121 FERC ¶ 62,198 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

PPL Montana

Project No. 2301-022

ORDER ISSUING NEW LICENSE (December 17, 2007)

INTRODUCTION

1. On December 15, 2006, PPL Montana filed an application for a new license pursuant to sections 4(e) and 15 of the Federal Power Act (FPA), to continue operation and maintenance of the Mystic Lake Hydroelectric Project No. 2301. The project's authorized capacity being licensed is 11.25 megawatts (MW). The project is located on West Rosebud Creek, in Stillwater and Carbon counties, Montana. The entire project is located on U.S. Forest Service (Forest Service) lands within the Custer National Forest and occupies 673.54 acres of federal lands. As discussed below, I am issuing a new license for the project.

BACKGROUND

- 2. The Commission issued an original license for the project on October 12, 1962,³ and then issued a new license for the project on October 5, 1976, ⁴ which has an expiration date of December 31, 2009.
- 3. On March 5, 2007, the Commission issued a notice accepting the license application, soliciting motions to intervene and protests, indicating that the application was ready for environmental analysis, and soliciting comments, recommendations, preliminary terms and conditions, and preliminary fishway prescriptions.⁵ The Forest

¹ 16 U.S.C. §§ 797(e) and 808 (2000).

² The project is required to be licensed under section 23(b)(1) of the FPA, 16 U.S.C. § 817 (2000) because it occupies federal lands.

³ 28 FPC 586 (1962).

⁴ 56 FPC 2008 (1976).

⁵ 72 Fed. Reg. 11,024 (March 12, 2007).

Service filed comments, a motion to intervene, preliminary section 4(e) conditions, and a single section 10(a) recommendation. The U.S. Department of the Interior (Interior) filed a motion to intervene and a reservation of authority to prescribe fishways pursuant to section 18 of the FPA. The Montana Department of Environmental Quality (Montana DEQ) filed a motion to intervene. Finally, American Whitewater Affiliation and the Beartooth Paddlers jointly filed a motion to intervene and comments. None of the intervenors oppose the project.⁶

- 4. On August 17, 2007, Commission staff issued an environmental assessment (EA) for the project. Comments on the EA were filed by Montana DEQ; Forest Service; American Whitewater/Beartooth Paddlers; Montana Fish, Wildlife, and Parks (Montana FWP); and PPL Montana. Comments on the EA are discussed in the Other Issues section of this order.
- 5. The motions to intervene, comments, and recommendations have been fully considered in determining whether, and under what conditions, to issue this license.

PROJECT DESCRIPTION

- 6. The Mystic Lake Project has two reservoirs on West Rosebud Creek: (1) Mystic Lake, which is the project's storage reservoir; and (2) West Rosebud Lake, which is located downstream of Mystic Lake and is used to moderate peaking flows from the powerhouse.
- 7. Water flowing into Mystic Lake is impounded by Mystic Lake dam, which is a 45-foot-high, 368-foot-long concrete arch-type structure. Mystic Lake has a full pool elevation of 7,673.5 feet above mean sea level and a total volume of about 47,000 acrefeet. Water from the lake flows through the project's 2.4-mile-long flowline to the powerhouse which contains two Pelton turbines with an installed capacity of 11.25 MW. Two 50-kilovolt (kV), 5.38-mile-long transmission lines run from the powerhouse to NorthWestern Energy's Line Creek switchyard.
- 8. After exiting the powerhouse, water re-enters West Rosebud Creek and flows for a distance of about one mile to West Rosebud Lake which is impounded by the Reregulation dam. The Re-regulation dam is a 19-foot-high by 420-foot-long earth-filled structure that modulates peaking flows from the powerhouse.
- 9. 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

⁶ Because the motions to intervene were timely and unopposed, they were granted pursuant to Rule 214 (c)(1) of the Commission's Rules of Practice and Procedure, 18 C.F.R § 214(c)(1) (2007).

is used to store water during heavy runoff months May through July, and then is used to augment flows during the rest of the year.

- 10. PPL Montana proposes to continue operating the project in the same general manner in which it is operated today. Proposed new shutoff and minimum-flow valves on the project's flowline would enable PPL Montana to quickly and reliably close the flowline for maintenance, automatically close the flowline should a pipeline rupture occur, and continue to release minimum flows into the bypassed reach when the flowline is dewatered.
- 11. The existing project boundary encloses Mystic Lake and dam, West Rosebud Lake and dam, the flowline, surge tank, penstock, powerhouse, an operator village adjacent to the powerhouse that includes four homes for PPL Montana employees and three maintenance buildings, transmission lines, and appurtenant facilities. The existing project boundary encloses 611.06 acres of Forest Service lands. The proposed project boundary being approved in this order encloses all of the same project features as the existing project boundary with a few minor adjustments, in part, to enclose lands needed for recreation. The project as licensed in this order occupies 673.54 acres of Forest Service lands.

WATER QUALITY CERTIFICATION

- 12. Under section 401(a)(1) of the Clean Water Act (CWA),⁷ the Commission may not issue a license authorizing the construction or operation of a hydroelectric project unless the state water quality certifying agency either has issued water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year. Section 401(d) of the CWA provides that the certification shall become a condition of any federal license that authorizes construction or operation of the project.⁸
- 13. On October 2, 2006, PPL Montana filed an application with Montana DEQ for water quality certification for the project. Montana DEQ issued a certification for the project with 12 conditions. Condition 1 and 2 require a 10-, 5-, or 4-cubic foot per second (cfs) minimum flow in the bypassed reach depending on the time of year; a 2-cfs ramping rate in the bypassed reach when flows are below 10 cfs; and a 20-cfs minimum flow below West Rosebud Lake. Condition 3 requires implementation of PPL Montana's water quality monitoring plan for Mystic Lake, West Rosebud Creek, and West Rosebud

⁷ 33 U.S.C. § 1341(a)(1) (2000).

⁸ 33 U.S.C. § 1341(d) (2000).

⁹ See filing of February 5, 2007.

Lake contained in Appendix A of the license application. Conditions 4 and 5 require PPL Montana to develop a chemical storage and spill containment plan, and a septic system maintenance plan, respectively. Condition 6 requires the development of an emergency flow plan for ensuring that the 20-cfs minimum flow below West Rosebud Lake is maintained in the event of any powerhouse flow interruptions. Conditions 7, 8, and 9 require notification before any construction, notification of any unauthorized discharge of pollutants, and reasonable access for Montana DEQ personnel to determine compliance with all other conditions. Condition 10 requires the acquisition of all permits, authorizations, and certifications, and reserves Montana DEQ's authority to correct violations. Finally, Conditions 11 and 12 define violations of the terms of the water quality certification and expiration of the water quality certification.

SECTION 4(e) FINDINGS AND CONDITIONS

14. The project is located on Forest Service lands within the Custer National Forest. Small portions of Mystic and West Rosebud Lakes are located within the boundary of the Absaroka-Beartooth Wilderness Area which was established in 1978 as designated wilderness within the Custer National Forest (Pub. L. 95-249, 92 Stat. 162 (1978)). Section 4(e) of the FPA¹¹ provides that the Commission can issue a license for a project located within any reservation only if it finds that the license will not interfere or be inconsistent with the purpose for which such reservation was created or acquired. I have reviewed the Organic Administration Act of 1897, which established the purposes for forest reservations, and the presidential proclamations that created and expanded or contracted the Custer National Forest. There is no evidence or allegation in this

The Commission is prohibited from issuing licenses authorizing the construction or operation of projects within wilderness areas (Thornton Lake Resource Co., 50 FERC ¶ 61,086 (1990)). However, the project works, with the exception of West Rosebud Lake, were licensed and constructed prior to the designation of the wilderness area. West Rosebud Lake was licensed prior to the designation of the wilderness area, but constructed shortly after. This license does not authorize any new construction within the wilderness area. *Cf*, *Northern States Power Company*, 67 FERC ¶ 61,282 (1994) (issuing a license for a project on a wild and scenic river where the project was constructed prior to the wild and scenic river designation).

¹¹16 U.S.C. § 797(e) (2000).

¹² 16 U.S.C. § 473 et seq. (2000).

¹³ The Custer National Forest was created by a presidential proclamation issued March 2, 1907, 34 Stat. 3305 (1907). (It was initially called the Otter Forest Reserve, but was renamed by Executive Order 908, issued July 2, 1908.) Subsequently, lands were added and/or excluded from the Custer National Forest by legislation and numerous executive orders. *See* Executive Order 3216 (January 12, 1920), Executive Order 3488

proceeding to indicate that relicensing the Mystic Lake Project would interfere with the purposes of the Custer National Forest. Further, the Forest Service states in its May 3, 2007 letter containing its section 4(e) conditions that the project neither interferes, nor is inconsistent, with the purposes for which the Custer National Forest was created or acquired. Considering the above, I find that this license, as conditioned, will be consistent with the purposes for which the Custer National Forest was created.

- 15. Section 4(e) further requires that Commission licenses for projects located within federal reservations must include all conditions that the Secretary of the department under whose supervision the reservation falls shall deem necessary for the adequate protection and utilization of such reservation. The Custer National Forest is under the supervision of the U.S. Department of Agriculture's Forest Service.
- The Forest Service filed 19 section 4(e) conditions on May 3, 2007. Conditions 1 16. to 8 require PPL Montana, respectively, to obtain a special use permit; Forest Service approval of final designs; Forest Service approval of any changes; annual consultation with the Forest Service; implementation of a restoration plan prior to any license surrender; maintenance responsibilities; safety responsibilities; and indemnification, risks, and damage provisions. Conditions 9, 10, and 11 specify a scenery management plan, public access management plan, and recreation plan, respectively. Condition 12 requires measures to minimize human/bear conflicts, protect raptors, monitor bald eagles, and surveys to detect Harlequin ducks. Condition 13 requires biological evaluations for Forest Service sensitive species. Condition 14 requires a 10-, 5-, or 4-cfs minimum flow in the bypassed reach depending on the time of year, a 2-cfs per hour ramping rate in the bypassed reach when flows are below 10 cfs, and a 20-cfs minimum flow below West Rosebud Lake. Condition 15 requires new shutoff and minimum-flow valves on the flowline to improve minimum flow reliability. Conditions 16, 17, 18, and 19 require a fisheries monitoring plan, erosion control plan, riparian vegetation monitoring plan, and a weed management plan, respectively.
- 17. On November 30, 2007, the Forest Service finalized its 4(e) conditions previously filed May 3, 2007, with two changes: (1) the Forest Service amended Condition 4 to reserve the right to make changes to its 4(e) conditions in the future, and (2) the Forest Service added a new Condition 20 to require a wilderness occupancy and use plan for addressing project-related actions that occur on wilderness lands.
- 18. All of the Forest Service's section 4(e) conditions are set forth in Appendix B of this order and are incorporated into this license by Ordering paragraph E.

(June 10, 1921), Executive Order 3526 (August 9, 1921), Executive Order 3911 (October 4, 1923), Executive Order 5801 (February 17, 1932), and Forest Exchange Act, Pub. L. No. 173, 42 Stat. 465.

SECTION 18 FISHWAY PRESCRIPTIONS

- 19. Section 18 of the FPA¹⁴ provides that the Commission shall require construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretaries of Commerce or the Interior, as appropriate.
- 20. By letter filed May 3, 2007, the Secretary of Interior requested that the Commission reserve authority to prescribe fishways. Consistent with Commission policy, Article 402 of this license reserves the Commission's authority to require fishways that may be prescribed by Interior for the Mystic Lake Project.

THREATENED AND ENDANGERED SPECIES

- 21. Section 7(a) of the Endangered Species Act of 1973 (ESA),¹⁵ 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 modification of designated critical habitat.
- 22. Federally listed species that could occur in the project area are the black-footed ferret, Canada lynx, and gray wolf. In the EA, Commission staff found that the proposed project would not affect these species. The U.S. Fish and Wildlife Service (FWS) concurred with staff's determinations by letter filed September 5, 2007. ¹⁶

NATIONAL HISTORIC PRESERVATION ACT

23. Under section 106 of the National Historic Preservation Act (NHPA),¹⁷ and its implementing regulations,¹⁸ federal agencies must take into account the effect of any proposed undertaking on properties listed or eligible for listing in the National Register (defined as historic properties) and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking. This generally requires the Commission to consult with the State Historic Preservation Officer (SHPO) to determine

¹⁴ 16 U.S.C. § 811 (2000).

¹⁵ 16 U.S.C. § 1536(a) (2000).

¹⁶ Commission staff also found in the EA that the proposed project is not likely to adversely affect grizzly bears. Staff requested FWS's concurrence with this finding by letter dated August 17, 2007. In its letter filed September 5, 2007, FWS noted that the Yellowstone grizzly bear population was delisted effective April 30, 2007.

¹⁷ 16 U.S.C. § 470 et seq (2000).

¹⁸ 36 C.F.R. Part 800 (2007).

whether and how a proposed action may affect historic properties, and to seek ways to avoid or minimize any adverse effects.

24. To satisfy these responsibilities, the Commission executed a Programmatic Agreement (PA) with the Montana SHPO and invited PPL Montana, Forest Service, Eastern Shoshone Tribe, Crow Tribe, Northern Arapaho Tribe, Shoshone-Bannock Tribes, and the Northern Cheyenne Tribe to concur with the stipulations of the PA. Only the Forest Service signed the PA as a concurring party. The PA requires PPL Montana to implement a Historic Properties Management Plan (HPMP) filed with the license application. Execution of the PA demonstrates the Commission's compliance with section 106 of the NHPA. Article 403 requires PPL Montana to implement the PA and HPMP.

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

- 25. Section 10(j)(1) of the FPA,¹⁹ requires the Commission, when issuing a license, to include conditions based on recommendations by federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act,²⁰ to "adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat)" affected by the project.
- 26. Neither the FWS nor Montana FWP filed section 10(j) recommendations for the Mystic Lake Project.

OTHER ISSUES

27. Montana DEQ, Forest Service, American Whitewater/Beartooth Paddlers, PPL Montana, and Montana FWP all filed comments on staff's EA, which are discussed below:²¹

A. Wilderness Characteristics

28. In its comments on the EA, the Forest Service says Commission staff should have analyzed the project's direct and indirect effects to Absaroka-Beartooth Wilderness characteristics, given the project's location on and adjacent to wilderness lands.

¹⁹16 U.S.C. § 803(j)(1) (2000).

²⁰16 U.S.C. § 661 et seq (2000).

²¹ Comment letters filed September 25, 2007, September 28, 2007, September 28, 2007, October 1, 2007, and October 2, 2007, respectively.

- 29. In the EA, staff provided an analysis of the project's effects to recreation and to the area's visual and aesthetic qualities, including those portions of the project that occupy wilderness lands (about 8.2 acres of Mystic Lake and 0.9 acre of West Rosebud Lake). These analyses evaluate the project's 80-year history of providing recreation to the area and the project's visual effects including the introduction of man-made forms, colors, textures, lines, and physical structures into a predominantly natural landscape. Staff used the Forest Service's own visual quality objectives to complete the aesthetics analysis. Evaluating the project's effects to other wilderness characteristics (e.g. opportunities for solitude or for primitive and unconfined types of recreation) appeared unnecessary because the Forest Service's Custer National Forest Management Plan states that the project is "consistent with the Wilderness Act direction and will be retained and continued."²²
- 30. Staff also recommended in the EA, and this license requires, all Forest Service section 4(e) conditions for aesthetics and recreation. Forest Service 4(e) condition No. 20 requires PPL Montana to prepare a wilderness occupancy and use plan that requires Forest Service approval for all project-related actions that may potentially affect wilderness lands. Given this condition, and the above discussion, further analysis is not needed prior to issuing a license for the project.

B. Recreation

- 31. Currently, there are no formal recreation facilities associated with the project. The Forest Service provides nearby non-project recreation sites. PPL Montana proposes several measures to enhance recreation at the project including: (1) maintaining Mystic Lake's minimum recreation pool during the summer; (2) at the Mystic Lake trailhead, designing an educational program and installing new signs to inform the public how they can avoid conflicts with bears, minimize their environmental footprints while visiting the project, and park to avoid sensitive areas; (3) providing a formal carry-in boat launch and barrier-free fishing facility at West Rosebud Lake; and (4) conducting recreational user surveys. These measures are required by Forest Service 4(e) Condition 11. The Mystic Lake trailhead and parking area, and the new facilities at West Rosebud Lake will be brought into the project boundary under this new license.
- 32. Current project operations affect whitewater boating downstream of the project by delaying whitewater flows, reducing the peak hydrograph, and decreasing the number of

²² USFS. 1986. Custer National Forest and National Grasslands land and resource management plan. Department of Agriculture, Billings, Montana. October 1986.

days with optimal whitewater flows. PPL Montana proposes to install and maintain a new U.S. Geological Survey gage²³ and to develop a whitewater flow plan to improve whitewater boating opportunities. The proposed whitewater flow plan would: (1) use information from the new U.S. Geological Survey gage to refine whitewater flow targets; (2) set a target number of days for whitewater flow releases; (3) use adaptive management to refine these targets; and (4) contain a process for annually consulting with the agencies and stakeholders. Forest Service 4(e) Condition 11 also requires these measures.

C. Forest Service Special Status Species

- 33. The Forest Service says the Western toad and Jove's buttercup have both been documented in the Beartooth Ranger District, contrary to the EA, which lists these two species as either not present or only potentially present on the district.
- 34. The project is located within the Beartooth Ranger District and staff acknowledges that the Western toad and Jove's buttercup have been documented in the district. However, staff has no information to indicate that either of these species is found at the project or would be affected by the proposed measures being incorporated into this license. Therefore, no changes to staff's environmental analysis or the conditions in this license appear necessary.

D. License Conditions

Administrative Conditions

- 35. The Commission collects annual charges from licensees for the administration of the FPA. Article 201 provides for the collection of funds for administration of the FPA and the use and occupancy of federal lands.
- 36. This license approves PPL Montana's exhibit F drawings filed on February 21, 2007. This license also approves PPL Montana's exhibit G drawings filed September 24, 2007, including new lands enclosed within the project boundary for recreation purposes. The Commission requires licensees to file sets of approved project drawings on microfilm and in electronic file format. Article 202 requires the filing of these drawings.
- 37. The Commission requires that for new major licenses, licensees must set up and maintain an amortization reserve account upon license issuance. Article 203 requires the establishment of this account.
- 38. Some projects directly benefited from headwater improvements that were constructed by other licensees, the United States, or permitees. Article 204 requires the

²³ PPL Montana installed this gage in October 2006.

licensee to reimburse such entities for these benefits if they were not previously assessed and reimbursed.

Shutoff and Minimum-Flow Valves

39. This license approves installation of new shutoff and minimum-flow valves on the project's flowline and other changes to project structures. Article 301 requires the licensee to commence installation of the proposed new valves within two years and to complete installation within five years.

Review of Final Plans and Specifications

- 40. Article 302 requires the licensee to provide the Commission's Division of Dam Safety and Inspections, Portland Regional Office (D2SI PRO) with final contract drawings and specifications, a quality control inspection program, temporary construction emergency action plan, and erosion and sediment control plan for the construction of project facilities required by this license, together with a supporting design report consistent with the Commission's engineering guidelines.
- 41. Article 303 requires the licensee to provide the Commission's D2SI PRO with cofferdam construction drawings.
- 42. Article 304 requires the licensee to file revised exhibits A, F, and G, as appropriate, within 90 days of the completion of the construction of facilities or other actions required by this license to show those project facilities as built or modified.

Scheduling and Reporting Requirements

43. In Appendices A and B, there are certain water quality certification conditions and section 4(e) conditions requiring PPL Montana to: (1) submit plans for Montana DEQ and Forest Service approval without also filing these plans for Commission approval; and (2) make certain modifications to project plans and operations required by Montana DEQ and the Forest Service without submitting an application to amend the license. Article 401 requires PPL Montana to also seek the Commission's approval of these plans and to file and obtain Commission approval of applications to amend the license prior to implementing certain mandatory conditions in Appendices A and B.

Use and Occupancy of Project Lands and Waters

44. Requiring a licensee to obtain prior Commission approval for every use or occupancy of project land would be unduly burdensome. Therefore, Article 404 allows the licensee to grant permission, without prior Commission approval, for the use and occupancy of project lands for such minor activities as landscape plantings. Such uses

must be consistent with the purpose of protecting and enhancing the scenic, recreational, and environmental values of the project.

STATE AND FEDERAL COMPREHENSIVE PLANS

45. Section 10(a)(2)(A) of the FPA requires the Commission to consider the extent to which a project is consistent with federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project.²⁴ Under section 10(a)(2)(A), federal and state agencies filed 31 comprehensive plans that address various resources in Montana. Of these, the staff identified and reviewed 16 plans that are relevant to this project.²⁵ No conflicts were found.

APPLICANT'S PLANS AND CAPABILITIES

46. In accordance with sections 10(a)(2)(C) and 15(a) of the FPA,²⁶ staff evaluated PPL Montana's record as a licensee for these areas: (a) conservation efforts; (b) compliance history and ability to comply with the new license; (c) safe management, operation, and maintenance of the project; (d) ability to provide efficient and reliable electric service; (e) need for power; (f) transmission service; (g) cost effectiveness of plans; and (h) actions affecting the public. I accept the staff's findings in each of the following areas.

A. Conservation Efforts

47. Section 10(a)(2)(C) of the FPA requires the Commission to consider the applicant's electricity consumption improvement program, including its plans, performance, and capabilities for encouraging or assisting its customers to conserve electricity cost-effectively, taking into account the published policies, restrictions, and requirements of state regulatory authorities. Because PPL Montana sells project power to a power marketing agent, its ability to influence end-users is limited. However, our review of PPL Montana's filing under 18 C.F.R. § 16.10 indicates that PPL Montana strives routinely to conserve energy at the project powerhouse and recreation facilities, and its power marketing agent offers energy efficiency services such as audits, conservation, consulting, performance contracting, and project financing for energy conservation measures. We conclude that PPL Montana is making a reasonable effort to encourage energy conservation.

²⁴ 16 U.S.C. § 803(a)(2)(A)(2000).

²⁵ These comprehensive plans are listed in Appendix D of the project's EA issued August 17, 2007.

²⁶ 16 U.S.C. §§ 803(a)(2)(C) and 808(a) (2000).

- B. Compliance History and Ability to Comply with the New License
- 48. Based on a review of PPL Montana's compliance with the terms and conditions of the existing license, staff finds that PPL Montana's overall record of making timely filings and compliance with its license is satisfactory. Therefore, staff concludes that PPL Montana can satisfy the conditions of a new license.
 - C. Safe Management, Operation, and Maintenance of the Project
- 49. We have reviewed PPL Montana's management, operation, and maintenance of the Mystic Lake Project pursuant to the requirement of 18 C.F.R. Part 12 and the Commission's Engineering Guidelines and periodic Independent Consultant's Safety Inspection Reports. Staff concludes that the dams and other project works are safe, and that there is no reason to believe that PPL Montana cannot continue to safely manage, operate, and maintain these facilities under a new license.
 - D. Ability to Provide Efficient and Reliable Electric Service
- 50. We have reviewed PPL Montana's plans and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service. Our review indicates that PPL Montana periodically inspects powerhouse operations, and continually maintains, repairs, and rehabilitates project features. PPL Montana has an active and evolving Asset Management Program which identifies and prioritizes equipment maintenance and reliability concerns both at a plant and system-wide level. We conclude that PPL Montana is capable of operating the project to provide efficient and reliable electric service in the future.

E. Need for Power

- 51. The region has a need for power over the near term and the project would continue to help meet that need in the future. The project's average 56,770 MWh of power would help displace fossil-fueled electric power generation that the Western Electricity Coordinating Council (WECC) region now uses, thereby conserving non-renewable fossil fuels and reducing the emission of noxious byproducts caused by fossil-fuel combustion.
- 52. All of the project's output is sold to PPL Montana's power marketing agent, PPL Energy Plus, LLC, who in turn, sells the power to the wholesale and retail electric power market.
- 53. To anticipate how the demand for electricity is expected to change in the future in the region, we looked at the regional need for power as reported by the North American Electric Reliability Council (NERC) for its WECC region. WECC encompasses an area of nearly 1.8 million square miles with about 71 million people. It is the largest and most diverse of the eight NERC regional reliability councils. WECC's service territory, which

extends from Canada to Mexico, includes the provinces of Alberta and British Columbia, the northern portion of Baja California, Mexico, and all or portions of the 13 adjacent western states. Transmission lines span long distances connecting the Pacific Northwest with its abundant hydroelectric resources to the arid Southwest with its large coal-fired and nuclear resources.

- 54. The project is located in the Northwest Power Pool (NWPP), a winter peaking area. NWPP comprises all or major portions of the states of Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming, a small portion of northern California, and the Canadian provinces of British Columbia and Alberta.
- 55. From 2006 through 2015, winter total internal demand is projected to grow at annual compound rates of 1.6 percent. Annual energy usage for the ten-year period from 2005 to 2015 is forecast to increase by 1.9 percent. Because capacity margins for this winter-peaking area range between 23.7 and 30.3 percent for the next 6 years, the ability to meet peak demand is expected to be adequate for the next 6 years. Projects at various stages of planning and implementation include about 986 miles of 500-kilovolt (kV) transmission lines. However, even with assumptions about future generation and transmission extension projects, statewide and local reliability problems exist in the short term. Oregon, Washington, and western Montana coordinate the operation of hydroelectric resources to serve demand.
- 56. We conclude that the region has a need for power over the near term and the project would continue to help meet that need in the future. The project's 56,770 MWh of power would help displace fossil-fueled electric power generation that the WECC region now uses, thereby conserving non-renewable fossil fuels and reducing the emission of noxious byproducts caused by fossil-fuel combustion.

F. Transmission Services

57. The project includes two 50-kV, 5.38-mile-long transmission lines that run from the powerhouse to NorthWestern Energy's Line Creek switchyard. Other than a program to replace transmission line poles (exhibit E of the license application), PPL Montana has no plans that would affect its own or other transmission services in the region.

G. Cost Effectiveness of Plans

58. PPL Montana plans to make facility and operational modifications to both improve project operation reliability and to enhance environmental resources affected by the project. These facility and operational modifications include: (1) monitoring water quality, fish populations, riparian vegetation, and certain wildlife species; (2) providing minimum flows in the bypassed reach and below West Rosebud Lake; (3) implementing new ramping rates in the bypassed reach; (4) installing new shutoff and minimum-flow valves to improve minimum flow reliability; (5) making transmission and distribution

lines raptor safe; (6) controlling noxious weeds; (7) constructing new recreation facilities; (8) continued minimum lake levels in Mystic Lake during the recreation season; (9) installing a new U.S. Geological Survey gage and providing flow information for whitewater boaters; (10) developing a Whitewater Flow Plan; and (11) implementing an HPMP. Based on PPL Montana's record as an existing licensee, staff concludes that these facility and operational modifications are likely to be carried out in a cost-effective manner.

H. Actions Affecting the Public

59. PPL Montana has provided numerous opportunities for public involvement in the development of its application for a new license for the project. During the previous license period and with the environmental enhancement measures proposed for the relicense, PPL Montana provided facilities to enhance public use of project lands and features. PPL Montana has also operated the project with consideration for the protection of downstream uses of West Rosebud Creek. PPL Montana uses the project to help meet local power needs and pays taxes that contribute to the cost of public services.

PROJECT ECONOMICS

- 60. In determining whether to issue a new license for an existing hydroelectric project, the Commission considers a number of public interest factors, including the economic benefits of project power. Under the Commission's approach for evaluating the economics of hydropower projects, as articulated in *Mead Corp.*, ²⁷ the Commission uses current costs to compare the costs of the project and likely alternative power with no forecasts concerning potential future inflation, escalation, or deflation beyond the license issuance date. The basic purpose of the Commission's economic analysis is to provide a general estimate of the potential power benefits and the costs of a project, and of reasonable alternatives to project power. The estimate helps to support an informed decision concerning what is in the public interest with respect to a proposed license.
- 61. In applying this analysis to the Mystic Lake Project, we have considered two options: PPL Montana's proposal and the project as licensed herein. As proposed by PPL Montana, the levelized annual cost of operating the project is \$1,818,500 (about \$32.04 per megawatt-hours (MWh)). The proposed project would generate an estimated average of 56,770 MWh of energy annually. When we multiply our estimated average generation by the alternative power cost of \$45/MWh, we get a total value of the project's power of \$2,554,650 in 2006 dollars. To determine whether the proposed

²⁷ Mead Corporation, Publishing Paper Division, 72 FERC ¶ 61,027 (1995).

²⁸ The alternative power cost of \$45 per MWh is based on an average range of \$40-\$50 estimated by PPL Montana.

project is currently economically beneficial, staff subtracts the project's cost from the value of the project's power. Therefore, in the first year of operation, the project would cost \$736,150 or about \$12.96/MWh less than the likely alternative cost of power.

As licensed herein with the mandatory conditions and staff measures, the levelized annual cost of operating the project would be about \$1,821,000 or about \$32.08/MWh. Based on an estimated average of 56,770 MWh of generation as licensed, the project would produce power valued at \$2,554,650 when multiplied by the \$45/MWh value of the project's power. Therefore, in the first year of operation, project power would cost \$733,650, or \$12.92/MWh, less than the likely cost of alternative power.

COMPREHENSIVE DEVELOPMENT

- 63. Sections 4(e) and 10(a)(1) of the FPA³⁰ require the Commission to give equal consideration to the power development purposes and to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of fish and wildlife, the protection of recreational opportunities, and the preservation of other aspects of environmental quality. Any license issued shall be such as in the Commission's judgment will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for all beneficial public uses. The decision to license this project, and the terms and conditions included herein, reflect such consideration.
- 64. The EA for the project contains background information, analysis of effects, and support for related license articles. I conclude, based on the record for this proceeding, including the EA and the comments thereon, that licensing the Mystic Lake Project as described in this order would not constitute a major federal action significantly affecting the quality of the human environment. The project will be safe if constructed, operated, and maintained in accordance with the requirements of this license.
- 65. Based on our independent review and evaluation of the project, recommendations from resource agencies and other stakeholders, and the no-action alternative, as documented in the EA, I have selected the proposed Mystic Lake Project, with staff-recommended measures and required mandatory conditions, and find that it is best adapted to a comprehensive plan for improving or developing West Rosebud Creek.
- 66. I selected this alternative because: (1) issuance of a new license will serve to maintain a beneficial, dependable, and an inexpensive source of electric energy; (2) the required environmental measures will protect and enhance fish and wildlife resources,

²⁹ Details of staff's economic analysis for the project as licensed herein and for various alternatives are included in the EA issued August 17, 2007.

³⁰16 U.S.C. §§ 797(e) and 803(a)(1) (2000).

water quality, recreational resources, and historic properties; and (3) the 11.25 MW of capacity from renewable resources will offset the use of fossil-fueled, steam-electric generating plants, thereby conserving nonrenewable resources and reducing atmospheric pollution.

LICENSE TERM

- 67. Section 15(e) of the FPA,³¹ provides that any new license issued shall be for a term that the Commission determines to be in the public interest, but not less than 30 years or more than 50 years. The Commission's general policy is to establish 30-year terms for projects with little or no redevelopment, new construction, new capacity, or environmental mitigation and enhancement measures, 40-year terms for projects with a moderate amount of such activities, and 50-year terms for projects with extensive measures.³² This license requires a moderate amount of new construction and environmental enhancement measures including: (1) installing new shutoff and minimum-flow valves to improve minimum flow reliability; (2) constructing new recreation facilities; (3) implementing new ramping rates in the bypassed reach; and (4) monitoring water quality, fish populations, riparian vegetation, and certain wildlife species. Consequently, a 40-year license for the Mystic Lake Project would be appropriate.
- 68. Because the term of the current license does not expire until December 31, 2009, this license order is not effective until January 1, 2010.³³

The Director orders:

(A) This license is issued to PPL Montana (licensee), for a period of 40 years, effective January 1, 2010, to construct, operate, and maintain the Mystic Lake Project. This license is subject to the terms and conditions of the Federal Power Act (FPA), which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.

³¹ 16 U.S.C. § 808(e) (2000).

³² See *Consumers Power Company*, 68 FERC ¶ 61,077 at 61,383-84 (1994).

³³ For this reason, the various deadlines in the license articles, including Article 401 that refers to deadlines contained in mandatory conditions, are measured from the January 1, 2010 effective date, rather than from the order issuance date. We interpret the dates in the mandatory conditions to refer to the effective date of the license.

(B) The project consists of:

(1) All lands, to the extent of the licensee's interests in those lands, enclosed by the project boundary shown by exhibit G filed September 24, 2007.

Exhibit G Drawing	FERC No. 2301-	Description
Sheet G-1	1012	Detail Map of Mystic Reservoir
Sheet G-2	1013	Detail Map of Tunnel, Flowline, Penstock, Railroad, and 4160 volt Distribution Lines
Sheet G-3	1014	Detail Map of Camp, Powerhouse, Domestic Water Line and Trailhead
Sheet G-4	1015	Detail Map of Re-Regulating Reservoir
Sheet G-5	1016	Plan of 50 kV Transmission Lines to Line Creek Substation

Project works consisting of: (a) 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 mean sea level (msl) impounded by; (b) Mystic Lake dam, a 368-foot-long, 45-foot-high, concrete arch dam with integrated 300.5-foot-long spillway section at the left abutment with 50 flashboards supporting 3.5-foot-high timbers running the length of the spillway; and (c) a 148-foot-long, 15-foot-high concrete-core and earthfill dike with 2.5-foot-high freeboards and 1-foot-high flashboards; (d) a flowline from the reservoir to the powerhouse consisting of a 1,005-foot-long, 6-foot by 7-foot tunnel, a 9,012-foot-long, 57-inch diameter steel pipeline with an inverted siphon near the mid-point of the pipeline, a surge tank, a 2,566-foot-long, 42- to 48-inch diameter steel penstock, and two 123-foot-long, 28-inch diameter penstocks that supply each turbine; (e) two shutoff valves and minimum-flow valves on the flowline; (f) a 60-foot-wide by 85-foot-long concrete powerhouse with two turbine/generator units with a total installed capacity of 11.25 MW; (g) two tailrace tunnels, 32-foot-long and 68-foot-long extending from the powerhouse to West Rosebud Creek; (h) a Re-regulation dam about one mile downstream from the powerhouse consisting of a 19-foot-high, 420-foot-long, earthfill dike with a concrete spillway; (i) 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; (j) two 5.38-mile-long, 50-kilovolt transmission lines; (k) a 9,363-footlong distribution line from the powerhouse to Mystic Lake dam and a 2,068-foot-long distribution line from the powerhouse to the surge tank; (l) an operator village adjacent to the powerhouse that includes four homes and three maintenance buildings; and (m) appurtenant facilities.

The project works generally described above are more specifically shown and described by those portions of exhibits A and F shown below:

Exhibit A: The following sections of exhibit A filed on December 15, 2006:

Volume I, Exhibit A, Pages 9, 10, 12-16, and 18.

Exhibit A: The following sections of exhibit A filed on September 24, 2007.

Volume I, Exhibit A, Pages 11 and 17.

Exhibit F: The following drawings of exhibit F filed on February 21, 2007:

Exhibit F Drawing	FERC No. 2301-	<u>Description</u>
Sheet F-1	1001	Dams
Sheet F-2	1002	Flashboard Structure
Sheet F-3	1003	Main Dam – Plan, Elevation, Section, and Detail
Sheet F-4	1004	Earth Dike – Plan, Section, and Details
Sheet F-5	1005	Intake New Line – Plan, Elevation, and Sections
Sheet F-6	1006	Flowline – Plan, Profile, and Details
Sheet F-7	1007	Surge Tank – Elevation and Sections
Sheet F-8	1008	Power House – Cross Sections
Sheet F-9	1009	Power House – Floor Plan

Sheet F-10	1010	Re-Regulating Reservoir Dan West Rosebud Lake Main One Line Diagram	
Sheet F-11	1011	Main One Line Diagram	

- (3) All of the structures, fixtures, equipment, or facilities used to operate or maintain the project, all portable property that may be employed in connection with the project, and all riparian or other rights that are necessary or appropriate in the operation and maintenance of the project.
- (C) The exhibits A, F, and G described above are approved and made part of this license.
- (D) This license is subject to the conditions submitted by the Montana Department of Water Quality under section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1431(a)(1) (2000), as those conditions are set forth in Appendix A to this order.
- (E) This license is subject to the conditions submitted by the U.S. Forest Service under section 4(e) of the FPA, as those conditions are set forth in Appendix B to this order.
- (F) This license is also subject to the articles set forth in Form L-1 (Oct. 1975), entitled, "Constructed Major Project Affecting Lands of the United States" (see 54 FPC 1799 et seq.(1975)), and the following additional articles:
- Article 201. Administrative Annual Charges. The licensee shall pay the United States annual charges, effective the first day of the month in which the license is effective, and as determined in accordance with provisions of the Commission's regulations in effect from time to time, for the purposes of:
- (1) reimbursing the United States for the cost of administration of Part I of the Federal Power Act. The authorized installed capacity for that purpose is 11,250 kilowatts;
- (2) recompensing the United States for the use, occupancy, and enjoyment of 588.70 acres of its land (other than for transmission line right-of-way);
- (3) recompensing the United States for the use, occupancy, and enjoyment of 84.84 acres of its land for transmission line right-of-way.

Article 202. Exhibit Drawings. Within 45 days of the effective date of this license, the licensee shall file the approved exhibit drawings in aperture card and electronic file formats.

(a) Four sets of the approved exhibit drawings shall be reproduced on silver or gelatin 35mm microfilm. All microfilm shall be mounted on type D (3-1/4" X 7-3/8") aperture cards. Prior to microfilming, the FERC Drawing Number (i.e., P-2301-1001 through P-2301-####) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number shall be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (i.e., F-1, G-1, etc.), Drawing Title, and date of this license shall be typed on the upper left corner of each aperture card.

Two of the sets of aperture cards along with form FERC-587 shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set shall be filed with the Commission's Division of Dam Safety and Inspections, Portland Regional Office. The remaining set of aperture cards (Exhibit G only) and a copy of Form FERC-587 shall be filed with the Bureau of Land Management office at the following address:

Branch of Land Resources (MT-932) Bureau of Land Management 5001 Southgate Drive Billings, MT 59101-4669

(b) The licensee shall file two separate sets of exhibit drawings in electronic raster format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the Commission's Division of Dam Safety and Inspections, Portland Regional Office. Exhibit F drawings must be identified as "Critical Energy Infrastructure Information" material under 18 CFR §388.113(c). Each drawing must be a separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this license, and file extension in the following format [P-2301-###, G-1, Project Boundary, MM-DD-YYYYY.TIF]. Electronic drawings shall meet the following format specification:

IMAGERY - black & white raster file FILE TYPE – Tagged Image File Format (TIFF), CCITT Group 4 RESOLUTION – 300 dpi desired, (200 dpi min) DRAWING SIZE FORMAT – 24" X 36" (min), 28" X 40" (max) FILE SIZE – less than 1 MB desired

Each Exhibit G drawing that includes the project boundary must contain a <u>minimum</u> of three known reference points (i.e., latitude and longitude coordinates, or state plane coordinates). The points must be arranged in a triangular format for GIS geo-

referencing the project boundary drawing to the vector (or polygon) data, and must be based on a standard map coordinate system. The spatial reference for the drawing (i.e., map projection, map datum, and units of measurement) must be identified on the drawing and each reference point must be labeled. In addition, each project boundary drawing must be stamped by a registered land surveyor.

(c) The licensee shall file two separate sets of the project boundary data in a georeferenced electronic file format (such as ArcView shape files, GeoMedia files, MapInfo files, or a similar GIS format) with the Secretary of the Commission, ATTN: OEP/DHAC. The filing shall include both vector (or polygon) data and all reference points shown on the individual project boundary drawings. A single electronic boundary vector data (or polygon) file is required for the project boundary. The geo-referenced electronic boundary data file must be positionally accurate to ± 40 feet in order to comply with National Map Accuracy Standards for maps at a 1:24,000 scale. The file name(s) shall include: FERC Project Number, data description, date of this license, and file extension in the following format [P-2301, boundary vector/polygon/or point data, MM-DD-YYYY.SHP]. The filing must be accompanied by a separate text file describing the spatial reference for the geo-referenced data: map projection used (i.e., UTM, State Plane, Decimal Degrees, etc), the map datum (i.e., North American 27, North American 83, etc.), and the units of measurement (i.e., feet, meters, miles, etc.). The text file name shall include: FERC Project Number, data description, date of this license, and file extension in the following format [P-2301, project boundary metadata, MM-DD-YYYY.TXT].

In addition, for those projects that occupy federal lands, a separate geo-referenced vector (or polygon) file(s) is required that identifies transmission line acreage and non-transmission line acreage affecting federal lands for the purpose of meeting the requirements of 18 CFR § 11.2. The file(s) must also identify each federal owner and federal acreage affected by the project boundary. Depending on the geo-referenced electronic file format, the vector (or polygon), point, and federal lands data can be included in a single file with multiple layers.

Article 203. Amortization Reserve. Pursuant to section 10(d) of the Federal Power Act, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. The licensee shall set aside in a project amortization reserve account at the end of each fiscal year one half of the project surplus earnings, if any, in excess of the specified rate of return per annum on the net investment. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year, the licensee shall deduct the amount of that deficiency from the amount of any surplus earnings subsequently accumulated, until absorbed. The licensee shall set aside one-half of the remaining surplus earnings, if any, cumulatively computed, in the project amortization reserve account. The licensee shall

maintain the amounts established in the project amortization reserve account until further order of the Commission.

The specified reasonable rate of return used in computing amortization reserves shall be calculated annually based on current capital ratios developed from an average of 13 monthly balances of amounts properly included in the licensee's long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts. The cost rate for such ratios shall be the weighted average cost of long-term debt and preferred stock for the year, and the cost of common equity shall be the interest rate on 10-year government bonds (reported as the Treasury Department's 10-year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

Article 204. Headwater Benefits. If the licensee's project was directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement during the term of the original license (including extensions of that term by annual licenses), and if those headwater benefits were not previously assessed and reimbursed to the owner of the headwater improvement, the licensee shall reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed, in the same manner as for benefits received during the term of this new license. The benefits will be assessed in accordance with Part 11, Subpart B, of the Commission's regulations.

<u>Article 301</u>. *Installation of Shutoff and Minimum-Flow Valves*. The licensee shall commence installation of the new shutoff and minimum-flow valves within two years and shall complete installation within 5 years from the effective date of the license.

Article 302. Contract Plans and Specifications. At least 60 days prior to the start of installation of the shutoff and minimum-flow valves, the licensee shall submit one copy of its final plans and specifications and supporting design document to the Commission's Division of Dam Safety and Inspections (D2SI) – Portland Regional Engineer, and two copies to the Commission (one of these shall be a courtesy copy to the Director, D2SI). The submittal must also include as part of preconstruction requirements: a Quality Control and Inspection Program, Temporary Construction Emergency Action Plan, and Soil Erosion and Sediment Control Plan. The licensee may not begin construction until the D2SI - Portland Regional Engineer has reviewed and commented on the plans and specifications, determined that all preconstruction requirements have been satisfied, and authorized start of construction.

Article 303. Cofferdam Construction Drawings. Before starting construction of the shutoff and minimum-flow valves, the licensee shall review and approve the design of contractor-designed cofferdams and deep excavations and shall make sure construction of cofferdams and deep excavations is consistent with the approved design. At least 30 days before starting construction of the cofferdam, the licensee shall submit one copy to the Commission's D2SI - Portland Regional Engineer and two copies to the Commission (one of these copies shall be a courtesy copy to the Commission's Director, Division of Dam Safety and Inspections), of the approved cofferdam construction drawings and specifications and the letters of approval.

Article 304. As-built Drawings. Within 90 days of completion of the shutoff and minimum-flow valves, the licensee shall file for Commission approval, revised exhibits A, F, and G, as applicable, to describe and show those project facilities as built. A courtesy copy shall be filed with the Commission's D2SI - Portland Regional Engineer, the Director, D2SI, and the Director, DHAC.

<u>Article 401.</u> Commission Approval and Filing of Amendments Required by Mandatory Conditions.

(a) Requirement to file plans for Commission approval.

Various conditions of this license found in the Montana Department of Environmental Quality's (Montana DEQ) water quality certification (Appendix A) and the U.S. Forest Service's (Forest Service) section 4(e) conditions (Appendix B) require the licensee to prepare and implement plans in consultation with other entities for approval by Montana DEQ or the Forest Service without prior Commission approval. Each such plan shall also be submitted to the Commission for approval before the plan is implemented. These plans are listed below:

Montana DEQ Condition	Forest Service 4(e) Condition	Plan Name	Due Date
3		Schedule and format for submitting water quality data pursuant to Water Quality Monitoring Plan	Within 1 year from the effective date of this license
4		Chemical Storage and Spill Containment Plan	Within 1 year from the effective date of this license

5		Septic System Maintenance Plan	Within 1 year from the effective date of this license
6		Emergency Flow Plan	Within 5 years from the effective date of this license
	9	Scenery Management Plan	Within 1 year from the effective date of this license or 60 days prior to any ground-disturbing activity
	10	Public Access Management Plan	Within 1 year from the effective date of this license
	11	Recreation Plan	Within 1 year from the effective date of this license
	13	Biological Evaluations	90 days prior to activities that may affect Forest Service sensitive species
	17	Soil Erosion Control Plan	90 days prior to ground-disturbing activities
	18	Riparian Vegetation Monitoring Plan	Within 1 year from the effective date of this license

19	Weed Management Plan	Within 1 year from the effective date of this license
20	Wilderness Occupancy and Use Plan	Within 6 months from the effective date of this license

The licensee shall submit to the Commission documentation of any consultation required by the conditions, copies of comments and recommendations by consulted entities made in connection with each plan and a description of how each plan accommodates the comments and recommendations. 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 make changes to any plan submitted. Upon Commission approval, each plan becomes a requirement of the license and the licensee shall implement the plan.

(b) Requirement to file amendment applications.

Two conditions found in Montana DEQ's water quality certification and the Forest Service's section 4(e) conditions contemplate unspecified long-term changes to project operations, facilities, or Commission-approved plans for the purpose of mitigating environmental effects. These changes may not be implemented without prior Commission authorization granted after the filing of an application to amend the license. These conditions are listed below:

Montana DEQ Condition	Forest Service 4(e) Condition	License Requirement
3		At a minimum of ten year intervals from the license effective date, review and evaluate the data collected for water quality trends, temperature effects on the fish assemblage and condition of aquatic resources within Mystic Lake, West Rosebud Lake, and West Rosebud Creek from the Mystic Lake dam to the outlet of West Rosebud Lake and based upon this review and evaluation, modify the monitoring plan as appropriate.

	12	Within one year of the license effective date, the licensee shall consult with the Forest Service (a member of the Mystic Lake Wildlife and Terrestrial Habitats Technical Advisory Committee) to begin implementing wildlife species protection, mitigation, and enhancement measures. The committee will provide recommendations for appropriate improvements at the PPL Montana Camp (PPL Montana's operator village adjacent to the powerhouse) and at other project facilities.
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Article 402. Reservation of Authority to Prescribe Fishways. Authority is reserved to the Commission to require the licensee to construct, operate, and maintain, or provide for the construction, operation, and maintenance of such fishways as may be prescribed by the Secretary of the Interior pursuant to section 18 of the Federal Power Act.

Article 403. Programmatic Agreement and Historic Properties Management Plan. The licensee shall implement the Programmatic Agreement Among the Federal Energy Regulatory Commission and the Montana State Historic Preservation Officer for Managing Historic Properties that may be Affected by Issuing a License to PPL Montana for the Continued Operation of the Mystic Lake Hydroelectric Project in Carbon and Stillwater Counties, Montana (FERC No. 2301), executed on August 17, 2007, including but not limited to the Historic Properties Management Plan (HPMP) for the project. In the event that the Programmatic Agreement is terminated, the licensee shall continue to implement the provisions of its approved HPMP. The Commission reserves the authority to require changes to the HPMP at any time during the term of the license. If the Programmatic Agreement is terminated, the licensee shall obtain approvals from or make notifications to the Commission and the Montana State Historic Preservation Office where the HPMP calls upon the licensee to do so.

Article 404. Use and Occupancy. (a) In accordance with the provisions of this article, the licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain types of use and occupancy, without prior Commission approval. The licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the licensee shall also have continuing responsibility to supervise and control the use and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under

the authority of this article is violated, the licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

- (b) The type of use and occupancy of project lands and waters for which the licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 water craft at a time and where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; and (4) food plots and other wildlife enhancement. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the use and occupancies for which it grants permission are maintained in good repair and comply with applicable state and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the impoundment shoreline. To implement this paragraph (b), the licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the licensee's costs of administering the permit program. The Commission reserves the right to require the licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.
- (c) The licensee may convey easements or rights-of-way across, or leases of project lands for: (1) replacement, expansion, realignment, or maintenance of bridges or roads where all necessary state and federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project impoundment. No later than January 31 of each year, the licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was

conveyed. If no conveyance was made during the prior calendar year, the licensee shall so inform the Commission in writing no later than January 31 of each year.

- (d) The licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary federal and state water quality certification or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 water craft at a time and are located at least one-half mile (measured over project waters) from any other private or public marina; (6) recreational development consistent with an approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from project waters at normal surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 60 days before conveying any interest in project lands under this paragraph (d), the licensee must submit a letter to the Director, Office of Energy Projects, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.
- (e) The following additional conditions apply to any intended conveyance under paragraph (c) or (d) of this article:
- (1) Before conveying the interest, the licensee shall consult with federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.
- (2) Before conveying the interest, the licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved report on recreational resources of an Exhibit E; or, if the project does not have an approved report on recreational resources, that the lands to be conveyed do not have recreational value.
- (3) The instrument of conveyance must include the following covenants running with the land: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; and (ii) the

grantee shall take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project.

- (4) The Commission reserves the right to require the licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project's scenic, recreational, and other environmental values.
- (f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G drawings would be filed for approval for other purposes.
- (g) The authority granted to the licensee under this article shall not apply to any part of the public lands and reservations of the United States included within the project boundary.
- (G) The licensee shall serve copies of any Commission filing required by this order on any entity specified in the order to be consulted on matters related to that filing. Proof of service on these entities must accompany the filing with the Commission.
- (H) This order is final unless a request for rehearing is filed within 30 days from the date of its issuance, as provided in section 313(a) of the FPA. The filing of a request for rehearing does not operate as a stay of the effective date of this license or of any other date specified in this order, except as specifically ordered by the Commission. The licensee's failure to file a request for rehearing shall constitute acceptance of this order.

J. Mark Robinson Director Office of Energy Projects

FEDERAL ENERGY REGULATORY COMMISSION TERMS AND CONDITIONS OF LICENSE FOR CONSTRUCTED MAJOR PROJECT AFFECTING LANDS OF THE UNITED STATES

<u>Article 1</u>. The entire project, as described in this order of the Commission, shall be subject to all of the provisions, terms, and conditions of the license.

Article 2. No substantial change shall be made in the maps, plans, specifications, and statements described and designated as exhibits and approved by the Commission in its order as a part of the license until such change shall have been approved by the Commission: Provided, however, That if the Licensee or the Commission deems it necessary or desirable that said approved exhibits, or any of them, be changed, there shall be submitted to the Commission for approval a revised, or additional exhibit or exhibits covering the proposed changes which, upon approval by the Commission, shall become a part of the license and shall supersede, in whole or in part, such exhibit or exhibits theretofore made a part of the license as may be specified by the Commission.

Article 3. The project area and project works shall be in substantial conformity with the approved exhibits referred to in Article 2 herein or as changed in accordance with the provisions of said article. Except when emergency shall require for the protection of navigation, life, health, or property, there shall not be made without prior approval of the Commission any substantial alteration or addition not in conformity with the approved plans to any dam or other project works under the license or any substantial use of project lands and waters not authorized herein; and any emergency alteration, addition, or use so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in project works, or in uses of project lands and waters, or divergence from such approved exhibits may be made if such changes will not result in a decrease in efficiency, in a material increase in cost, in an adverse environmental impact, or in impairment of the general scheme of development; but any of such minor changes made without the prior approval of the Commission, which in its judgment have produced or will produce any of such results, shall be subject to such alteration as the Commission may direct.

Article 4. The project, including its operation and maintenance and any work incidental to additions or alterations authorized by the Commission, whether or not conducted upon lands of the United States, shall be subject to the inspection and supervision of the Regional Engineer, Federal Energy Regulatory Commission, in the

region wherein the project is located, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such purposes. The Licensee shall cooperate fully with said representative and shall furnish him such information as he may require concerning the operation and maintenance of the project, and any such alterations thereto, and shall notify him of the date upon which work with respect to any alteration will begin, as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of work for a period of more than one week, and of its resumption and completion. The Licensee shall submit to said representative a detailed program of inspection by the Licensee that will provide for an adequate and qualified inspection force for construction of any such alterations to the project. Construction of said alterations or any feature thereof shall not be initiated until the program of inspection for the alterations or any feature thereof has been approved by said representative. The Licensee shall allow said representative and other officers or employees of the United States, showing proper credentials, free and unrestricted access to, through, and across the project lands and project works in the performance of their official duties. The Licensee shall comply with such rules and regulations of general or special applicability as the Commission may prescribe from time to time for the protection of life, health, or property.

Article 5. The Licensee, within five years from the date of issuance of the license, shall acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction maintenance, and operation of the project. The Licensee or its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights or occupancy and use; and none of such properties shall be voluntarily sold, leased, transferred, abandoned, or otherwise disposed of without the prior written approval of the Commission, except that the Licensee may lease or otherwise dispose of interests in project lands or property without specific written approval of the Commission pursuant to the then current regulations of the Commission. The provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear; and mortgage or trust deeds or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article.

Article 6. In the event the project is taken over by the United States upon the termination of the license as provided in Section 14 of the Federal Power Act, or is transferred to a new licensee or to a nonpower licensee under the provisions of Section 15 of said Act, the Licensee, its successors and assigns shall be responsible for, and shall

make good any defect of title to, or of right of occupancy and use in, any of such project property that is necessary or appropriate or valuable and serviceable in the maintenance and operation of the project, and shall pay and discharge, or shall assume responsibility for payment and discharge of, all liens or encumbrances upon the project or project property created by the Licensee or created or incurred after the issuance of the license: Provided, That the provisions of this article are not intended to require the Licensee, for the purpose of transferring the project to the United States or to a new licensee, to acquire any different title to, or right of occupancy and use in, any of such project property than was necessary to acquire for its own purposes as the Licensee.

<u>Article 7</u>. The actual legitimate original cost of the project, and of any addition thereto or betterment thereof, shall be determined by the Commission in accordance with the Federal Power Act and the Commission's Rules and Regulations thereunder.

Article 8. The Licensee shall install and thereafter maintain gages and streamgaging stations for the purpose of determining the stage and flow of the stream or streams on which the project is located, the amount of water held in and withdrawn from storage, and the effective head on the turbines; shall provide for the required reading of such gages and for the adequate rating of such stations; and shall install and maintain standard meters adequate for the determination of the amount of electric energy generated by the project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, shall at all times be satisfactory to the Commission or its authorized representative. The Commission reserves the right, after notice and opportunity for hearing, to require such alterations in the number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, as are necessary to secure adequate determinations. The installation of gages, the rating of said stream or streams, and the determination of the flow thereof, shall be under the supervision of, or in cooperation with, the District Engineer of the United States Geological Survey having charge of stream-gaging operations in the region of the project, and the Licensee shall advance to the United States Geological Survey the amount of funds estimated to be necessary for such supervision, or cooperation for such periods as may mutually agreed upon. The Licensee shall keep accurate and sufficient records of the foregoing determinations to the satisfaction of the Commission, and shall make return of such records annually at such time and in such form as the Commission may prescribe.

<u>Article 9</u>. The Licensee shall, after notice and opportunity for hearing, install additional capacity or make other changes in the project as directed by the Commission, to the extent that it is economically sound and in the public interest to do so.

<u>Article 10</u>. The Licensee shall, after notice and opportunity for hearing, coordinate the operation of the project, electrically and hydraulically, with such other projects or power systems and in such manner as the Commission any direct in the

interest of power and other beneficial public uses of water resources, and on such conditions concerning the equitable sharing of benefits by the Licensee as the Commission may order.

Article 11. Whenever the Licensee is directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement, the Licensee shall reimburse the owner of the headwater improvement for such part of the annual charges for interest, maintenance, and depreciation thereof as the Commission shall determine to be equitable, and shall pay to the United States the cost of making such determination as fixed by the Commission. For benefits provided by a storage reservoir or other headwater improvement of the United States, the Licensee shall pay to the Commission the amounts for which it is billed from time to time for such headwater benefits and for the cost of making the determinations pursuant to the then current regulations of the Commission under the Federal Power Act.

Article 12. The operations of the Licensee, so far as they affect the use, storage and discharge from storage of waters affected by the license, shall at all times be controlled by such reasonable rules and regulations as the Commission may prescribe for the protection of life, health, and property, and in the interest of the fullest practicable conservation and utilization of such waters for power purposes and for other beneficial public uses, including recreational purposes, and the Licensee shall release water from the project reservoir at such rate in cubic feet per second, or such volume in acre-feet per specified period of time, as the Commission may prescribe for the purposes hereinbefore mentioned.

Article 13. On the application of any person, association, corporation, Federal agency. State or municipality, the Licensee shall permit such reasonable use of its reservoir or other project properties, including works, lands and water rights, or parts thereof, as may be ordered by the Commission, after notice and opportunity for hearing, in the interests of comprehensive development of the waterway or waterways involved and the conservation and utilization of the water resources of the region for water supply or for the purposes of steam-electric, irrigation, industrial, municipal or similar uses. The Licensee shall receive reasonable compensation for use of its reservoir or other project properties or parts thereof for such purposes, to include at least full reimbursement for any damages or expenses which the joint use causes the Licensee to incur. Any such compensation shall be fixed by the Commission either by approval of an agreement between the Licensee and the party or parties benefiting or after notice and opportunity for hearing. Applications shall contain information in sufficient detail to afford a full understanding of the proposed use, including satisfactory evidence that the applicant possesses necessary water rights pursuant to applicable State law, or a showing of cause why such evidence cannot concurrently be submitted, and a statement as to the

relationship of the proposed use to any State or municipal plans or orders which may have been adopted with respect to the use of such waters.

Article 14. In the construction or maintenance of the project works, the Licensee shall place and maintain suitable structures and devices to reduce to a reasonable degree the liability of contact between its transmission lines and telegraph, telephone and other signal wires or power transmission lines constructed prior to its transmission lines and not owned by the Licensee, and shall also place and maintain suitable structures and devices to reduce to a reasonable degree the liability of any structures or wires falling or obstructing traffic or endangering life. None of the provisions of this article are intended to relieve the Licensee from any responsibility or requirement which may be imposed by any other lawful authority for avoiding or eliminating inductive interference.

Article 15. The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

Article 16. Whenever the United States shall desire, in connection with the project, to construct fish and wildlife facilities or to improve the existing fish and wildlife facilities at its own expense, the Licensee shall permit the United States or its designated agency to use, free of cost, such of the Licensee's lands and interests in lands, reservoirs, waterways and project works as may be reasonably required to complete such facilities or such improvements thereof. In addition, after notice and opportunity for hearing, the Licensee shall modify the project operation as may be reasonably prescribed by the Commission in order to permit the maintenance and operation of the fish and wildlife facilities constructed or improved by the United States under the provisions of this article. This article shall not be interpreted to place any obligation on the United States to construct or improve fish and wildlife facilities or to relieve the Licensee of any obligation under this license.

Article 17. The Licensee shall construct, maintain, and operate, or shall arrange for the construction, maintenance, and operation of such reasonable recreational facilities, including modifications thereto, such as access roads, wharves, launching ramps, beaches, picnic and camping areas, sanitary facilities, and utilities, giving consideration to the needs of the physically handicapped, and shall comply with such reasonable modifications of the project, as may be prescribed hereafter by the Commission during the term of this license upon its own motion or upon the recommendation of the Secretary

of the Interior or other interested Federal or State agencies, after notice and opportunity for hearing.

Article 18. So far as is consistent with proper operation of the project, the Licensee shall allow the public free access, to a reasonable extent, to project waters and adjacent project lands owned by the Licensee for the purpose of full public utilization of such lands and waters for navigation and for outdoor recreational purposes, including fishing and hunting: Provided, That the Licensee may reserve from public access such portions of the project waters, adjacent lands, and project facilities as may be necessary for the protection of life, health, and property.

Article 19. 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.

Article 20. The Licensee shall clear and keep clear to an adequate width lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which results from the clearing of lands or from the maintenance or alteration of the project works. In addition, all trees along the periphery of project reservoirs which may die during operations of the project shall be removed. All clearing of the lands and disposal of the unnecessary material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.

Article 21. Timber on lands of the United State cut, used, or destroyed in the construction and maintenance of the project works, or in the clearing of said lands, shall be paid for, and the resulting slash and debris disposed of, in accordance with the requirements of the agency of the United States having jurisdiction over said lands. Payment for merchantable timber shall be at current stumpage rates, and payment for young growth timber below merchantable size shall be at current damage appraisal values. However, the agency of the United States having jurisdiction may sell or dispose of the merchantable timber to others than the Licensee: Provided, That timber so sold or disposed of shall be cut and removed from the area prior to, or without undue interference with, clearing operations of the Licensee and in coordination with the Licensee's project construction schedules. Such sale or disposal to others shall not relieve the Licensee of responsibility for the clearing and disposal of all slash and debris from project lands.

Article 22. The Licensee shall do everything reasonably within its power, and shall require its employees, contractors, and employees of contractors to do everything reasonably within their power, both independently and upon the request of officers of the agency concerned, to prevent, to make advance preparations for suppression of, and to suppress fires on the lands to be occupied or used under the license. The Licensee shall be liable for and shall pay the costs incurred by the United States in suppressing fires caused from the construction, operation, or maintenance of the project works or of the works appurtenant or accessory thereto under the license.

Article 23. The Licensee shall interpose no objection to, and shall in no way prevent, the use by the agency of the United States having jurisdiction over the lands of the United States affected, or by persons or corporations occupying lands of the United States under permit, of water for fire suppression from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license, or the use by said parties of water for sanitary and domestic purposes from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license.

Article 24. The Licensee shall be liable for injury to, or destruction of, any buildings, bridges, roads, trails, lands, or other property of the United States, occasioned by the construction, maintenance, or operation of the project works or of the works appurtenant or accessory thereto under the license. Arrangements to meet such liability, either by compensation for such injury or destruction, or by reconstruction or repair of damaged property, or otherwise, shall be made with the appropriate department or agency of the United States.

Article 25. The Licensee shall allow any agency of the United States, without charge, to construct or permit to be constructed on, through, and across those project lands which are lands of the United States such conduits, chutes, ditches, railroads, roads, trails, telephone and power lines, and other routes or means of transportation and communication as are not inconsistent with the enjoyment of said lands by the Licensee for the purposes of the license. This license shall not be construed as conferring upon the Licensee any right of use, occupancy, or enjoyment of the lands of the United States other than for the construction, operation, and maintenance of the project as stated in the license.

Article 26. In the construction and maintenance of the project, the location and standards of roads and trails on lands of the United States and other uses of lands of the United States, including the location and condition of quarries, borrow pits, and spoil disposal areas, shall be subject to the approval of the department or agency of the United States having supervision over the lands involved.

Article 27. The Licensee shall make provision, or shall bear the reasonable cost, as determined by the agency of the United States affected, of making provision for avoiding inductive interference between any project transmission line or other project facility constructed, operated, or maintained under the license, and any radio installation, telephone line, or other communication facility installed or constructed before or after construction of such project transmission line or other project facility and owned, operated, or used by such agency of the United States in administering the lands under its jurisdiction.

Article 28. The Licensee shall make use of the Commission's guidelines and other recognized guidelines for treatment of transmission line rights-of-way, and shall clear such portions of transmission line rights-of-way across lands of the United States as are designated by the officer of the United States in charge of the lands; shall keep the areas so designated clear of new growth, all refuse, and inflammable material to the satisfaction of such officer; shall trim all branches of trees in contact with or liable to contact the transmission lines; shall cut and remove all dead or leaning trees which might fall in contact with the transmission lines; and shall take such other precautions against fire as may be required by such officer. No fires for the burning of waste material shall be set except with the prior written consent of the officer of the United States in charge of the lands as to time and place.

Article 29. The Licensee shall cooperate with the United States in the disposal by the United States, under the Act of July 31, 1947, 61 Stat. 681, as amended (30 U.S.C. sec. 601, et seq.), of mineral and vegetative materials from lands of the United States occupied by the project or any part thereof: Provided, That such disposal has been authorized by the Commission and that it does not unreasonably interfere with the occupancy of such lands by the Licensee for the purposes of the license: Provided further, That in the event of disagreement, any question of unreasonable interference shall be determined by the Commission after notice ad opportunity for hearing.

Article 30. If the Licensee shall cause or suffer essential project property to be removed or destroyed or to become unfit for use, without adequate replacement, or shall abandon or discontinue good faith operation of the project or refuse or neglect to comply with the terms of the license and the lawful orders of the Commission mailed to the record address of the Licensee or its agent, the Commission will deem it to be the intent of the Licensee to surrender the license. The Commission, after notice and opportunity for hearing, may require the Licensee to remove any or all structures, equipment and power lines within the project boundary and to take any such other action necessary to restore the project waters, lands, and facilities remaining within the project boundary to a condition satisfactory to the United States agency having jurisdiction over its lands or the Commission's authorized representative, as appropriate, or to provide for the continued operation and maintenance of nonpower

facilities and fulfill such other obligations under the license as the Commission may prescribe. In addition, the Commission in its discretion, after notice and opportunity for hearing, may also agree to the surrender of the license when the Commission, for the reasons recited herein, deems it to be the intent of the Licensee to surrender the license.

Article 31. The right of the Licensee and of its successors and assigns to use or occupy waters over which the United States has jurisdiction, or lands of the United States under the license, for the purpose of maintaining the project works or otherwise, shall absolutely cease at the end of the license period, unless the Licensee has obtained a new license pursuant to the then existing laws and regulations, or an annual license under the terms and conditions of this license.

<u>Article 32</u>. The terms and conditions expressly set forth in the license shall not be construed as impairing any terms and conditions of the Federal Power Act which are not expressly set forth herein.

APPENDIX A

Montana Department of Environmental Quality Section 401 Water Quality Certification filed February 5, 2007 Terms and Conditions

- 1. In order to protect aquatic life PPL shall provide a minimum flow in West Rosebud Creek from Mystic Lake to the Powerhouse, the "Mystic bypass reach," as measured at the weir in West Rosebud Creek immediately upstream of the Powerhouse (the upper weir) as follows:
 - a) During the months June, July and August PPL will provide a minimum Mystic bypass reach flow of 10 cfs as measured at the upper weir.
 - b) During the months September through May PPL will provide a minimum Mystic bypass reach flow of 5 cfs with the option to provide up to 11 days (randomly selected) each month of 4 cfs as measured at the upper weir. Any release of 4 cfs, even if less than a full 24-hour period, will count toward the 11-day per month maximum.
 - c) PPL will provide flow ramping rates from the Mystic "fish valve" at no more than 2 cfs per hour, measured at the upper weir, to the bypass reach during planned flow decreases (e.g. summer 10 cfs to winter minimum on August 31) or during other flow reductions when flow in the bypass reach is less than 10 cfs. There will be no ramp rate requirements for the bypass reach at flows above 10 cfs.
- 2. PPL shall provide for a minimum flow release of 20 cfs downstream from the West Rosebud Creek Re-regulation Dam except when natural inflow is less than 20 cfs or when maintenance of facilities prevents such a release. This minimum flow will be measured at the USGS gage (#06204070 installed October 2006) in West Rosebud Creek located immediately downstream of the bridge to the Emerald Lake Campground.
- 3. PPL shall implement the water quality monitoring plan for Mystic Lake, West Rosebud Creek and West Rosebud Lake as submitted to FERC in the Final License Application, Appendix A and:
 - a) Within one year of the license date develop a schedule and format for submitting data collected to the Department;
 - b) At a minimum of ten year intervals of the license date, review and evaluate the data collected for water quality trends, temperature effects on the fish assemblage and condition of aquatic resources within Mystic Lake, West Rosebud Lake and West Rosebud Creek from the Mystic Lake Dam to the outlet of West Rosebud Lake

and based upon this review and evaluation, modify the monitoring plan as appropriate with Department approval.

- 4. PPL shall, within one year of the license date, develop a fuel and chemical storage and spill containment plan that will ensure the protection of surface and groundwater in the event of an accidental spill.
- 5. PPL shall, within one year of the license date, develop a maintenance plan for the project septic system(s) including delineation of a replacement drain field location(s).
- 6. PPL shall, within five years of the license date, develop an emergency flow plan that will provide for flows up to 20 cfs below the West Rosebud Lake Re-regulation Dam (measured at USGS gage #06204070) in the event that flows from the power house are interrupted and in accordance with the minimum flow requirement in Conditions 1 and 2. The plan and any Project modifications are to be implemented as soon as practicable with the concurrence of the Department.
 - a) PPL is to notify the Department and the Montana Department of Fish Wildlife & Parks of any flow interruption within 24 hours.
- 7. PPL shall notify the Department in writing not less than two (2) weeks prior to commencing any construction activity within the Project boundary which may result in a discharge of pollutants to state waters and notify the Department within seven (7) days after completion of any construction activity.
- 8. PPL shall notify the Department within 24 hours of any un-authorized discharge of pollutants (i.e., spills) to Mystic Lake, West Rosebud Creek or West Rosebud Lake.
- 9. PPL shall allow the Department reasonable entry and access to the Project and review of appropriate records in order to determine compliance with conditions of this certification.
- 10. PPL shall obtain all permits, authorizations and certifications required by federal, state or local laws, regulations or ordinances prior to the commencement of any activity that could reasonably be expected to violate Montana's water quality standards. The Department reserves the authority under this certification to require plans, corrective actions and monitoring necessary to correct water quality violations that may result from operation, maintenance or construction associated with the Project.
- 11. Should the Project be found to be materially out of compliance with any of the conditions of this certification, or should the permittee construct or operate this Project in any way materially different from the manner specified in the Application or supporting

documents, as modified by the conditions of this certification, and an appropriate remedy is not found, then the terms of this certification shall be considered to have been violated.

12. This certification shall expire upon the assignment of transfer of the property covered by this certification unless the new owner submits to the Department a written consent to all the terms and conditions of this certification.

APPENDIX B

U.S. Forest Service Section 4(e) Terms and Conditions filed May 3, 2007 and modified by filing of November 30, 2007.

Condition No. - 1. Requirement to Obtain a US Forest Service Special Use Authorization

If during the term of the License the Commission determines that the project involves the use of any additional National Forest System (NFS) lands, outside the current project boundary, the Licensee shall obtain a special use authorization from the US Forest Service (Forest Service) for the occupancy and use of such additional NFS lands. The Licensee shall obtain the executed authorization before beginning any ground disturbing activities on NFS lands covered by the special use authorization, and shall file that authorization with the Commission. The Licensee shall be responsible for the costs of collecting all information directly related to the evaluation of the effects of the proposed occupancy and use that the Forest Service needs in order to make a decision concerning issuance of a special use authorization.

If during the term of the License the Licensee proposes to perform any project construction work, the Licensee shall obtain a construction temporary special use authorization before beginning any ground disturbing activities on NFS lands. The Licensee shall be responsible for the costs of collecting all information directly related to the evaluation of the effects of the proposed construction that the Forest Service needs in order to make a decision concerning issuance of a construction temporary special use authorization. The Licensee may commence ground disturbing activities authorized by the License and construction temporary special use authorization no sooner than 60 days following the date the Licensee files the Forest Service temporary special use authorization with the Commission, unless the Commission prescribes a different commencement schedule. In the event there is a conflict between any provisions of the License and the Forest Service special use authorization, the special use authorization shall prevail to the extent that the Forest Service, in consultation with the Commission, deems necessary to protect and utilize NFS resources.

Condition No. - 2. US Forest Service Approval of Final Design

Before any construction of the project occurs on NFS lands, the Licensee shall obtain the prior written approval of the Forest Service for all final design plans for project components that the Forest Service deems as affecting or potentially affecting NFS resources. The Licensee shall follow the schedules and procedures for design review and approval specified in the Forest Service construction temporary special use authorization. As part of such prior written approval, the Forest Service may require adjustments in final plans and facility locations to preclude or mitigate impacts and to assure that the project is compatible with on-the-ground conditions. Should such necessary adjustments be deemed by the Forest Service, the Commission, or the Licensee to be a substantial change, the Licensee shall follow procedures of Article 2 of the license. Any changes made to the License for any reason, pursuant to Article 2 or Article 3, shall

be made subject to any new terms and conditions of the Secretary of Agriculture pursuant to section 4(e) of the Federal Power Act.

Condition No. - 3. Approval of Changes after Initial Construction

Notwithstanding any license authorization to make changes to the project, the Licensee shall get written approval from the Forest Service prior to making any changes in the location of any constructed project features or facilities, or in the use of project lands and waters, or any departure from the requirements of any approved exhibits filed with the Commission. Following receipt of such approval from the Forest Service, and at least 60 days prior to initiating any such changes or departure, the Licensee shall file a report with the Commission describing the changes, the reasons for the changes, and showing the approval of the Forest Service for such changes. The Licensee shall file an exact copy of this report with the Forest Service at the same time it is filed with the Commission. This article does not relieve the Licensee from the amendment or other requirements of Article 2 or Article 3 of this License.

Condition No. 4 – Consultation

Each year during the 60 days preceding the anniversary of this license, or as arranged with the Forest Service, the Licensee shall consult with the Forest Service with regard to measures needed to protect National Forest System lands and resources affected by the Project. Within 60 days following such consultation, the Licensee shall file with the Commission evidence of the consultation with any recommendations made by the Forest Service. The Forest Service reserves the right, after notice and opportunity for comment and administrative review, to require changes in the project and its operation through revision of the 4(e) conditions that set forth measures necessary to protect National Forest System lands and resources.

Condition No. - 5. Surrender of License or Transfer of Ownership

Prior to any surrender of this License, the Licensee shall restore NFS lands to a condition satisfactory to the Forest Service. At least one year in advance of the proposed application for License surrender, the Licensee shall file with the Commission a restoration plan approved by the Forest Service. The restoration plan shall identify improvements to be removed, restoration measures, and time frames for implementation and estimated restoration costs. In addition, at least one year in advance of the proposed application for license surrender, the Licensee shall pay for an independent audit to assist the Forest Service in determining whether the Licensee has the financial ability to fund the surrender and restoration work specified in the plan.

As a condition of any transfer of the License or sale of the project, the Licensee shall require the proposed transferee to demonstrate, in a manner satisfactory to the Forest Service, that it has the financial ability to provide for the costs of surrender and restoration of the project.

Condition No. - 6. Maintenance of Improvements

The Licensee shall maintain all its improvements and premises on NFS lands to standards of repair, orderliness, neatness, sanitation, and safety acceptable to the Forest Service. The

Licensee shall comply with all applicable Federal, State, and local laws and regulations, including but not limited to, the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., the Resources Conservation and Recovery Act, 42 U.S.C. 6901 et seq., the Comprehensive Environmental Response, Control, and Liability Act, 42 U.S.C. 9601 et seq., and other relevant environmental laws, as well as public health and safety laws and other laws relating to the siting, construction, operation, and maintenance of any facility, improvement, or equipment.

Condition No. - 7. Safety During Project Construction Plan

Sixty days prior to ground disturbing activity related to new project construction on or affecting NFS lands, the Licensee shall file with the Commission a Safety During Construction Plan approved by the Forest Service that identifies potential hazard areas and measures necessary to protect public safety. Areas to consider include construction activities near public roads, trails, and recreation areas and facilities.

The Licensee shall perform daily (or on a schedule otherwise agreed to by the Forest Service in writing) inspections of the Licensee's construction operations on NFS lands while construction is in progress.

The Licensee shall document these inspections (informal writing sufficient) and shall deliver such documentation to the Forest Service on a schedule agreed to by the Forest Service. The inspections must specifically include fire plan compliance, public safety, and environmental protection. The Licensee shall act immediately to correct any items the Forest Service, the Licensee, or the Commission deem necessary to protect public safety.

Condition No. - 8. Indemnification, Risks and Hazards, and Damage to Lands, Property, and Interests of the United States

The Licensee shall indemnify, defend, and hold the United States harmless for any costs, damages, claims, liabilities, and judgments arising from past, present, and future acts or omissions of the Licensee in connection with the use and/or occupancy authorized by this License. This indemnification and hold harmless provision applies solely to any negligent acts and omissions of the Licensee or the Licensee's heirs, assigns, agents, employees, affiliates, subsidiaries, fiduciaries, contractors, or lessees in connection with the use and/or occupancy authorized by this License which result in: (1) violations of any laws and regulations which are now or which may in the future become applicable, and including, but not limited to environmental laws, such as the Comprehensive Environmental Response Compensation and Liability Act, Resource Conservation and Recovery Act, Oil Pollution Act, Clean Water Act, and Clean Air Act; (2) judgments, claims, demands, penalties, or fees assessed against the United States; (3) costs, expenses, and damages incurred by the United States; or (4) the release or threatened release of any solid waste, hazardous substances, pollutant, contaminant, or oil in any form in the environment. The provisions of this condition do not apply to any damages, judgments, claims, or demands arising out of the negligence, recklessness, or willful misconduct of the United States or other third parties or to damages, judgments, claims, or demands arising out of any activity initially occurring outside the project boundary or outside NFS lands. The

Licensee's liability hereunder shall be limited to reasonable damages, costs, claims, and judgments.

The Licensee is responsible for periodically inspecting (in accordance with good utility practice) its project site, right-of-way, and immediate adjoining area for dangerous trees, hanging limbs, and other evidence of hazardous conditions. Licensee shall abate those conditions, except those caused by third parties not related to the occupancy and use authorized by the License, after securing permission from the Forest Service, except in an emergency where there is an imminent risk of death or injury to the public or facilities, in which case the Licensee shall notify the Forest Service of the action as soon as possible.

The extent of the Licensee's liability for fire and other damages to NFS lands shall be determined in accordance with Standard L-Form Articles 22 and 24 of this License and the liability standard shall be determined in Federal Court by using applicable Montana law.

Condition No. - 9. Scenery Management Plan

Within one year of License issuance, or 60 days prior to any ground disturbing activity, the Licensee shall file with the Commission a Scenery Management Plan that is approved by the Forest Service. The objective of this plan is to include Forest Plan scenery management objectives for maintenance or alteration of existing project features or when construction of new project features are being proposed. At a minimum, this plan shall provide the following:

- Detailed mitigation plans (plan and profile views) for any work being proposed for project features that affect the project's visual characteristics or the scenery management objectives of the area.
- Areas of project features to be disguised or screened.
- Paint colors and/or textures.
- Species to be planted.
- Physical modifications to project features.
- Schedule for completion.

Condition No. - 10. Public Access Management Plan

Within one year of License issuance, the Licensee shall file with the Commission a Public Access Management Plan approved by the Forest Service. The plan shall address public access at the project for the duration of the License term. At a minimum, implementation of this plan shall provide the following:

- Unrestricted administrative access for Forest Service personnel to project lands.
- Motorized and non-motorized public access on and across project lands.
- Road maintenance.
- Schedule for completion.

Condition No. - 11. Recreation Plan

Within one year of License issuance, the Licensee shall file with the Commission a Recreation Plan approved by the Forest Service. The plan shall address the management of the recreational resources at the project for the duration of the License term. The Licensee shall provide the necessary funding for the development and implementation of the Recreation Plan.

The Recreation Plan is intended to provide a framework for implementation of all recreation-site protection, mitigation and enhancement measures. At a minimum, the Recreation Plan shall include the following:

- A general description of the recreational sites.
- A discussion of the facilities that would be designed or redesigned to take into account the needs of disabled persons.
- A description of the erosion and sediment control measures where ground disturbing activities are proposed.
- A means for monitoring and reporting recreational use.
- A means to conduct consultation with stakeholders.
- Minimum pool level at Mystic Lake (7,663.5 ft, USGS datum) for seasonal recreational use.
- An outline of agreements and general terms and conditions for cooperation with the Forest Service, including planning and design of recreation facilities and improvements.
- A projected implementation schedule consistent with Condition No. 10, and an estimation of construction, and annual operation and maintenance costs for all proposed recreation measures.

Specific Recreation Plan protection, mitigation and enhancement measures include:

- Mystic Lake trailhead facility maintenance, including sanitary facilities.
- Information and educational materials.
- Mystic Lake trailhead parking & safety measures.
- Replacement of upper footbridge, Mystic Lake trail.
- Maintenance of sanitary and associated parking facilities at West Rosebud Lake.
- Development of handicapped accessible fishing opportunities at West Rosebud Lake (shoreline trail and pier).
- Development of a carry-in boat launch facility at West Rosebud Lake.
- Installation of a bear-resistant refuse container and provision for solid waste collection at West Rosebud Lake.
- Maintenance of USGS flow gage.
- Development of a Mystic Lake Whitewater Flow Plan.
- Establishment of an annual consultation process to forecast whitewater boating flows and enhance whitewater flows as conditions permit.
- Maintain a minimum water surface elevation at Mystic Lake of 7,663.5 ft (USGS datum) from July 10 to September 15 each year.
- Implementation of Recreational Use Surveys (initiate in 2013, then every 6 years).

Condition No. - 12. Wildlife Species Protection

Within one year of License issuance, the Licensee shall consult with the Forest Service (a member of the Mystic Lake Wildlife and Terrestrial Habitats Technical Advisory Committee) to begin implementation of wildlife species protection, mitigation, and enhancement measures. The committee will provide recommendations for appropriate improvements at the PPL Montana camp and other project facilities. At a minimum, the Licensee shall complete the following wildlife protection measures during the term of the new License.

Bear-Human Interactions

The Licensee shall undertake actions to minimize potential for human/bear conflicts. At a minimum, the following actions shall be taken beginning in calendar year 2007:

- Install and maintain a bear-resistant refuse container at the PPL Montana camp.
- Install and maintain bear-resistant refuse containers and solid waste collection in recreational areas surrounding West Rosebud Lake (Re-regulation Dam).
- Throughout the term of the License, collaborate with the Forest Service for any future maintenance of bear-aware sign postings within the project area.

Raptor Protection

The Licensee shall undertake actions to reduce potential for mortality of bald eagles and other raptors. At a minimum, the following actions shall be taken:

- Update the Project transmission lines (A and B lines between Line Creek Substation and Mystic Lake Powerhouse) per accepted raptor safety standards as lines are replaced or upgraded for maintenance purposes.
- Update all Project distribution lines, including the lines located along the trail from the powerhouse to Mystic Lake, the lines adjacent to the flow line, and the lines around the housing compound per accepted raptor safety standards as lines are replaced or upgraded for maintenance purposes.

Bald Eagle Monitoring

The licensee shall establish a baseline of bald eagle use of West Rosebud Creek and associated water bodies from the Mystic Lake Trailhead to the outlet of Emerald Lake and determine disturbance effects of recreation on bald eagles. At a minimum, the Licensee shall:

- Conduct bald eagle monitoring for each of the first three years after License issuance, then every five years for the term of the new project license.
- File a progress report of the monitoring and determination of effects with the Commission within one year of the completion of the first 3-year survey, followed by subsequent reports within one year of the completion of each additional survey conducted on a 5-year interval.

Harlequin Duck Survey

The Licensee shall determine the presence or non-detection of Harlequin ducks along West Rosebud Creek from the Forest Service boundary upstream to the powerhouse and determine disturbance effects of recreation on Harlequin ducks. At a minimum, the Licensee shall:

- Conduct surveys annually for the first five years after License issuance, then survey incrementally in future years if warranted.
- File a progress report of the monitoring and determination of effects with the Commission within one year of the completion of the 5-year survey.

Condition No. - 13. US Forest Service Sensitive Species Management

Within 90 days prior to implementing any activity that may affect Forest Service sensitive wildlife or plant species and their habitat, the Licensee shall file with the Commission a biological evaluation (BE) for sensitive species that is approved by the Forest Service. At a minimum, the BE shall incorporate the following mitigation measures:

- Development of procedures to minimize adverse effects to sensitive species.
- Develop implementation and effectiveness monitoring of measures taken or employed to reduce effects to sensitive species.
- Development of construction and maintenance schedules to avoid conflicts with sensitive species.

Condition No. - 14. Instream Flow Requirements

The Licensee shall provide continuous minimum flows and ramping rates on West Rosebud Creek as follows:

- During fall, winter, and spring months (September through May) the Licensee shall provide a minimum bypass reach flow of 5 cfs with the option to provide up to 11 days (selected at Licensee's discretion) each month of 4 cfs as measured at the upper weir, located upstream of the return flow from the powerhouse. Any release of 4 cfs, even if less than a full 24 hour period, shall count toward the 11-day per month maximum.
- During summer months (June through August) the Licensee shall provide a minimum bypass reach flow of 10 cfs as measured at the upper weir.
- During the entire year the Licensee shall ramp descending bypass reach flows below 10 cfs at 2 cfs per hour maximum, as measured at the upper weir. No ramp rate limits are required at flows above 10 cfs.
- The Licensee shall provide for a minimum flow release of 20 cfs downstream of the Reregulation Dam except when natural inflow is less than 20 cfs or when maintenance of facilities prevents such a release. This minimum flow shall be measured at the new USGS gage (#06204070) on West Rosebud Creek immediately downstream of the bridge to Emerald Lake Campground.

The minimum streamflows may be temporarily modified, not to exceed 24 hours, if required by equipment malfunction or operating emergencies reasonably beyond the control of the Licensee. If the streamflow is so modified, the Licensee shall provide notice to the Commission and the Forest Service as soon as possible, but no later than 10 days after such incident.

Condition No. - 15. Emergency Flow Restoration and Shutoff

Within two years of license issuance, the Licensee shall install a new emergency flow shutoff and by-pass flow restoration system in the flowline. This system shall be designed to allow for emergency flow shutoff to the penstock in the event of a pipeline rupture or break, and to provide flow restoration to maintain fish and aquatic habitat in West Rosebud Creek (bypass reach and downstream reaches).

Installation of an emergency shutoff valve shall be required to isolate the conduit during a runaway pipeline condition. The isolation valve shall be capable of automatic closure during these conditions.

The new system shall be designed to provide minimum bypass releases from the Mystic Lake flowline to West Rosebud Creek. The bypass valves (two valves) shall be sized to provide a variable minimum flow between 3 and 10 cfs to the bypass reach under normal conditions and a minimum flow of 20 cfs below the Re-regulation Dam for all Mystic Lake water levels above 7,612.5 ft amsl under emergency conditions.

Condition No. – 16. Fisheries Management

Within one year of License issuance, the Licensee shall file with the Commission, a Fisheries Monitoring Plan approved by the Mystic Lake Fisheries, Aquatic Habitats and Water Quality Technical Advisory Committee (Forest Service, MT Division of Environmental Quality, and MT Fish, Wildlife, and Parks). The monitoring shall be conducted for the duration of the License term to assess fisheries and aquatic habitat conditions in the project area to ensure that project operations are not adversely affecting aquatic resources. The Fisheries Monitoring Plan is a protective measure designed to detect trends, if any, in fish populations or aquatic habitat conditions that may be related to project activities. The Fisheries Monitoring Plan shall meet the protocol described in section E.5.3.3.3 of Volume IA – Public, Final License Application, Applicant Prepared Environmental Assessment, Exhibit E (December 15, 2006). The Fisheries Monitoring Plan shall be conducted on a six-year cycle for the term of the new Mystic Lake project license and encompass Mystic Lake and West Rosebud Creek from Mystic Lake to below Emerald Lake.

Condition No. - 17. Erosion Control Measures Plan

At least 90 days prior to any ground disturbing activity, the Licensee shall file with the Commission an Erosion Control Measures Plan that is approved by the Forest Service. The Plan shall include soil and water conservation measures to control erosion, stream sedimentation, dust, and soil mass movement. Upon Commission approval, the Licensee shall implement the Plan.

Condition No. - 18. Riparian Vegetation Monitoring Plan

Within one year of license issuance, the Licensee shall file with the Commission a Riparian Vegetation Monitoring Plan approved by the Forest Service. The Monitoring Plan shall meet the protocol as described in Appendix B of Volume IA – Public, Final License Application, Applicant Prepared Environmental Assessment, Exhibit E (December 15, 2006). The Plan shall be designed to detect changes in the riparian vegetation, if any, as a result of changes in fluvial processes caused by operation of the Mystic Lake Hydroelectric Plant for the duration the License term. The Licensee shall establish permanent riparian transects along West Rosebud Creek in order to quantify riparian habitat and monitor trends. These permanent transects shall allow changes in the riparian communities along West Rosebud Creek to be detected after subsequent readings every five years. If the riparian vegetation recovery trend is upward for the 20-year period, monitoring shall be discontinued. If the trend is downward for the 20-year period as a result of project operations, the Licensee shall prepare a revised Riparian Vegetation Management Plan, which shall include means for improving vegetation condition, such as planting and seeding, instream flow releases below the diversion, and physical alterations of the affected riparian habitat. The revised Plan shall include monitoring over an additional 20-year period to ensure vegetation conditions are improving. The revised Plan shall be filed with the Commission after review and approval by the Forest Service.

Condition No. - 19. Weed Management Plan

The Licensee shall be responsible for the prevention and control of noxious weeds and invasive plants of concern within the project area authorized by this License. Within one year of License issuance, or 60 days prior to any ground disturbing activity, the Licensee shall file with the Commission a Weed Management Plan that is approved by the Forest Service. At a minimum the Plan shall:

- Identify and prioritize (into high, moderate and low priority sites) all inadequately vegetated areas to be re-vegetated or rehabilitated along with an implementation schedule.
- List the species to be used along with planting locations, methods, and densities (emphasis shall be given to use of native species).
- Identify site preparation, irrigation, mulch, fertilizer, and herbivore protection requirements for plant establishment.
- Identify methods for prevention and control of noxious weeds.
- Treat existing infestations of high-priority weeds shall be initiated immediately upon approval of the Weed Management Plan by the Commission.
- Identify all vegetation control methods the Licensee proposes to use at or along all project facilities.
- Explain how re-vegetation and vegetation control methods and materials meet objectives for integrated noxious weed management, erosion control, wildlife habitat, and other management direction.
- Develop a monitoring program to evaluate the effectiveness of re-vegetation, vegetation control, and noxious weed prevention and control measures.

- Follow current applicable Forest Service Best Management Practices for weed prevention (e.g., Forest Service Manual 2080, Supplement No.: R1 2000-2001-1; Forest Service Handbook 2509.22, Soil and Water Conservation; and the Custer National Forest Weed Management EIS and Record of Decision (2006), including all guidelines for pit or stockpile sources for aggregate and borrow material).
- Develop procedures for identification of additional measures that the Licensee shall implement if monitoring reveals that revegetation and vegetation control is not successful or does not meet intended objectives.
- Utilize the State of Montana list of noxious species available at the Montana War on Weeds website, (http://mtwow.org/Weed-ID.html) as the source for species identification.

Condition No. - 20. Wilderness Occupancy and Use

Within six months of License issuance, the Licensee shall file with the Commission a Wilderness Occupancy and Use Plan approved by the Forest Service. The plan shall include:

- A description of all past, present, and reasonably foreseeable future actions associated
 with Project operations and License requirements that would occur within either
 congressionally designated wilderness areas or within any lands recommended for
 wilderness protection by the Forest Service. The plan should disclose all such actions
 that may potentially affect wilderness and recommended wilderness lands.
- Procedures and timelines to request, in writing, Forest Service approval of the use of
 motorized equipment or mechanical transport within the Absaroka-Beartooth Wilderness
 or in recommended wilderness areas. For such use within the Absaroka-Beartooth
 Wilderness, the Regional Forester shall review each proposal, determine if it is consistent
 with the purposes of the Wilderness, and authorize the scope and conditions of approved
 uses in writing. For such use within recommended wilderness, the Forest Supervisor
 shall review each proposal and authorize the scope and conditions of approved uses in
 writing.
- Methods and procedures of reporting emergency use of motorized equipment or mechanical transport within the Absaroka-Beartooth Wilderness or in recommended wilderness areas in response to emergencies involving public health and safety or potential loss of life. Emergency use shall be exempt from prior written authorization as long as that use involves public health and safety or potential loss of life. However, any emergency access activities involving mechanized or motorized equipment shall be directly reported to the Forest Service within 24 hours and a written summary of the occurrence shall be filed with FERC and the Forest Supervisor within 30 days of the occurrence.
- Timeline and survey procedures for locating the Absaroka-Beartooth Wilderness boundary and posting the boundary with National Forest Wilderness sign 27-6A supplied by the Forest Service. The Licensee shall ensure that their employees, contactors and all others conducting activities on behalf of the Licensee are aware of the location of the

boundary and the procedures for mechanized or motorized activities set forth in this condition. The Licensee shall complete all surveying and signing activities for those portions of the Absaroka-Beartooth Wilderness boundary located within the Project boundary, within one year following FERC approval of the Wilderness Occupancy and Use Plan.