

107 FERC ¶ 61,158
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
Nora Mead Brownell, Joseph T. Kelliher,
and Suedeen G. Kelly.

Portland General Electric Company

Project No. 477-024

ORDER GRANTING SURRENDER APPLICATION,
ADOPTING PROPOSED TERMS, AND
DENYING APPLICATION TO AMEND LICENSE

(Issued May 12, 2004)

1. In this order we grant Portland General Electric Company's (PGE) application to surrender its license for the 22-megawatt (MW) Bull Run Project No. 477, located on the Sandy, Little Sandy, and Bull Run Rivers, near the Town of Sandy in Clackamas County, Oregon.¹ The surrender application proposes removal of the project, as set forth in an accompanying Settlement Agreement and Decommissioning Plan. PGE also applied to amend its license to authorize what the surrender application requests, and to extend the license term accordingly. For the reasons discussed below, we grant PGE's surrender application as conditioned herein, approve the Settlement Agreement, adopt the Decommissioning Plan with minimal revisions, and deny the license amendment application as unnecessary.

¹Total land within the project boundary is about 606 acres, of which 84 percent is PGE-owned. Three percent of the project is on Forest Service lands in Mount Hood National Forest, and nine percent is on land managed by the Bureau of Land Management (BLM) or owned by the State of Oregon. The last four percent are owned by private parties other than PGE.

I. Procedural Background

2. The Commission issued PGE's current license for the Bull Run Project on May 1, 1980,² with an effective date of November 17, 1974, and an expiration date of November 16, 2004, for a license term of 30 years.³

3. On November 12, 1999, PGE timely filed a notice of its intent not to seek a new license for the project.⁴ On November 12, 2002, it timely filed the surrender application,⁵ associated Decommissioning Plan, a Settlement Agreement signed by 23 parties,⁶ and the license amendment application.

²11 FERC ¶ 62,145.

³Prior to its current major license, PGE held a minor-part license which was issued on November 17, 1924, and expired on November 17, 1974.

⁴Section 15(b)(1) of the Federal Power Act (FPA), 16 U.S.C. § 808(b)(1), requires an existing licensee to notify the Commission, at least five years before the expiration of the existing license, whether it intends to apply for a new license. 18 C.F.R. § 16.6(c) requires such notice of intent no sooner than 5 ½ years before expiration of the existing license.

⁵The Commission's March 2, 2000 public notice of PGE's surrender application required PGE to file the application by two years before expiration of the project license.

⁶The signatories to the settlement agreement are: PGE; the Forest Service; BLM; U.S. Fish and Wildlife Service (FWS); National Marine Fisheries Service (NOAA Fisheries); State of Oregon; Oregon Department of Environmental Quality; Oregon Division of State Lands; Oregon Department of Fish and Wildlife; Oregon Department of Water Resources; City of Sandy, Oregon; Western Rivers Conservancy; Sandy River Basin Watershed Council; Association of NW Steelheaders; Northwest Sportfishing Industry Association; Alder Creek Kayak Supply, Inc.; American Whitewater; WaterWatch of Oregon; American Rivers; Oregon Trout; Native Fish Society; Trout Unlimited; and Oregon Council of Trout Unlimited.

4. In response to the Commission's November 21, 2002 public notice of PGE's filings, timely interventions were filed by the U.S. Department of the Interior, U.S. Department of Agriculture, and National Marine Fisheries Service (NOAA Fisheries).⁷ In addition, timely joint interventions were filed by the Sandy River Basin Watershed Council, American Whitewater Affiliation, Alder Creek Kayak Supply, Inc., and WaterWatch of Oregon; and by American Rivers, Oregon Trout, Trout Unlimited, Oregon Council Trout Unlimited, and the Native Fish Society.

5. Comments were filed by BLM; the Forest Service; Mt. Hood National Forest; U.S. Fish and Wildlife Service (FWS); U.S. Environmental Protection Agency; Oregon Department of Environmental Quality (Oregon DEQ); Oregon Water Resources Department (Oregon Water); Oregon Department of Fish and Wildlife (Oregon DFW); American Whitewater Affiliation; Northwest Sportfishing Industry Association; Association of Northwest Steelheaders; American Rivers; Sandy Fire District No. 72; and Joseph L. Miller, Jr., M.D.

6. Commission staff issued a Draft Environmental Impact Statement in July 2003, and a Final Environmental Impact Statement (Final EIS) in October 2003, which addressed PGE's surrender application and license amendment application.

II. Project Facilities

7. The Bull Run Project consists of one development comprised of two dams (the Marmot and Little Sandy Dams), a forebay (Roslyn Lake), an intake, a powerhouse, and a system of canals, flumes and tunnels that divert water from the Sandy River, deliver it to the powerhouse, and discharge it into the Bull Run River, which rejoins the Sandy River downstream.

8. Marmot Dam, on the Sandy River, is the most upstream structure of the Bull Run Project.⁸ Downstream of Marmot Dam, the project diverts water west through a series of

⁷NOAA Fisheries is the preferred acronym of the National Marine Fisheries Service.

⁸The 47-foot-high, 345-foot-long Marmot Dam impounds an 18-acre reservoir. However, since sand and gravel have settled behind the dam, the reservoir has no storage capacity.

A fish ladder for upstream migrants is operated on the south side of the dam. On its north end, a concrete gravity-section wing dam extends downstream to provide

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concrete canals, flumes, and tunnels for about two miles, and then north through a 4,702-foot-long tunnel carved through a mountain, to the Little Sandy River just upstream of the Little Sandy diversion dam.

9. At the Little Sandy diversion dam,⁹ the combined waters of the Sandy and Little Sandy Rivers enter a 16,810-foot-long wooden box flume and flow westerly to discharge into the 160-acre, man-made Roslyn Lake.¹⁰

10. The project's waters flow through an intake structure on the east side of the lake, through two penstocks to the powerhouse, and are then discharged into the Bull Run River, which joins the Sandy River 1.5 miles downstream.

11. The Sandy River and its tributaries are used by the anadromous spring- and fall-run Chinook salmon, steelhead, coho, and cutthroat salmon, and rainbow trout; resident bull trout; and lamprey and other fish species. Spring- and fall-run Chinook salmon, winter-run steelhead, and bull trout have been listed as threatened species pursuant to the Endangered Species Act (ESA).

III. Surrender Application

A. The Proposal

12. PGE proposes to remove the Marmot and Little Sandy Dams and dismantle their associated water conveyance structures. Marmot Dam would be removed in 2007; the Little Sandy Diversion Dam, Roslyn Lake, and the project's canals and tunnels would be removed in 2008. Generation would continue until the Little Sandy Dam is removed. In

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additional spillway and to direct water to an intake structure. The intake structure has two tainter gates that regulate the diversion flow into a canal system. A traveling screen facility passes downstream-migrating fish back into the Sandy River about 700 feet below the dam.

⁹The 15.75-foot-high Little Sandy diversion dam impounds an approximately 3-acre reservoir with no storage capacity.

¹⁰The water for Roslyn Lake comes from the Sandy and Little Sandy River water conveyance system, and from the City of Portland's municipal water supply conduits.

2009, PGE would complete removal of the project's flume, and, if an alternative use for the powerhouse is not found, remove the powerhouse and appurtenant structures.

13. PGE's Decommissioning Plan,¹¹ which it asks us to adopt as the terms of the surrender, sets out specific protocols for removing the project works, conducting certain environmental mitigation measures, and monitoring before, during, and after removal of the project dams.¹² Starting in 2008, PGE will convey about 1,530 acres (including land formerly under license) to the Western Rivers Conservancy.¹³

B. Discussion

14. Section 6 of the Federal Power Act (FPA) provides that hydropower licenses "may be altered or surrendered only upon mutual agreement between the licensee and the Commission after thirty days' public notice."¹⁴ Our regulations provide that licenses may be surrendered only upon the licensee's fulfillment of such obligations under the license as the Commission may prescribe, as well as "upon such conditions with respect to the disposition of [project] works as may be determined by the Commission."¹⁵

¹¹We note that the term "decommission" has no designated meaning in the context of Part I of the FPA, which governs hydropower licensing. In various proceedings, parties, as well as the Commission, have used the term as short-hand both for the cessation of hydroelectric generation and for the removal of project works. For clarity, it is preferable to refer to project removal or the removal of project works, where that is the intended meaning.

¹²The mitigation measures relate to fish passage, aquatic habitat, historic preservation, navigation and boater safety, and site restoration. The subject of monitoring is turbidity, sediment deposition, channel complexity, fish passage barriers, construction-related impacts (such as oil contamination, erosion, and bank stability), revegetation, noxious weeds, bald eagle and spotted owl presence, and other ecological effects of dam removal.

¹³The Western Rivers Conservancy is an independent, non-profit organization founded to manage corridors along outstanding western rivers for ecological and compatible recreational purposes. The transferred lands will be used for conservation corridors.

¹⁴16 U.S.C. § 799.

¹⁵18 C.F.R. § 6(2) (2004). Section 23(b)(1) of the FPA, 16 U.S.C. § 817(1),
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15. The surrender of a license for an existing project is conditioned, at a minimum, on the licensee disconnecting the generating equipment and taking measures to ensure public safety. The issue of whether to authorize or require the removal of some or all project works requires additional analysis, which was undertaken in the EIS in this proceeding.

16. PGE states that it wishes to surrender the Bull Run Project license because it has determined that the likely cost of environmental protection, mitigation, and enhancement measures associated with relicensing the project would make continued operation uneconomical. PGE and the other settlement parties have agreed that removal of the project works will serve the public interest by restoring the Sandy and Little Sandy Rivers to a free-flowing state, thereby improving fish passage conditions for various species of salmon and trout, several of which are listed as threatened under the ESA.

17. PGE does not plan to remove Marmot Dam until 2007, because of the role the dam's fish ladder plays in Oregon DFW's management plan for the Sandy River. Until recently, Oregon DFW released hatchery fish in the vicinity of Marmot Dam and relied on the dam's fish ladder for the process of sorting and separating of hatchery fish from wild stock.¹⁶ While Oregon DFW is now releasing its hatchery fish further downstream and soon won't need Marmot Dam's fish ladder for sorting purposes, the last of the hatchery fish previously released near the dam will return to the Sandy River in 2007. The proposal is therefore to keep the dam and its fish ladder intact until that time.

18. Little Sandy Diversion Dam cannot be removed until after Marmot Dam has been removed. This is because during removal of Marmot Dam the canal and flumes that currently divert flow from the Little Sandy Diversion to the powerhouse will be modified and used to divert flow around Marmot Dam's deconstruction site, to protect threatened

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describes the projects whose construction and operation require a Commission license. Bull Run is one such project. There is also a specific class of projects that may be licensed but are not required to be licensed, and therefore can be operated even after surrender or termination of their license. See Pennsylvania Electric Co., 56 FERC ¶ 61,435 (1991).

¹⁶Hatchery salmonids have a cycle in which they travel to the ocean and return up the river to the area where they have been released. The fish ladder at Marmot Dam has been used to lead fish to a sorting facility which separates hatchery and wild fish, providing needed sanctuary for threatened species, including fall Chinook salmon, spring Chinook salmon, steelhead, and bull trout.

fish species. As noted, PGE proposes to continue generating electricity until Marmot Dam is removed, since it will not interfere with the removal and will help to finance it.¹⁷

19. Once Marmot Dam has been removed, the Decommissioning Plan calls for monitoring the effect on fish passage of sediment released by the dam removal,¹⁸ and provides for contingency measures, should the need arise.¹⁹ The Plan establishes a team comprised of representatives from PGE, Oregon DFW, NOAA Fisheries, and FWS to oversee the monitoring program and determine when monitoring is no longer needed.²⁰

20. The EIS concludes that project removal will entail short-term impacts to the aquatic ecosystem downstream and will result in the loss of recreational opportunities at Roslyn Lake. The EIS also finds that project removal has long-term environmental benefits, notably elimination of the project's adverse impacts (mortality, false attraction, etc.) on anadromous fish; restored access to 6.5 miles of the Little Sandy River and to the 1.7-mile-long bypassed reach of the Little Sandy River; restored natural flows to 10 miles of the Sandy River; and the transfer of project land to the Western River Conservancy for use in the creation of a conservation corridor on the Sandy and Little Sandy Rivers.

¹⁷See Arizona Public Service Company, 97 FERC ¶ 61,315 at 62,455-56 (2001).

¹⁸Section 4 of the Decommissioning Plan proposes monitoring of (1) turbidity, channel complexity, and flow; (2) bank stability (until banks have stabilized and re-vegetated); (3) erosion (until vegetation is re-established); (4) revegetation; (5) noxious weeds; and (6) barriers to fish passage, including sediment obstructions in the main channel, side-channel, tributary, and mouth of Sandy River; and high-velocity flow.

¹⁹Just under 1 million cubic yards of sediment (a mixture of sand, gravel, cobble, and boulders) will be free to move downstream once Marmot Dam is removed. The deposition of large amounts of sediment could block fish from upstream migration or movement into a tributary. Contingency measures could include mechanically removing passage barriers, creating channel complexity, constructing a temporary trap and haul facility, and emergency fish recovery. See Decommissioning Plan, section 4.6, Table 4-1.

²⁰FWS' and NOAA Fisheries' reasonable and prudent measures to avoid incidental take incorporate by reference these aspects of the Decommissioning Plan (see Attachments A and B to this order), as does the water quality certification issued by Oregon DEQ (see Attachment C to this order).

21. Based on the record evidence in this proceeding, we find that PGE's proposal to remove the project works, pursuant to the provisions of the Decommissioning Plan, is reasonable and will benefit important fishery species, some of which enjoy ESA protection. We also conclude, as is discussed below, that the proposed timetable for commencement and completion of project removal is reasonable and supported by the record. We are therefore approving surrender of the license and, with very few exceptions,²¹ adopting as license conditions the Decommissioning Plan's protocol and schedule for removal of the project dams and other works, as set forth in Attachment D to this order.²²

22. We are, in addition, requiring certain measures that complement the Decommissioning Plan: development of an erosion and sedimentation control plan (ordering paragraph E);²³ a lowering of the canal level to protect downstream-migrating juvenile salmonids, and continued operation and maintenance of the Marmot Dam fish ladder and trap until the dam is removed (ordering paragraph F);²⁴ construction of a

²¹Two provisions of the Decommissioning Plan are not within our jurisdiction. Thus, we do not adopt the plan's disposition of non-project lands (section 5) and transfer of water rights (section 6). However, these provisions pose no conflict with the surrender requirements, and PGE remains bound to perform them; see section 7.3.2 of the Settlement Agreement.

²²Attachment D also contains the Decommissioning Plan's exhibits and appendices. The text of the plan, its exhibits, and appendices contain much background and discussion. For ease of enforcement, the requirements which the plan imposes on the licensee are set out in bold print, language added for clarity is underlined, and these requirements along with the plan's figures and tables are specifically incorporated in the license.

²³The activities required for project removal (dredging 20,000 to 30,000 cubic yards of sediment; constructing cofferdams and a fish trap; and disposing of sediment and debris) will cause increased sediment load into the Sandy and Little Sandy Rivers. While PGE proposed to use best management practices and erosion control measures, no specific plan was submitted. Therefore, in ordering paragraph E, we require development and implementation of erosion and sediment control measures based on the final design of construction activities, staging areas, and access locations.

²⁴PGE will lower Marmot dam diversion canal water levels to 4.7 feet from February 15 to March 1. It will lower the canal water levels to 4.2 feet for 8 hours per day, beginning daily at sunset, between March 15 and May 15, and maintain it at no
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temporary fish facility and operation plan for the period in which Marmot Dam is being removed (ordering paragraph G);²⁵ implementation of measures to minimize incidental take of salmon and steelhead, and bull trout (ordering paragraph H);²⁶ development of a spotted owl protection plan (ordering paragraph I);²⁷ development of a final revegetation, noxious weed control, and site restoration plan (ordering paragraph(J));²⁸ implementation of a programmatic agreement and related historic properties management plan (ordering paragraph K); and notification to area homeowners of plans and schedule to drain Roslyn Lake (ordering paragraph L).²⁹

23. While the monitoring timetable and the plan for contingency measures appear reasonable, the Decommissioning Plan does not provide for the Commission's role in this

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greater than 4.7 feet for the remaining periods of these days. These limitations will minimize impacts to listed salmon species. At the 4.2-foot level, it is estimated that 80 percent of the fry would use the bypass ports and not become impinged -- a 10 to 45 percent improvement over impingement levels at higher canal levels. Furthermore, since 90 percent of outmigration occurs during night-time hours, reducing night-time canal levels will reduce impingement for 90 percent of the fry during peak outmigration.

²⁵ PGE proposed to construct a temporary fish barrier, Denil fish ladder, and fish trap to be operated while Marmot Dam is being removed. Ordering paragraph G requires PGE to file detailed design drawings of these facilities and an operation plan, prepared after consultation with appropriate agencies.

²⁶See also Attachment A and Attachment D to this order.

²⁷See discussion, infra.

²⁸While PGE has developed a plan for revegetation, noxious weed control, and site restoration, the plan does not establish the final mix of species and planting densities, a final list of tree and shrub species and planting densities, contingencies for replanting, or detailed exotic/invasive species control plans for the pre-construction and monitoring periods. Therefore, the revised plan required under ordering paragraph (J) requires a description of that mix, as well a statement of the criteria to be used to determine the need for revegetation of streambank and riparian areas upstream and downstream of Marmot dam, and appropriate time frames.

²⁹See discussion, infra.

process. As noted above, a surrender, including its effective date, must be agreed to by the Commission. Once the conditions are fulfilled, the Commission will issue an order stating that the surrender is effective and that the Commission's jurisdiction over the project is terminated. To this end, ordering paragraphs (D) and (T) establish schedules of PGE monitoring reports to the Commission.

IV. License Amendment Application

24. At the same time as PGE filed its surrender application, it also filed an application to amend its current license to authorize the same actions as it proposes in its surrender application, and to extend the current license term to November 16, 2017, to accommodate those actions.³⁰

25. The standard basis for extending a license term is the licensee's need for additional years over which it can amortize the cost of a substantial increase in generation capacity and/or substantial new environmental measures.³¹ That is not the case here. Perhaps the term extension is sought because PGE or the other settlement parties were concerned that the Commission might deny PGE's surrender/project removal application as entailing too long a delay between Commission approval and the actual removal of project works.

26. In the case before us, PGE and the settlement parties propose project removal commencing 3 years after Commission approval and finishing 5 years after approval. On the facts of this case, we conclude that this delay is reasonable³² and fully supported by the record. Because we approve this project removal schedule as a condition of the surrender, there is no need to grant what in effect is an alternative application for the same result, and we accordingly deny PGE's license amendment application as unnecessary.

³⁰This would be a 13-year extension, resulting in a total license term of 43 years. Section 3.2 of the Settlement Agreement required PGE to file the license amendment application.

³¹See PacifiCorp, 97 FERC ¶ 61,348 at 62,626 (2001).

³²Compare PacifiCorp, 97 FERC ¶ 61,348 at 62,626 (removal during years 4 and 5 after Commission approval); Arizona Public Service Co., 97 FERC ¶ 61,315 at 62,456 (2001) (removal during years 4 through 8 after Commission approval).

V. Removal of Roslyn Lake

27. Leakage from Roslyn Lake has contributed about 5 to 7 cubic feet per second (cfs) to local groundwater resources. Removal of the lake could therefore affect residential water wells that have benefited from that leakage.³³ The Bull Run Community Association (Association), a community planning organization representing the rural area surrounding Roslyn Lake, recommends that the Commission require PGE to mitigate for any such effects.³⁴

28. PGE studied the issue and concluded that removal of Roslyn Lake could potentially affect 58 wells located within about a mile of the lake. Of these, PGE found that 26 wells were likely to be affected, and that there was insufficient information to make a judgment on the likelihood of the remaining 32 wells being affected.

29. The costs associated with re-drilling affected wells would depend on the depth and size of the wells and the nature of the geologic materials. Based on interviews with well drillers with experience in northeast Clackamas County, PGE estimates a per-well cost of between \$14,000 and \$31,000. Were all 58 wells required to be re-drilled, the cost would be between \$1.3 and \$1.7 million.³⁵

30. Roslyn Lake also serves as the Town of Sandy Fire District's primary water source for fire emergencies in the northern 15 to 20 square miles of the district. The Bull Run Community Association commented that the loss of Roslyn Lake could hamper the Fire District's capability to respond to fire emergencies in a portion of its northern district, which includes residences and businesses. The Association notes, however, that according to the Fire Chief the loss of Roslyn Lake as a water resource could be mitigated by the installation of a hydrant tying into the City of Portland Water Bureau's water mainline where it passes the Roslyn Lake fire station.

31. By filing of July 17, 2003, PGE countered the Association's claim to a remedy for affected wells, noting that PGE's vested surface water rights in the lake are senior to the

³³Most of the wells were drilled after 1967.

³⁴Comments filed April 28, 2003.

³⁵The Final EIS (at pp. 95-98) addressed the Association's issues, pointing out that another alternative to drilling deeper wells would be to obtain water from Portland's Water Bureau.

ground water rights of the well owners, and that owners of junior rights cannot compel owners of senior rights to continue the prior use of such rights. However, as a condition of the surrender order, the Commission can require PGE to use its water rights in the public interest.³⁶

32. PGE also asserts that requiring it to expend potentially \$1.7 million in re-drilling costs would, by the terms of the settlement agreement, entitle PGE to withdraw from the settlement on the basis of a significant change in its obligations. Finally, it states that the requirement to drill new wells would be inconsistent with Oregon law, which requires that a ground water user first fully develop the aquifer from which it is drawing water.

33. In this matter we will defer to state law with respect to any remedies that may be available to well owners whose wells are found to be adversely affected by the removal of Roslyn Lake.

VI. Water Quality Certification

34. Under section 401(a)(1) of the Clean Water Act (CWA),³⁷ any applicant for a federal license or permit for an activity which may result in a discharge into United States waters must obtain from the state in which the discharge originates certification that any such discharge will comply with applicable water quality standards, or a waiver of certification. Removal of the Marmot and Little Sandy Dams requires certification. Oregon DEQ issued water quality certification for the Bull Run Project surrender/project removal on October 22, 2003. The conditions to the certification are conditions to this order and are appended as Attachment C.

VII. Endangered Species Act

35. Section 7(a)(2) of the ESA³⁸ requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed and endangered species, or result in the destruction or adverse modification of designated critical habitat.³⁹ Based on its Biological Evaluation, Commission staff concluded that the

³⁶Cf. *Portland General Electric Co. v. FPC*, 328 F.2d 165 (9th Cir. 1964).

³⁷33 U.S.C. § 1341(a)(1).

³⁸16 U.S.C. § 1536(a)(2).

³⁹50 C.F.R. § 402.02(d).

removal of the project's dams and project structures is likely to adversely affect the northern spotted owl, Columbia River distinct population segment⁴⁰ of bull trout, lower Columbia River Chinook salmon, Lower Columbia River steelhead (which are listed as threatened species), and the Lower Columbia River/Southwest Washington Coast coho salmon (a candidate for listing as threatened or endangered). Accordingly, staff initiated formal consultation with FWS and NOAA Fisheries on the four threatened species and requested a conference opinion on the candidate species.⁴¹

36. FWS' Biological Opinion, filed October 15, 2003, concludes that the proposed action will not jeopardize the continued existence of the northern spotted owl or bull trout, but contains terms and conditions to implement reasonable and prudent measures necessary to minimize the take of spotted owls and bull trout.

37. NOAA's Biological Opinion, filed October 23, 2003, concluded that the proposed action will not jeopardize the continued existence of Lower Columbia River (LCR) Chinook salmon and LCR steelhead Evolutionarily Significant Units (ESUs). NOAA's Biological Opinion contains terms and conditions to implement reasonable and prudent measures necessary to minimize the take of the LCR Chinook salmon, LCR steelhead, and LCR/Southwest Washington Coast coho salmon.

38. The terms and conditions of the Biological Opinions of FWS and NOAA Fisheries are set out in Appendices B and C, respectively, and are adopted as conditions of this order by ordering paragraph (H). Accordingly, ordering paragraph (I) requires PGE to file a spotted owl protection plan that is to include the results of spotted owl surveys, the measures required by FWS, and any additional measures necessary to protect spotted owls.

VIII. Magnuson-Stevens Act

39. Section 305(b)(2) of the Magnuson-Stevens Act requires federal agencies to consult with the Secretary of Commerce on proposed actions which, if authorized by the agency, may adversely affect Essential Fish Habitat. Essential Fish Habitat includes waters and substrate necessary to ensure the production needed to support a long-term sustainable fishery for Pacific Salmon (Washington, Oregon, and California coho and

⁴⁰A distinct population segment is a discrete and significant portion of a species.

⁴¹FWS concurred in Commission staff's finding that project retirement is not likely to adversely affect the bald eagle.

Chinook salmon). Because increased sedimentation resulting from project removal would have short-term impacts on salmon, the Commission staff asked NOAA Fisheries to provide Essential Fish Habitat conservation recommendations. NOAA Fisheries' recommendations in this regard are among the measures included in its Biological Opinion under the ESA and are, as noted above, conditions to this order.

IX. National Historic Preservation Act

40. Under section 106 of the National Historic Preservation Act,⁴² the Commission must take into account the effects of its actions on properties included in or eligible for the National Register of Historic Places, and prior to taking action on a proposed undertaking⁴³ must afford the Advisory Council on Historic Preservation (Advisory Council) a reasonable opportunity to comment.⁴⁴ Such comment generally entails consultation with the State Historic Preservation Officer (SHPO), the Advisory Council, and additional consulting parties, including the license applicant, affected Indian tribes,⁴⁵ local governments, and members of the public.

41. If a federal agency determines that the undertaking will have an adverse effect on historic properties, and the federal agency and the SHPO agree on how adverse effects will be resolved, they typically execute a Memorandum of Agreement (MOA) addressing potential adverse effects and the actions to be taken to mitigate them, and submit a copy of their executed agreement, along with documentation, to the Council before approving the undertaking.⁴⁶

⁴²16 U.S.C. § 470f.

⁴³An undertaking is defined as a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those requiring a federal permit, license, or approval. 36 C.F.R. § 800.16(y) (2003). Here, the license surrender with project removal is the activity requiring Commission approval.

⁴⁴36 C.F.R. § 800.1(a) (2003).

⁴⁵In this instance the consulted Indian tribes were the Confederated Tribes of the Grand Ronde, Confederated Tribes of Warm Springs, Confederated Tribes of Chinook, Confederated Tribes of the Siletz Indians, Confederated Tribes of the Yakama, Confederated Tribes of the Umatilla, and Cowlitz Indian Tribe.

⁴⁶36 C.F.R. § 800.6(b)(1) (2003).

42. The proposed undertaking is the removal of Marmot Dam, Little Sandy Diversion Dam, Roslyn Lake earth-fill dikes, and the project water conveyance systems, powerhouse, transformer building, and machine shop. Since all these project works are eligible for listing on the National Register of Historic Places, the proposed undertaking would obviously have an adverse effect.⁴⁷ In addition, PGE conducted an archeological survey that identified three archeological sites, four locations with isolated prehistoric artifacts, and two locations with modern or historic refuse that could be affected by the surrender and project removal.

43. The Commission's Office of Energy Projects, the SHPO, and the Council executed an MOA setting out requirements to resolve adverse effects, which PGE signed in concurrence. The MOA provides for implementation of an Historic Properties Management Plan to minimize impacts on archeological and historic sites at the project during project removal. PGE's final management plan, filed January 20, 2004, is adopted by ordering paragraph (K) below.

The Commission orders:

(A) Surrender of the license for the Bull Run Project No. 477 is accepted and will become effective upon fulfillment of all surrender conditions as determined by the Commission.

(B) The licensee shall commence project removal after May 27, 2007 and shall complete project removal by September 7, 2009.

(C) The licensee shall continue generation of power until the Little Sandy Diversion Dam is removed.

(D) The licensee shall implement the surrender measures in the Decommissioning Plan, as set out in bold print, in underlining, and in the figures and tables of Attachment D of this order. No later than December 31, 2004, then yearly through December 31, 2006, and quarterly thereafter, the licensee shall file with the Commission and the Division of Dam Safety and Inspections' Portland Regional Engineer a progress report outlining the decommissioning activities conducted pursuant to the Decommissioning Plan. The report shall include: a description of the activities

⁴⁷Eligible properties and properties actually listed are both considered historic properties and so treated the same for the purposes of section 106 of the National Historic Preservation Act. See Section 800.16(1)(1) (2003).

completed during the previous reporting period, including the results of the monitoring required by the Decommissioning Plan and this order; (2) the status of site restoration efforts; and (3) activities to be completed during the next reporting period. The Commission reserves the right to require changes to the Decommissioning Plan.

Project decommissioning will not be considered complete until the Commission issues a letter indicating that the surrender is effective.

(E) The licensee shall, at least 90 days before the start of any land-disturbing or land-clearing activities, file with the Commission for approval, an erosion and sedimentation control plan based on actual site geological, soil, and ground water conditions and on the final project design, including but not limited to: (a) a description of the actual site conditions; (b) measures to control erosion, prevent slope instability, and minimize the quantity of sediment and potentially toxic substances released into the river during project removal; (c) detailed description, functional design drawings, and specific topographic locations for all control measures; (d) monitoring and maintenance programs for project construction and operation, including an implementation schedule; and (h) provisions for periodic review and revision.

The licensee shall prepare the plan after consultation with the U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, Oregon Department of Water Resources, Oregon Department Fish and Wildlife, Forest Service, and U.S. Bureau of Land Management. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No land-disturbing or land-clearing activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

(F) Beginning in 2005, to protect downstream-migrating juvenile salmonids, the licensee shall: (1) limit the canal level to 4.7 feet from February 15 until March 15; and (2) starting on March 15 and continuing for 8 weeks, (a) operate the canal levels at 4.2 feet for 8 hours per day, and (b) operate the canal levels at no more than 4.7 feet all other hours. The licensee shall also continue to operate and maintain the fish ladder and fish trap at Marmot Dam until that dam is removed.

(G) At least 90 days before the start of any land-clearing or land-disturbing activities at the project site, the licensee shall file for Commission approval, a fish facility design and operation plan. The licensee shall prepare the plan after consultation with NOAA Fisheries, U.S. Fish and Wildlife Service (FWS), and Oregon Department of Fish and Wildlife (Oregon DFW).

The plan shall include: (1) detailed design drawings of the licensee's proposed fish facility, comprised of (a) a temporary fish barrier, Denil fish ladder and fish trap to be operated during the time when Marmot dam is being removed, (b) identification of the specific location of the fish facility, (c) a schedule for installing the fish facility, and (d) an operation schedule for the facility; and (2) detailed design drawings of the licensee's proposed emergency trap and haul facility, comprised of (a) a picket system, (b) Denil fish ladder, (c) floating pump station, and trap/handling facility, to be installed on the Sandy River if needed to pass fish around sediment blockages, (d) identification of the specific location of the fish facility, (e) a schedule for installing the fish facility, and (e) an operation schedule for the facility.

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

The Commission reserves the right to require changes to the proposed fish facility plan. Land-disturbing activities shall not begin until the licensee is notified by the Commission that the filing is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

(H) The licensee shall implement the measures to minimize incidental take of listed salmon and steelhead species and bull trout outlined in the biological opinions issued by NOAA Fisheries (Attachment A of this order) and FWS (Attachment B of this order).

(I) By December 31, 2006, PGE shall file for Commission approval, the results of spotted owl surveys conducted during 2005 and 2006 nesting seasons and a plan to protect nesting spotted owls which have been located by the survey. The plan shall include provisions to ensure that disturbances are minimized to the extent practicable during the critical nesting period (March 1-July 15). If potential owl nest trees must be

removed, removal will occur outside of critical nesting period. If a potential nest tree must be removed during the critical nesting period, all reasonable efforts shall be taken to determine that the tree is unoccupied prior to removal, and if nesting owls that may be harassed by the proposed action are discovered during the surveys, PGE shall monitor the nests and document the owls' response to the actions. The licensee shall prepare the plan after consultation with U.S. Fish and Wildlife Service (FWS) and Oregon Department of Fish and Wildlife (Oregon DFW).

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

The Commission reserves the right to require changes to the proposed plan. Land-disturbing activities shall not begin until the licensee is notified by the Commission that the filing is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

(J) Within 1 year from the date of this order, PGE shall file a revised revegetation, noxious weed control, and site restoration plan for Commission approval after consultation with Bureau of Land Management (BLM), U.S. Forest Service (FS), Oregon Department of Fish and Wildlife (Oregon DFW), and U.S. Fish and Wildlife Service (FWS). The plan shall state the final requirements for the mix of species or planting densities, a list of tree and shrub species and planting densities, contingencies for replanting, or detailed exotic/invasive species control plans for pre-construction and monitoring period. The plan shall also include a statement of the criteria that will be used to determine the need for revegetation of the streambank and riparian areas upstream and downstream of Marmot Dam, based on monitoring and time frames for the revegetation.

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

The Commission reserves the right to require changes to the proposed plan. Land-disturbing activities shall not begin until the licensee is notified by the Commission that the filing is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

(K) The licensee shall implement the Memorandum of Agreement Among The Federal Energy Regulatory Commission, The Advisory Council on Historic Preservation, And The Oregon State Historic Preservation Officer For Managing Historic Properties That May Be Affected By Portland General Electric Company's Surrender for the Bull Run Hydroelectric Project In Clackamas County, Oregon, executed on February 29, 2004 (MOA), and including, but not limited to, the Historic Properties Management Plan (HPMP) for the project. In the event that the MOA is terminated, the licensee shall continue to implement the provisions of its approved HPMP until the licensee fulfills all of the requirements in the surrender order. The Commission reserves the authority to require changes to the HPMP at any time during the term of the surrender order. If the MOA is terminated, the licensee shall obtain approval from the Commission and the Oregon State Historic Preservation Officer where the HPMP calls upon the licensee to do so.

(L) PGE shall notify, in writing, homeowners with water wells that may be adversely affected by the loss of Roslyn Lake, of its plans and schedule to drain Roslyn Lake, at least six months prior to their implementation, in order to give these homeowners adequate time to implement necessary measures to meet their water supply needs. At the same time, PGE shall file with the Commission, proof of its notification to these homeowners and a copy of the written notification.

(M) In consultation with the Sandy Fire District, Clackamas County, and the City of Portland's Water Bureau, PGE shall investigate possible measures that could be implemented to mitigate for the loss of Roslyn Lake as a water source for fire emergencies. This investigation shall consider the feasibility of various alternative water source measures, including installation and operation costs, implementation method, and implementation schedule. The investigation shall begin within six months from the date of issuance of this order.

Within one year from the date of issuance of this order, the licensee shall file, with the Commission, a report summarizing the results/status of the investigation, including any need for further investigation into the issue, identification of the preferred mitigation measure and any plans and schedule for PGE and/or others to implement such a measure. The filing shall also include documentation of PGE's consultation with the above entities.

(N) At least 60 days before start of construction/removal activities, the licensee shall file with the Commission, for approval, and submit three copies to the Division of Dam Safety and Inspections' Portland Regional Engineer, a plan (Plan) for removal of project works, in accordance with ordering Paragraphs (B) and (C), and for retiring any project works to remain. The Plan shall include, but need not be limited to, a detailed description of the following:

- (1) The decommissioning or removal of the hydroelectric generation facilities. If the powerhouse is not being removed, actions must include, but are not limited to: disconnecting the electrical connection; locking or sealing all project doors and gates; covering or otherwise protecting all windows to reduce opportunities for vandalism and entry; and removing any toxic materials, such as lubricants, hydraulic fluids, solvents, and batteries, which may be stored in the powerhouse.
- (2) The dam removal process and sequence for each of the two dams, including measures to control sedimentation and erosion.
- (3) The final site restoration.
- (4) An implementation schedule.

The licensee shall prepare the Plan after consultation with the Oregon Departments of Fish and Wildlife, of Environmental Quality, and of Water Resources; U.S. Fish and Wildlife Service; U.S. Forest Service; U.S. Bureau of Land Management, and National Marine Fisheries Service. The Plan shall include: documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the Plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the Plan with the Commission for approval. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the Plan. The Plan shall not be implemented until the licensee is notified the Plan is approved. Upon approval, the licensee shall implement the Plan, including any changes required by the Commission.

(O) At least 60 days before starting removal activities, the licensee shall submit one copy to the Division of Dam Safety and Inspections' Portland Regional Engineer,

two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), and one copy to the Oregon Water Resources Department Dam Safety Section, of final removal contract plans and specifications, a public safety plan for the period during removal activities, and a disposal plan. The Regional Engineer may require changes to the plans and specifications to assure the work is completed in a safe and environmentally sound manner. Construction may not commence until authorized by the Regional Engineer.

(P) At least 60 days before starting removal activities, the licensee shall submit one copy to the Division of Dam Safety and Inspections' Portland Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of a Quality Control and Inspection Program (QCIP) for the Regional Engineer's review and approval. The QCIP shall include a sediment and erosion control plan.

(Q) At least 60 days before starting removal activities, the licensee shall submit one copy to the Division of Dam Safety and Inspections' Portland Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of a Temporary Emergency Action Plan (TEAP) for the Regional Engineers' review and approval. The TEAP shall describe emergency procedures in case failure of a cofferdam, large sediment control structure, or any other water retaining structure could endanger construction workers or the public. The TEAP shall include a notification list of emergency response agencies, a plan drawing of the proposed cofferdam arrangement, the location of safety devices and escape routes, and a brief description of testing procedures.

(R) Before starting Marmot Dam removal activities, the licensee shall review and approve the design of contractor-designed cofferdams and deep excavations. At least 30 days before starting cofferdams construction, the licensee shall submit one copy of the approved cofferdam construction drawings and specifications and the letters of approval to the Division of Dam Safety and Inspections' Portland Regional Engineer, two copies to the Commission (one of these copies shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), and one copy to the Oregon Water Resources Department Dam Safety Section.

(S) At least 30 days before starting any blasting activities, the licensee shall submit one copy of the blasting subcontractor's blasting plan to the Division of Dam Safety and Inspections' Portland Regional Engineer and two copies to the Commission (one of these copies shall be a courtesy copy to the Director, Division of Dam Safety and Inspections).

(T) Within 60 days of completing construction activities associated with dam removal, the licensee shall submit to the Division of Dam Safety and Inspections' Portland Regional Engineer a report documenting the work. The removal of project structures will not be considered complete until the Commission's Portland Regional Office performs a final site inspection and issues a letter accepting the report and the condition of the site and any remaining structures.

During project removal activities, the licensee shall submit to the Division of Dam Safety and Inspections' Portland Regional Engineer three copies of monthly removal progress reports by the 15th of each month.

(U) 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 Federal Power Act. The filing of a request for rehearing does not operate as a stay of the effective date of this order or of any other date specified in the order, except as specifically ordered by the Commission.

By the Commission.

(S E A L)

Linda Mitry,
Acting Secretary.

ATTACHMENT A

NOAA FISHERIES' REASONABLE AND PRUDENT MEASURES AND IMPLEMENTING TERMS AND CONDITIONS

Reasonable and Prudent Measures (RPM)

1. Use best available science to adaptively manage dam removal activity protocols to minimize listed species incidental take.
2. Ensure all dam removal and other decommissioning inwater and near-water construction activities are conducted in a fashion that minimizes impacts to aquatic and riparian resources.

Terms and Conditions

To implement RPM 1, above, PGE must comply with the following:

- a. In spring 2007, convene the ESA Fish Monitoring and Implementation Team (PGE, USFWS, NOAA Fisheries, and ODFW) and other DWG members to review the dam removal activities and review any new information for potential impacts that were not considered during consultation. If new methods of avoiding and/or minimizing incidental take are identified, or if new information indicates proposed decommissioning and monitoring activities are not necessary, the ESA Subgroup shall use an adaptive management process to discuss and finalize take minimization activities before decommissioning activities commence. Changes to the Project's proposed action or this Incidental Take Statement shall be completed via simple amendment of this Opinion. Issues to be specifically reviewed in 2007 prior to decommissioning activities include:
 1. All new and ongoing habitat and fisheries monitoring and assessment information, including baseline, endpoint, and ESA contingencies monitoring information.
 2. Oregon State University evaluation of sediment impacts from Marmot Dam removal, including prediction of sediment transport and storage areas, future locations of stored sediment, fish habitat modifications, fish passage blockage, channel migration and bank erosion, and post-dam removal monitoring and contingency needs.

3. Potential effects of large wood (soft and hardwood species, both live and dead) that could be mobilized from Reach 1 upon Marmot Dam removal, and cause temporary and long-term downstream fish passage barriers in Reach 2.

To implement RPM 2, above, PGE must comply with the following:

- a. Best management practices shall be used to prevent concrete products (dust, chips, larger chunks) mobilized by dam removal activities from entering flowing or standing waters. Concrete-tainted wastewater shall be disposed of away from flowing or standing water. Best practicable efforts shall be made to collect and remove all concrete products prior to rewatering of construction areas.
- b. Construction activities associated with habitat enhancement and erosion control measures shall meet or exceed best management practices and other performance standards contained in the ODEQ National Pollutant Discharge Elimination System (“NPDES”) 1200-CA permit (General NPDES Stormwater Discharge Permit).
- c. Erosion control and sediment containment devices shall be employed at the Marmot Dam and Little Sandy Dam construction sites. All erosion control and sediment containment devices shall be inspected weekly, at a minimum, during dam removal to ensure that they are working adequately. Any erosion control or sediment containment inadequacies will be immediately addressed until properly functioning.
- d. Erosion control and sediment containment materials (e.g., silt fence, straw bales, aggregate) in excess of those installed shall be available on site for immediate use during emergency erosion control needs.
- e. Vehicles operated within 150 ft of the construction site waterways will be free of fluid leaks. Daily examination of vehicles for fluid leaks is required during periods operated within or above the waterway.
- f. During construction activities, no pollutants of any kind (sewage, waste spoils, petroleum products, etc.) shall come in contact with the water body nor their substrate below the mean high-high water elevation or 10-year flood elevation, whichever is greater.

- g. Any areas used for staging, access roads, or storage are to be evacuated, and all materials, equipment, and fuel shall be removed if flooding of the area is expected to occur within 24 hours.
- h. Vehicle maintenance, refueling of vehicles, and storage of fuel shall be done at least 150 ft from the waterway, provided, however, that cranes and other semi-mobile equipment may be refueled in place.
- i. At the end of each work shift, vehicles shall not be stored within, or over, the waterway.
- j. Prior to operating within the waterway, all equipment shall be cleaned of external oil, grease, dirt, or caked mud. Any washing of equipment shall be conducted in a location that shall not contribute untreated wastewater to any flowing stream or drainage area.
- k. Temporary erosion and sediment controls will be used on all exposed slopes during any hiatus in work exceeding 7 days.
- l. Material removed during excavation will only be placed in locations where it cannot enter sensitive aquatic resources.
- m. Alteration or disturbance of the streambanks and existing riparian vegetation will be minimized to the greatest extent possible.
- n. No herbicide application shall occur as part of this action. Mechanical removal of undesired vegetation and root nodes is permitted.
- o. Clearing limits shall be identified and marked. Construction activity or movement of equipment into existing vegetated areas shall not begin until clearing limits are marked.
- p. All existing vegetation within 150 ft of the edge of the bank should be retained to the greatest extent practicable.

ATTACHMENT B

U.S. FISH AND WILDLIFE SERVICES'S REASONABLE AND PRUDENT MEASURES AND IMPLEMENTING TERMS AND CONDITIONS

Reasonable and Prudent Measures (RPM) for Bull Trout

1. Use best available science to adaptively manage dam removal activity protocols to minimize listed species incidental take of bull trout.
2. Ensure all dam removal and other decommissioning in-water and near-water construction activities are conducted in a fashion that minimizes impacts to aquatic and riparian resources.

Terms and Conditions for Bull Trout

To implement RPM 1, above, PGE must comply with the following:

- a. In spring 2007, convene the ESA Fish Monitoring and Implementation Team (PGE, Service, NOAA Fisheries, and ODFW) and other Decommissioning Work Group members to review the dam removal activities and review any new information for potential impacts that were not considered during consultation. If new methods of avoiding and/or minimizing incidental take are identified, or if new information indicates proposed decommissioning and monitoring activities are not necessary, the ESA Subgroup shall use an adaptive management process to discuss and finalize take minimization activities before decommissioning activities commence. Changes to the Project's proposed action or this Incidental Take Statement shall be completed via simple amendment of this Opinion.

Issues to be specifically reviewed in 2007 prior to decommissioning activities include:

1. All new and ongoing habitat and fisheries monitoring and assessment information, including baseline, endpoint, and ESA contingencies monitoring information.
2. Oregon State University evaluation of sediment impacts from Marmot Dam removal, including prediction of sediment transport and storage areas, future locations of stored sediment, fish habitat

modifications, fish passage blockage, channel migration and bank erosion, and post-dam removal monitoring and contingency needs.

3. Potential effects of large wood (soft and hardwood species, both live and dead) that could be mobilized from Reach 1 upon Marmot Dam removal, and cause temporary and long-term downstream fish passage barriers in Reach 2.
4. Activities and methodologies associated with removal of the diversion canal and flume, and subsequent stream crossing restoration.

To implement RPM 2, above, PGE must comply with the following:

- a. Best management practices shall be used to prevent concrete products (dust, chips, larger chunks) mobilized by dam removal activities from entering flowing or standing waters. Concrete-tainted wastewater shall be disposed of away from flowing or standing water. Best practicable efforts shall be made to collect and remove all concrete products prior to re-watering of construction areas.
- b. Construction activities associated with habitat enhancement and erosion control measures shall meet or exceed best management practices and other performance standards contained in the ODEQ National Pollutant Discharge Elimination System (“NPDES”) 1200-CA permit (General NPDES Stormwater Discharge Permit).
- c. Erosion control and sediment containment devices shall be employed at the Marmot Dam and Little Sandy Dam construction sites. All erosion control and sediment containment devices shall be inspected weekly, at a minimum, during dam removal to ensure that they are working adequately. Any erosion control or sediment containment inadequacies will be immediately addressed until properly functioning.
- d. Erosion control and sediment containment materials (e.g., silt fence, straw bales, aggregate) in excess of those installed shall be available on site for immediate use during emergency erosion control needs.
- e. Vehicles operated within 150 ft of the construction site waterways will be free of fluid leaks. Daily examination of vehicles for fluid leaks is required during periods operated within or above the waterway.

- f. During construction activities, no pollutants of any kind (sewage, waste spoils, petroleum products, etc.) shall come in contact with the water body nor their substrate below the mean high-high water elevation or 10-year flood elevation, whichever is greater.
- g. Any areas used for staging, access roads, or storage are to be evacuated, and all materials, equipment, and fuel shall be removed if flooding of the area is expected to occur within 24 hours.
- h. Vehicle maintenance, refueling of vehicles, and storage of fuel shall be done at least 150 ft from the waterway, provided, however, that cranes and other semi-mobile equipment may be refueled in place.
- i. At the end of each work shift, vehicles shall not be stored within, or over, the waterway.
- j. Prior to operating within the waterway, all equipment shall be cleaned of external oil, grease, dirt, or caked mud. Any washing of equipment shall be conducted in a location that shall not contribute untreated wastewater to any flowing stream or drainage area.
- k. Temporary erosion and sediment controls will be used on all exposed slopes during any hiatus in work exceeding 7 days.
- l. Material removed during excavation will only be placed in locations where it cannot enter sensitive aquatic resources.
- m. Alteration or disturbance of the streambanks and existing riparian vegetation will be minimized to the greatest extent possible.
- n. No herbicide application shall occur as part of this action. Mechanical removal of undesired vegetation and root nodes is permitted.
- o. Clearing limits shall be identified and marked. Construction activity or movement of equipment into existing vegetated areas shall not begin until clearing limits are marked.
- p. All existing vegetation within 150 ft of the edge of the bank should be retained to the greatest extent practicable.

Reasonable and Prudent Measures (RPM) for Northern Spotted Owl

1. Use best available science to adaptively manage dam removal activity protocols to minimize listed species incidental take of spotted owls.
2. To the extent feasible, ensure all dam removal and other decommissioning activities are conducted in a fashion that minimizes impacts to spotted owls and their habitat.

Terms and Conditions for Northern Spotted Owl

To implement RPM 1, above, PGE must comply with the following:

- a. In spring 2007, convene the ESA Fish Monitoring and Implementation Team (PGE, Service, NOAA Fisheries, and ODFW) and other Decommissioning Work Group members to review the Project removal activities and review any new information for potential impacts that were not considered during consultation, including the results of the proposed spotted owl surveys to be conducted in 2005 and 2006. If spotted owls are found during the surveys, the ESA Subgroup shall use an adaptive management process to discuss and finalize incidental take minimization activities before decommissioning activities commence. Changes to the Project's proposed action or this Incidental Take Statement shall be completed via simple amendment of this biological opinion.

Issues to be specifically reviewed in 2007 prior to decommissioning activities include a review of the survey results for spotted owls in the Project area, including the location of any sightings, activity centers or nests found within 1 mile of the dam sites, or ¼ mile of all other Project features to be removed during decommissioning.

To implement RPM 2, above, PGE must comply with the following:

- a. Minimize disturbance to the extent possible within the critical nesting period (March 1-July 15)
- b. If potential spotted owl nest trees must be removed during decommissioning activities, these trees should be removed outside of the critical nesting period (July 16 – February 28). If a potential nest tree must be removed during the critical nesting period, all reasonable efforts shall be taken to determine that the tree is unoccupied prior to removal.

- c. If nesting spotted owls are discovered during surveys that may be harassed by the proposed action, PGE shall monitor the nests and document the spotted owls' response to the decommissioning actions.

ATTACHMENT C

**Clean Water Act § 401 Certification
For the
Decommissioning
of the
Bull Run Hydroelectric Project
(FERC No. 477)
Sandy River Basin
Clackamas County, Oregon**

Based upon the Evaluation Report and Findings on the Application for Certification Pursuant to Section 401 of the Federal Clean Water Act for the Decommissioning of the Bull Run Hydroelectric Project in Clackamas County, Oregon, FERC No. 477, dated October 22, 2003, the Oregon Department of Environmental Quality (DEQ) certifies that the decommissioning of the Bull Run Hydroelectric Project will comply with applicable provisions of sections 301, 302, 303, 306, and 307 of the Federal Clean Water Act, Oregon water quality standards, and other appropriate requirements of state law. This Certification is subject to and incorporates the following conditions, in accordance with 33 USC 1341(d).

Certification Conditions**1) Sediment**

- a) Fish passage Impairment: GE shall implement the Fish Passage Monitoring and Contingencies Plan as specified in section 4.6 of the Decommissioning Plan submitted with the Settlement Agreement Concerning Removal of the Bull Run Hydroelectric Project, FERC Project No. 477.
- b) Channel Complexity Measures: PGE shall monitor the affected reaches of the Sandy River to characterize the channel complexity changes in the river related to dam removal, and to identify PGE's endpoint for ESA related activities, as specified in section 4.7 of the Decommissioning Plan.
- c) Erosion Control during and after Construction: No less than 120 days before submitting an application to the Corps of Engineers for a § 404 Dredge and Fill Permit for Project removal activities, PGE shall submit an Erosion Control Plan for review, public comment, and approval by DEQ. This plan must identify areas that may be disturbed during construction

activities, measures that will be taken to control erosion in these areas, a plan for monitoring affected sites and stream reaches after project facilities have been removed, and measures that will be taken to control erosion and restore vegetation in these areas.

2) **Turbidity**

- a) Turbidity Monitoring: PGE shall conduct turbidity monitoring before, during, and after Project removal.

Before Removal: For two years beginning in August 2003, PGE shall collect turbidity data using continuous monitors at two sites in the Sandy River. One site must be located above Marmot Dam, and the other site must be located below the mouth of the Bull Run River. Data collected from August through July must be submitted to DEQ by January 1 of the following year.

During Project Removal: PGE shall monitor sites directly above and below Marmot Dam, above and below Little Sandy Dam, and below Roslyn Lake. Sampling intervals must be no less than every four hours, encompassing the work day, and occurring at times of peak activity. Details of the sampling sites, sampling schedule, and data reporting must be set out in the Turbidity Management Plan.

After Project Removal: PGE shall use continuous recording instruments to monitor turbidity at five sites. These are: above and below Marmot Dam, above and below the Little Sandy Dam, and in the Sandy River below the mouth of the Bull Run River. Monitoring must continue until PGE is no longer responsible for fish passage as determined by the ESA Monitoring and Implementation Team established under the Decommissioning Plan, or until DEQ determines that monitoring is no longer necessary. At a minimum, monitoring must continue for at least two years after the dams and lake have been removed. Data must be submitted to DEQ annually, including data from October through September submitted by January 1 of the following year.

- b) Turbidity Management During Project Removal: No less than 120 days prior to applying for a § 404 Dredge and Fill Permit for Project removal activities, PGE shall submit a Turbidity Management Plan for review, public comment, and DEQ approval. This plan must describe the management activities that will be implemented during removal activities at

all Project sites to control turbidity originating from project lands disturbed by construction activity. Data collected on background turbidity levels prior to Project removal may be used to develop construction management action levels.

3) **Biological Criteria; Protection of Beneficial Uses of Salmonid Spawning, Salmonid Rearing, and Resident Fish & Aquatic Life; Other Appropriate Requirements of State Law**

- a) Water Elevation in Marmot Canal: Beginning in 2005, and continuing until Marmot Dam is removed, the water level in the Marmot Dam diversion canal may not exceed 4.7 feet from February 15 through March 15. From March 15, and continuing for 8 weeks, the canal must operate at 4.2 feet for 8 hours, beginning at dusk. The Canal may not be operated at levels exceeding 4.7 feet during the remaining hours during this period. The initiation of the 8 week period may be adjusted at the request of the National Marine Fisheries Service and the Oregon Department of Fish and Wildlife based on information regarding the arrival of downstream migrating juvenile salmonids at Marmot Dam. After May 31, these elevation restrictions will no longer apply.
- b) Fish Passage: PGE shall provide for the continued operation of the existing fish ladder and sorting facility at Marmot Dam, until a temporary fish ladder is in place and the coffer dam above Marmot Dam has been constructed, as specified in section 3.1 of the Decommissioning Plan.

Prior to construction of the coffer dam above Marmot Dam, PGE shall construct, operate, and maintain, a temporary fish ladder and trap and haul facility as specified in section 3.3 of the Decommissioning Plan.

4) **Temperature/TMDL**

- a) In the event removal of the Marmot and Little Sandy Dams is not completed by December 31, 2009, DEQ may reconsider this Certification or modify these Certification conditions, in accordance with OAR Chapter 340 Division 48, as necessary to ensure implementation of TMDLs .

5) **General**

- a) Certification Modification. Subject to OAR Chapter 340 Division 48, and, as applicable, 33 USC 1341, DEQ may reconsider this Certification, and

add, delete, or modify certification conditions, as necessary to address changes in knowledge, Project conditions, or water quality standards or to address any failure of Certification conditions to protect water quality and beneficial uses. Any added or modified condition shall, so long as it is in effect, become a condition of any federal license or permit subsequently issued for the Project.

- b) **Removal-Fill Permit.** Before commencing dam removal activities, PGE shall obtain a removal-fill permit from the Oregon Division of State Lands.
- c) **Subsequent Federal Permits or Licenses.** Upon applying for a federal permit or permits for decommissioning activities, including a § 404 dredge and fill permit from the Corps of Engineers, PGE shall provide written notice to DEQ of such application and of any proposed changes in decommissioning activities since the date of issuance of this Certification. Within 60 days of DEQ's receipt of notice from the Corps or other federal permitting agency that it is processing PGE's application, DEQ will notify the federal agency and PGE either (i) that this Certification is sufficient for purposes of the federal permit and permit conditions, or (ii) that, in light of new information related to the water quality impacts of decommissioning activities since issuance of this Certification, there is no longer reasonable assurance of compliance with state water quality standards. In the latter event, DEQ will consider the new information, solicit and consider public and agency comment as required by law, and issue a section 401 certification determination for purposes of the federal permit and decommissioning activities. In the event DEQ determines that this Certification is sufficient for purposes of a federal permit or permits for decommissioning activities, PGE shall perform decommissioning in accordance with these Certification conditions.
- d) **Project Changes.** PGE shall obtain DEQ review and approval before undertaking any change to the Project or Decommissioning Plan that might significantly affect water quality, including changes to Project structures, operations, and flows.
- e) **Project Repair or Maintenance.** PGE shall obtain DEQ review and approval before undertaking Project repair or maintenance activities that might significantly affect water quality. DEQ may, at PGE's request, provide such prior approval effective prospectively for specified repair and maintenance activities.

- f) Access. PGE shall allow DEQ such access as necessary to the Project area and Project records at reasonable times as necessary to monitor compliance with these Certification conditions.
- g) Posting of Certification. PGE shall post a copy of these Certification conditions in a prominent location at the Bull Run Powerhouse Control Center.
- h) Spill Management. PGE shall maintain and implement current Spill Prevention, Control, and Countermeasure (SPCC) plans for oil and hazardous materials prepared in accordance with the Clean Water Act requirements of 40 CFR 112. These plans shall address all locations at the Project where Project operations may potentially result in a spill or release or threatened spill or release to Project reservoirs or the Sandy River, the Little Sandy River or the Bull Run River. In the event of a spill or release or threatened spill or release to Project waters or to the Sandy River, the Little Sandy River or the Bull Run River, PGE shall immediately implement the site's SPCC plans and notify the Oregon Emergency Response System (OERS) at 1-800-452-0311.

APPENDIX D – DECOMMISSIONING PLAN

NOT ON DISKETTE

(Please see eLibrary for complete document)