not limited to:

- information, quantified data, or professional opinion that helps define the geographic and temporal scope of any cumulative effects and that helps identify significant environmental issues;

- identification about any other EA, Environmental Impact Statement, or similar document of study (previous, on-going, or planned) relevant to licensing the project;

- information and any data that aids in describing the past and present actions and effects of the project and other developmental activities on aquatic, terrestrial, recreation, aesthetic, and socio-economic resources;

- information that characterizes existing environments and habitats;

- the identification of any federal, state, or local resource plans or future project proposals in the Mystic Lake area along with any implementation schedules; and

- documentation that the proposed project would or would not contribute to cumulative adverse or beneficial effects on any resources. Documentation can include, but need not be limited to, how the project would interact with other projects in the area and other developmental activities; study results; resources management policies; and reports from federal, state, and local agencies.

All information, comments on SD1, and study requests should be submitted in writing to the Commission no later than **September 15, 2004**. All correspondence must clearly show at the top of the first page "Mystic Lake Project No. 2301-019." Send your information, comments, and study requests to:

The Secretary
Federal Energy Regulatory Commission
888 First Street, NE,
Washington, DC 20426

Scoping comments and study requests 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 www.ferc.gov under the "e-Filing" link. The Commission strongly encourages electronic filings.

Register online at: www.ferc.gov/esubscribenow.htm to be notified via email of new filings and issuances related to this or other pending Commission projects. For

assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov; call toll-free at (866) 208-3676; or, for TTY, call (202) 502-8659.

Intervenors - those on the Commission's service list for this proceeding, are reminded that if they file comments with the Commission, they must also serve a copy of their filing on each person whose name appears on the official service list. The current service list is presented in section 9.0. However, the list is periodically updated. The official service list can be obtained on the Commission's web site www.ferc.gov, scroll down to Documents and Filing, right click on service list, or call the Office of the Secretary, Dockets Branch at (202) 502-8715. In addition, if a party files comments or documents with the Commission relating to the merits of an issue that may affect the responsibilities of a particular resource agency, they must also serve a copy of the document on that resource agency.

For additional information on the site visit, scoping meetings, or how to file written comments with the Commission, please contact Steve Hocking with the Commission at (202) 502-8753 or steve.hocking@ferc.gov. Additional information about the Commission's licensing process and the Mystic Lake Project may be obtained from our website www.ferc.gov or PPL Montana's website www.mysticlakeproject.com.

4.0 PROPOSED ACTION AND ALTERNATIVES

In accordance with NEPA guidelines, Commission staff will consider at least three alternatives in the EA: (1) PPL Montana's proposed action, (2) Commission staff's alternative, and (3) the no-action alternative.

4.1 Applicant's Proposed Action

PPL Montana proposes to continue operating the Mystic Lake Project as a base load or peaking facility depending on water availability, electrical demand and license constraints. Project operations are tailored for the primary purposes of energy production, summer recreation, minimum flows to the bypassed reach, and flow moderation in West Rosebud Creek to benefit fish and wildlife resources.

4.1.1 Mystic Lake Project Facilities

The Mystic Lake Project has the following existing facilities: (1) a 148-foot-long, 18.6-foot-high concrete corewall and earthfill dike with 1-foot-high flashboards; (2) a 300.5-foot-long, 45-foot-high, concrete arch spillway section with left abutment section; (3) 42-inch high flashboards on top of the arch spillway; (4) Mystic Lake with a storage capacity of 47,000 acre-feet and a surface area of 446.7 acres at its normal maximum

surface elevation of 7,673.5 feet msl; (5) a conduit from the lake to the powerhouse consisting of a 1,005-foot-long tunnel, a 9,012-foot-long, 57-inch steel pipeline with an inverted siphon near the mid-point of the pipeline, a surge tank, and a 2,566-foot-long steel penstock; (6) a 60-foot-wide by 85-foot-long concrete powerhouse with two turbine/generator units with a total installed capacity of 11,500 kilowatts; (7) a re-regulation dam about one mile downstream from the powerhouse consisting of an 18-foot-high, 420-foot-long earthfill dike with a concrete spillway; (8) West Rosebud Lake with a storage capacity of 470 acre-feet and a surface area of 49 acres at its normal maximum surface elevation of 6,397.4 feet msl; (9) two 5.3-mile-long, 50-kilovolt transmission lines; (10) a 9,363-foot-long distribution line from the powerhouse to the arch dam and a 2,068-foot-long distribution line from the powerhouse to the surge tank; (11) an operator village adjacent to the powerhouse which includes four homes and three maintenance buildings; and (12) appurtenant facilities.

4.1.2 Current Project Operations

PPL Montana operates the project in both base load and peaking modes depending on water availability, electric demands, and license constraints. In general, Mystic Lake is used to store water during heavy runoff months May through July and then used to release water during the rest of the year, when flows in West Rosebud Creek would otherwise be lower.

Typically, from mid-May to mid-August, inflows exceed the plant's normal hydraulic capacity of 152 cubic feet per second (cfs) and the powerhouse is operated as a base load plant, continuously generating a normal full load of about 10.5 MW. Also, during this time, inflows are captured in Mystic Lake with the project only releasing about 46%, 49%, and 92% of available inflows during May, June, and July, respectively. As a result, Mystic Lake is gradually raised about 15 to 20 feet per month until it exceeds the minimum recreation pool elevation of 7,663.5 feet msl required by article 34.[4] In fact,

[4]Article 34 (as amended) states: Pending further order by the Commission on its own motion or at the request of others, after notice and opportunity for hearing, the Licensee shall: (a) provide for the discharge of a continuous minimum flow of 3 cubic feet per second from June 1 through August 31, or inflow to the reservoir, whichever is less, for the purpose of protecting and enhancing aquatic resources in West Rosebud Creek between the project dam and powerhouse. These flows shall be measured at the weir located in West Rosebud Creek channel immediately upstream of the powerhouse, and may be temporarily modified if required by operating emergencies beyond the control of the Licensee, and for short periods for fishery management purposes upon mutual agreement between the Licensee and the Montana Department of Fish and Game; (b) [this paragraph deleted]; (c) maintain a minimum water surface elevation of 7,663.5 feet, (USGS datum) from July 10 to September 15 each year; (d) provide for a minimum flow release of 20 cfs downstream from the West Rosebud Creek re-regulating dam except

the lake is typically maintained an average of about 10 feet higher than the minimum recreation pool elevation July through August. Once the lake reaches the spillway crest at elevation 7,670.0 feet msl, adding flashboards can bring the lake up to full pool at elevation 7673.5 feet msl.

After Labor Day weekend, PPL Montana begins to slowly draft the lake, reducing its elevation by an average of 8 to 9 feet per month, until the lake is at or near its lowest elevation of 6,512.0 feet msl by the end of March. Drafting the lake allows PPL Montana to release more water into West Rosebud Creek than otherwise would be available from inflows - August through March. Outflows generally exceed inflows by more than 300% for January, February, and March. During the fall and early winter, PPL Montana employs limited peaking to maximize generation during high use periods, generally from 8:00 am to 4:00 pm daily. Peaking cannot be used as frequently in late winter/early spring because low lake levels cause low pressure concerns in the project's penstock. In general, flow changes caused by peaking do not extend further than the re-regulation dam located about 1.5 miles downstream from the powerhouse. The re-regulation dam is used to moderate flow changes so as to provide steady releases into West Rosebud Creek.

At all times, PPL Montana maintains a minimum flow of 3 cfs from September 1 through May 31 and 10 cfs from June 1 through August 31 in the project's bypassed reach and a minimum flow of 20 cfs below the re-regulation dam (subject to inflows).

4.1.3 Proposed Project Facilities and Operation

PPL Montana does not propose any changes to project facilities or operations at this time.

4.1.4 Proposed Protection, Mitigation, and Enhancement Measures

PPL Montana does not propose protection, mitigation, and enhancement measures at this time. However, based on the issues identified to date, PPL Montana is considering certain measures which may be proposed in the future. This preliminary list of measures includes:

- New instrumentation and flow monitoring equipment and access to flow data via the internet;

- Raptor protection on the project's two transmission lines;

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when natural inflow is less than 20 cfs or when maintenance of facilities prevents such a release. See 56 FPC ¶ 2008 (1976) as amended by 16 FERC ¶ 62,276 (1981) and 31 FERC ¶ 62,309 (1985).

- Increased parking at the Mystic Lake trailhead;
- A new bridge over West Rosebud Creek on the Mystic Lake trail;
- Additional maintenance on the Mystic Lake trail and backcountry restoration activities;
- Information and education materials for Mystic Lake trail and backcountry users to help reduce user impacts;
- A new boat launch facility for carry-in boats at West Rosebud Lake;
- A handicapped accessible fishing site at West Rosebud Lake, including a trail and fishing pier;
- A dumpster at West Rosebud Lake to service any new recreation site and the Mystic Lake trailhead;
- Additional maintenance of West Rosebud road during the summer;
- Long-term recreation monitoring at the project, including periodic visitor surveys and automated road and trail counters, for adaptive management purposes; and
- Relocating, burying, or planting vegetation to hide project distribution lines.

4.1.5 Preliminary List of Studies

PPL Montana has compiled a potential list of studies for 2004 and 2005. This list is attached as Appendix A to this document.

4.2 Commission Staff's Alternative

Commission staff will review and consider alternatives to the proposed action, including environmental measures not proposed by PPL Montana. Modifications could include recommendations from agencies, Indian tribes, non-governmental organizations, and individuals.

4.3 No-Action Alternative

In the no-action alternative, the project would continue to operate under the terms and conditions of the existing license and no new environmental protection, mitigation, or

enhancement measures would be implemented. Commission staff use this alternative to establish baseline environmental conditions for comparison with other alternatives.

4.4 Alternatives Considered But Eliminated From Detailed Study

Commission staff propose eliminating the following alternatives from detailed study in the EA:

4.4.1 Federal Government Takeover

Commission staff do not consider federal takeover to be a reasonable alternative. Federal takeover of the Mystic Lake Project would require Congressional approval. While that fact alone would not preclude further consideration of this alternative, there is currently no evidence showing that a federal takeover should be recommended to Congress. No party has suggested that federal takeover would be appropriate and no federal agency has expressed an interest in operating the Mystic Lake Project.

4.4.2 Nonpower License

A nonpower license is a temporary license which the Commission would terminate whenever it determines that another governmental agency is authorized and willing to assume regulatory authority and supervision over the lands and facilities covered by the nonpower license. At this time, no governmental agency has suggested a willingness or ability to takeover the project. No party has sought a nonpower license and we have no basis for concluding that the Mystic Lake Project should no longer be used to produce power. Thus, we do not consider a nonpower license a reasonable alternative.

4.4.3 Project Decommissioning

Decommissioning the project would require denying PPL Montana's license application and requiring the surrender and termination of PPL Montana's existing license with any necessary conditions. The project would no longer be authorized to generate power. The Mystic Lake Project has generated an average of about 56.8 gigawatt-hours of electricity annually.

There would be significant costs involved with decommissioning the project and/or removing any project facilities. Also, decommissioning would foreclose any opportunity to add environmental enhancements to the existing project. For these reasons, we do not consider project decommissioning a reasonable alternative.

5.0 SCOPE OF CUMULATIVE ANALYSIS AND RESOURCE ISSUES

5.1 Cumulative Effects

According to the Council on Environmental Quality's regulations for implementing NEPA, an action may cause cumulative effects if its impacts overlap in space and/or time with the impacts 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 a period of time, including hydropower and other land and water development activities.

At this time, Commission staff have not identified any resources that would be cumulatively affected by the proposed project.

5.2 Resource Issues

In this section, Commission staff present a preliminary list of environmental issues to be addressed in the EA. We have identified these issues, which are listed by resource area, by reviewing the Pre-Application Document and the Commission's record for the Mystic Lake Project. This list is not intended to be exhaustive or final, but contains those issues raised to date that could have substantial impacts. After scoping is completed, Commission staff will review this list and determine the appropriate level of analysis needed to address each issue in the EA.

5.2.1 Geology and Soils

- No issues concerning geology and soils have been identified to date;

5.2.2 Water Quantity and Quality

- Effects of spill over Mystic Lake dam, flow through the powerhouse, and spill over the re-regulation dam on total dissolved gasses in West Rosebud Creek;

- Effects of lowering Mystic Lake each winter on turbidity and sediment deposition in West Rosebud Creek from Mystic Lake to Emerald Lake;

- Effects of project operations on PCB levels in sediments in West Rosebud Lake and Emerald Lake;

- Effects of project operations on water temperatures in West Rosebud Creek from Mystic Lake to Emerald Lake;

- Effects of project operations on heavy metals in West Rosebud Creek from

Mystic Lake to Emerald Lake;

- Effects of a pipeline rupture on PPL Montana's ability to maintain minimum flows in the project's bypassed reach;

- Effects of project operations on dissolved oxygen levels in Mystic Lake and in West Rosebud Creek from Mystic Lake to Emerald Lake;

5.2.3 Aquatic Resources

- Effects of project operations on the potential for whirling disease in West Rosebud Creek from Mystic Lake to Emerald Lake;

- Effects of existing minimum flows on fish habitat and fish populations in West Rosebud Creek from Mystic Lake to Emerald Lake;

- Effects of ramping rates on fish habitat and fish populations in West Rosebud Creek from Mystic Lake to Emerald Lake;

- Effects of project operations on trout spawning and trout winter survival in West Rosebud Creek from Mystic Lake to Emerald Lake;

5.2.4 Terrestrial Resources

- Effects of project operations on sensitive amphibians, including boreal toad and northern leopard frog, around Mystic Lake and adjacent to West Rosebud Creek from Mystic Lake to Emerald Lake;

- Effects of project transmission and distribution lines on raptors, including potential electrocution and collision hazards;

- Effects of project operations on riparian vegetation around Mystic Lake and adjacent to West Rosebud Creek from Mystic Lake to Emerald Lake;

- Effects of project operations on wildlife in the project vicinity;

- Effects of project operations on any proposed or federally-listed threatened and endangered species or critical habitat;

- Effects of livestock grazing on lands within the project boundary;

5.2.5 Recreation Resources

- Effects of project operations on public access to Mystic Lake and West Rosebud Creek from Mystic Lake to Emerald Lake;

- Effects of project operations on public use of the Mystic Lake trailhead including potential overcrowding at the trailhead parking lot;

- Effects of project operations on public use of the Mystic Lake trail, from the powerhouse to Mystic Lake, including user impacts and any maintenance and repair issues;

- Effects of project operations on boating and handicapped accessible fishing opportunities at West Rosebud Lake;

- Effects of project operations on trash removal at West Rosebud Lake and the Mystic Lake trailhead;

- Effects of project operations on West Rosebud road, including potential repair and maintenance needs;

- Effects of project operations on whitewater boating opportunities in West Rosebud Creek from the re-regulation dam to Emerald Lake;

- Effects of project operations on flow instrumentation and data needs, including any need for real-time flow data for whitewater boaters in West Rosebud Creek from the re-regulation dam to Emerald Lake;

- Effects of project operations on long-term recreation monitoring needs;

5.2.6 Land Use and Aesthetics

- No issues concerning land-use have been identified to date;

- Effects of project operations, including maintenance activities, on aesthetic resources in the project vicinity;

5.2.7 Cultural Resources

- Effects of project operations on archeological resources within the area of potential effect;

- Effects of project operations on historic, architectural-engineering properties within the area of potential effect;

5.2.8 Tribal Resources

- Effects of project operations on traditional cultural properties within the area of potential effect;

5.2.9 Developmental Resources

- Effects of proposed protection, mitigation, and enhancement measures on project economics;

6.0 EA PREPARATION SCHEDULE

At this time, Commission staff intend to prepare a "single EA" for this project (i.e. no draft EA will be issued). All stakeholders will have 45 days to review the EA and file comments with the Commission. All comments on the EA will be considered in any Commission order rendering a decision on a new license for the project. Major milestones, including those for preparing the EA include:

Major Milestone	Target Date
Scoping Meetings	August 2004
License Application Filed	December 2007
Issue Ready for Environmental Analysis Notice	March 2008
Deadline for Filing Comments, Recommendations and Agency Terms and Conditions	May 2008
Single EA Issued	August 2008
Deadline for Filing Modified Agency Recommendations	December 2008
Ready for Commission Decision on the Application	February 2009

A copy of PPL Montana's process plan, which has a complete list of relicensing milestones for the Mystic Lake Project, is attached as Appendix B to this document.

7.0 DRAFT EA OUTLINE

The preliminary outline for the Mystic Lake EA is as follows:

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X. FINDING OF (NO) SIGNIFICANT IMPACT

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APPENDICES (if necessary)

8.0 CONSISTENCY WITH COMPREHENSIVE PLANS

Section 10(a)(2) of the FPA requires the Commission to consider the extent to which a project is consistent with federal and state comprehensive plans for improving, developing, and conserving waterways affected by a project. We have identified the following comprehensive plans as being relevant to relicensing the Mystic Lake Project:

Forest Service. 1986. Custer National Forest and National Grasslands land and resource management plan. Department of Agriculture, Billings, Montana. October 1986. 186 pp.

Montana Department of Fish, Wildlife, and Parks. 2003. Montana Statewide Comprehensive Outdoor Recreation Plan (SCORP), 2003-2007. Helena, Montana. March 2003.

Montana Department of Natural Resources and Conservation. 1989. Montana water plan section: Instream flow protection. Helena, Montana. February 1989. 5 pp.

Montana Department of Natural Resources and Conservation. 1990. Montana water plan: Water storage. Helena, Montana. December 1990. 19 pp.

Montana Department of Natural Resources and Conservation. 1990. Montana water plan: Drought management. Helena, Montana. December 1990. 9 pp.

Montana Department of Natural Resources and Conservation. 1992. Montana water plan: Integrated water quality and quantity management. Helena, Montana. November 1992. 17 pp.

Montana Department of Natural Resources and Conservation. 1989. Montana water plan management section: Federal hydropower licensing and State water rights. Helena, Montana. February 1989. 4 pp.

9.0 SERVICE LIST

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APPENDIX A - PRELIMINARY LIST OF STUDIES

Source: PPL Montana's Pre-Application Document

Potential Informal (2004) and Formal (2005) Studies List

Wildlife and Terrestrial Habitats

• 2004 – Shoreline survey presence/absence for sensitive amphibian species (Boreal toad, Northern leopard frog) and habitat on West Rosebud and Emerald lakes

• 2004 – Compare time series aerial photos of West Rosebud Creek riparian habitats, and identify areas of disturbance from potential causes (e.g., livestock grazing, recreation and land uses, and Project operations)

• 2004 – Survey general riparian plant community and utilization (breeding activity) by avian species along West Rosebud Creek

• 2004 – Identify adverse avian electrocution or collision hazards by Project transmission and distribution lines

• 2005 – Follow up study or data collection per individual resource issue needs

Fisheries, Aquatic Habitats, and Water Quality

• 2004 – Describe fish habitat within the bypass reach of West Rosebud Creek and how habitat changes with varying stream discharge

• 2004 – Estimate abundance, length, weight, and age characteristics of fish residing within the West Rosebud Creek bypass reach

• 2004 – Visual fall survey for presence/absence of mountain whitefish in West Rosebud Creek upstream of Mystic Lake

• 2004 – Evaluate use of sonar equipment as method for monitoring the relative abundance of rainbow trout in Mystic Lake

• 2004 – Monitor total dissolved gases in West Rosebud Creek

• 2004 – Sample total dissolved and suspended solids in Project waters during winter drawdown of Mystic Lake

• 2004 – Sample sediments for presence/absence of PCBs in West Rosebud and Emerald lakes

• 2004 – Monitor water temperature in West Rosebud Creek from Project downstream to confluence with East Rosebud Creek

• 2004 – Sample West Rosebud and Emerald lakes for presence of oligochaete worm *Tubifex tubifex*, the secondary host to *Myxobolus cerebralis* (the causative agent of whirling disease)

• 2004 – Sample metal concentrations within the Project's waters using the State of Montana's standards as criteria

• 2005 – Begin fisheries monitoring within Mystic Lake on a 3- to 4-year time interval

• 2005 – Fish abundance estimates within the West Rosebud Creek bypass reach

• 2005 – Develop penstock flow restoration plan including actions taken in unlikely event that flow line or penstock flow is shut off during periods when Mystic Lake elevation is too low (or otherwise unable) to provide spill

• 2005 – Follow up study or data collection per individual resource issue needs

Recreation, Land Use and Aesthetics

• 2004 – Collection of use data with automated road and trailhead counters to supplement visitor information collected from the 2001 Visitor Survey and from USFS National Visitor Use Monitoring

• 2004 – Install real-time flow gage in June 2004 and implement internet-based survey of West Rosebud Creek whitewater boaters to determine minimum and optimum flow ranges for boating

• 2005 – Possible continuation of the internet-based survey of whitewater floaters or controlled flow below West Rosebud Re-regulation Dam

• 2005 – Follow up study or data collection per individual resource issue needs

Cultural

• 2004 – Research and prepare context statements, property type descriptions and NRHP registration requirements for archaeological properties

• 2004 – Research and prepare context statements, property type descriptions and NRHP registration requirements for historic architectural-engineering properties (Plant Operating Facilities)

• 2004 – Begin review of ethnographic literature and other studies pertinent to identification of Traditional Cultural Properties on the Project

• 2005 – Inventory and NRHP evaluation of archaeological properties-Mystic Lake fluctuation and backshore Zones

• 2005 – Inventory and NRHP Evaluation of archaeological properties-plant operating area

• 2005 – Inventory and NRHP Evaluation of historic architectural-engineering properties (Plant Operating Facilities)

• 2005 – Inventory and NRHP Evaluation of traditional cultural properties on the Project.

• 2005 – Follow up study or data collection per individual resource issue needs

APPENDIX B - MYSTIC LAKE PROCESS PLAN

Note that the Mystic Lake Process Plan attached to Scoping Document 1 was revised shortly after the Mystic Lake Scoping Meetings. Please go to PPL Montana's website **www.mysticlakeproject.com** for the most recent version of the Process Plan.