

EXHIBIT I

144 FERC ¶ 62,044
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

City of Seattle, Washington

Project No. 553-221

ORDER AMENDING LICENSE AND REVISING ANNUAL CHARGES

(Issued July 17, 2013)

1. On July 12, 2011, the City of Seattle, Washington, licensee for the Skagit River Hydroelectric Project, FERC No. 553, filed an application to amend its license in order to construct a second power tunnel between the project's Gorge Dam and Gorge Powerhouse and to include a series of fish protection measures under license Articles 401 and 404. The project is located on the Skagit River in Skagit, Snohomish, and Whatcom Counties, Washington and occupies federal lands managed by the National Park Service within the Ross Lake National Recreation Area.

Background

2. The license for the Skagit River Project was issued May 16, 1995.¹ The project consists of three developments: (1) the Ross Development; (2) the Diablo Development; and (3) the Gorge Development. The licensee's proposal only affects the Gorge Development, which consists of: (1) a combination concrete arch and gravity diversion dam rising 300 feet from bedrock to the crest, with a 94-foot-wide spillway and two fixed wheel gates; (2) a 240-acre reservoir with a total capacity of 8,500 acre-feet; (3) an intake structure; (4) a 20.5-foot-diameter power tunnel, 11,000 feet long; (5) three 11.25-foot-diameter penstocks and one 15.5-foot-diameter penstock totaling 1,600 feet long; (6) a surge tank; (7) a power plant containing four generating units with a combined nameplate capacity of 207 megawatts (MW); (8) a transmission line extending from the power plant to North Mountain substation; and (9) appurtenant facilities.

3. License Article 404 requires the licensee to provide certain flows to protect anadromous fishery resources downstream of the Gorge Powerhouse. The project's Fisheries Resources Plan, required by license Article 401 and approved by the Commission on July 30, 1996, incorporated these operational restrictions and schedules.² Although these requirements were incorporated into the license through the Fisheries Resources Plan and license Article 404, the licensee has, for the life of its license,

¹ 71 FERC ¶ 61,159 (1995).

² 76 FERC ¶ 62,078 (1996).

voluntarily followed stricter operation constraints which it now wishes to make part of the license as discussed below.

Proposed Action

4. The licensee states that although the Gorge Development is licensed at a capacity of 207 MW, it can only produce a maximum of 176 MW due to head losses in the development's single existing power tunnel. To remedy this problem, the licensee proposes to bore a second power tunnel between the Gorge Dam and Powerhouse alongside the existing tunnel. This new tunnel would be 22 feet in diameter and 11,000 feet long. It would connect to the existing power tunnel just downstream of the intake and reconnect just upstream of the penstocks. To accommodate the new tunnel, the project boundary would need to be expanded near the tunnel's ends, incorporating an additional 1.21 acres of federal lands into the project boundary. The majority of the new tunnel would be constructed using a tunnel-boring machine while the connections to the existing tunnel and the initial portal into the mountain north of the Gorge Powerhouse would be drilled and blasted. The tunnel would be unlined except at the connections to the existing tunnel, and where fractured rock is encountered.

5. In order to connect to the existing tunnel, the Gorge Development would be shut down for a period of 2.5 months and all Skagit River flow would be spilled into the normally-dewatered bypassed reach. During construction, cooling water and groundwater exiting the proposed tunnel would be monitored and treated for contaminants on site and allowed to percolate into a natural depression near the town of Newhalem. Boring the tunnel is expected to produce about 278,800 cubic yards of spoils, which would be trucked about 10 miles down river and used to reclaim the licensee's Bacon Creek quarry site.

6. The licensee does not propose any change to the project's authorized installed or hydraulic capacities. However, because of the increased efficiency of the Gorge Development following the addition of the second power tunnel, the project is expected to produce an additional 56,000 megawatt-hours (MWh) annually.

7. The licensee also proposes to amend license Article 404 to include four fish protection measures it has been voluntarily implementing since 1995. These measures were developed by the Flow Coordinating Committee and were incorporated into an updated Fisheries Settlement Agreement in January 2011 which was executed on June 29, 2011.³ The measures are: (1) protect steelhead and Chinook salmon yearlings by limiting downramping rates to less than 3,000 cfs/hour from October 16 to

³ The updated Fisheries Settlement Agreement was filed with the Commission August 25, 2011.

December 31 each year; (2) begin salmon fry stranding protection January 1 instead of February 1; (3) change the chum salmon spawning default start date to November 1 rather than November 16; and (4) increase November/December chum salmon minimum incubation flows in Table C-3, Appendix C, of the Fisheries Settlement Agreement.

Pre-Filing Consultation

8. Prior to filing the license amendment application with the Commission, the licensee began initial consultation in the form of telephone calls, emails, letters, and meetings in 2007. The consulted parties included federal and state agencies, Indian tribes, and non-governmental organizations.⁴ Concerns during this period of early consultation primarily included release of natural contaminants during tunneling, additional truck traffic and noise, disturbance to fisheries and wildlife, protection of archeological and cultural resources, and the underground disturbance of a wilderness area.

9. The licensee developed a draft application and distributed it to the consulted parties on August 25, 2010, and then held a meeting on September 24, 2010. The licensee received comments concerning tunnel and storm water monitoring and management, human-bear interaction, waste dump contamination, fish surveys, spill timing, Coastal Zone Management Act (CZMA) determination, terrestrial resource protection, and recreational access to the bypass reach during the shutdown. The licensee addressed these concerns before filing its final amendment application with the Commission.

Public Notice

10. On September 7, 2011, the Commission issued public notice that the amendment application was accepted for filing, that the project was ready for environmental analysis, and soliciting comments, recommendations, terms and conditions, and prescriptions. In response, timely notices of intervention were filed by the U.S. Forest Service, U.S. Department of the Interior (Interior), National Marine Fisheries Service (NMFS), Washington Department of Fish & Wildlife (Washington DFW), Sauk-Suiattle Indian Tribe, Swinomish Indian Tribal Community, and Upper Skagit Indian Tribe.⁵ Interior also filed comments and recommendations in response to the public notice.

⁴ For a complete list of consulted parties, see pages 4-3 through 4-6 of the applicant prepared environmental assessment.

⁵ The Upper Skagit Indian Tribe's intervention was filed late and was granted by notice issued November 30, 2011.

11. The motions to intervene, comments, and recommendations have been fully considered in determining whether, and under what conditions, to issue this amendment of license.

12. On July 9, 2012, Commission staff issued an Environmental Assessment (EA) for the proposed action. The findings of the EA are summarized under *Environmental Assessment*, below.

Water Quality Certification

13. Under section 401(a) of the Clean Water Act (CWA),⁶ the Commission may not authorize construction or operation of a hydroelectric project that may result in a discharge from the 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.⁷

14. In a letter to the licensee dated April 13, 2009, the Washington Department of Ecology (Washington DOE) stated that a 401 certification is not required for the amendment to the project license since flows from the project would not change in volume, timing, or velocity.

Threatened and Endangered Species

15. Section 7(a)(2) of the Endangered Species Act of 1973,⁸ requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence to federally listed threatened and endangered species, or result in the destruction or adverse modification of their designated critical habitat.

16. Federally listed species that may be affected by the proposed action include bull trout (*Salvelinus confluentus*), Puget Sound Chinook salmon (*Oncorhynchus tshawytscha*), Puget Sound steelhead (*Oncorhynchus mykiss*), marbled murrelet (*Brachyramphus marmoratus*), and northern spotted owl (*Strix occidentalis*).

17. On December 12, 2011, Commission staff initiated formal section 7 consultations with the U.S. Fish and Wildlife Service (FWS) and NMFS and provided a draft

⁶ 33 U.S.C. § 1341(a) (2006).

⁷ 33 U.S.C. § 1341(d) (2006).

⁸ 16 U.S.C. § 1536(a) (2006).

Biological Assessment, prepared by the licensee. After review of the Biological Assessment, the FWS requested additional information. Commission staff provided the FWS a supplemental Biological Assessment on July 24, 2012.

18. On November 21, 2012, as supplemented March 1, 2013, NMFS filed a Biological Opinion with its determination that the proposed action is not likely to jeopardize the continued existence of Puget Sound Chinook salmon or Puget Sound steelhead, or destroy or adversely modify Puget Sound Chinook salmon designated habitat.⁹ NMFS' Biological Opinion includes an incidental take statement with reasonable and prudent measures to minimize take of Puget Sound Chinook salmon and Puget Sound steelhead, along with terms and conditions to implement the measures. The reasonable and prudent measures and terms and conditions are set forth in Appendix A of this order and are incorporated into the license through Ordering Paragraph (C).

19. NMFS' term and condition No. 1 requires the licensee to monitor Puget Sound Chinook salmon and Puget Sound steelhead populations and habitat and report all incidental take that occurs annually to the NMFS. A monitoring plan to ensure mortality of listed fishes does not exceed incidental take levels is to be developed in conjunction with, and approved, by the NMFS. This plan should also be filed with the Commission, for approval. Ordering paragraph (E) requires the licensee to file this plan for approval.

20. NMFS' term and condition Nos. 2, 3, and 4, implement measures to minimize incidental take by incorporating flow management measures and reducing the possibility of adverse impacts while performing in-water or near-water construction activities. More specifically, term and condition No. 2 requires the licensee to limit downramping rates to less than 3,000 cfs/hour between October 16 and December 31, while term and condition No. 3 requires the licensee to implement all salmon fry protection measures for spawning flow, incubation flow, and downramping rates on the dates specified in the license. The licensee proposed to follow these requirements in its application. Term and condition No. 4 requires the licensee to follow best management practices during construction that occurs in, or near water and to obtain a Hydraulic Project Approval from Washington DFW.

21. By letter dated December 30, 2011, FWS stated that the proposed action is not likely to adversely affect the marbled murrelet and northern spotted owl. On February 13, 2013, FWS filed a Biological Opinion with its determination that the proposed action is not likely to jeopardize the continued existence of bull trout, and is not likely to destroy or adversely modify designated critical habitat. FWS' Biological Opinion includes an incidental take statement with a reasonable and prudent measure to minimize take of bull trout, along with a term and condition to implement the measure.

⁹ NMFS has not yet designated critical habitat for Puget Sound steelhead.

The reasonable and prudent measure and term and condition are set forth in Appendix B of this order and are incorporated into the license through Ordering Paragraph (D).

National Historic Preservation Act

22. Under section 106 of the National Historic Preservation Act,¹⁰ and its implementing regulations,¹¹ federal agencies must take into account the effect of any proposed undertaking on properties listed or eligible for listing in the National Register of Historic Places (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 to determine whether and how a proposed action may affect historic properties, and to seek ways to avoid or minimize any adverse effects. In the event that Indian tribe properties are identified, section 106 requires that the Commission consult with any potentially interested Indian tribes that might attach religious or cultural significance to such properties.

23. Project construction has the potential to affect the Gorge Railroad Bridge and Ross Crypt, historic properties that qualify for the National Register. By letter dated December 9, 2010, the Washington Department of Archaeology and Historic Preservation stated that the licensee's proposed action would have no adverse effect on the character-defining features of the bridge and the crypt.

24. The licensee submitted its draft application to the Swinomish Indian Tribal Community, Upper Skagit Indian Tribe, Sauk-Suiattle Indian Tribe and the Nlaka'pamux Nation of British Columbia. By letter dated November 16, 2010, the Upper Skagit Indian Tribe indicated its support of the licensee's proposal. By an undated letter, included in the licensee's application, the Swinomish Indian Tribal Community commented that the area of potential effect would not affect cultural and archeological resources.

Section 18 Fishway Prescriptions

25. Section 18 of the Federal Power Act (FPA)¹² provides that the Commission shall require the construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as

¹⁰ 16 U.S.C. § 470 (2006) *et seq.*

¹¹ 36 C.F.R. Part 800 (2012).

¹² 16 U.S.C. § 811 (2006).

appropriate. No fishway prescriptions or reservations of authority were filed under section 18 of the FPA.

Coastal Zone Management Act

26. Under section 307(c)(3)(A) of the CZMA,¹³ the Commission cannot issue a license for a project within or affecting a state's coastal zone unless the state CZMA agency concurs with the license applicant's certification of consistency with the state's CZMA program, or the agency's concurrence is conclusively presumed by its failure to act within 180 days of its receipt of the applicant's certification.

27. The Washington DOE received the licensee's CZMA Certification on August 18, 2010. Washington DOE failed to act within 180 days of receiving the complete certification so it is presumed to concur with the licensee's proposal.

Magnuson-Stevens Fishery Conservation and Management Act

28. Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act¹⁴ requires federal agencies to consult with the Secretary of Commerce regarding any action or proposed action authorized, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH) identified under the Act. Under section 305(b)(4)(A) of the Magnuson-Stevens Act, NMFS is required to provide EFH Conservation Recommendations for actions that would adversely affect EFH.¹⁵

29. As part of its Biological Opinion, filed November 21, 2012, NMFS concluded that the proposed action would adversely affect EFH designated for Chinook salmon. NMFS stated that the conservation measures required in its incidental take statement, included in its Biological Opinion, are necessary and sufficient to conserve EFH.

Recommendations Pursuant to Section 10(a)(1) of the FPA

30. Section 10(a)(1) of the FPA¹⁶ requires that any project for which the Commission issues a license shall be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce; for the improvement and utilization of waterpower development; for the

¹³ 16 U.S.C. § 1456(3)(A) (2006).

¹⁴ 16 U.S.C. § 1855(b)(2) (2006).

¹⁵ 16 U.S.C. § 1855(b)(4)(A) (2006).

¹⁶ 16 U.S.C. § 803(a)(1) (2006).

adequate protection, mitigation, and enhancement of fish and wildlife; and for other beneficial public uses, including irrigation, flood control, water supply, recreation, and other purposes. On November 7, 2011, Interior filed a recommendation that we consider under the broad public interest standard of FPA section 10(a)(1).

31. Interior recommends that all of the proposed environmental measures listed in the applicant-prepared EA, which the licensee included with its application, be incorporated into the amendment to ensure mitigation of project impacts and protection of the resources of the Ross Lake National Recreational Area. We concur with this recommendation. Ordering paragraph (A) approves the licensee's proposal, including the proposed environmental measures.

Proposed Environmental Protection Measures

A. Spill Flow Reduction, Fish Recovery and Removal Plan

32. During construction of the second power tunnel, the licensee would spill all flows of the Skagit River over the Gorge Dam and into the bypass reach during a 2.5-month period. When construction is complete, and flow is returned to the tunnels, flow to the bypass reach would cease, which could potentially cause fish stranding and redd dewatering. To reduce the likelihood of adverse impacts to fish, the licensee proposes to spill water over the dam during the non-spawning period when species are not likely to be present. In addition, the licensee proposes to implement a Spill Flow Reduction Plan and a Fish Recovery and Removal Plan to recover stranded fish, as well as conduct pre- and post-spill fish surveys. Since these plans are related, they should be combined into one plan. The plan should be filed with the Commission for approval. Ordering paragraph (F) requires the licensee to file this plan with the Commission for approval.

B. Restoration and Monitoring Plan

33. The licensee is also proposing to develop a Restoration and Monitoring Plan for all sites affected by project construction, including the Bacon Creek quarry restoration and portal staging area. Plans for the Bacon Creek quarry and the portal staging area would include site preparation measures, contour diagrams, methods for plant salvage, plant species composition, planting densities and locations, monitoring, and measures to control weeds and protect plantings from wildlife damage. To ensure that these areas are restored and monitored in a manner acceptable to the resource agencies, the licensee should be required to develop this plan in consultation with the agencies and file the plan for Commission approval. Ordering paragraph (G) requires the licensee to file this plan with the Commission for approval.

Incorporation of Fish Protection Measures into Project License

34. In order to incorporate the four fish protection measures into the project license, the licensee proposes to modify license Article 404. Article 404 requires the licensee, in its Project Fishery Resources Plan (required by Article 401), to address flow for protecting anadromous fishery resources in the mainstem Skagit River downstream of the Gorge Powerhouse, in accordance with Section 6.0 of the Fisheries Settlement Agreement. In January 2011, the Fisheries Settlement Agreement was modified, including modification to section 6.0, and the modified agreement was executed on June 29, 2011. In order to incorporate the updated 2011 version of the Fisheries Settlement Agreement into the project license, ordering paragraph (H) revises Article 404 by indicating the 2011 revision.

35. Considering that Article 401 requires the licensee to develop and implement a Project Fisheries Resources Plan, which includes provisions of the Fisheries Settlement Agreement, the licensee should also re-file its Project Fisheries Resources Plan with the Commission for approval. Ordering paragraph (I) requires the licensee to re-file its plan.

Comprehensive Plans

36. Section 10(a)(2)(A)¹⁷ 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 waterways affected by the project.¹⁸ Four plans address resources relevant to the Skagit River Project.¹⁹ No conflicts were found.

Applicant's Plans and Capabilities

A. Conservation Efforts

37. Section 10(a)(2)(C) of the FPA requires the Commission to consider the electricity consumption improvement program of the applicant, including its plans, performance, and capabilities for encouraging or assisting its customers to conserve electricity cost effectively, taking into account the published policies, restriction, and requirements of state regulatory authorities. The project provides power to the City of Seattle's municipal electrical system.

¹⁷ 16 U.S.C. § 803(a)(2)(A) (2006).

¹⁸ Comprehensive plans for this purpose are defined at 18 C.F.R. § 2.19 (2012).

¹⁹ See section 5.3 of the EA for a complete list of all relevant comprehensive plans.

38. The licensee provides both financial incentives and technical assistance to its residential, commercial, and industrial customers who reduce their energy consumption through efficiency upgrades. We conclude that, given its efforts to persuade its customers to reduce energy usage and improve efficiency, the licensee complies with section 10(a)(2)(C) of the FPA.

B. Safe Management, Operation, and Maintenance of the Project

39. Commission staff has reviewed the licensee's management, operation and maintenance of the Skagit River Project pursuant to the requirements of 18 C.F.R. Part 12 of the Commission's regulations and the Commission's Engineering Guidelines and periodic Independent Consultant Safety Inspection Reports. We have determined that the amendment application, with the measures described above, should not prevent the licensee from safely managing, operating, and maintaining the project.

Project Economics

40. In determining whether to grant this license amendment, the Commission considers a number of public interest factors, including the economic benefits of project power. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in *Mead Corporation*,²⁰ 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 amendment 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 amendment.

41. Commission staff applied this analysis to the City of Seattle's application to amend its license for the Skagit River Project. The proposed amendment would result in an increase in annual generation of approximately 56,000 MWh. When the estimate of average annual generation is multiplied by the regional estimated alternative energy value of \$36.11/MWh,²¹ the total value of the project's additional energy would be \$2,022,260 annually. The levelized annual cost of implementing the proposed action, including annual operation and maintenance costs, would be \$5,695,500. To determine whether the proposal is economically beneficial, the proposal's cost is subtracted from the value of

²⁰ 72 FERC ¶ 61,027 (1995).

²¹ The estimated alternative energy value is based on information available in the *Energy Information Administration, Supplement to the Annual Energy Outlook 2011*.

the energy gains. Therefore, the net cost of the licensee's proposal, including total capital costs and generation benefits, would be approximately \$3,673,240 annually.

Comprehensive Development

42. Sections 4(e) and 10(a)(1) of the FPA,²² require the Commission to give equal consideration to 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 would be best adapted to a comprehensive plan for improving or developing a waterway or waterways for all beneficial public uses. The decision to issue this license amendment, and the terms and conditions included herein, reflects such consideration.

43. Based on staff's independent review and evaluation of the project, recommendations from resource agencies, and the no-action alternative, as documented in the EA, we have selected the licensee's proposal and find that it is best adapted to a comprehensive plan for improving or developing the Skagit River.

44. We selected this alternative because: (1) issuance of the amendment would serve to maintain a beneficial and dependable source of electric energy; (2) the project, with an increased annual generation of 56,000 MWh, would eliminate the need for an equivalent amount of fossil fuel produced energy, which helps conserve these nonrenewable resources and decreases atmospheric pollution; and (3) the proposed and staff-recommended environmental measures would protect project resources.

Administrative Conditions

A. Annual Charges

45. The Commission collects annual charges from licensees for administration of Part I of the FPA and for the use, occupancy and enjoyment of federal lands. With the modifications proposed by the licensee, the amount of federal lands within the project boundary would increase by 1.21 acres. Additionally, the licensee revised and filed the entire set of Exhibit K drawings for the project. While reviewing the federal acreage, the licensee noted several errors. The Commission's records indicate the project occupies 19,068.76 acres of federal lands not within a transmission line right-of-way, and 214.92 acres within a transmission line right-of-way. The licensee found parcels of federal land occupied by the project that had been counted twice, not counted, or located incorrectly. With the corrections, the licensee states the project currently occupies

²² 16 U.S.C. §§ 797(e) and 803(a)(1) (2006).

19,058.85 acres of federal lands not within a transmission line right-of-way, and 221.87 acres within a transmission line right-of-way. With the addition of the 1.21 acres as a result of the second power tunnel's construction, the project would now occupy 19,060.06 acres of federal lands not within a transmission line right-of-way. The amount of federal lands within a transmission line-right-of-way is not changing as a result of the proposed action. To reflect the changes to federal land acreage, Article 201 of the license will be revised accordingly in ordering paragraph (J).

B. Project Description

46. The licensee filed an Exhibit M, improperly labeled an Exhibit A, pertaining solely to the second power tunnel with the application.²³ We have reviewed the exhibit and determined that several sections from it, namely the portions under the headings Physical Composition, Lands of the United States, and Table A-1, fulfill the requirements of the Commission and are approved and added to the project's existing Exhibit M through ordering paragraph (K).

C. Exhibit Drawings

47. The Commission requires licensees to file sets of approved project drawings on microfilm and in electronic file format. The licensee filed entire new sets of both Exhibit K and Exhibit L drawings which it improperly labeled as Exhibit G and Exhibit F drawings, respectively. The licensee also included four one-line diagrams. One-line diagrams are not general design drawings and are exclusively required by the Commission in an Exhibit H, which is only filed as part of the integrated license application process. Therefore, we will not approve these four drawings. Staff has reviewed the remaining exhibit drawings submitted by the licensee and has determined that they conform to the Commission's regulations; they are approved as labeled in ordering paragraph (L). Ordering paragraph (M) requires the licensee to file the approved drawings in electronic and aperture card format. Because exhibit numbers were inconsistently assigned to the existing drawings, we are relabeling all drawings with new exhibit numbers to conform to the Commission's conventions.

48. In addition, ordering paragraph (N) requires the licensee to submit as-built Exhibits M, L and K, as appropriate, to reflect the construction of the facilities approved in this order, within 90 days following the completion of construction activities.

²³ The licensee labeled its exhibits in accordance with the Commission's current regulations. However, to remain consistent with the naming conventions of the original license, we will continue to use the method for labeling exhibits used in the license rather than the Commission's current conventions.

D. Review of Final Plans and Specifications

49. Ordering paragraph (O) requires the licensee to provide the Commission's Division of Dam Safety & Inspections (D2SI)-Portland Regional Engineer with final contract drawings and specifications – together with a supporting design report consistent with the Commission's engineering guidelines. Ordering paragraph (P) requires the licensee to provide the D2SI-Portland Regional Engineer with cofferdam construction drawings.

Environmental Assessment

50. On July 9, 2012, Commission staff issued an EA analyzing the potential environmental effects of the licensee's proposal. The EA found that the only significant impact related to the construction and operation of the second power tunnel would be the spill of water over Gorge Dam during a 2.5-month period, potentially leading to the stranding of fish, including threatened species. The EA recommended a Spill Flow Reduction Plan and a Fish Recovery and Removal Plan to recover stranded fish, as well as pre- and post-spill fish surveys. These measures would reduce the likelihood of adverse impacts to fish. The EA also recommended that the licensee file, for Commission approval, restoration and monitoring plans for all sites affected by project construction. These measures are incorporated into this license amendment and their implementation should ensure that the proposed action would not have any significant impacts to environmental resources at the project.

Conclusion

51. Commission staff concludes that the proposed amendment for the Skagit River Project, with the mitigation measures required by this order, would not constitute a major federal action significantly affecting the quality of the human environment. Therefore, the amendment application will be granted, as considered herein.

The Director orders:

(A) The City of Seattle's request for amendment of the license for the Skagit River Project, FERC No. 553, filed July 12, 2011, is approved as provided by this order, effective the day this order is issued

(B) Ordering paragraph (B) of the license for the Skagit River Project is revised, in part, to read as follows:

The Gorge facilities consist of... (4) a 20.5-foot-diameter and a 22-foot-diameter power tunnel, both 11,000 feet long;...

(C) The license for the Skagit River Project is subject to the reasonable and prudent measures and terms and conditions of the Biological Opinion, filed November 21, 2012, and March 1, 2013, by the National Marine Fisheries Service under section 7 of the Endangered Species Act, as set forth in Appendix A of this order.

(D) The license for the Skagit River Project is subject to the reasonable and prudent measure and term and condition of the Biological Opinion, filed February 13, 2013, by the U.S. Fish and Wildlife Service under section 7 of the Endangered Species Act, as set forth in Appendix B of this order.

(E) Within six months of issuance of this order, the licensee shall file with the Commission for approval, a plan to monitor Puget Sound Chinook and Puget Sound steelhead populations and habitat in accordance with the National Marine Fisheries Service's term and condition No. 1 contained in Appendix A attached to this order.

The Chinook and steelhead monitoring plan shall be developed after consultation with the National Marine Fisheries Service and Washington Department of Fish and Wildlife. The licensee shall include with the plan documentation of consultation, copies of 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 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 reasons.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

(F) At least 90 days before the start of construction, the licensee shall file, for Commission approval, a Spill Flow Reduction, Fish Recovery, and Removal Plan. The plan shall include: (1) measures to protect aquatic species when spill is reduced in the bypass reach and flow is returned to the tunnels; (2) pre- and post-spill fish surveys; and (3) stranded fish recovery and removal measures for the bypass reach.

The licensee shall prepare the plan in consultation with the U.S. Fish and Wildlife Service, National Marine Fisheries Service, National Park Service, and Washington Department of Fish and Wildlife. 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 license's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plans. Project construction shall not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensees shall implement the plan, including any changes required by the Commission.

(G) At least 90 days before the start of project construction, the licensee shall file, for Commission approval, a Restoration and Monitoring Plan. The plan shall include detailed descriptions of restoration and monitoring activities to ensure that all areas affected by project construction are restored, including the Bacon Creek quarry and the portal staging area. The plan shall include site preparation measures, contour diagrams, methods for plant salvage, plant species composition, planting densities and locations, monitoring, and measures to control weeds and protect plantings from wildlife damage.

The licensee shall prepare the plan in consultation with the U.S. Fish and Wildlife Service, National Park Service, Washington Department of Ecology, and Washington Department of Fish and Wildlife. 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 license's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plans. Project construction shall not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensees shall implement the plan, including any changes required by the Commission.

(H) Article 404 of the license for the Skagit River Project is revised to read as follows:

The licensee, in the Project Fishery Plan, shall address flow for protecting anadromous fishery resources in the mainstem Skagit River downstream of the Gorge Powerhouse, in accordance with Section 6.0 of the Fisheries Settlement Agreement. Where minimum flows required for incubation and fry protection for the various species of anadromous salmon or steelhead spawning groups overlap in time, the licensee shall provide the highest minimum flow indicated on any particular day. Any subsequent modifications to the Fisheries Settlement Agreement agreed to by the parties thereto shall also be approved by the Commission prior to implementation.

(1) Salmon

(a) Salmon Redd Program. For spawning salmon and subsequent protection of redds in the Skagit River below the Gorge development, the licensee shall release water from the Gorge Development so as to limit maximum flow levels during spawning, and maintain minimum flows throughout the incubation period that are adequate to keep most redds covered until the fry emerge, consistent with Section 6.3 of the Fisheries Settlement Agreement, as executed June 29, 2011.

(b) Salmon Fry Protection. For newly emerged salmon fry in the Skagit River below the Gorge Development, the licensee shall release water from the Gorge Development so as to limit the daily downramp amplitude, maintain minimum flows throughout the salmon fry protection period that are adequate to cover areas of gravel bar commonly inhabited by salmon fry, and limit downramping to nighttime hours except in periods of high flow, consistent with Section 6.3 of the Fisheries Settlement Agreement, as executed June 29, 2011.

(2) Steelhead

(a) Steelhead Redd Protection. For spawning steelhead and subsequent protection of redds in the Skagit River below the Gorge development, the licensee shall release water from the Gorge Development so as to limit maximum flow levels during spawning, shape daily flows for uniformity over the extended spawning period, and maintain minimum flows through the incubation period that are adequate to keep most redds covered until fry emerge from the gravel, consistent with Section 6.3 of the Fisheries Settlement Agreement, as executed June 29, 2011.

(b) Steelhead Fry Protection. For newly emerged steelhead fry in the Skagit River below the Gorge Development, the licensee shall release water from the Gorge Development so as to limit daily downramp amplitude, and maintain minimum flows throughout the steelhead fry protection period that are adequate to cover areas of gravel bar commonly inhabited by steelhead fry, and downramping will be limited to a very slow rate when project discharge is moderately low and limited to a moderate rate when Project discharge is relatively high to minimize or prevent fry stranding on gravel bars, consistent with Section 6.3 of the Fisheries Settlement Agreement, as executed June 29, 2011.

(I) Within 90 days of issuance of this order, the licensee shall file a revised Project Fishery Resources Plan, pursuant to Article 401, to incorporate the provisions of the revised June 29, 2011, Fisheries Settlement Agreement. The plan shall be developed in accordance with all the provisions of Article 401 of the project license, including documentation of consultation with the listed agencies, tribes and non-governmental

organizations. The plan shall also include the requirements stipulated in ordering paragraphs (B) and (C) from the Commission’s Order Modifying and Approving Fishery Resources Plan, issued July 30, 1996.

(J) Article 201 of the license for the Skagit River Project is revised, in part, to read as follows:

...(b) Recompensing the United States for the use, occupancy, and enjoyment of 19,060.06 acres of its lands, other than for transmission line right-of-way. The licensee shall pay a reasonable charge as determined by the Commission in accordance with its regulations, in effect from time to time.

(c) Recompensing the United States for the use, occupancy, and enjoyment of 221.87 acres of its lands for transmission line right-of-way. The licensee shall pay a reasonable charge as determined by the Commission in accordance with its regulations, in effect from time to time.

(K) The sections of the Exhibit M under the headings Physical Composition, Lands of the United States, and Table A-1, filed with the amendment application on July 12, 2011, are approved and made part of the existing Exhibit M.

(L) The following exhibit drawings filed on July 12, 2011, for the Skagit River Project conform to the Commission's rules and regulations and are approved and made part of the license. The superseded exhibit drawings are removed from the project license.

EXHIBIT	FERC DRAWING No.	SUPERSEDED FERC DRAWING No.	LICENSEE DRAWING No.²⁴	FERC DRAWING TITLE
L-1	P-553-309	---	D-44940	Generation Facilities, Gorge General Plan
L-2	P-553-310	P-553-268	D-44941	Gorge Dam, Plan, Elevation, and Sections
L-3	P-553-312	P-553-267	D-44942	Gorge Power Plant, Plan and Sections

²⁴ The licensee’s drawing numbers are being included to assist the licensee in identifying and properly labeling the approved drawings and are not being used for the Commission’s record keeping purposes.

EXHIBIT	FERC DRAWING No.	SUPERSEDED FERC DRAWING No.	LICENSEE DRAWING No.²⁴	FERC DRAWING TITLE
L-4	P-553-313	---	D-44943	Gorge 2 nd Tunnel Preliminary Details
L-5	P-553-314	P-553-273	D-44944	Gorge Powerhouse, Plan, Elevation, and Sections
L-6	P-553-315	---	D-44946	Diablo General Plan
L-7	P-553-316	P-553-278	D-44947	Diablo Dam, Plan, Elevation, and Sections
L-8	P-553-317	P-553-277	D-44948	Diablo Power Plant, Plan and Sections
L-9	P-553-318	P-553-282	D-44949	Diablo Powerhouse, Plan, Elevation, and Sections
L-10	P-553-319	---	D-44951	Ross General Plan
L-11	P-553-320	P-553-287	D-44952	Ross Dam, Plan, Elevation, and Sections
L-12	P-553-321	P-553-286	D-44953	Ross Power Plant, Plan and Sections
L-13	P-553-323	P-553-296	D-44954	Ross Powerhouse, Plan Elevation, and Sections
J-1	P-553-324	P-553-218, P-553-297, P-553-299	D-27700	Project Boundary
K-1	P-553-325	P-553-219	D-27701	Project Boundary
K-2	P-553-326	P-553-220	D-27702	Project Boundary
K-3	P-553-327	P-553-220	D-27703	Project Boundary
K-4	P-553-328	P-553-221	D-27704	Project Boundary
K-5	P-553-329	P-553-222	D-27705	Project Boundary
K-6	P-553-330	P-553-223	D-27706	Project Boundary
K-7	P-553-331	P-553-223	D-27707	Project Boundary
K-8	P-553-332	P-553-224	D-27708	Project Boundary
K-9	P-553-333	P-553-225	D-27709	Project Boundary

EXHIBIT	FERC DRAWING No.	SUPERSEDED FERC DRAWING No.	LICENSEE DRAWING No.²⁴	FERC DRAWING TITLE
K-10	P-553-334	P-553-225	D-27710	Project Boundary
K-11	P-553-335	P-553-226	D-27711	Project Boundary
K-12	P-553-336	P-553-227	D-27712	Project Boundary
K-13	P-553-337	P-553-227	D-27713	Project Boundary
K-14	P-553-338	P-553-228	D-27714	Project Boundary
K-15	P-553-339	P-553-229	D-27715	Project Boundary
K-16	P-553-340	P-553-230	D-27716	Project Boundary
K-17	P-553-341	P-553-230	D-27717	Project Boundary
K-18	P-553-342	P-553-231	D-27718	Project Boundary
K-19	P-553-343	P-553-232	D-27719	Project Boundary
K-20	P-553-344	P-553-233	D-27720	Project Boundary
K-21	P-553-345	P-553-233	D-27721	Project Boundary
K-22	P-553-346	P-553-234	D-27722	Project Boundary
K-23	P-553-347	P-553-235	D-27723	Project Boundary
K-24	P-553-348	P-553-236	D-27724	Project Boundary
K-25	P-553-349	P-553-236	D-27725	Project Boundary
K-26	P-553-350	P-553-237, P-553-307	D-27726	Project Boundary
K-27	P-553-351	P-553-238	D-27727	Project Boundary
K-28	P-553-352	P-553-238, P-553-239	D-27728	Project Boundary
K-29	P-553-353	P-553-300	D-44118	Project Boundary
K-30	P-553-354	P-553-240	D-27729	Project Boundary
K-31	P-553-355	P-553-241	D-27730	Project Boundary
K-32	P-553-356	P-553-241	D-44119	Project Boundary
K-33	P-553-357	P-553-242	D-27731	Project Boundary
K-34	P-553-358	P-553-242	D-27732	Project Boundary
K-35	P-553-359	P-553-243	D-27733	Project Boundary
K-36	P-553-360	P-553-244	D-27734	Project Boundary
K-37	P-553-361	P-553-245	D-27735	Project Boundary

EXHIBIT	FERC DRAWING No.	SUPERSEDED FERC DRAWING No.	LICENSEE DRAWING No.²⁴	FERC DRAWING TITLE
K-38	P-553-362	---	D-44120	Project Boundary
K-39	P-553-363	P-553-302	D-44121	Project Boundary
K-40	P-553-364	P-553-303	D-44122	Project Boundary
K-41	P-553-365	P-553-246	D-27736	Project Boundary
K-42	P-553-366	P-553-247	D-27737	Project Boundary
K-43	P-553-367	P-553-248	D-27738	Project Boundary
K-44	P-553-368	P-553-304	D-44123	Project Boundary
K-45	P-553-369	P-553-249	D-27739	Project Boundary
K-46	P-553-370	P-553-249	D-27740	Project Boundary
K-47	P-553-371	P-553-250, P-553-251	D-27741	Project Boundary
K-48	P-553-372	P-553-304	D-44124	Project Boundary
K-49	P-553-373	P-553-251, P-553-252	D-27742	Project Boundary
K-50	P-553-374	P-553-253	D-27743	Project Boundary
K-51	P-553-375	P-553-254, P-553-255	D-27744	Project Boundary
K-52	P-553-376	P-553-305, P-553-306	D-44125	Project Boundary
K-53	P-553-377	P-553-256	D-27745	Project Boundary
K-54	P-553-378	P-553-257, P-553-258	D-27746	Project Boundary
K-55	P-553-379	P-553-259	D-27747	Project Boundary
K-56	P-553-380	P-553-260, P-553-261	D-27748	Project Boundary
K-57	P-553-381	P-553-262	D-27749	Project Boundary
K-58	P-553-382	P-553-263, P-553-264, P-553-308	D-45235	Project Boundary
K-59	P-553-383	P-553-265	D-45236	Project Boundary
K-60	P-553-384	P-553-265	D-45237	Project Boundary
K-61	P-553-385	P-553-265	D-45238	Project Boundary
K-62	P-553-386	P-553-266	D-45239	Project Boundary

EXHIBIT	FERC DRAWING No.	SUPERSEDED FERC DRAWING No.	LICENSEE DRAWING No. ²⁴	FERC DRAWING TITLE
K-63	P-553-387	P-553-266	D-45240	Project Boundary
K-64	P-553-388	P-553-301	D-44126	Project Boundary

(M) Within 45 days of the date of issuance of this order, 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 Project-Drawing Number (i.e., P-553-309, etc) shall be shown in the margin below the title block of the approved drawings. 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., L-1 etc.), Drawing Title, and date of this order shall be typed on the upper left corner of each aperture card (See Figure 1).

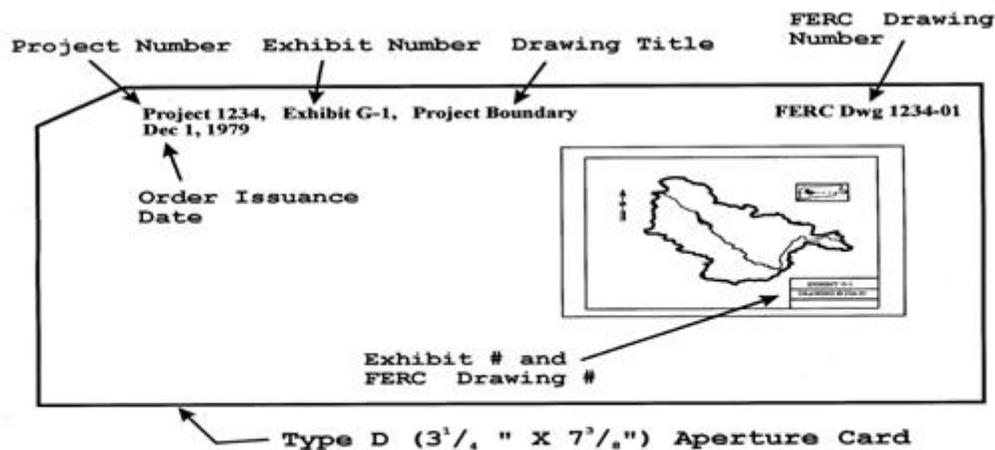


Figure 1 Sample Aperture Card Format

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 Exhibit K aperture cards and a copy of Form FERC-587 shall be filed with the Bureau of Land Management office at the following address:

Bureau of Land Management
 Lands and Minerals Adjudication Section (OR 936.1)
 PO Box 2965
 Portland, OR 97208-2965

Form FERC-587 is available through the Commission’s website at the following URL: <http://www.ferc.gov/docs-filing/forms/form-587/form-587.pdf>. If the form cannot be downloaded from the Internet, a hard copy may be obtained by mailing a request to the Secretary of the Commission.

- 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 L drawings must be segregated from other project exhibits, and identified as (CEII) 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 order, and file extension in the following format [553-309, L-1, Generation Facilities, Gorge General Plan, MM-DD-YYYY.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 K drawing that includes the project boundary must contain a minimum 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 georeferencing the project boundary drawing to the 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 polygon data and all reference points shown on the individual project boundary drawings. An electronic boundary polygon data file is required for each project

development. Depending on the electronic file format, the polygon and point data can be included in single files with multiple layers. The georeferenced 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 order, and file extension in the following format [P-553, boundary polygon/or point data, MM-DD-YYYY.SHP]. The filing must be accompanied by a separate text file describing the spatial reference for the georeferenced 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 order, and file extension in the following format [P-553, project boundary metadata, MM-DD-YYYY.TXT].

In addition, for those projects that occupy federal lands, a separate georeferenced 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 georeferenced electronic file format, the polygon, point, and federal lands data can be included in a single file with multiple layers.

(N) Within 90 days of completion of construction of the project modifications, the licensee shall file with the Commission for approval, revised exhibits M, L, and K, as applicable, to describe and show those project facilities as-built. A courtesy copy shall be filed with the Commission's Division of Dam Safety and Inspections—Portland Regional Engineer; the Director, Division of Dam Safety and Inspections; and the Director, Division of Hydropower Administration and Compliance.

(O) At least 60 days prior to start of any construction, the licensee shall submit one copy of its 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 to the Portland Regional Engineer must also include as part of the preconstruction requirements: a final Supporting Design Document, a Quality Control and Inspection Program (QCIP), a Temporary Emergency Action Plan, a Blasting Plan, and a Soil Erosion and Sediment Control Plan. The licensee shall not begin any construction until the D2SI - Portland Regional Engineer has reviewed and commented on the plans and

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specifications, determined that all preconstruction requirements have been satisfied, and authorized start of construction.

(P) Before starting construction, 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 a cofferdam or deep excavation, the licensee shall submit one copy to the Commission's Division of Dam Safety and Inspections (D2SI)-Portland Regional Engineer and two copies to the Commission (one of these copies shall be a courtesy copy to the Commission's Director, D2SI), of the approved cofferdam and deep excavation construction drawings and specifications and the letters of approval.

(Q) The licensee shall serve copies of any Commission filing required by this order on any entity specified in this order to be consulted on matters related to that filing. Proof of service on these entities must accompany the filing with the Commission.

(R) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in section 313(a) of the Federal Power Act, 16 U.S.C. § 8251 (2006), and the Commission's regulations at 18 C.F.R. § 385.713 (2012). 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 this order. The licensee's failure to file a request for rehearing shall constitute acceptance of this order.

Steve Hocking
Chief, Environmental Review Branch
Division of Hydropower Administration
and Compliance

APPENDIX A

DEPARTMENT OF COMMERCE NATIONAL MARINE FISHERIES SERVICE

REASONABLE AND PRUDENT MEASURES AND TERMS AND CONDITIONS OF THE INCIDENTAL TAKE STATEMENT AS PART OF THE BIOLOGICAL OPINION FOR THE SKAGIT RIVER PROJECT (FERC NO. 553)

Filed November 21, 2012 and supplemented March 1, 2013

Reasonable and Prudent Measures

1. Minimize incidental take from the operation of the project by requiring the licensee to adhere to all the measures in the Fisheries Settlement Agreement (FSA) as approved and adopted by the Commission in 1995 (FERC 1995) and incorporate the existing and extended measures into the proposed amended license.
2. Minimize incidental take by incorporating into the Skagit project license the additional flow management measures described in section 3.3.1 of the biological evaluation (Seattle City Light 2010).
3. Minimize incidental take from in-water and near-water construction activities by using Best Management Practices (BMPs) for the proposed action to avoid or minimize adverse effects to water quality and aquatic resources.
4. FERC must include the standard license reopener clause in any license issued for this project to ensure continuing agency discretion throughout the life of the license as may be necessary to protect species listed under the Endangered Species Act (ESA).

Terms and Conditions

To carry out RPM #1, FERC or its licensee must undertake the following:

1. Require the licensee to monitor fish populations and habitat as described in the provisions of the FSA that relate to Puget Sound Chinook and Puget Sound steelhead (including, but not limited to aquatic habitat conditions [e.g., flows and habitat restoration], construction, monitoring, and fish sampling) for this project. The Licensee must report all incidental take that occurs during these activities to NMFS. The licensee must report the results of monitoring fish and water quality

annually to National Marine Fisheries Service (NMFS). This may be concurrent with the project annual reports to FERC and shall be provided to NMFS by March 31 each year for take, which occurred in the prior calendar year. Listed fish must be handled with extreme care and kept in water, with adequate circulation, to the maximum extent possible during sampling and monitoring. When a mix of species are captured or collected, ESA-listed fish must be processed first, to the extent possible, to minimize stress. Listed fish must be transferred using a sanctuary net (which holds water during transfer) whenever practical to prevent the added stress of being dewatered. Require the licensee to monitor juvenile and adult mortality to ensure that incidental take levels are not exceeded. The licensee must develop the monitoring measures in conjunction with NMFS, and receive our approval of the monitoring plan.

Incidental take should be reported to:

National Marine Fisheries Service
 Hydropower Division, FERC and Water Diversions
 Attention: Keith Kirkendall, Branch Chief
 1201 NE Lloyd Blvd., Suite 1100
 Portland, OR 97232

To carry out RPM #2, FERC or its licensee must undertake the following:

2. Require the licensee to further protect steelhead and Chinook salmon yearlings by limiting downramping rates to < 3,000 cfs/hr from October 16 to December 31 each year.²⁵
3. Require the licensee to further minimize Chinook salmon fry stranding by implementing all salmon fry protection period measures for spawning flow, incubation flow, and downramping rate on the date specified in the license each year.

To carry out RPM #3, FERC or its licensee must undertake the following:

4. Require the licensee to use best management practices in all construction work, including adhering to certain timing restrictions. Spill control equipment must be

²⁵ Due to a typographical error in the licensee’s Biological Evaluation, NMFS’ term and condition No. 2 originally required the licensee to limit downramping rates to <3,000 cfs/hr from October 16 to January 31 each year. NMFS was notified of the inconsistency and subsequently filed a revised term and condition on March 1, 2013.

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on site and in quantities sufficient to effectively contain and recover accidental release of chemicals. Project personnel must be familiar with spill control equipment operation and procedures prior to the initiation of work. Instream work shall be conducted according to BMPs, consistent with Washington Department of Fish and Wildlife's (WDFW) Hydraulic Code (RCW 77-55) by conforming to a Hydraulic Project Approval (HPC) (WAC 220-110) obtained from WDFW. In the event that the regulations are significantly modified or repealed during the license term, the terms in effect in 2012 shall continue in force for the term of the license to protect fish and their habitat.

APPENDIX B

DEPARTMENT OF THE INTERIOR U.S. FISH AND WILDLIFE SERVICE

REASONABLE AND PRUDENT MEASURES AND TERMS AND CONDITIONS OF THE INCIDENTAL TAKE STATEMENT AS PART OF THE BIOLOGICAL OPINION FOR THE SKAGIT RIVER PROJECT (FERC NO. 553)

Filed February 13, 2013

Reasonable and Prudent Measures

The Service believes that the conservation measures negotiated as part of the amendment to the settlement agreement and the FERC license, and included in the project description, constitutes all the reasonable and prudent measures necessary and appropriate for FERC and the City of Seattle to minimize impact of the incidental take of bull trout. However, the Service believes it is necessary to include, as a reasonable and prudent measure, the monitoring and reporting of incidental take resulting from project operation and maintenance.

Terms and Conditions

Report, annually, on the implementation of the ESA Fish Research Program as described in the Biological Evaluation (SCL 2011, page 37). The report should be submitted by June 1 of each year and include the results of any study(ies) implemented during the previous calendar year. If no studies are conducted in any particular year, no reporting is required.

Reports of incidental injury or killing of bull trout shall include any pertinent information such as the cause of death or injury. Such reports will generally include the quantification of take, including numbers of fish incidentally killed or injured, and the locations where this take occurred. The report should also include any insight derived from this work that may contribute to minimizing sources of injury or mortality in the future.

Reports will be submitted annually by March 31, for all activities conducted in the preceding year, to the U.S. Fish and Wildlife Office, Eastern Washington Field Office, 11103 E. Montgomery Drive, Spokane, Washington 99206.

The Service believes that no more than 435 of bull trout will be incidentally taken as a result of the proposed action. If, during the course of the action, this level of

incidental take is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the reasonable and prudent measures provide. The Commission and the City of Seattle must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

The Service is to be notified with three working days upon locating a dead, injured, or sick endangered or threatened species specimen. Initial notification must be made to the nearest U.S. Fish and Wildlife Service Law Enforcement Office. Notification must include the date, time, precise location of the injured animal or carcass, and any other pertinent information. Care should be taken in handling sick or injured specimens to preserve biological materials in the best possible state for later analysis of cause of death, if that occurs. In conjunction with the care of sick or injured endangered or threatened species or preservation of biological materials from a dead animal, the finder has the responsibility to ensure that evidence associated with the specimen is not unnecessarily disturbed. Contact the U.S. Fish and Wildlife Service Law Enforcement Office at (425) 883-8122, or the Service's Washington Fish and Wildlife Office at (360) 753-9440.

Document Content(s)

P-553-221.DOC.....1