

122 FERC ¶ 61,248
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Sudeen G. Kelly, Marc Spitzer,
Philip D. Moeller, and Jon Wellinghoff.

Finavera Renewables Ocean Energy, Ltd

Project No. 12751-001

ORDER ON REHEARING AND CLARIFICATION
AND AMENDING LICENSE

(Issued March 20, 2008)

1. The Washington State Department of Natural Resources (Washington DNR), the Makah Tribe, and the Washington State Department of Ecology (Ecology) have filed timely requests for rehearing of the Commission's December 21, 2007 order that issued an original license to Finavera Renewables Ocean Energy, Ltd. (Finavera) for the 1-megawatt Makah Bay Offshore Wave Pilot Project (Makah Bay Project).¹ The project will be located in the Pacific Ocean in Makah Bay, about 1.9 nautical miles offshore of Waatch Point in Clallam County, Washington.

2. For the reasons discussed below, we are granting rehearing in certain respects, clarifying the license order, and denying rehearing on other issues. In addition, Finavera has received the authorizations necessary to allow it to commence on-site construction and installation, and we will therefore amend the license order to reflect these authorizations.

Background

3. The Makah Bay Project will occupy about 1 acre of land on the Makah Indian Reservation and about 28.3 acres of the Olympic Coast National Marine Sanctuary (Olympic Coast Sanctuary). The project will consist of: (1) four 250-kilowatt (kW) steel wave energy conversion buoys (AquaBuOYs) and an associated mooring/anchoring and electrical connection system; (2) a 3.7-statute-mile²-long, submarine transmission cable from one of the AquaBuOY's power cable to the shore station; (3) a metal shore station 15 feet long by 15 feet wide by 10 feet high; (4) an access road and parking area at the

¹*Finavera Renewables Ocean Energy, Ltd.*, 121 FERC ¶ 61,288 (2007).

²A statute mile equals one land mile, or 5,280 feet.

shore station; (5) an approximately 20-foot-long, 12-kV transmission line to connect the shore station to the nearby existing Clallam County Public Utility District distribution line; and (6) appurtenant facilities. The project will generate an average of about 1,500 megawatt-hours (MWh) of energy annually.

4. In instances where the Clean Water Act (CWA) applies, section 401(a)(1) of the CWA provides that applicants for a hydroelectric license for facilities that “may result in any discharge into the navigable waters” shall provide the licensing agency a water quality certification from the State in which the discharge will originate.³ On February 5, 2007, Finavera submitted, and Ecology received, a request for water quality certification pursuant to section 401 of CWA for the Makah Bay Project.⁴

5. Section 307(c)(3) of the Coastal Zone Management Act (CZMA) requires applicants seeking a federal license to “conduct an activity, in or outside of the coastal zone, affecting any land or water use or natural resources of the coastal zone” to provide the licensing agency, as well as the state agency that manages the state’s coastal zone management program, with a certification that the proposed activity complies with the enforceable policies that program. In the State of Washington, Ecology is the agency that manages the coastal zone management program and either concurs with or objects to the applicant’s certification. Finavera filed its request for CZMA consistency certification with Ecology on June 25, 2007.

6. Section 7(a)(2) of the Endangered Species Act of 1973 (ESA),⁵ 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 their designated critical habitat. On September 18, 2007, the U.S. Fish and Wildlife Service (FWS) announced that it was commencing formal consultation with the Commission and would file a biological opinion in early 2008 regarding the effects of licensing the project on the federally listed threatened marbled murrelet.

³33 U.S.C. § 1341(a)(1) (2000).

⁴Finavera also applied to the Makah Tribe for water quality certification on February 15, 2007. On June 7, 2007, the Makah Tribe issued certification, noting that the project will not cause or contribute to a violation of tribal water quality standards or any other appropriate requirements of tribal law relating to water quality.

⁵16 U.S.C. § 1536(a) (2000).

7. Consistent with our recent Policy Statement on Conditioned Licenses for Hydrokinetic Projects,⁶ on December 21, 2007, while the above items were pending before the relevant agencies, the Commission issued a license to Finavera. The order did not authorize Finavera to begin any on-site construction or installation. Rather, the order made final Commission approval of on-site construction and installation contingent on Finavera receiving all authorizations required under federal law.

Discussion

A. Conditioned License

8. On rehearing, Ecology argues that the CZMA and the CWA prohibit the Commission from issuing a license until Finavera has obtained a CZMA consistency concurrence and a CWA certification.

9. However, on February 25, 2008, Ecology filed its CZMA consistency concurrence, along with a water quality certification that contains a number of water quality conditions. The CZMA consistency certification states that the project will be consistent if Ecology's water quality conditions are made a part of the license. The conditions in the certification are reasonable, and we are amending the license to include certification conditions as conditions of Finavera's license.⁷ Ecology's arguments about issuing a license without the required authorizations are therefore moot.

10. In any event, it is the Commission's view that the issuance of a conditioned license did not violate the CZMA or the CWA. As noted, the conditioned license did not authorize on-site construction or installation, and expressly stated that no such authority would be granted until Finavera obtained all necessary authorizations.

11. In support of its argument, Ecology cites to the provisions of the CZMA that provide in pertinent part: "[n]o license or permit shall be granted" until the state has concurred with the applicant's consistency certification for a proposed activity "affecting any land or water use or natural resource of the coastal zone of [a] state."⁸ However, a

⁶*Policy Statement on Conditioned Licenses for Hydrokinetic Projects*, 121 FERC ¶ 61,221 (2007).

⁷We are attaching the conditions as Appendix B to the license, revising Ordering Paragraph (B) to require the measures in the appendix, and making conforming changes to Article 401.

⁸16 U.S.C. § 1456(c)(3)(A) (2000).

conditioned license is not a license to conduct an activity affecting any land or water use or natural resource of the coastal zone because it does not authorize on-site construction or installation.⁹

12. In support of Ecology's argument the Commission lacks authority to issue a conditioned license without water quality certification (or a waiver of such certification), it cites to section 401(a)(1) of the CWA. That section provides that an applicant for a federal license to conduct an activity that "may result in any discharge into navigable waters" must obtain water quality certification and, further, that "[n]o license or permit shall be granted until the certification required by this section has been obtained or has been waived...."¹⁰ However, as with the requirements of the CZMA, certification is not a prerequisite for issuing a conditioned license; a conditioned license does not authorize any on-site construction or installation activities. Thus, there is no activity that "may result in any discharge."¹¹

13. In *Georgia Strait Crossing Pipeline LP*,¹² the Washington Department of Ecology complained that the Commission improperly authorized natural gas facilities and granted a Presidential Permit without the state first issuing CWA and CZMA authorization. While concluding that the state's argument was an untimely collateral attack on the underlying conditional order, and that the state had waived its authority under the CZMA by failing to act timely, the Commission nonetheless addressed Washington's arguments on the merits. The Commission explained that:

⁹For the same reason, we find that Ecology's cite to *Mountain Rhythm Resources v. FERC*, 302 F.3d 958 (9th Cir. 2002), is inapposite. There, the Court agreed with the Commission that, under the CZMA, the Commission "cannot issue [a] license unless the state's applicable agency concurs that the proposed project is consistent with the state's Coastal Zone Management Program." *Id.* at 965. However, unlike the situation here, that case dealt with a license that would have authorized construction activities in the state's coastal zone.

¹⁰33 U.S.C. § 1341(a)(1) (2000).

¹¹For these same reasons, Ecology's cites to *City of Tacoma, Wash. v. FERC*, 460 F.3d 53 (D.C. Cir. 2006); *City of Fredericksburg v. FERC*, 876 F.2d 1109 (4th Cir. 1989); and *State of North Carolina v. FERC*, 112 F.3d 1175 (D.C. Cir. 1997) are misplaced.

¹²108 FERC ¶ 61,053 (2004).

[Washington] ignores the fact that, as with virtually every certificate issued by the Commission that authorizes construction of natural gas pipeline facilities, the NGA authorization for [the] proposed pipeline is conditioned upon meeting the federal permitting requirements of, among other things, the CWA and CZMA. Thus, as so conditioned, [the applicant] could not exercise the certificate authority granted by the Commission by constructing the project without first obtaining CWA and CZMA certifications from [the State].¹³

14. The Commission bolstered its conclusions by citing to *City of Grapevine, Texas v. Department of Transportation*.¹⁴ In that case, the court upheld the Federal Aviation Administration's approval of a runway, conditioned upon the applicant's compliance with the National Historic Preservation Act (NHPA). The Commission found the NHPA to be analogous to the CWA and CZMA, in that the NHPA states that the head of a federal agency "shall," prior to the approval of the expenditure of any Federal funds on an undertaking, take into account the effect of the undertaking on historic properties. Thus, the Commission explained, "this language expressly prohibits a federal agency from acting prior to compliance with its terms, a fact that did not deter the *City of Grapevine* court from upholding the FAA's conditional approval of a runway."¹⁵

15. The Commission followed a similar approach in the recent *Crown Landing* proceeding,¹⁶ in the face of complaints by the State of Delaware that the Commission erred in issuing authorization to construct a liquefied natural gas terminal in the absence of state approval under the CZMA and the Clean Air Act. In addition to citing *City of Grapevine*, the Commission also relied upon *Public Utility Commission of the State of California v. FERC*,¹⁷ which affirmed the Commission's determination that, contingent upon the completion of environmental review, there were no non-environmental bars to construction of a proposed pipeline. In doing so, the court noted that the "Commission's non-environmental approval was expressly not to be effective until the environmental

¹³*Id.* at P 13-16.

¹⁴17 F.3d 1502, 1509 (D.C. Cir. 1994).

¹⁵108 FERC ¶ 61,053 at P 16.

¹⁶*Crown Landing LLC*, 117 FERC ¶ 61,209 (2006) (Crown Landing).

¹⁷900 F.2d 269 (D.C. Cir. 1990).

hearing was completed” and that an agency can make “even a final decision so long as it assessed the environmental data before the decision’s effective date.”¹⁸ The Commission stated that the judicial precedent

construe[s] the statutory terms with appropriate respect for the practical demands facing an administrative agency and the common sense necessary to accomplish disparate statutory goals, without doing violence to such terms. The approval we issued . . . is expressly conditioned upon completion of Crown Landing’s remaining and unchallenged duties under [the] applicable statutes. Our order is an incipient authorization without current force and effect, since it does not yet allow Crown Landing to begin the activity it proposes. Crown Landing can do nothing to make the Commission’s conditional approval operative or effective until it fulfills the conditions [Delaware] challenges.¹⁹

16. The Commission went on to explain that “the practical reason underlying our approach is that, in spite of the best efforts of those involved, it may be impossible for an applicant to obtain all approvals necessary to construct and operate a project in advance of the Commission’s issuance of its certificate without unduly delaying the project.”²⁰

17. In *State of Idaho v. Interstate Commerce Commission*,²¹ the court reviewed the ICC’s issuance of authorization for a railroad to abandon and salvage a stretch of track. The authorization provided that the railroad could not begin salvage activity until: it had consulted with the state and the EPA regarding the Comprehensive Environmental

¹⁸*Id.* at 282.

¹⁹117 FERC ¶ 61,209 at P 21 (footnote omitted). In the *Crown Landing* order, the Commission cited a number of instances where it has issued conditional natural gas authorizations. *Id.* at n.19 and n.36.

²⁰*Id.* at P 26 (footnote omitted). The holding in *Crown Landing* echoed that in *Millennium Pipeline Company, L.P.*, 100 FERC ¶ 61,277, at P 225-231 (2002).

The Commission’s *Crown Landing* orders are currently pending appellate review. *Delaware Department of Natural Resources and Environmental Control v. FERC*, D.C. Cir. No. 07-1007 (*appeal docketed* January 12, 2007). An appeal was filed in the *Georgia Strait* case, but it became moot when the certificate was surrendered. The *Millennium* orders were also appealed, but the appeals were dismissed after the project proponent altered the pipeline route as a result of a negative CZMA determination.

²¹35 F.3d 585 (D.C. Cir. 1994).

Response, Compensation, and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA); it had consulted with FWS and the U.S. Army Corps of Engineers regarding wetlands and related issues; ESA compliance was completed; and any necessary water quality certification had been obtained. While the court concluded that the ICC had erred by not performing a proper NEPA analysis and had violated ESA regulations by not preparing a biological assessment, it also stated that it is “important to note that the Commission has still not given final approval to salvage operations; it has merely set forth the conditions under which [the railroad] may undertake them if it chooses to do so.” The court quoted a statement from counsel for the ICC at oral argument that the Commission’s interpretation of its authorization was that the railroad had to prepare a biological assessment, followed by FWS’s issuance of a biological opinion, at which point the railroad would come back before the Commission, which would then decide what to do, based on the findings of the biological assessment and the biological opinion.²²

18. We conclude that the analysis articulated by the Commission in *Georgia Straits* and *Crown Landing*, as well as the judicial holdings in *City of Grapevine* and *Idaho v. ICC*, supports the issuance of the conditioned license in this proceeding. Our preclusion of construction before all necessary authorizations were received ensures that there can be no impact whatsoever on the environment until there has been full compliance with all relevant Federal laws.

19. The license was also conditioned on the receipt of FWS’s biological opinion, which was filed with the Commission on February 20, 2008. The biological opinion concluded that although project construction, operation, maintenance, and removal is likely to adversely affect the marbled murrelet, it is not likely to jeopardize the continued existence of the species or result in the destruction or adverse modification of its critical habitat. FWS did not submit any incidental take terms and conditions for inclusion in the license, and instead recommended the following conservation measures to minimize or avoid adverse effects on the marbled murrelet: (1) restrict boat speeds to 10 knots per hour or less, as safety conditions allow, during the marbled murrelet breeding season; (2) conduct underwater inspections of the in-water project facilities for entangled marine debris at least every 90 days; (3) use a silt curtain or other appropriate barrier to minimize sediment effects on marbled murrelet forage fish during drilling operations and anchoring of the project’s transmission line; and (4) suspend all project construction, installation, and removal activities involving vessels from 2 hours before sunset until 2 hours after sunrise during the marbled murrelet breeding season.²³

²²*Id.* at 598.

²³The consultation procedures outlined in the joint regulations for FWS and the National Marine Fisheries Service concerning interagency cooperation under the ESA
(continued...)

20. The recommended conservation measures are appropriately considered in the context of the implementation of license Articles 401, 404, and 409 and Conditions 2A of Appendix A and B.2 and D.1.b of Appendix B. These license requirements direct the licensee to develop and implement plans that include provisions to: (1) establish speed restrictions for construction vessels (Article 402); (2) inspect in-water project facilities for entangled marine debris at least bi-annually (Article 401, Condition 2B of Appendix A, and Condition D.1.b of Appendix B); (3) implement measures to minimize turbidity increases during in-water project construction and installation activities (Article 401 and Condition B.2 of Appendix B); and (4) either avoid nighttime construction or implement measures to minimize the effects of nighttime construction on marbled murrelets (Article 409). In the development of the plans, the licensee is required to consult with various federal and state agencies, including FWS, and we expect the licensee to carefully consider FWS recommendations. However, to allow for a free exchange of ideas during the consultations and to ensure that the required plans address the issues and concerns of all parties, we are not at this time requiring the specific elements of FWS' recommended conservation measures.

21. The Commission notes our appreciation of the federal and state agencies' efforts to remain on schedule and issue the required authorizations in a timely manner.

B. Olympic Coast National Marine Sanctuary

22. The Makah Tribe and Washington DNR seek rehearing of the Commission's determination that the National Marine Sanctuaries Program (Sanctuary Program Group) has authority to condition the Makah Bay Project under section 4(e) of the FPA, on the basis that the Olympic Coast Sanctuary is a federal reservation. FPA section 4(e) requires that Commission licenses for projects located within federal reservations must include all conditions that the Secretary of the department under whose supervision the reservation falls shall deem necessary for the adequate protection and utilization of such reservation. The Federal Power Act defines a "reservation" as,

national forests, tribal lands embraced within Indian reservations, military reservations, and other lands and interest in lands owned by the United States, and withdrawn, reserved, or withheld from private appropriation and disposal under the public land laws; also lands and interests in lands acquired and held for any public purposes....²⁴

provide that FWS may provide discretionary conservation recommendations with the biological opinion. 50 C.F.R. 402.14 (2007) ("Conservation recommendations are advisory and are not intended to carry any binding legal force.").

²⁴16 U.S.C. § 796(2) (2000).

23. The Olympic Coast Sanctuary is located off the coast of the State of Washington and is jointly managed by the Sanctuary Program Group and Washington DNR. The State of Washington owns the submerged lands within the Olympic Coast Sanctuary up to 3 nautical miles offshore, including the area where the project will be located. Both Washington DNR and the Makah Tribe note that the designation of the Olympic Coast Sanctuary did not transfer ownership of state-owned aquatic lands.

24. In a letter submitted on January 25, 2008, the Sanctuary Program Group stated that it agrees the Olympic Coast Sanctuary is a regulatory overlay on the state's submerged lands and is not a proprietary interest in those state lands. However, the Sanctuary Program Group claims that the Olympic Coast Sanctuary has thoroughly incorporated the state-owned submerged lands for management, regulatory, and administrative purposes, and therefore, the United States has an interest in those lands consistent with the meaning of "reservation" under the FPA.

25. Washington DNR and the Makah Tribe state that, except for the tidelands owned by the Makah Tribe, all of the submerged lands to be occupied under the license are owned by the State of Washington. They add that the National Marine Sanctuaries Act²⁵ does not convey property; it only provides authority to regulate the use of sanctuary resources. Consequently, they maintain that the Sanctuary Program Group's regulatory authority over state-owned land is insufficient to render the lands a federal "reservation" for the purposes of the FPA. In support, they cite *Federal Power Comm'n v. Tuscarora Indian Nation*.²⁶

26. In *Tuscarora*, the Court concluded, based on its analysis of the plain words and legislative history of the FPA, that "the term 'reservations' is confined, as Congress evidently intended, to those located on 'lands owned by the United States' or in which it owns a proprietary interest."²⁷ We find this language persuasive. The submerged lands at issue are state-owned, and the Sanctuary Program Group has not shown that the United States owns the lands or has a property interest in them. Rather, the United States has an interest in regulating the use of sanctuary resources, rather than an interest in the land itself.²⁸ We therefore clarify that the portion of the Olympic Coast Sanctuary that will be

²⁵16 U.S.C. §§ 1431-1445 (2000).

²⁶*Federal Power Comm'n v. Tuscarora Indian Nation*, 362 U.S. 99 (1960).

²⁷*Id.* at 113.

²⁸As Washington DNR points out, although our December 21, 2007 Order stated that the project will be located within a federal reservation because it is in the Sanctuary, it did not address the issue of state ownership of the submerged lands on which the project will be located. *Finavera*, 121 FERC ¶ 61,288 at nn. 6 & 26. Our earlier ruling

(continued...)

occupied by the Makah Bay Project is not a federal reservation under the FPA, and that therefore, the Sanctuary Program Group does not have section 4(e) authority over the project.²⁹

27. Although the Commission finds that the Sanctuary Program Group does not have 4(e) mandatory conditioning authority, we have considered the Sanctuary Program Group's measures that were filed pursuant to FPA section 4(e) as recommended measures under the broad public interest standard of FPA section 10(a)(1). We have decided to adopt all except two of the measures as conditions of the license. Specifically, we are not including the Sanctuary Program Group's Condition 5 stipulating an assessment of EMF levels at the project, because it is largely redundant to the provisions of Article 410 with the exception of conducting an engineering analysis of EMF strength associated with the electrical transmission cable. Article 410 does not adopt this requirement, because the results of an engineering assessment would add little, if any, benefit to a similar literature-based analysis that staff already provided in the Environmental Assessment (EA).³⁰ However, we have modified Article 410 to be consistent with Condition 5 in other respects, except that we are giving the licensee a choice: if EMF exceeds 1,000 microvolts per meter ($\mu\text{V}/\text{m}$), the licensee may either conduct biotic monitoring as specified in Condition 5, or develop attenuation measures to lower the EMF levels to no more than 1,000 $\mu\text{V}/\text{m}$.

28. In addition, the Commission is not reserving authority to the Sanctuary Program Group to add license conditions at a later time as stipulated by the Sanctuary Program Group's Condition 10. However, standard Article 11 of Form L-19, which is incorporated into this license by Ordering Paragraph G of the December 2007 Order, provides that upon the request of resource agencies, (which would include the Sanctuary Program Group), the Commission, after notice and opportunity for hearing, can modify the license at a later time to include additional recommended measures. The Commission is also not reserving approval authority to the Sanctuary Program Group over plans discussed in the conditions, and has modified the conditions accordingly.

on jurisdiction similarly did not address the issue of state ownership, but rather simply stated that portions of the project would be located within the Sanctuary on federal lands. *See AquaEnergy Group LTD*, 102 FERC ¶ 61,242, at P 14 (2003). Upon further examination, we clarify that, while the Sanctuary includes both state-owned and federal lands, no portion of the project is located on federal lands.

²⁹Because the Commission finds that the Makah Bay Project is not located on federal lands, Article 202 of the December 21, 2007 Order is modified to the extent that annual charges were assessed for the use of federal lands. (Ordering Paragraph B)

³⁰ See EA at p. 151, issued May 31, 2007.

29. Additionally, Washington DNR's request for rehearing asks the Commission to clarify that Finavera must obtain the right to use state-owned lands prior to beginning construction of the project. Article 204 of the December 21, 2007 license requires Finavera to acquire all property rights necessary or appropriate for the construction, maintenance, and operation of the project within two years of the effective date of the license, and prior to starting on-site project construction or installation. The Commission clarifies that Finavera is required to obtain the right to use state-owned lands, including submerged land within the Olympic Coast Sanctuary, prior to beginning on-site construction or installation of the project.

C. Annual Charges

30. As noted, the project will occupy about 1 acre of land on the Makah Indian Reservation. Article 202(b) of the license requires the licensee to negotiate a reasonable annual charge with the Makah Tribe for the use of those lands and to submit the payment agreement within six months of the effective date of the license. The article also states that, in the event the licensee and the Makah Tribe are unable to reach an agreement in that period of time, the Commission will take appropriate action to establish the annual charge, after notice and opportunity for hearing.

31. The Makah Tribe asks the Commission to modify Article 202(b), arguing that it is not in conformity with section 10(e) of the FPA.³¹ Section 10(e) provides that, when (as is the case here) "licenses are issued involving the use of ... tribal lands embraced within Indian reservations the Commission shall ... in the case of tribal lands, *subject to the approval of the Indian tribe having jurisdiction of such lands* ... fix a reasonable annual charge for the use thereof."³²

32. As the Makah Tribe acknowledges in their rehearing request, the Commission has used similar language in other licensing orders.³³ The language is not intended to reserve unilateral power to the Commission to establish annual charges, as alleged by the Makah Tribe. As stated in the license order, if the Makah Tribe is unable to reach an agreement after six months, the Commission can take "appropriate action" to establish the annual charges. Of course, any such action would have to comply with the requirements of

³¹16 U.S.C. § 803(e)(1) (2000).

³²*Id.*

³³*See, e.g., Minnesota Power & Light Co.*, 75 FERC ¶ 61,131, at 61,440 (1996).

section 10(e). Therefore, even if the Commission needs to take action to establish the annual charge, the tribe's section 10(e) approval authority under the FPA would remain intact.

The Commission orders:

(A) The requests for rehearing filed on January 18, 2008, by the Makah Tribe, Washington State Department of Ecology, and Washington State Department of Natural Resources are granted to the extent set forth in this order, and denied in all other respects.

(B) The Commission's December 21, 2007 Order is revised as follows:

(1) Ordering Paragraph (B) is replaced with the following: "The license is subject to the water quality conditions submitted by the Washington State Department of Ecology, as those conditions are set forth in Appendix B to this order.

(2) Ordering Paragraph (F) is replaced with the following: "The license is subject to the measures submitted by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Sanctuary Program, and revised by the Commission, as those measures are set forth in Appendix A to this amended order."

(3) Paragraph (a) of Article 202 has been modified as follows:

Article 202. Annual Charges.

(a) The licensee shall pay the United States annual charges, effective as of the date of commencement of project construction and installation, and as determined in accordance with the provisions of the Commission's regulations in effect from time to time, for the purposes of:

(1) reimbursing the United States for the cost of administration of Part I of the Federal Power Act. The authorized installed capacity for that purpose is 1,000 kilowatts (kW). Under the regulations currently in effect, projects with authorized installed capacity of less than or equal to 1,500 kW will not be assessed an annual charge.

(4) The title and paragraph (a) of Article 401 have been modified, and paragraph (f) has been added to the article as follows:

Article 401. Additions to Appendix A Environmental Measures and Appendix B Water Quality Conditions

(a) Requirement to Consult and File Plans for Commission Approval

Appendix A requires the licensee to prepare plans in consultation with the National Oceanic and Atmospheric Administration's National Marine Sanctuary Program. Appendix B requires the licensee to prepare plans for approval by the Washington State Department of Ecology's "Federal Permit Coordinator." Each such plan shall be filed with the Commission for approval and include an implementation schedule. These plans are listed below.

Condition	Plan	Due Date
Appendix A: 1A	Baseline Epibenthic Study Plan	Within six months of the effective date of the license
Appendix A: 1A	Post-Installation Epibenthic Study Plan	At least 90 days before starting on-site project construction or installation
Appendix A: 1B	Macroalgae/Eelgrass Survey Plan	Within six months of the effective date of the license
Appendix B: B.2	Water Quality Monitoring and Protection Plan	At least 60 days before starting on-site project construction or installation
Appendix A: 1C and 1D Appendix B: D.1.a	Final Project Design, Specifications, and Construction Plan	At least 60 days before starting on-site project construction or installation
Appendix A: 2A Appendix B: D.1.b	Facilities Inspection and Maintenance Plan	At least 90 days before starting on-site project construction or installation
Appendix B: D.1.c	Spill Prevention, Containment, and Counter Measures Plan	At least 60 days before starting on-site project construction or installation
Appendix B: D.1.d	Horizontal Directional Drilling Implementation Plan	At least 60 days before starting on-site project construction or installation
Appendix A: 3 Appendix B: D.1.e	Antifouling Compound Study and Plan	At least 90 days before starting on-site project

Condition	Plan	Due Date
		construction or installation
Appendix A: 4	Noise Assessment Plan	At least 90 days before starting on-site project construction or installation
Appendix A: 6A	Marine Mammal Mitigation and Monitoring Plan	At least 90 days before starting on-site project construction or installation

The licensee shall prepare each of the plans after consultation with the Olympic Coast National Marine Sanctuary, Washington State Department of Natural Resources, Makah Tribe, National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, and Washington State Department of Ecology. The licensee shall include with each plan, documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the consulted entities, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the consulted entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plans. On-site project construction and installation shall not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

* * *

(f) Notification of a Spill of Fuel or Other Oil Products

Condition G.5.d of Appendix B requires the licensee to notify the Washington State Department of Ecology of any spill or discharge of fuel or other oil products within 24 hours. The licensee shall also, within the same time frame, notify the Olympic Coast National Marine Sanctuary, Makah Tribe, Washington State Department of Natural Resources, Washington Department of Fish and Wildlife, and the Commission. Notification shall include a description of the nature, time, date, location, and action taken for containing any spill or discharge of fuel or other oil products along with preventive measures implemented to minimize the risk of a reoccurring spill.

(5) Articles 402 and 403 are deleted.

(6) Article 410 has been modified as follows:

Article 410. Electromagnetic Field Assessment. The licensee shall, at least 90 days before starting on-site project construction or installation, file for Commission approval, an electromagnetic field (EMF) assessment plan to determine if the project's submarine transmission cable and AquaBuOY electrical cables emit EMF at levels that would cause harm to marine mammals and fish. The plan shall include: (a) a detailed description of the methods and equipment that would be used to determine and monitor project EMF emissions in the marine environment; (b) a provision for filing a report of the monitoring results; and (c) an implementation schedule.

If the analyses of the monitoring results show that EMF levels would exceed 1,000 microvolts per meter ($\mu\text{V}/\text{m}$), then the report stipulated in item (b) shall include either measures proposed to be implemented to reduce the EMF levels to below 1,000 $\mu\text{V}/\text{m}$, along with an implementation schedule, or a monitoring plan to assess the effects of the EMF levels on fish (including elasmobranchs), marine mammals, and shellfish. The monitoring plan, at a minimum, shall include: (i) a provision for in-field monitoring studies; (ii) a provision for submitting quarterly reports to the consulted entities named below; (iii) a provision for developing and implementing a plan for attenuating any adverse effects documented during the in-field monitoring; and (iv) an implementation schedule.

The licensee shall prepare the plan after consultation with the Olympic Coast National Marine Sanctuary, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Makah Tribe, and National Marine Fisheries Service. 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 consulted entities, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the consulted entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. On-site project construction or installation shall not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

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

(D) This order is final unless a request for rehearing is filed within 30 days from the date of its issuance, as provided in section 313(a) of the FPA. The filing of a request for rehearing does not operate as a stay of the effective date of this license or of any other date specified in this order, except as specifically ordered by the Commission. The licensee's failure to file a request for rehearing shall constitute acceptance of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

Appendix A

U.S. Department of Commerce

National Oceanic and Atmospheric Administration

National Marine Sanctuary Program

Environmental Measures filed February 16, 2007 (as modified by the Commission)

Condition 1. Anchoring, Mooring and Transmission Systems Design

A. Prior to finalization of the engineering, design and cable route selection for the transmission cable, and in consultation with the Sanctuary Program Group, the Licensee shall develop a study plan and conduct a baseline study of the existing epibenthic (surface dwelling) community on hard substrate along the proposed transmission cable route. The Licensee will file the study with the Commission and send a copy to the Sanctuary Program Group. If the Sanctuary Program Group determines that this baseline study reveals the presence of important marine life or habitat, the Licensee will, in consultation with the Sanctuary Program Group, develop and implement a plan to monitor the post-installation impacts of transmission cable where it traverses the hard substrate.

B. Prior to finalization of the engineering, design and cable route selection for the transmission cable, the Licensee, in consultation with the Sanctuary Program Group, will conduct a macroalgae/eelgrass survey of nearshore sections of the transmission cable. The Licensee will conduct the survey following standard methods defined by Washington Department of Fish and Wildlife (WDFW). The Licensee shall file a report of the survey with the Commission and a copy to the Sanctuary Program Group. The information in the survey report will be used by the licensee, in consultation with the Sanctuary Program Group, to determine the most environmentally appropriate route for the transmission cable.

C. No less than sixty days prior to the date the Licensee expects to submit final engineered design specifications for the mooring system to the Commission, the Licensee shall provide these final specifications for the mooring system to the Sanctuary Program Group. These specifications must include a general description, materials description, and full dimensions of system components; anticipated depth of seabed penetration of anchors; safety, navigational, and aesthetic design characteristics of components on the sea surface; and the anticipated height above the seabed and below the sea surface of subsurface floats. Upon incorporating any comments submitted by the Sanctuary Program Group, the Licensee shall file the final mooring system design with the Commission before any project components are deployed in the Olympic Coast Sanctuary.

D. No less than thirty days prior to the date the Licensee expects to submit final engineering design specifications and installation methods for the power transmission cable to shore, the Licensee shall provide, these final specifications to the Sanctuary

Program Group for review. These specifications must include a description of the cable and its component parts, as well as methods of installation, including techniques for anchoring the cable to locations where this will be necessary. Upon incorporating any comments submitted by the Sanctuary Program Group, the Licensee shall file the final power transmission cable design with the Commission.

E. The Licensee shall conduct an initial mooring, anchoring and cable system visual inspection at the time of project installation and at each phase of AquaBuOY installation to ensure that anchors are properly set into the seabed and that chain or cable does not hang down to contact the seabed at maximum slack periods.

Condition 2. Site Inspections

A. The Licensee shall develop an installation inspection plan in consultation with the Sanctuary Program Group. The installation inspection plan will define the scheduling, tasks, observations and reporting by the Licensee. The installation inspection plan will also define plans and methods for removal of marine debris, including derelict fishing gear, that becomes entangled with project components.

B. The Licensee shall conduct periodic site inspections at a minimum of biannually, but more frequently as additional data becomes available, and if so directed by the Commission, to ascertain the physical condition of the installation (including all AquaBuOYs, anchors, and mooring cables), to ensure the integrity and performance of the installation, to determine the risks to marine mammals and other sanctuary resources, and to search and address marine debris caught on project features. The Licensee shall also conduct visual inspections of the transmission cable in areas of hard substrate annually and provide an annual report of these inspections to the Sanctuary Program Group by December 31 of each year.

C. The Licensee shall provide for access and participation of Sanctuary Program Group personnel in each inspection and shall follow appropriate safety procedures when engaged in such inspections. The Licensee may combine other monitoring tasks required by the Project license with the site inspections, and integrate such tasks into the inspection plan.

Condition 3. Antifouling Compound Study and Plan

The Licensee shall develop, in consultation with the Sanctuary Program Group, an antifouling study plan before installation of any in-water components of the project. The plan must include a description of proposed antifouling compounds and/or methods, analysis of their compliance with any recognized national and Washington State standards, a maintenance schedule, an experimental design for monitoring of effectiveness over time, and a reporting schedule for this study. The study plan shall

describe a methodology for monitoring and reporting to the Sanctuary Program Group any effects on sanctuary resources that may result from the use of anti-fouling compounds.

Condition 4. Noise Assessment

A. Phase 1.

Before project deployment, the Licensee shall, in consultation with the Sanctuary Program Group, design and implement a plan for measuring and monitoring project noise. The Licensee shall, in consultation with the Sanctuary Program Group, conduct monitoring to characterize the sound generated by the array and determine whether there is potential for detectable response by marine mammals and fish. The plan for measurement and monitoring of noise shall be of sufficient scientific rigor to support analysis of likely long-term effects on marine mammals including deviation of migratory route, short term behavioral modification (feeding and migrating), habitat use or abandonment, changes to marine mammal foraging patterns or vulnerability to predation. The Licensee shall, in consultation with the Sanctuary Program Group, file with the Commission a data reporting schedule. The monitoring program must measure the sound frequency and amplitude and attenuation over distance from the project site, and compare these results with Malme *et al.* (1984 and 1988) and Moore and Clarke (2002) on acoustic disturbance to whales and other marine mammals and sanctuary resources. Field measurements of sound must be conducted at a minimum to a distance where values are below identified disturbance thresholds.

B. Phase 2

If monitoring measures noise levels exceeding the disturbance threshold of 120dB, identified by Malme *et al.* (1984 and 1988) and Moore and Clarke (2002) and NMFS, 70 Fed. Reg. 18751-1 8757 (January 11, 2005), the Licensee must, in consultation with the Sanctuary Program Group, develop and implement, within one year, a more extensive monitoring program to evaluate and document any occurrence of behavioral change, disturbance or injury to marine life, particularly marine mammals and fish. All monitoring, mitigation and implementation plans will include quarterly reporting requirements by the Licensee to the Commission with a copy to the Sanctuary Program Group.

Condition 6. Marine Mammal Entanglement and Collision

A. In consultation with the Sanctuary Program Group, the Licensee shall develop and implement a mitigation and monitoring plan to prevent marine mammal entanglement.

B. If the Licensee discovers such a marine mammal entanglement while on site for an inspection or otherwise, the Licensee or its contractors and their vessel(s) must remain available for 24 hours after telephone contact is made to assist NOAA with retrieval of the entangled animal(s). If, at any time, including during maintenance inspection, the Licensee finds or is notified that a marine mammal is entangled on project equipment or dead within the project area, the Licensee shall notify via phone the Olympic Coast Sanctuary (360-457-6622) and NOAA's Marine Mammal Stranding Network (206-526-6733) within 24 hours. If a sea otter is entangled, the contact telephone number is the U.S. Fish and Wildlife Service at 877-326-8837.

C. After any marine mammal entanglement incident, the Licensee shall meet with the Sanctuary Program Group and other appropriate NOAA personnel as available, not later than two weeks after the incident, to review circumstances of the entanglement and to define additional mitigation measures to reduce the risk of future entanglements.

Condition 7. Alterations to the Project

The Licensee shall consult with the Sanctuary Program Group prior to changing any element of the project installation including the location of any project equipment within the sanctuary. The Licensee also shall consult with the Sanctuary Program Group for any action that is inconsistent with the authorizations and project description provided in the FERC license application, and/or inspection plan submitted under Condition 2.

Condition 8. Bond and Decommissioning Plan

A. The Licensee shall, prior to the conduct of any activities under this License, purchase and maintain a bond, or equivalent financial assurance, to cover the entirety of costs in the event any portion of the project is no longer in compliance with this License (*e.g.* an AquaBuOY breaks free of its mooring and anchoring system or a cable becomes detached or cannot be secured in such a manner as to avoid injury to sanctuary resources), costs associated with any emergency response and restoration of any injured sanctuary resources, and the costs of the removal of all project components from the Olympic Coast Sanctuary at the end of the service life for the project.

B. The Licensee shall develop a project decommissioning plan, in consultation with the Sanctuary Program Group, at least 12 months prior to commencing any removal activities associated with project decommissioning. The Licensee's decommissioning plan must, at a minimum, include the following elements:

1. A detailed description of the methods to be employed to remove the equipment;
2. An environmental analysis of the potential environmental impacts associated with decommissioning the project;

3. A schedule for completion of the removal of the project from the Olympic Coast Sanctuary.

Condition 9. Emergency Response

If an emergency response or repair is required, the Licensee shall notify the Olympic Coast Sanctuary by telephone (360-457-6622 ext. 13) within 24 hours of the time it becomes aware of the need for this response/repair. The Licensee shall describe the need for the emergency action and proposed methods of response. The licensee shall provide the Olympic Coast Sanctuary with updates on the progress of the response every 24 hours or at a mutually agreed time interval. A written report summarizing the emergency response, including the need, response actions, and any activity that may have impacted sanctuary resources shall be filed with the Commission, with a copy provided to the Olympic Coast Sanctuary within 30 days of the conclusion of the response.

Appendix B

Washington State Department of Ecology Water Quality Conditions filed February 25, 2008

A. General Conditions:

1. For purposes of this Order, the term "Applicant" shall mean Finavera Renewables, Ltd" and its agents, assignees, and contractors.
2. For purposes of this Order, all submittals and notifications required by conditions of this Order shall be sent to Ecology's Southwest Regional Office, Attn: Federal Permit Coordinator, SEA Program, P.O. Box 47775, Olympia, WA 98504-7775. Or by telephone at (360) 407-6926 or (360) 407-6300, or by fax to (360) 407-6305. Any submittals and/or notifications shall reference Order No. 5360 and FERC Project No. 12751-000.
3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on February 15, 2007. The Applicant will be out of compliance with this Order and must reapply with an updated application if the information contained in the JARPA is voided by subsequent changes to the project not authorized by this Order.
4. Within 30 days of receipt of an updated JARPA Ecology will determine if the revised project requires a new water quality certification and public notice or if a modification to this Order is required.
5. Copies of this Order shall be kept on the job site and readily available for reference by Ecology personnel, the construction superintendent, construction managers and lead workers, and state and local government inspectors.
6. The Applicant shall provide access to the project site and all mitigation sites upon request by Ecology personnel for site inspections, monitoring, necessary data collection, and/or to ensure that conditions of this Order are being met.
7. Nothing in this Order waives Ecology's authority to issue additional orders if Ecology determines that further actions are necessary to implement the water quality laws of the state. Further, Ecology retains continuing jurisdiction to make modifications hereto through supplemental order, if additional impacts due to project construction or operation are identified (*e.g.*, violations of water quality standards, downstream erosion, etc.), or if additional conditions are necessary to further protect water quality.
8. The Applicant shall ensure that all appropriate project engineers and contractors at the project site have read and understand relevant conditions of this Order and all permits, approvals, and documents referenced in this Order. The Applicant shall provide Ecology

a signed statement (see Attachment A for an example) from each project engineer and contractor that they have read and understand the conditions of this Order and the above-referenced permits, plans, documents, and approvals. These statements shall be provided to Ecology before construction begins at the project.

9. This Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the state or related aquatic resources, except as specifically provided for in conditions of this Order.

10. Any person who fails to comply with any provision of this Order shall be liable for a penalty of up to ten thousand dollars (\$10,000.00) per violation for each day of continuing noncompliance.

B. Water Quality Conditions:

1. This Order does not authorize temporary exceedances of water quality standards beyond the limits established in WAC 173-201A- 210(1)(e)(i). Furthermore, nothing in this certification shall absolve the Applicants from liability for contamination and any subsequent cleanup of surface waters or sediments occurring as a result of project construction or operations.

2. Water Quality Monitoring and Protection Plan. A plan for monitoring water quality shall be developed and submitted to the Federal Permit Coordinator for a 60 day review and approval period prior to beginning construction. **In-water work is not authorized to begin until approval for such work is received from the appropriate regulatory authority.**

- a. This Plan shall include:
 - i. the name(s) and phone number(s) of the person responsible for onsite monitoring and reporting.
 - ii. the BMP's and procedures to be used to protect water quality during specific proposed in-water activities.
 - iii. a water sampling plan for turbidity which includes the requirement of B.3 below.
 - iv. a map with numbered or named sampling locations associated with the in-water activities that require monitoring.
 - v. a schedule for submittal of monitoring results to Ecology Federal Permit Coordinator per condition A.2.

- b. A background sample (sample collected outside the area of influence of the in-water activity) shall be collected at the beginning of each sample event.
- c. Any changes and/or additions to the Plan must be approved in writing by Ecology.

3. Turbidity shall be assessed and recorded at a minimum of every four (4) hours during daylight hours when in-water activities (including installation, maintenance, and removal activities) are being conducted. Monitoring points shall be at the point of compliance as specified in WAC 173-201A-210(1)(e)(i)(D), which allows a radius of 150-foot temporary mixing zone from the point of in-water activities. A turbidimeter is recommended; however, visual gauging of turbidity is acceptable.

- a. For this project, the following is considered to be an exceedance of the standard:
 - Project-related turbidity visible 150 feet from the in-water activity;OR,
 - 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or more than ten (10) percent increase in turbidity when the background turbidity is more than 50 NTU, at the point of compliance when a turbidimeter is used.

4. If water quality exceedances are observed outside of the point of compliance, work shall cease immediately and the Applicant or the contractor shall assess the cause of the water quality problem and take immediate action to stop, contain, correct the problem, and/or prevent further water quality turbidity exceedances. If an exceedance occurs, the Applicant shall follow the protocols and notification procedures below:

- a. Notification of Exceedances: Notification of exceedances that are detected through water quality monitoring shall be made to Ecology within 24 hours of occurrence. Notification shall be made per Condition A2 above. The Applicant shall, at a minimum, provide Ecology with the follow information:
 - i. A description of the nature and cause of non-compliance, including the quantity and quality of any unauthorized discharges;
 - ii. The period of non-compliance, including exact dates, duration, and times and/or the anticipated time when the Applicant will return to compliance; and,

- iii. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the non-compliance.
- iv. In addition, within five (5) days after notification of an exceedance, the Applicant shall submit a written report to Ecology that describes the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, photographs, and any other pertinent information.

5. Mitigation and/or additional monitoring may be required if water quality standards are not met.

C. Conditions for In-Water and Over-Water Construction Activities:

1. All work in or near the waters of the state shall be done in a manner that minimizes turbidity, erosion, and other water quality impacts.
2. All debris or deleterious material resulting from construction shall be properly contained and disposed of so that such material cannot enter waters of the state.
3. No material shall be stockpiled within the Ordinary High Water Mark (OHWM) of waters of the state.
4. Machinery and equipment used during construction shall be serviced, fueled, and maintained on uplands in a confined area, unless otherwise approved by Ecology, in order to prevent contamination to waters of the state. Fueling areas will be provided with adequate spill containment.
5. During construction, the Applicant shall have a boat available on site at all times to retrieve any debris entering the water.
6. Turbid water generated from construction activities, including turbid de-watering water, shall not be discharged directly to waters of the state, including wetlands. Turbid water shall be routed to an upland location to allow removal of fine sediment and other contaminants.

D. Plan Submittals Required:

1. Additional Reports and Plans are required of the Applicant. The Applicant shall prepare and submit the following plans to Ecology's Federal Permit Coordinator per condition A2 above for a minimum **60-day review period** prior to the start of construction activities:

a. Final Project Design, Specifications, and Construction Plan: The Applicant shall develop a plan that includes:

- Final project design drawings and specifications;
- Installation methods for the buoys, anchoring system, and transmission cable.

b. Facilities Inspection and Maintenance Plan: This plan shall include the following information:

- Monitoring protocols;
- Frequency of inspections;
- BMPs for any over-water facility maintenance;
- Notification and reporting procedures.

c. A Spill Prevention, Containment, and Counter Measures Plan (SPCC Plan): The Applicant shall develop an SPCC plan to be implemented during proposed project construction, operation, maintenance, and decommissioning. The plan shall include provisions for inspecting vessels and equipment for fuel and hydraulic leaks on a daily basis, and containing and removing petroleum or other oil products, in the event of a spill or leak.

d. HDD Implementation Plan:

- Location of HDD entry and exit points. The exit point shall be located in water deep enough to minimize the potential for wave scour. If that is not possible, the HDD plan shall address the reason for an alternative exit point and provide a plan to monitor for scouring.
- Size and depth of pit;
- Preventative measures that will be in place to prevent seepage of drilling fluid and any corrective measures that may be taken if there is a “frac-out”;
- Contingency Measures that will be taken should the drilling fail. Contingency measures shall include a discussion of how many times will the HDD be attempted, BMPs that will be in

place during the HDD, and alternative methods for anchoring the cable that will be used should the HDD fail.

- e. Antifouling Compound Study and Plan: Ecology recommends the use of biocide-free anti-fouling systems. If the use of these types of systems is not possible, the Applicant shall provide an Antifouling Compound Study and Plan to Ecology's Federal Permit Coordinator for review and approval. This Plan shall address the reason for the use of an alternative compound and describe how the project will comply with the marine water quality acute criterion for copper.
- f. Project "As-Built Report": An "As-Built" Report documenting the final project facilities as-built shall be submitted to Ecology within 90 days of completion of project construction. This report shall contain:
 - Final project design drawings and specifications for all AquaBuOY components and the underwater transmission cable.
- g. Project Decommissioning Plan: The Applicant shall submit a project removal and decommissioning plan to Ecology for a 120-day review and approval period prior to the start of project construction. This plan shall include the following information:
 - Project removal timing and sequencing;
 - Method of equipment removal;
 - Best management practices (BMP's) that will be used to protect water quality impacts during project decommissioning;
 - A plan for restoring the project area to pre-project conditions. This plan shall address the HDD pits as well as any impacts to erosion/sedimentation caused by the cable.

E. Notification Requirements:

1. Notification shall be made to Ecology's Federal Project Coordinator in accordance with conditions A.2 above for the following activities:

- a. At least ten (10) days prior to the pre-construction meeting
- b. At least ten (10) days prior to the onset of any work on site
- c. At least ten (10) days prior to the onset of in-water work, including wetlands

- d. At least ten (10) days prior to the onset of work at the wetland mitigation site
- e. Immediately following a violation of the state water quality standards or any condition of this Order.

F. Timing Requirements:

1. This Order is valid for a period of five years from the date of issuance.
2. In-water work is subject to the fishery closure window determined by Washington State Department of Fish and Wildlife's (WDFW).

G. Emergency/Contingency Measures:

1. The Applicant shall develop and implement if needed a spill prevention and containment plan for all aspects of this project. This plan shall be on site and readily available for reference by Ecology personnel, the construction superintendent, construction managers and lead workers, and state and local government inspectors.
2. Spill clean-up materials (Spill Kits) shall be on site at all construction locations at all times.
3. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters, including wetlands.
4. If at any time during work the proponent finds buried chemical containers, such as drums, or any unusual conditions indicating disposal of chemicals, the proponent shall immediately notify Ecology's Southwest Regional Spill Response Office at (360) 407-6300.
5. Any discharge of oil, fuel, or chemicals into state waters or onto land with a potential for entry into state waters is prohibited. If such a discharge occurs, the Applicant shall immediately take the following actions:
 - a. Cease operations at the location of the discharge. Containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work.
 - b. Assess the cause of the problem and take appropriate measures to correct the problem and/or prevent further environmental damage. Cleanup shall include proper disposal of any spilled material and used cleanup materials.

- c. In the event of finding distressed or dying fish, the applicant shall collect fish specimens and water samples in the affected area within the first hour of the event. These samples shall be held in refrigeration or on ice until the applicant is instructed by Ecology on what to do with them. Ecology may require analyses of these samples before allowing the work to resume.
- d. Notify Ecology of the discharge or spill. Spill events shall be reported immediately to Ecology's 24-hour Southwest Regional Spill Response Team at (360) 407-6300, and within 24 hours of other events contact Ecology's Federal Permit Coordinator per condition A2 above.
- e. A detailed written report shall be submitted to Ecology (per condition A2 above) within five (5) days of the event describing the nature of the event, any corrective action taken and/or planned, steps to be taken to prevent a recurrence, and any other pertinent information.

Compliance with these requirements does not relieve the Applicant from responsibility to maintain continuous compliance with the terms and conditions of this Order or the resulting liability from failure to comply.