

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

PacifiCorp	Project Nos. 935-037, 2071-015
	2111-011
Cowlitz PUD No. 1	Project No. 2213-002

ORDER AMENDING LICENSES

May 12, 2003

INTRODUCTION

1. On July 6, 2000, PacifiCorp filed an application to amend its licenses for the Lewis River Projects (Merwin P-935, Yale P-2071, and Swift No. 1 P-2111), located on the North Fork Lewis River in southwestern Washington, and supplemented that filing on August 17, 2000. PacifiCorp requested that the licenses be amended to incorporate measures for protecting, enhancing, or mitigating impacts on endangered, threatened, proposed and candidate fish species under the Endangered Species Act of 1973, as amended (ESA)¹.

2. On August 17, 2000, Cowlitz PUD No.1 (PUD) filed an application to amend its license for the Swift No. 2 Project (P-2213) located on the North Fork Lewis River in southwestern Washington. The Swift No. 2 Project is operated by PacifiCorp. As was done by PacifiCorp, the PUD requested license amendments to incorporate measures for protecting, enhancing, or mitigating impacts to listed, proposed, and candidate fish species.

3. In this order I grant the proposed amendments to the Merwin, Yale, Swift No. 1 and Swift No. 2 licenses. The amendments should address impacts to the subject fish species associated with ongoing operation of the subject projects. More specifically, implementation of these actions, pursuant to the Biological Opinion, will reduce incidental take of those species resulting from the operation of the four projects and would be in the public interest.

BACKGROUND

¹ 16 U.S.C. §1536(a)

Project No. 935-037, *et al.*

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BACKGROUND

4. On April 1, 1999, the Commission approved the use of the Alternative Licensing Process (ALP) and for the simultaneous and coordinated processing of the license applications for the four North Fork Lewis River Projects: Merwin, Yale, Swift No. 1 and Swift No. 2². The current license for the Yale Project expired on May 1, 2001. The expiration date for the remaining licenses is April 30, 2006³. The primary goal of the requested amendments is to provide the Licensees with incidental take authorization under the ESA for the operation of the four projects, until the relicensing process for the projects is completed.

PROJECT DESCRIPTIONS

5. The four projects begin approximately ten miles east of Woodland, Washington. The upstream sequence of the projects from the confluence of the Lewis and Columbia Rivers is as follows: Merwin, Yale, Swift No. 2, and Swift No. 1. The Merwin, Yale, and Swift No.1 Projects represent a linked reservoir/powerhouse system covering over 30 miles of the Lewis River. The Swift No. 2 Project does not include a dam and reservoir. It utilizes water directly from the tailrace of Swift No.1, which flows into a 3.2 mile-long canal that discharges through the Swift No. 2 powerhouse into Yale reservoir.

LICENSEE'S AMENDMENT APPLICATION

6. Following the Licensees' receipt of the Commission's approval to utilize the ALP for the processing of their license applications for the four North Fork Lewis River Projects, in April 1999, the Licensees began informal discussions with Commission staff, National Marine Fisheries Service (NMFS) and the U. S. Fish and Wildlife Service (USFWS) about a joint ESA consultation. For the year prior to filing of the amendment applications, the Licensees and the federal agencies defined and clarified the proposed conservation measures and prepared a draft Biological Assessment (BA) which was filed with each of the license amendment applications. A Biological Opinion (BO) and its associated incidental take statement was filed by the NMFS and USFWS on June 28, 2002 and is consistent with and supports the conservation measures within the proposed amendments.

² Letter from J. Mark Robinson (Director, Office of Energy Projects) to Dave Leonhardt (PacifiCorp) and Dennis Robinson (Cowlitz PUD).

³ Application filing date for relicensing is April 30, 2004.

PROPOSED AMENDMENTS

PacifiCorp's Merwin Project

7. PacifiCorp proposes to modify the Merwin Project's ramping rates as described by Article 49. Currently, ramping rates for the Merwin Project, as required by Article 49, are 1 ft/hr up ramping and 1.5 ft/hr down ramping. PacifiCorp proposes to provide project down ramping only during periods of darkness at a rate not to exceed 0.5 ft/3-hrs (and not to exceed 2 inches per hour as is possible) and up ramping will be restricted to 1.5 ft/hr up to river discharge that exceeds turbine capacity of the project. The down-ramping rate will protect juveniles and fry using shallow stream margin habitat and the up-ramping limitations focus on safety for those using the river below the project.

8. In June 1999, Clark County obtained monies to match state funding for the purchase of Eagle Island. Eagle Island is a 259-acre parcel with an associated 20-acre mainland piece downstream of the Merwin Project. The adjacent shoreline and riparian areas provide over 75 percent of the present day wild fall chinook shoreline rearing habitat. This area also provides critical habitat for adult and juvenile steelhead and cutthroat trout, coho and chum salmon. PacifiCorp's proposal is to pay for the County's portion of the funding required for the island's purchase and acquisition by the State of Washington. Under this proposal, Clark County will utilize their matching funds, obtained originally for the purchase of Eagle Island, to protect and restore steelhead rearing areas, improve the wildlife habitat on the island, and fund the continued preservation of Eagle Island providing in perpetuity valuable habitat for trout and salmon.

PacifiCorp's Yale Project

9. PacifiCorp has implemented, expanded, and will continue net and haul activities for migratory fish species at the Yale Project consistent with the BO.

10. Operation of the spillway at the Yale Project is believed to entrain bull trout. The USFWS has indicated the need for a spillway modification design to improve survival of fish passage through spill. PacifiCorp, in consultation with the USFWS, NMFS, and the Washington Department of Fish and Wildlife (WDFW), proposes developing a preliminary conceptual design to address spillway modification and the effects on bull trout entrainment.

11. Additionally, PacifiCorp has purchased land in the Cougar Creek riparian corridor for the protection of bull trout spawning and rearing habitat and proposes a conservation easement that will encompass a 500-foot buffer on Cougar Creek and a 200-foot buffer

on Panamaker Creek. Other than these creeks, no other known spawning habitat for bull trout residing in Yale reservoir is known. Therefore, the protection of this habitat is very desirable.

PacifiCorp Swift No. 1 Project

12. In its July 6, 2000 application, PacifiCorp stated that it has entered into a contract with Weyerhaeuser Corporation (Weyerhaeuser) to purchase lands in the Swift Creek arm of Swift Reservoir to protect bull trout and enhance the productivity of the riparian habitat. PacifiCorp attached a map showing land it already owned and land to be purchased from Weyerhaeuser that would be subject to a conservation easement for purposes of conserving and protecting bull trout.

Cowlitz PUD Swift No. 2 Project

13. The PUD has proposed to amend the license for the Swift No. 2 project to include the purchase of land and creation of a conservation easement along the Swift Creek arm of Swift Reservoir. This proposed measure would provide additional conservation of and protection for bull trout and cutthroat trout.

COMMENTS AND INTERVENTIONS

14. By letter dated October 20, 1999, the Commission recognized the PUD and PacifiCorp as non-federal designees under Section 7 of the ESA. On August 17, 2000, the PUD and PacifiCorp each filed a copy of an applicant-prepared environmental assessment (APEA). The APEA was prepared by PacifiCorp and analyzed for PacifiCorp's and the PUD's proposed amendments. On August 31, 2000, the Commission adopted the APEA as a draft environmental assessment (DEA) and issued two notices simultaneously, soliciting comments, motions to intervene and protests on the applications for amendment and the DEA. The following filed motions to intervene: NMFS, PacifiCorp, American Rivers, Cowlitz PUD, State of Washington, and the U.S. Department of the Interior. Comments on the DEA were filed by the U.S. Forest Service (USFS), NMFS, and American Rivers. These comments are addressed in the final environmental assessment (FEA)⁴ being issued concurrently with this order. Measures

⁴A copy of the FEA is available for public inspection in the Public Reference Room of the Commission's offices at 888 First Street, N.E., Washington, DC 20426. The FEA may also be viewed on the Internet at <http://www.ferc.gov> using the "FERRIS" link-
(continued...)

contained in the preferred alternative were arrived at through extensive pre-filing discussions with the USFWS and NMFS. Both agencies support the proposed measures and have issued a BO and incidental take statement that are consistent with and support the proposed amendments to the licenses.

15. The NMFS and American Rivers expressed concern that the DEA did not address, comprehensively, the impacts of ongoing operation of the four North Fork Lewis River Projects on listed species but limited the scope to the specific measures contained in the amendment. The BA, which was included in the FEA, did address the impacts of ongoing operation on listed species to the extent they were known. However, as indicated earlier, the projects are undergoing the preparation of relicense applications. This effort will ultimately result in a comprehensive examination of project effects on listed species.

16. In addition, both the NMFS and American Rivers expressed concern regarding the lack of details as to how the lands are to be protected and will be managed. As stated in the FEA and required in this order, the easements will be protected and managed in a manner consistent with the BO including, but not limited to, the control of non-native plant species, installation of boundary markers or fences, and planting of vegetation.

17. Finally, these entities expressed concern that, in the event that unforeseen circumstances cause the relicensing effort to become a protracted affair, the actions approved herein should have some time limits. Specifically their concern is that the protection measures may not afford the necessary protection for ongoing operation beyond the expiration of the existing licenses. There does exist the possibility, albeit remote, that information will become available that indicates additional measures are required to address, as yet, unidentified effects to listed species associated with the ongoing operation of the subject projects. The ALP collaborative is in the process of undertaking studies or reviewing study results pursuant to the relicensing effort and it is possible that such efforts could reveal unidentified impacts. If this were to happen, then I would expect the Commission staff, in concert with the Licensee, NMFS, and USFWS, would undertake an effort similar to that which culminated in this proceeding.

In the event that new information becomes available that indicates a need to require additional protective measures, the Commission may use its reserved authority to reopen

⁴(...continued)

-select "Docket #" and follow the instructions. For assistance, please contact FERC online support at FERCOnlineSupport@ferc.gov or call toll-free 866-208-3676 or (202) 502-8659 (for TTY).

the license to seek reasonable modifications to project operation and structures. Standard Article 15 of the Merwin (P-935) license provides such authority that reserves the Commission's authority to modify the projects, after notice and opportunity for hearing, in the event new information indicates a need to seek redress of any ESA issues⁵. However, the other three licenses do not contain such a reservation of the Commission's authority. I am therefore modifying these licenses by adding an article.

ENDANGERED SPECIES

18. Section 7(a) of the ESA requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of designated critical habitat. The Licensees request Commission approval to include within their licenses ESA measures contained in the subject amendment. These measures are intended to provide the Licensees with ESA protection for the Merwin, Yale, and Swift No. 1 and Swift No. 2 Projects until the relicensing effort is completed. The Commission requested consultation under Section 7 of the ESA in a letter to the NMFS and USFWS dated October 4, 2000. In response, a BO, and its associated incidental take statement, was filed June 28, 2002 by the NMFS and USFWS. The BO, and its associated incidental take statement, is consistent with and supports the proposed amendments to the licenses. The incidental take statement includes 20 terms and conditions to implement the reasonable and prudent measures that the NMFS and USFWS believe necessary to minimize impacts of incidental take of bull trout, salmon and steelhead in the Lewis River basin. These terms and conditions of the incidental take statement are attached to this order as Appendix A.

19. Several of the terms and conditions of the incidental take statement call for studies of project effects on listed species. While Commission staff appreciates the usefulness for these types of studies in filling data gaps to address uncertainty, we have concerns with these studies being made a condition of the BO. Studies could generate information regarding the identification of additional measures to minimize additional take. In situations where, as here, the relicensing process for the four North Fork Lewis River projects is well underway and is already addressing these study needs, incorporating such study terms and conditions into the existing licenses is redundant and unnecessary. Clearly, in this case the relicensing process is the appropriate mechanism for conducting these studies, not the existing licenses. If the Licensees have the need or desire to engage in such studies to address incidental take issues, they do not need the Commission's

⁵ Merwin license 25 FERC ¶ 61,052 (1983)

approval for them. It is important to note that conducting studies does not minimize incidental take, which is the purpose of a term and condition in a BO in a section 7 consultation. However, since the Licensee has agreed to undertake the studies and, pursuant to the relicense process, most if not all of the studies are ongoing, I see no need to make modifications to the terms and conditions of the incidental take statement in this instance.

DISCUSSION

20. I congratulate the Licensees and the resource agencies for their successful efforts in developing measures for protection, enhancement or mitigation of endangered and threatened fish species. Because the "comprehensive development" standard of FPA Section 10(a)(1) continues to govern regulation of a project throughout the term of its license,⁶ it is the Commission's responsibility to approve, through appropriate license amendments, all material changes to the project and its maintenance and operation.⁷ I read the applications for amendment of licenses as entirely consistent with this fundamental principle.

21. To ensure compliance with the BO, I have included a new license article in each of the four licenses which requires the respective licensee to file a threatened and endangered species plan and annual report with the Commission for approval.

22. Each of the licenses has been amended to include new articles which require changes to the license exhibits to incorporate the aforementioned easements in the project boundary. Specifically, Articles 33, 44, and 29 have been added to the Yale, Swift No. 1 and Swift No. 2 licenses, respectively, to file documentation of the conservation easements and revised Exhibit G drawings to reflect the changed project boundary to include the aforementioned tributary streams. Finally, Articles 34, 45, and 30 have been added to these same three projects, respectively, to reserve Commission authority to seek changes to the project, after notice and opportunity for hearing, for the protection and conservation of fish and wildlife species.

⁶See, e.g., S.D. Warren Co., 68 FERC ¶ 61,213 at p. 62,022 (1994).

⁷The Commission's regulations, as well as the terms of the license and basic due process principles, govern what types of alterations require what sorts of submittals or public notice.

The Commission orders:

- (A) The applications for amendment of license for the four North Fork Lewis River Projects: Merwin (P-935-037), Yale (P-2071-015), Swift No. 1 (P-2111-011) and Swift No. 2 (P-2213-002), filed on August 17, 2000 are approved.
- (B) The following articles are added to the Yale Project license (P-2071):
1. Article 33. The Licensee shall file within 30 days of the issuance date of this order with the Commission documentation that it has acquired interests in the conservation easement sufficient to carry out the appropriate protection measures for threatened and endangered species using these areas. Within 90 days of the date of issuance of this order, the Licensee shall file, for Commission approval, a revised Exhibit G which depicts the location of the conservation easement along Cougar and Panamaker Creeks.
 2. Article 34. The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.
- (C) The following articles are added to the Swift No. 1 Project license (P-2111):
1. Article 44. The Licensee shall file within 30 days of the date of issuance of this order with the Commission documentation that it has acquired interests in the conservation easement sufficient to carry out the appropriate protection measures for threatened and endangered species using these areas. Within 90 days of the date of issuance of this order, the Licensee shall file, for Commission approval, a revised Exhibit G which depicts the location of the conservation easement along the Swift Creek arm of Swift Reservoir.

2. Article 45. The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

(D) The following articles are added to the Swift No. 2 license (P-2213):

1. Article 29. The Licensee shall file within 30 days of the date of issuance of this order with the Commission documentation that it has acquired interests in a conservation easement sufficient to carry out the appropriate protection measures for threatened and endangered species using these areas. Within 90 days of the date of issuance of this order, the Licensee shall file, for Commission approval, a revised Exhibit G which depicts the location of the conservation easement.
2. Article 30. The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

(E) The following license article is added to each of the four projects, to ensure compliance with the Biological Opinion and its associated incidental take statement, as follows:

Merwin (P-935). Article 57.
Yale (P-2071). Article 35.
Swift No. 1 (P-2111). Article 46.
Swift No. 2 (P-2213). Article 31.

Within one year of the issuance date of this order and on or before March 31 of each year thereafter, the Licensee shall file for Commission approval a Threatened and Endangered Species Plan and Annual Report. The plan shall address the Licensee's compliance with the terms and conditions of the Biological Opinion, and its associated incidental take statement, filed on June 28, 2002 by the National Marine Fisheries Service and the U. S. Fish and Wildlife Service and attached to this order as Appendix A.

The Licensee shall prepare the Threatened and Endangered Species Plan and Annual Report after consultation with the National Marine Fisheries Service and the U. S. Fish and Wildlife Service. The plan shall include, at a minimum, any modifications to project facilities or operations proposed to minimize take of listed and proposed species occurring as a result of current facility operations. The plan shall also discuss progress on the reasonable and prudent measures and document and discuss any incidental take during the preceding year. 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 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 make any changes to the plan.

(F) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the issuance date of this order, pursuant to section 18 C.F.R. § 385.713.


J. Mark Robinson
Director
Office of Energy Projects

Appendix A
 Terms and Conditions from the
 Biological Opinion Issued June 28, 2002
 by the U.S. Fish and Wildlife Service (FWS) and
 the National Marine Fisheries Service (NMFS)

TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of the ESA, FERC must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline required reporting/monitoring requirements. PacifiCorp and Cowlitz PUD have indicated in the biological assessment and applications to amend the licenses that they are committed to implementing the terms and conditions to protect listed species within the Lewis River project area. In the event that there are any inconsistencies or discrepancies between these terms and conditions and FERC's final order approving the applications to amend the licenses, PacifiCorp and Cowlitz PUD shall be in compliance with the ESA if PacifiCorp and Cowlitz PUD comply with the terms and conditions in this Incidental Take Statement. These terms and conditions are non-discretionary.

Terms and Conditions Specific to Bull Trout

The following terms and conditions specific to bull trout are necessary for the implementation of FWS Reasonable and Prudent Measure (RPM) 1.

1. Within 30 days of the FERC issuance of the final order approving the application to amend the license, FERC shall direct PacifiCorp to record their proposed conservation easement along Cougar Creek and Panamaker Creek. This easement shall be at least 500 feet measured horizontally on either side of the high water mark along Cougar Creek but shall not extend past the toe slope of the road to the south of Cougar Creek. The easement may be expanded by mutual agreement of PacifiCorp and the FWS if needed to ensure the protection of Cougar Creek. The Panamaker Creek easement shall be at least 200 feet measured horizontally on either side of the high water mark or greater if agreed to by PacifiCorp and the FWS. It will follow the property boundary if < 200 feet as approximated on Figure 3. If during layout, obvious areas of slope instability are encountered, the conservation easement boundary shall be expanded to include the areas of instability.
2. Within 30 days of the FERC issuance of the final order approving the application to amend the license, FERC shall direct PacifiCorp to record their proposed conservation easement along

the Swift Creek arm of Swift Reservoir. The easement shall include all of PacifiCorp lands adjacent to the Swift Creek Arm as identified on Figure 4.

3. Within 30 days of the FERC issuance of the final order approving the application to amend the license, FERC shall direct Cowlitz PUD to record their proposed conservation easement along the Swift Creek arm of Swift Reservoir. The easement includes part of the area above PacifiCorp lands on the east side of Swift Creek Arm as approximated on Figure 4.

The following terms and conditions are necessary for the implementation of FWS RPM 2.

1. To carry out license Article 51, PacifiCorp shall continue to develop annual plans and fund the cost of operating the net and haul system in place at Yale tailrace. These plans shall be developed in consultation with WDFW and the FWS. Netting shall be completed at least weekly as soon as migratory adult bull trout are present and Merwin Reservoir levels permit safe working conditions in the Yale tailrace. If it is apparent that fish are being delayed past their appropriate ripening date, the net and haul shall be conducted twice weekly. Applicant maintains a section IOa(1)A permit to carry out this trap and haul operation.
2. PacifiCorp shall continue, in coordination with Cowlitz PUD, the net and haul program and sampling at the Swift No. 2 tailrace and the Swift bypass reach. FERC shall direct Cowlitz PUD to continue its involvement in the bull trout monitoring program at the Swift 2 tailrace.
3. FERC shall direct PacifiCorp to evaluate the feasibility of reestablishing bull trout passage at Yale dam. This evaluation should address upstream and downstream adult and juvenile passage. Consideration of spill, flow attraction, temperature and other issues affecting passage should be included. This evaluation should be discussed with the relicensing participants in the Alternative Licensing Process, including NMFS and FWS. Nothing in this RPM waives or limits FWS or NMFS' Section 18 fishway prescription authority under the Federal Power Act.
4. FERC shall direct PacifiCorp and Cowlitz PUD to evaluate the feasibility of reestablishing bull trout passage at Swift No. 1 dam. This evaluation should address upstream and downstream adult and juvenile passage. Consideration of spill, flow attraction, temperature and other issues affecting passage should be included. This evaluation should be discussed with the relicensing participants in the Alternative Licensing Process, including NMFS and FWS. Nothing in this RPM waives or limits FWS' or NMFS' Section 18 fishway prescription authority under the Federal Power Act.

The following term and condition is necessary for the implementation of FWS RPM 3.

1. Within 30 days of the FERC issuance of the final orders approving the applications to amend licenses, FERC shall direct PacifiCorp and Cowlitz PUD to develop a plan to evaluate the effects of entrainment on bull trout at Swift No. 1 turbines. This information will be extrapolated to Yale and correlated to population sizes at the two reservoirs. Critical information on bull trout entrainment and distribution, timing, and usage is needed to minimize the effects of the project on bull trout. This plan should be coordinated with the relicensing participants and approved by FWS.

The following term and condition is necessary for the implementation of FWS RPM 4.

1. In carrying out Article 51, the FERC shall direct PacifiCorp to partially fund and continue their participation in the monitoring activities for bull trout in the North Fork Lewis River basin. Proposed funding levels, activities and methods shall be developed in cooperation with the appropriate agencies and provided to the FWS and NMFS for review before implementation. These include the Cougar Creek, Pine Creek and Rush Creek bull trout spawning surveys. Results of the various bull trout monitoring activity shall be provided to the FWS annually as directed by FERC in their amendment order to Article 51 of the Merwin license.

The following term and condition is necessary for the implementation of FWS RPM 5.

1. FERC shall direct PacifiCorp to monitor habitat within the proposed conservation easement prior to bull trout spawning migration in Cougar Creek to assure that no detrimental changes have occurred due to upland management activities and br winter storm damage.

The following term and condition is necessary for the implementation of FWS RPM 6.

1. FERC shall direct PacifiCorp to develop a road maintenance plan within the Cougar Creek conservation easement, and a schedule for implementation of the plan that meets the current Washington State Forest Practices Act. This plan shall be developed in consultation with FWS, WDFW and NMFS and shall be the basis for the repair and/or closure of roads on the newly acquired lands in the Cougar Creek drainage. Such plan shall include closure of the road that forms the southeast boundary of the Cougar Creek conservation easement to all vehicular access except maintenance equipment.

The following terms and conditions are necessary for the implementation of FWS RPM 7.

1. FERC shall direct PacifiCorp to complete testing of TDG at Merwin and Yale to determine if State water quality standards are being met and, if they are not being met, to develop a schedule and methods as part of new licenses to bring the projects into compliance to the extent needed to minimize the take of bull trout.

2. FERC shall direct PacifiCorp and Cowlitz PUD to complete testing of TDG at Swift No.

1 and Swift No. 2 to determine if State water quality standards are being met and, if they are not being met, to develop a schedule and methods as part of a new licenses to bring the projects into compliance to the extent needed to minimize the take of bull trout.

3. The FERC shall direct PacifiCorp to implement operational constraints at Merwin Dam intended to minimize adverse effects of rapid and severe river flow fluctuations on anadromous fish, including year-round minimum flows and ramping rates, seasonal water management, conducting studies to monitor the adequacy of the constraints, and providing for modification of the operational constraints depending on study results.

The following terms and conditions are necessary for the implementation of FWS RPM 8.

1. FERC shall direct PacifiCorp and Cowlitz PUD to develop annual implementation plans to implement the measures contained in this Opinion or until new licenses are issued. Further, FERC shall direct PacifiCorp and Cowlitz PUD to coordinate with the FWS and NMFS on the proposed annual plan in sufficient time to allow review and discussion prior to implementation.

2. In carrying out Article 49 of the Merwin License, FERC shall direct PacifiCorp to coordinate with the FWS and NMFS, and the affected state agencies, in pre-season planning and in-season management of water management operations.

Term and Condition Specific to Anadromous Salmonids

The following term and condition specific to anadromous salmonids is necessary for the implementation of NMFS RPM 1.

1. Within 30 days of the FERC issuance of the final order approving the application to amend the license, FERC shall direct PacifiCorp to provide documentation to verify the purchase of Eagle Island and name the agencies responsible for the ownership and maintenance of the property.

The following term and condition specific to anadromous salmonids is necessary for the implementation of NMFS RPM 2.

1. Within 30 days of the FERC issuance of the final order approving the application to amend the license, FERC shall direct PacifiCorp to alter their ramping rates to meet a limit of 0.5 feet per three hour period and with the additional limit to down-ramping of only 2 inches per hour and revise up-ramping rate to 1.5 ft. per hour.

The following term and condition specific to anadromous salmonids is necessary for the implementation of NMFS RPM 3.

1. Within 30 days of the FERC issuance of the final order approving the application to amend the license, FERC shall direct PacifiCorp to demonstrate implementation of equipment and operating procedures to prevent future occurrences of lower river and adult salmon trap de-watering.

The following term and condition specific to anadromous salmonids is necessary for the implementation of NMFS RPM 5.

1. Within 30 days of the FERC issuance of the final order approving the application to amend the license, FERC shall direct PacifiCorp to work with the ALP to conduct studies to be completed during interim period, which are necessary to determine appropriate long-term operations with reduced levels of incidental take (see Table 3).

REPORTING REQUIREMENTS

The Services' are to be notified within three (3) 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 and National Marine Fisheries Service Law Enforcement Offices. 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. 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 FWS Law Enforcement Office at (425) 883-8122 or the FWS Western Washington Office at (360)753-9440 or the NMFS Law Enforcement Office at (360) 418-4246.

In order to monitor the effectiveness and impacts of implementing the reasonable and prudent measures, FERC shall direct PacifiCorp and Cowlitz PUD to prepare a report describing their progress in implementing the license terms and conditions (50 CFR §402.14(I)(3)). The progress report shall be submitted to the Western Washington Office of FWS and the Portland office of NMFS each year prior to March 31. The report shall discuss PacifiCorp and Cowlitz PUDs progress on the RPMs and document and discuss any incidental take during the preceding year. Included should be any activities in the conservation easements, results of studies that bear on the information gaps discussed above, any changes to operations that improve or protect the species or their habitat, and any plans for the next year's activities.

The amendment to article 51 requires PacifiCorp to file results from the annual monitoring with the FWS and the Commission on an annual basis. The report shall be filed annually with the FWS and the Commission within 60 days of its completion, and include any comments from the Washington Department of Fish and Wildlife and the U.S. Forest Service. (Note: these two agencies are major cooperators in the annual bull trout monitoring in the North Fork Lewis

River.) The annual monitoring required by article 51 is discussed in Term and Condition 1 and the specifics required in that article may be coordinated with the annual report described above.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, help implement recovery plans, or develop information.

1. Coordinate with the WDFW and fund a creel census to document angler use, the type of gear used, fish identification proficiency, catch rates, and catch composition in the project area for at least the next two years. Methodologies for sampling and reporting recreational creel surveys should be consistent with previous creel census done for relicensing.
2. Continue to post interpretive signs to educate anglers on identifying and conserving native char (bull trout/Dolly Varden). These signs should be placed to inform anglers on how to carefully release fish (catch and release methodologies) and the benefits of using barbless hooks and no bait. These actions should help minimize incidental hooking mortality of bull trout. Since there are several fish species in Swift and Yale reservoirs, the interpretive signs need to clearly distinguish native bull trout from other species.
3. Work with the WDFW to reduce the risk of angler harvest of bull trout in the Swift No. 2 canal and the upper reservoir.

In order for the Service's to be kept informed of actions minimizing or avoiding adverse effects of benefitting listed species or their habitats, the Service's request notification of the implementation of any conservation recommendations.