BEFORE THE STATE OF WASHINGTON

ENERGY FACILITY SITE EVALUATION COUNCIL

In the Matter of:

APPLICATION NO. 2002-01

BP WEST COAST PRODUCTS, LLC

BP CHERRY POINT COGENERATION PROJECT COUNCIL ORDER No. 803 REVISED

Findings of Fact, Conclusions of Law, and Order Recommending Approval of Site Certification on Condition

SYNOPSIS: The Energy Facility Site Evaluation Council (EFSEC or Council) has reviewed BP West Coast Products, LLC's application for site certification (Application), No. 2002-01; conducted public and adjudicative hearings; and by this Order recommends approval of the Application to the Governor of the state of Washington. The Applicant, BP West Coast Products, LLC, has entered into stipulations and settlement agreements with all parties to the proceeding. The Council approved each settlement agreement. As a result of the settlement agreements, Counsel for the Environment presented no contested issues to the Council. Whatcom County, although presenting evidence in the Adjudicative Proceedings, withdrew all evidence which was contrary to its settlement with the Applicant. As the result of the foregoing Settlements and withdrawal of evidence by Whatcom County and the evidence presented by the Applicant, the Applicant has made a prima facie showing that its proposal complies with all applicable laws. Furthermore, pursuant to the requirements of the settlements and the evidence presented during the hearing, the Applicant will provide offset and mitigation measures such that the planned project will produce minimal adverse impacts on the environment, the ecology of the land and its wildlife, and the ecology of the state waters and their aquatic life. Thus, the proposed project with its revisions and settlement agreement requirements meets the requirements of applicable law and comports with the policy and intent of Chapter 80.50 RCW.

Nature of the Proceeding: This matter involves an application for certification of a proposed site in the Cherry Point Industrial Area in unincorporated Whatcom County, approximately 15 miles Northwest of Bellingham and 7 miles south of Blaine, Washington, for the construction and operation of the BP Cherry Point Cogeneration Project (Project), a natural gas-fired energy production facility with an associated electric transmission line and natural gas pipeline. Approximately 180 acres of undeveloped land would be converted for: the cogeneration facility; gas, water, wastewater, and steam pipelines; construction laydown areas; access roads; and wetland mitigation areas. BP

West Coast Products, LLC, (BP or Applicant) seeks a Site Certification Agreement (SCA) to construct and operate a 720 megawatt (MW) natural gas-fired combined cycle combustion turbine electrical cogeneration facility, an approximately .8 mile 230-Kilovolt (KV) electric transmission line, and a 1,400-foot natural gas pipeline. The siting of the transmission line is under the jurisdiction of the Bonneville Power Administration (Bonneville).

Executive Summary: The Energy Facility Site Evaluation Council (EFSEC or Council) is the state agency charged with making a recommendation to the Governor as to whether a new major energy facility should be sited in the state of Washington. Chapter 80.50 RCW. The Council is aware of the region's need for energy and electrical generation capacity. The Council is also mindful of its duty to protect the broad public interest.

The Council determined, upon careful consideration of the state's need for energy at a reasonable cost and the need to minimize environmental impacts, that this facility with the agreed upon requirements of the various settlements and stipulated mitigation measures will provide the region with significant energy benefits while not resulting in unmitigated, significant adverse environmental impacts. The Council recommends that the Governor approve the siting of this project, as described in this Order and the accompanying Site Certification Agreement.

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Procedural History

On March 1, 2002, BP West Coast Products, LLC (BP or Applicant) requested that EFSEC conduct a Potential Site Study and on May 1, 2002, a public information meeting was held in Blaine, Washington. On June 10, 2002, BP submitted an Application for Site Certification (ASC) to the Council to construct and operate the BP Cherry Point Cogeneration Project (Project) in Whatcom County, Washington. On October 1, 2002, EFSEC issued its Potential Site Study report.

On April 22, 2003, the Applicant submitted an amended ASC that included, among other things, a change from air to water-cooling using recycled industrial water from the Alcoa Intalco Works, an adjacent aluminum processing company. On April 28, 2003, EFSEC gave Notice of Application revisions. The original application and the amended application will be referred herein as the Application, except as otherwise noted. Pursuant to its statutory obligations, EFSEC reviewed the Project Application for Site Certification (Application or ASC), No. 2002-01, conducted hearings to determine if the proposal complies with local land use regulations, issued a Draft Environmental Impact Statement (Draft EIS), adopted and issued a Final Environmental Impact Statement (Final EIS), considered state and federal required permits, and conducted formal adjudicative and public comment hearings.

Various delays were incurred during these proceedings, at the request of the Applicant. In late 2002, the Applicant indicated that a revised Application would be submitted in early 2003; however, the Application for Site Certification was filed with EFSEC on April 28, 2003. The Council issued a Draft EIS and scheduled proceedings in this matter, resulting in an Adjudicative Proceeding and Land Use Hearing being held in December 2003. A post hearing briefing schedule was established at the conclusion of the hearings. After these hearings were held, the Applicant and Whatcom County jointly petitioned the Council to delay deciding the land use and adjudicative proceedings, so that that Applicant and Whatcom County could explore settlement. The Applicant and Whatcom County asked for further extension of time to continue their discussions and then reached settlement in June 2004, filing their agreement dated June 30, 2004.

EFSEC also gave notices of: receipt of the Application; public meetings; land use hearing; intent to hold adjudicative proceedings; notice for filing of petitions for intervention and deadline for filing such petitions; and notices of prehearing conferences, adjudicative hearings; Determination of Significance and request for comments on scope of the Environmental Impact Statement (EIS); Draft EIS comment period and public comment hearings; Draft Prevention of Significant Deterioration (PSD)/Notice of Construction (NOC) permit comment periods and public comment hearings; Draft State Waste Discharge permit; Recommendation for 401 Water Quality Certification; notice of Draft National Pollutant Discharge Elimination System (NPDES) permit; and notice of availability of a Final EIS. EFSEC duly published all required notices of these proceedings.

The Council issued a Draft PSD/NOC air emissions permit and Technical Support Document on November 7, 2003. The Council issued a Draft State Waste Discharge

(SWD) Permit and Fact Sheet on November 7, 2003. The Council issued a Draft National Pollutant Discharge Elimination System (NPDES) and Fact Sheet on July 2, 2004.

On December 9, 2003, the Council held a public hearing regarding the Draft PSD/NOC permit, the Draft SWD permit, and the Recommendation for 401 Water Quality Certification, in Blaine, Washington. The Council received oral comments from 17 persons¹. The Council accepted written comments regarding the PSD/NOC permit through March 1, 2003, and received 37 written comment letters regarding the PSD/NOC permit. The Council accepted written comments regarding the Draft SWD permit through December 12, 2003, and received 6 written comment letters regarding the SWD permit. The Council accepted written comments regarding the Recommendation for 401 Water Quality Certification through December 12, 2003, and received 5 written comment letters regarding the ecommendation. On August 5, 2004, the Council held a public hearing regarding the Draft NPDES permit in Blaine, Washington, and received oral comments from 3 persons. The Council accepted written comments regarding the Draft NPDES permit through August 6, 2004, and received 9 written comment letters addressing the Draft NPDES permit.

On June 13, 2002, as the lead agency for environmental review of BP's Application pursuant to the requirements of the State Environmental Policy Act (SEPA), Chapter 43.21C RCW, the Council issued a Determination of Significance and request for comments on the scope of the EIS and published it in the SEPA register on June 14, 2002. A public comment meeting on the scope of the EIS was held in Blaine, Washington, on July 9, 2002. Approximately 33 people attended the agency meeting and approximately 68 people attended the public scoping meeting. The Council accepted written comments on the scope of the EIS until August 16, 2002. In September 2002, EFSEC and Bonneville issued the Final Scoping Report.

On September 5, 2003, EFSEC and Bonneville² jointly issued a Draft EIS prepared by an independent consultant. The Council accepted written comment on the Draft EIS postmarked through November 3, 2003. The Council held a hearing to accept oral comment from the public on the Draft EIS on October 1, 2003, in Blaine, Washington. The Council heard oral comments from 11 members of the public. The Council accepted written comments through November 3, 2003. The Council received 33 written comments. A Final EIS was jointly issued by EFSEC and Bonneville on August 20, 2004.

¹ The comment meeting on the draft permits and recommendation was held jointly with the Public Testimony session scheduled in connection with the adjudicative hearings. The oral comments included both general comments regarding the Project, as well as specific comments regarding the draft permits and recommendation.

² The analysis in the Draft and Final EIS was undertaken to meet the direction of SEPA for state and private lands, and the National Environmental Policy Act (NEPA) and other relevant federal laws and regulations for Federal permits and approvals.

On September 18, 2002, EFSEC issued its Notice of Intent to Hold Adjudicative Proceedings, Notice of Opportunity and Deadline to File Petitions for Intervention by October 22, 2002 and Notice of Schedule for Responses to Petition for Intervention and Notice of Intent to Hold Prehearing Conference on November 5, 2002.

Statutory parties to the EFSEC adjudicative hearings include the Applicant and the Counsel for the Environment. The Council received petitions for intervention and granted party status to the Washington Utilities and Transportation Commission (WUTC), which is entitled to intervene under Council rules. WAC 463-30-050. Upon petitions being filed, the Council also granted party status to Whatcom County and The Province of British Columbia.

On November 5, 2002, the First Prehearing Conference was held and the First Prehearing Order (Council Order 773) was thereafter issued and distributed. In June 2003, EFSEC issued its Notice of Second Prehearing Conference, scheduling it for July 15, 2003. The Second Prehearing Conference was held on July 15, 2003, and the Second Prehearing Orders (Council Orders Nos. 779 and 780) were issued and distributed to the parties. Subsequently, a Third and Fourth Prehearing Conference were held on November 3, 2003, and December 8, 2003, with orders (Council Orders 784, 785 and 787) being issued and distributed to the parties.

Prior to the Land Use hearing and the Adjudicative Proceedings, intervenors, the WUTC and the Province of British Columbia, moved to withdraw and orders were entered allowing their withdrawal.

On October 17, 2003, prior to the adjudicative hearing, Counsel for the Environment entered into a Stipulation and Settlement Agreement with the Applicant settling all issues between the Applicant and Counsel for the Environment. The Council approved this stipulation and settlement on December 8, 2003, at its hearing in Bellingham, Washington. The Council held a formal Adjudicative Proceeding regarding BP's Application, No. 2002-01, on December 8 through 12, 2003, in Bellingham, Whatcom County, Washington. On the evening of December 9, 2003, the Council held a public hearing in Blaine, Washington, at which 17 members of the public testified. EFSEC received 54 written comments regarding the project³. Although public comment was mixed, the majority favored the Project. On December 9 and 10, 2003, the Council held a land use consistency hearing. No members of the public testified during the land use hearing; however, both the Applicant and Whatcom County presented testimony and exhibits. At this hearing, Whatcom County took the position that the Project was not consistent with Whatcom County land use plans.

Subsequent to the Adjudicative Proceedings, Counsel for the Applicant and Whatcom County, after filing briefs in the land consistency proceeding, petitioned the Council to delay issuing a land use order from the December 9 and 10, 2003, proceedings

³ Numerous comment letters included both comments of a general nature about the project, and comments specific to draft permits and recommendation issued for public review.

and to delay requiring the parties to file post hearing briefs in connection with the Adjudicative Proceedings, so that the Applicant and Whatcom County could attempt to reach agreement with regard to all issues between them. The Council agreed to the delay on February 9, 2004 (Council Order No. 788). On June 30, 2004, the Applicant and Whatcom County filed a Stipulation and Settlement Agreement with EFSEC, settling all issues between them. Pursuant to proper notice, on July 26, 2004, an Adjudicative Proceeding was held on the Settlement Agreement, and the land use consistency proceeding was reconvened. The Council approved the Settlement Agreement, and found the Project to be consistent with Whatcom County land use plans and zoning ordinances. (See Council Orders Nos. 797 and 798). At this hearing session, one member of the public testified and supported the Project.

In accordance with the requirements of chapter 34.05 RCW and 80.50 RCW, on September 24, 2004, the Council voted unanimously to recommend approval of the Project to the Governor of Washington state. The Council memorialized its action in Council Order No. 803, Findings of Fact, Conclusions of Law, and Order Recommending Approval of Site Certification on Condition. On October 7, 2004, through its counsel, the Applicant filed with EFSEC a Motion for Reconsideration of Council Order No. 803.⁴ On October 11, 2004, upon consideration of the Motion for Reconsideration, and hearing no objections raised by other parties to this proceeding the Council granted the Motion for Reconsideration.

Appearances: The parties were represented in the various hearings as follows:

Applicant, BP West Coast Products, LLC: Karen M. McGaffey and Elizabeth McDougall, Perkins Coie Law Firm, Seattle Washington, 98501.

<u>Counsel for the Environment</u>: Mary Barrett, Senior Assistant Attorney General, Office of the Attorney General, 1125 Washington Street SE, P.O. Box 40100, Olympia, Washington 98504-0100.

Whatcom County: David M. Grant, Deputy Prosecuting Attorney, 311 Grand Avenue, Bellingham, Washington.

Washington Utilities and Transportation Commission, Sally Johnston, Senior Assistant Attorney General, 1400 S. Evergreen Park Drive S.W., P.O. Box 40128, Olympia, Washington 98504-0128.

<u>Province of British Columbia.</u> David Bricklin, Bricklin, Newman & Dodd, LLP, 1424 Fourth Avenue., Suite 1015, Seattle, Washington 98101.

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⁴ The Motion for Reconsideration filed by the Applicant proposed two clerical corrections and changes to Articles in the draft Site Certification Agreement concerning General Conditions - Legal Relationship, Cultural and Archeological Resources, and Public Services and Utilities.

The Council: Council representatives participating in these proceedings to consider the Application are the following: James O. Luce, Council Chair; Richard Fryhling, Department of Community, Trade and Economic Development; Hedia Adelsman, Department of Ecology (Ecology); Chris Towne, Department of Fish and Wildlife; Tony Ifie, Department of Natural Resources; Tim Sweeney, Washington Utilities and Transportation Commission; and Dan McShane, Whatcom County. The Port of Bellingham appointed Stephan Jilke to represent the Port on the Council pursuant to the requirements of RCW 80.50.030 (6)⁵. Julian C. Dewell was retained by the Council as an administrative law judge to facilitate and conduct the hearings.

MEMORANDUM

As indicated above, the Applicant reached a stipulation and settlement with the Counsel for the Environment (CFE) on the issues of climate change/greenhouse gas emissions and regional air quality, site restoration and construction material reuse, whereupon CFE agreed not to pursue any other issues. At the adjudicative hearing, in December 2003, the Council was required to decide all contested issues between Applicant and Whatcom County. To comply with its statutory duty, the Council was required to determine that the Project met all the legal requirements and was consistent with the intent and policy of Chapter 80.50 RCW. However, as noted above, on June 30, 2004, Applicant and Whatcom County settled all issues between themselves. That settlement dealt with the issues of project noise, wetland/wildlife (Great Blue Heron), land use, seismic hazards and site restoration. By virtue of that settlement, Whatcom County withdrew all testimony and evidence previously submitted that was inconsistent with the settlement agreement or which advocated requirements in addition to those set forth in the settlement agreement.

Introduction

The Applicant and the Project

The Applicant for site certification is BP West Coast Products, LLC, (BP or Applicant) a wholly owned subsidiary of BP Public Limited Company (p.l.c.). The Applicant manufactures and markets petroleum products in the Western United States. It owns two refineries, one at Cherry Point, Washington, and another in Carson, California, and owns marketing assets including roughly 1700 service stations in five states.

BP proposes to locate the Cherry Point Cogeneration Project (Project) on a 33-acre site in the Cherry Point industrial area of unincorporated Whatcom County, Washington. The Project site is adjacent to the BP Cherry Point Refinery. It is approximately 15 miles north of Bellingham, Washington, 7 miles south of Blaine, Washington, and 8 miles south of the U.S.-Canada border. The site is zoned "Heavy Impact Industrial," under the Whatcom County Code.

⁵ The Port representative is a non-voting member of the council. RCW 80.50.030 (6).

The Project, as stated by the Applicant, is a nominal 720 megawatt (MW) gas-fired combined cycle, cogeneration facility. The Project will consist of three (3) General Electric Model 7FA combustion gas turbines, three (3) heat recovery steam generators (HRSG), and a steam turbine generator. Each combustion gas turbine is expected to have a nominal power rating of 174 MW at average annual ambient temperatures. The steam turbine generator will be rated to produce 216 MW when supplying 510,000 lbs/hr of steam to the BP Refinery. The nominal Project power rating is 738 MW. The HRSGs will be equipped with supplemental duct firing capability.

A natural gas/air mixture is combusted in the combustion gas turbine generator compressors. The hot combustion gases then exit the combustion gas turbine generator compressors and enter the HRSGs where the hot gases convert water into superheated steam and additional heat from gas-fired "duct" burners located in the HRSG inlet duct is used to generate steam. The steam is delivered to the steam turbine generators to produce additional electrical energy. The hot gases exit each HRSG through a 150-foot tall and 20-foot diameter steel exhaust stack.

The Project has also been designed to deliver steam to the BP refinery for use in refining processes. The steam that is not delivered to the Refinery exhausts to a water-cooled condenser that condenses the steam to water (condensate). The condensate then is pumped back to the HRSG feed water system for reuse. The water from the cooling water system will be pumped to the wet-mechanical-draft cooling tower, where the heat will be transferred to the atmosphere. The wet-mechanical-draft cooling tower cools the water in the closed loop circulating water system by spraying hot circulating water over a large surface area using a fan to pull air through the falling water. As part of the cooling process a portion of the circulating water is evaporated and must be replaced.

Nitrogen oxide (NO_X) and carbon monoxide (CO) reduction catalysts are included in the HRSG ductwork to reduce power plant emissions. The Applicant proposed to control NO_X emissions to 2.5 parts per million (ppm) during normal steady state by a combination of dry low- NO_X combustion in the combustion gas turbine generators and selective catalytic removal (SCR) systems in the HRSGs. CO emissions will be controlled to not more than 2 ppm during normal steady state operations using low emission combustors in the combustion gas turbines and an oxidation catalyst system in the HRSGs. The levels of NO_X and CO will be higher during initial plant commissioning and when the combustion gas turbine-generators are in the startup or shutdown modes during commercial operations.

The sole fuel source for the facility will be natural gas, except for diesel oil used in the emergency generator and the firewater pumps. The Project will be supplied by a connection to the existing 16-inch Ferndale pipeline that runs from the U.S.-Canada border near Sumas, Washington, to the BP Refinery.

The Generation Facility makeup supply water will be provided from Whatcom County Public Utility District No. 1 (PUD). BP has agreed to fund a water reuse facility as part of the Project, which will allow the Project and the Refinery to reuse approximately 4.0 million gallons per day (gpd) of non-contact, once-through cooling

water currently discharged by Alcoa from the Intalco Aluminum Smelter to the Strait of Georgia. Potable water required for drinking, personal washing and sanitation will be provided by the PUD or the Birch Bay Water and Sewer District.

Process wastewater will be delivered to the BP Refinery for treatment in its wastewater treatment system, prior to discharge into the Strait of Georgia. Stormwater from the Project site will be collected, treated in retention ponds, and discharged to the wetland mitigation areas. Any storm water that becomes contaminated will be discharged to the Refinery treatment system. All sanitary waste will be discharged to the Birch Bay Sewer and Water District.

The Project site consists of approximately 33 acres, with approximately 36 acres to be used as a construction lay down area. 4.86 acres of wetlands and 4.41 acres of wetland buffers will be temporarily impacted by the Project and 30.51 acres of low value wetlands will be permanently filled. The Applicant has proposed to mitigate these impacts to, and the loss of, wetlands resulting from construction of the Project. Approximately 110 acres of degraded wetlands and surrounding uplands located in two Compensatory Mitigation Areas (CMAs) located north of Grandview Road will be restored. CMA1 consists of approximately 50 acres located east of Blaine Road and CMA2 consists of approximately 60 acres located west of Blaine Road. Historic drainage patterns will be restored by rerouting treated stormwater runoff and plugging existing ditches. Non-native invasive plant species, such as reed canary-grass, will be removed and suppressed. Native plant communities will be established.

Approximately 4.86 acres of wetland and 4.41 acres of wetland buffers (collectively the "Restoration Area") that will be temporarily impacted by construction activities and equipment laydown will be restored. Wetland hydrology will be restored in the 4.86 acres of wetlands. Both wetland and buffer portions of the Restoration Area will be planted with a variety of forested, scrub-shrub and emergent plant communities dominated by native vegetation.

Electricity generated by the Project will be transmitted to a 230 kilovolt (kV) switchyard located on the east side of the cogeneration facility for further transmission to the Refinery and the Bonneville transmission system. A portion of the electricity will be stepped down to an intermediate voltage of 69 kV or 115 kV for distribution in the adjacent BP Refinery. The remainder will be transmitted via a 0.8 mile, 230 kV transmission line from the substation at the Project site, to an interconnection point along the existing Bonneville transmission lines. The 230 kV transmission line will be constructed, owned, and operated by Bonneville and will be subject to Bonneville's jurisdiction.

The EFSEC Process

EFSEC was created to assist the Governor in deciding which proposed locations are appropriate for the siting of large new energy facilities. RCW Chapter 80.50. The Legislature recognized that the selection of sites would have a significant impact on the welfare of the population, the location and growth of industry, and the use of the natural

resources of the state. It is the policy of the state of Washington to recognize the pressing need for increased energy facilities and to ensure, through available and reasonable methods, that the location and operation of such facilities will produce minimal adverse effects on the environment, ecology of the land and its wildlife, and the ecology of state waters and their aquatic life. RCW 80.50.010.

The Council has a comprehensive mandate to balance the need for abundant energy at a reasonable cost with the broad interest of the public. RCW 80.50.010. The Council is charged to protect the health of citizens and recommend site approval for power plants where minimal adverse effects on the environment can be achieved. RCW 80.50.010; see also WAC 463-47-110.

The Council is also charged with the responsibility to apply the State Environmental Policy Act (SEPA), RCW Chapter 43.21C, which provides for the consideration of probable adverse environmental impacts and possible mitigation. WAC 463-47-140. EFSEC is the lead agency for environmental review under SEPA, and the Council Manager is the SEPA responsible official. WAC 463-47-051.

The Council conducted its review of the Application as an adjudicative proceeding pursuant to Chapter 34.05 RCW, as required by RCW 80.50.090(3) and Chapter 463-30 WAC.

In this proceeding, the Council complied with SEPA requirements by issuing a Determination of Significance and Scoping Notice, conducting a scoping hearing, issuing a Draft EIS for public comment, conducting a public hearing and accepting written comments on the Draft EIS, and adopting and issuing a Final EIS.

A Draft Prevention of Significant Deterioration/Notice of Construction (PSD/NOC) air emissions permit and a Technical Support Document were issued for comment on November 7, 2003, and a public hearing on the Draft PSD/NOC permit was held on December 9, 2003. The Council accepted written comments on the Draft PSD/NOC permit through March 1, 2004.

A Draft State Waste Discharge (SWD) permit and a Fact Sheet were issued for comment on November 7, 2003, and a public hearing on the Draft SWD permit was held on December 9, 2003. The Council accepted written comments on the Draft SWD permit through December 12, 2003.

A Recommendation for 401 Water Quality Certification was issued for comment on November 7, 2003, and a public hearing on the Recommendation was held on December 9, 2003. The Council accepted written comments on the Recommendation for 401 Certification through December 12, 2003.

A Draft National Pollution Discharge Elimination System (NPDES) permit, and a Fact Sheet were issued for comment on July 2, 2004, and a public hearing on the Draft NPDES permit was held on August 5, 2004. The Council accepted written comments on the Draft NPDES permit through August 6, 2004.

Public Testimony and Comment

The Council is required to hold public hearings in which any person may be heard in support of, or in opposition to, an application. RCW 80.50.090; see also, WAC 463-14-030. The Council provided an opportunity for public witnesses to testify during the hearing on the Draft EIS, the hearing on the Draft PSD/NOC, Recommendation for 401 Water Quality Certification and SWD permits, the hearing on the NPDES permits, public hearings on the proposed Project, and the hearings on land use consistency.

The Council received oral comments during public witness hearings, as follows: comment on the Draft EIS on October 1, 2003, in Blaine, Washington, 11 members of the public; comment on the Draft PSD/NOC air emissions, Recommendation for 401 Water Quality Certification and Draft SWD permits, on December 9, in Blaine, Washington, 17 members of the public; at public witness hearings held December 9, 2003, in Blaine, Washington, 17 members of the public; the land use consistency hearing on December 9 and 10, 2004, in Bellingham, Washington, no members of the public; hearing on Draft NPDES permit, on August 5, 2004, in Blaine, Washington, 3 members of the public; and land use consistency hearing on July 26, 2004, in Seattle, Washington, one member of the public.

The Council received 54 comment letters from members of the public regarding the Application, in addition to 33 letters on the Draft EIS, 37 letters on the Draft PSD/NOC air emissions permit, 6 letters on the Draft SWD permit, 5 letters on the Recommendation for 401 Water Quality Certification, and 9 letters on the Draft NPDES permit. Some letters dealt with comments on more than one draft permit or recommendation document.

The Council carefully considered both the specific comments of the witnesses and the topics they addressed as indications of matters significant to the public as well as the written comments submitted by the public. The Council expresses its appreciation for these witnesses' testimony and written comments.

Issues

As a result of the settlements between the Applicant and CFE and Whatcom County, the Council was not required to decide any contested issues because the parties either withdrew or entered into settlement agreements before, during or after the adjudicatory hearings. Notwithstanding settlement agreements and the resulting absence of contested issues, the Council still had to consider issues such as consistency with local land use regulations, air quality, greenhouse gases, noise, wetlands, wildlife, water quality and quantity, energy and natural resources, visual resources, health and safety/public services, seismic/volcanic hazards, traffic and transportation, cultural resources, site restoration and construction material reuse, PSD/NOC air emission permits, wastewater discharge and NPDES permits, 401 Water Quality Certification, and whether the Applicant made a prima facie demonstration that the project met the requirements of law and was consistent with the legislative policy and intent of Chapter 80.50 RCW.

Settlement and Stipulations

In connection with Application No. 2002-01, the Council encouraged the parties to make all reasonable efforts to settle contested issues. The parties worked hard to achieve settlements, and the Council acknowledges the professionalism, attention to detail, and advocacy underlying each settlement. The Council held settlement hearings on December 8, 2003, and July 26, 2004. After review of each settlement document and consideration of testimony concerning the settlement, the Council approved each settlement agreement.

BP and the Counsel for the Environment entered into a settlement agreement on October 17, 2003, prior to the adjudicatory hearings held in December 2003. This settlement agreement will be attached to the Site Certification Agreement, and is incorporated herein by reference. The settlement agreement addresses greenhouse gas emissions, regional air quality, construction materials reuse, and site restoration. It sets forth requirements and conditions that BP and the Counsel for the Environment have agreed should be included in any Site Certification Agreement (SCA) issued for the Project. So long as those requirements and conditions are included in the SCA, the Counsel for the Environment fully supports the issuance of an SCA for the Project. An order was entered, approving the agreement with Counsel for the Environment on December 8, 2003, as Council Order 787.

BP and Whatcom County entered into a settlement agreement on June 30, 2004, following the adjudicatory hearings held in December 2003. This settlement agreement will be attached to the Site Certification Agreement, and is incorporated herein by reference. The settlement agreement addresses project noise, wetlands, heron habitat, traffic and transportation, seismic hazards, land use consistency and site restoration. It sets forth requirements and conditions that BP and Whatcom County have agreed should be included in any Site Certification Agreement. So long as those requirements and conditions are included in the SCA, Whatcom County will not object to the issuance of an SCA for the Project. By the terms of the settlement agreement, Whatcom County has withdrawn any testimony or evidence presented during the hearing that is inconsistent with the settlement agreement or that advocates requirements in addition to those set forth in the settlement agreement. Whatcom County reserved the right to comment, if the SCA or permits are inconsistent with its agreement. An order was entered, approving the Whatcom County agreement on August 25, 2004, as Council Order 797.

The WUTC and the Province of British Columbia both intervened in these proceedings and later withdrew. The Council accepted their withdrawals, as evidenced by Council Orders Nos. 780 and 785.

Land Use Consistency

The Council is required to hold a public hearing to determine whether the proposed use of the site is consistent with county or regional land use plans or zoning ordinances in effect at the time of Application submittal to the Council. WAC 463-14-030. A land use consistency hearing was conducted on December 9 and 10, 2003, in

Bellingham, Washington, and on July 26, 2004, in Seattle, Washington.

During the December 2003 hearing sessions, both Whatcom County and BP presented evidence demonstrating that the Project was consistent with the Whatcom County zoning ordinances. However, the parties disagreed about whether the Project was consistent with portions of Whatcom County's Critical Areas Ordinance, which Whatcom County asserted was a part of its Comprehensive Plan and its land use plans. BP and Whatcom County presented opposing evidence on the land use issue.

Subsequent to the December 9 and 10, 2003, land use hearing, BP and Whatcom County, after filing land use proceeding briefs, petitioned the Council to delay rendering its land use decision, to allow them to seek a mutual agreement on the issues between them. They also requested that the post hearing briefing schedule in the Adjudicative Proceeding be delayed as well. The Council entered its post hearing order No. 1, Council Order No. 788, delaying its decision in the land use consistency matter and the briefing schedule for the Adjudicative Proceeding. The parties made several additional requests for delay, which the Council granted. These delays resulted in extending the time during which the Council planned to render its decision from the first part of 2004 until October 2004.

On June 30, 2004, BP and Whatcom County entered into a settlement agreement resolving all issues, including land use consistency. The settlement agreement includes a certification that the Project is consistent with Whatcom County land use requirements, including the Critical Areas Ordinance, so long as the conditions and requirements of the settlement agreement were included in the SCA.

At the July 26, 2004, land use consistency hearing, the Council accepted the settlement agreement as a certificate from Whatcom County declaring that the Project is consistent with local land use requirements. Certificates from local authorities attesting to the fact that the proposal is consistent and in compliance with county or regional land use plans or zoning ordinances are regarded as prima facie proof of consistency and compliance with such zoning ordinances or land use plans absent contrary demonstration by anyone at the hearing. WAC 463-26-090. At the July 26, 2004, hearing representatives from Whatcom County testified that the Project was now consistent with County land use plans and zoning ordinances. During the land use hearings, only one member of the public provided comments, essentially in favor of the Project. No evidence was introduced contrary to the land use certificate. The Council found and concluded with regard to Application No. 2002-01 that the proposed use of the site was consistent and in compliance with county land use plans and zoning ordinances, and entered its Order No.798 on August 25, 2004.

"Need and Consistency" Requirements

"Need and Consistency" is a term developed in EFSEC siting proceedings. The Council determines the "Need and Consistency" requirements on a case-by-case basis guided by state legislative intent and policy. See RCW 80.50.010 and RCW 43.21F.015. The Council considers need and consistency as a single concept, not just a demonstration

of the need to produce power based on current supply and demand. Consistent with legislative intent, the Council views the concept more broadly, asking whether an energy facility at a particular site will produce a net benefit after balancing the need for abundant power at a reasonable cost and the impact to the environment.

The traditional question of whether consumers "need" a particular plant may be largely obsolete in an electricity market structure, where the developers bear the risk of an unsuccessful project. However, the Council still questions whether a plant at a given location is in the public interest, considering the environmental costs of that facility at that location.

Here, the Council finds that the Project is in the public interest. It will contribute to the diversification and reliability of the state's electrical generation capacity, and, thereby, add economic benefits to the region. The evidence in the record supports the conclusion that the region needs to continue to add electrical generation capacity. As a combined-cycle cogeneration facility, the Project will generate electricity more efficiently than a stand-alone thermal generating facility, thereby conserving natural gas resources and minimizing environmental impacts. The Council finds that the Project will provide a benefit to the western power grid and the residents and businesses in this region. At the same time, the Applicant has committed to investments for environmental enhancement and has agreed to appropriate mitigation requirements for the Project.

In considering what benefit a proposed facility might bring to the people, the Council may also consider such factors as whether the Applicant's project will minimize environmental impacts and/or provide offsets that mitigate such impacts. Here, as indicated above, the record and settlement agreements show that the Project will provide economic benefits locally and state-wide, and minimize environmental impacts.

Air Quality

EFSEC is charged with protecting the people's health and welfare and with reviewing proposed power plants to assure that there are no significant adverse impacts to the environment. RCW 80.50.040 (12); WAC 463-39-010; see also, WAC 463-47-110. Additionally, EFSEC is charged with responsibility to apply the laws of Chapter 43.21C RCW, the State Environmental Policy Act (SEPA), which provides for the consideration and mitigation of probable significant adverse environmental impacts. WAC 463-47-140. The Council carefully considers public comment on proposed power facilities. RCW 80.50.090; WAC 463-14-030.

The Project is subject to federal and state emissions control requirements: Notice of Construction Approval (NOC), Prevention of Significant Deterioration (PSD); New Source Performance Standards (NSPS); and air toxics standards. The Project qualifies as a major source under the PSD program because it is one of 28 listed industries that becomes a "major source" when emitting more that 100 tons per year of any regulated pollutant. The project has the capacity to emit more than 100 tons per year of any of the following: nitrogen oxides (NO_x) , carbon monoxide (CO), particulate matter (PM), or particulate matter less than or equal to 10 microns in diameter (PM_{10}) .

Whatcom County and the immediate surrounding area is an "attainment area" for all criteria pollutants, meaning that ambient air concentrations of all criteria pollutants are below National and Washington state Ambient Air Quality Standards.

The Applicant proposes, except for its emergency generator and firewater pump, which will use low sulfur diesel fuel, to exclusively use natural gas for electric energy production and good combustion practice to limit volatile organic compound (VOC) and PM_{10} emissions. VOC emissions will not exceed 3.0 pounds per hour (lbs/hr) averaged over 24 hours per turbine with HRSG and duct burners. PM_{10} emissions will not exceed 20.6 lbs/hr averaged over 24 hours per turbine with HRSG and duct burners.

The Applicant proposes to use Selective Catalytic Reduction (SCR) and catalytic oxidation as emission control techniques to control NO_X and CO, respectively. The emission controls will be installed in each HRSG associated with each set of combustion gas turbine and HRSG duct burners. With the use of SCR, the NO_X emissions will be limited to 2.5 ppm, averaged over three hours. Ammonia emissions will not exceed 5 ppm, averaged over 24 hours, except for a short period of time during startup. CO emissions would be limited to 2.0 ppm, averaged over three hours during normal steady state operations.

The Council's air permit writing contractor from the Washington Department of Ecology has opined that the proposed emission controls would be Best Available Control Technology (BACT), as required under WAC 173-400-113(2).

Because the Project is located in an attainment area, the Applicant is not required to offset the Project's emissions of criteria pollutants. Nonetheless, the Project will offset total criteria air pollutants by allowing the adjacent BP Refinery to shut down three existing boilers. The Project will provide steam to the Refinery that is currently produced by these boilers, as well as generating electric power. As a result, the pollutants that would otherwise be emitted by those boilers will be avoided. The Applicant's consultants have demonstrated that the effect of the Project emissions and Refinery emissions reductions is likely to be a net reduction in NO_x and PM₁₀ in the airshed.

The Applicant's consultants have performed air quality modeling to determine the maximum potential impact of emissions from the project on ambient air quality. The Applicant asserts that, to be conservative, the modeling did not include the emission reductions at the BP Refinery, resulting from shutting down its boilers. The modeling results demonstrate that, even when Refinery emission reductions are excluded, the Project emission concentrations would not exceed U.S. EPA Significant Impact Levels (SILs) for each pollutant. As such, these emissions are considered not to have a significant impact on ambient air quality.

The Project's emissions of toxic air pollutants would result in concentrations that are below the Acceptable Source Impact Levels. Such concentrations are not considered to pose a significant risk to public health.

The Applicant's consultants have also performed sophisticated regional modeling

to determine the effect of the Project on regional haze and visibility. The modeling results indicate that the Project emissions will not have a significant effect on visibility and regional haze.

Emissions from the Project will not cause the haze or visibility in Federal Class I areas to increase above allowed increments. The Council finds that the Project emissions will be consistent with making reasonable progress toward meeting the national goal of preventing any future, and remedying any existing, impairment of visibility by human-caused air pollution in mandatory Federal Class I areas.

Best management practices will be implemented to control fugitive dust during construction: water will be applied as necessary; access roads shall be graveled or paved, as practical; and where applicable, exposed areas and topsoil storage piles will be promptly revegetated, seeded, or otherwise managed to minimize dust sources.

As a condition of the settlement with the Counsel for the Environment, BP has agreed to decommission three utility boilers at the Refinery and to fund one of two alternative air quality improvement projects. The first project is the Solar Connection School program, which involves installing solar generating systems and providing curriculum materials about renewable energy. BP would fund and implement the program at seven area schools for a period of 10 years. The second project is the Commuter Trip Reduction program. If BP were unable to implement the Solar Connection program, it would instead contribute \$10,000 annually for ten years to the Whatcom County Commuter Trip Reduction program. The Council concludes that the three utility boilers at the Refinery should be decommissioned and removed within 6 months of the Project's beginning commercial operation. Upon completion of the decommissioning, the certificate Holder shall provide EFSEC with written notification and assurances that those Refinery boilers have been decommissioned.

The Council has carefully considered the settlement agreements, uncontested evidence and public comment and finds that the Project as proposed, when coupled with the required mitigation measures, will have no adverse effect on the ambient air quality in the airshed. The Council finds that Project satisfies all requirements for PSD and NOC approval.

Water Quantity

The Project is expected to use an average of 2,244 to 2,316 gallons per minute (gpm) of non-potable fresh water. The Applicant will purchase this water from Whatcom County Public Utility District No. 1 (PUD). The PUD has sufficient rights to withdraw water from the Nooksack River, so that it can supply the Project with needed water as well as continuing to serve existing customers.

⁶ The Site Certification Agreement defines the beginning of commercial operation as the time when the Certificate Holder begins delivering electricity to purchasers under commercial power purchase agreements.

Furthermore, as part of the Project, the Applicant has agreed to fund a water reuse project to be implemented by the PUD. The nearby Alcoa Intalco aluminum smelter currently discharges 2,780 gpm of non-contact, once-through cooling water to the Strait of Georgia. The water reuse project will recover this water and allow it to be reused at the Project and the BP Refinery, thereby reducing overall water use by an average of 464 to 536 gpm.

The Council concludes that the Project's water supply will occur through certificated water rights held by the Whatcom County PUD. The council further concludes that the water reuse project will provide sufficient water for the Cogeneration Project, thus reducing the average amount of water withdrawn from the Nooksack River if both the Intalco Aluminum Smelter and the Project are in operation.

Water Quality

The Project will discharge process wastewater to the BP Refinery, where it will be treated along with Refinery wastewater before being discharged to the Straits of Georgia. The evidence demonstrated that the Project wastewater would not materially change the composition of wastewater being discharged from the Refinery. The Council contracted with the Department of Ecology to prepare a Draft Waste Discharge Permit conditioning the discharge of process wastewater from the Project to the Refinery's waste treatment system, and a Draft National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges. The Refinery will need to amend its NPDES permit to reflect the added waste stream from the Cogeneration Project.

BP will prepare a number of water quality plans for both construction and operation phases of the project. The plans will be submitted to the Council for approval, and shall include: Solid Waste Control Plan, Residual Solids Handling Plan, Construction and Operation Phase Spill Prevention, Control and Countermeasure Plan, Construction Phase and Operation Stormwater Pollution Prevention Plan. The Council has prepared a Wastewater Disposal Permit⁷ governing the discharge of process wastewater water from the Generation Facility to the BP West Coast Products Refinery. The Wastewater Disposal permit is an attachment to the Site Certification Agreement.

Storm water from the Generation Facility site will be collected and routed to two retention ponds for treatment and discharge flow control. Stormwater collected from the generation facility site will be routed to Stormwater Detention Pond 1, and then discharged to the wetland mitigation areas north of Grandview Road. Stormwater collected from the main laydown areas southwest of the intersection of Grandview and Blaine Roads, will be routed to Stormwater Detention Pond 2, and then discharged to existing ditches west of the Project site.

⁷ Although the council issued a Draft "State Waste Discharge" permit for public comment, the Council concluded that a different nomenclature for the permit, i.e. Wastewater Disposal permit, would clarify that the permit is not being issued by the Department of Ecology, but by EFSEC pursuant to its authority under Chapter 80.50 RCW.

During operation of the Generation Facility, any storm water collected that appears to be contaminated will be routed to the Refinery treatment system. The Council has prepared an individual NPDES permit governing the discharge of stormwater from the Project site. The NPDES permit is an attachment to the Site Certification Agreement. At the conclusion of construction, the Certificate holder shall request approval from EFSEC to transfer operation of Stormwater Detention Pond 2 to the BP Refinery.

The Project is expected to generate 1-5 gpm of sanitary wastewater. This wastewater will be discharged to the Blaine Sewer & Water District.

Wetlands

The Generation Facility site consists of approximately 33 acres, with approximately 36 acres to be used as a construction lay down area. 4.86 acres of wetlands will be temporarily impacted by the Generation Facility site and 30.51 acres of low value wetlands will be permanently filled. To mitigate these temporary and permanent impacts, the Applicant proposes to restore the wetlands that will be impacted temporarily and to enhance wetlands in two compensatory mitigation areas totaling 110 acres in size to compensate for the permanent fill of wetlands.

The Applicant proposes to implement a wetland mitigation plan provided in the Final Cogeneration Project Compensatory Mitigation Plan (Compensatory Plan), Appendix H7 of the Application as revised and submitted to the U.S. Army Corps of Engineers on June 2, 2004. (See Exhibit 12 to the Adjudicative Proceedings). The goals of the Compensatory Plan are:

- a. The restoration of approximately 110 acres of degraded wetlands and surrounding uplands located in two compensatory mitigation areas (CMAs) located north of Grandview Road. CMA1 consists of approximately 50 acres located east of Blaine Road and CMA2 consists of approximately 60 acres located west of Blaine Road. Historic drainage patterns will be restored by rerouting treated stormwater runoff and plugging existing ditches. Non-native invasive plant species, such as reed canary-grass, will be removed and suppressed. Native plant communities will be established.
- b. The restoration of approximately 4.86 acres of wetland and 4.41 acres of wetland buffers (collectively the "Restoration Area") that will be temporarily impacted by construction activities and equipment laydown. Wetland hydrology will be restored in the 4.86 acres of wetlands. Both wetland and buffer portions of the Restoration Area will be planted with a variety of forested, scrubshrub and emergent plant communities dominated by native vegetation.

The Compensatory Plan includes the following elements that shall be implemented to attain the goals stated above: implementation of restoration activities in manner to meet or exceed the performance standards identified in the Compensatory Plan; development, and submittal to EFSEC, of an as-built report documenting the final grading, hydrologic pathways, and planting schemes; implementation of temporary site

protection activities; execution and recording of deed restrictions with respect to the wetland mitigation areas prior to beginning of site preparation; implementation of a ten year Monitoring Plan including the monitoring of wetland hydrology through the installation of monitoring wells; implementation of a maintenance and contingency plan; submittal of progress and monitoring reports; implementation and compliance with construction, Monitoring and Reporting Schedules; and provisions for a parent company guarantee to the U.S. Army Corps of Engineers.

The Applicant proposes additional mitigation measures, agreed through the settlement with Whatcom County, to enhance use of the Compensatory Wetland Mitigation Areas by Great Blue Heron. The Applicant shall implement the requirements of Appendix F of the Compensatory Plan: "BP Cherry Point Cogeneration Facility Wetland Mitigation and the Birch Bay Great Blue Heron Colony", June 2004, submitted as part of the Stipulation and Settlement Agreement with Whatcom County. (See Exhibit 11.0A).

The evidence demonstrates that the wetland mitigation offered by the Applicant, with the foregoing requirements, will compensate for the temporary and permanent wetland impacts expected from the Project.

BP will be required to obtain a permit from the U.S. Army Corps of Engineers pursuant to Clean Water Act Section 404, before proceeding with Project construction.

Wildlife

The Project site is located in the Heavy Impact Industrial Area of Whatcom County. A moderate variety of native birds, mammals, reptiles and amphibians are expected to inhabit the grassland, shrubland, forested and wetland habitats in the project vicinity. The habitats within the Project site generally have low vegetation species diversity, and a dominant presence of nonnative species such as Himalayan black berry and reed canary-grass. While wildlife habitat in the project site likely provides cover, foraging and breeding habitat for a variety of wildlife species, wildlife habitat characteristics associated with the Project site do not provide conditions typically associated with high quality habitat for wildlife.

No federal or state-listed sensitive, threatened, or endangered wildlife species forage, breed, or occur within the proposed Project site. Bald eagle breeding sites have been identified within 2 miles of the project site near Birch Bay and Lake Terrell. Although the presence of anadromous fish in Terrell Creek has been documented, federally and state listed endangered bull trout and coho salmon only use the Nooksack River for spawning. There are no known occurrences of rare plants, priority habitats, or high quality ecosystems near the Project site.

Overall, impacts on wildlife, habitat, and endangered species associated with the construction of the Project are expected to be small and are unlikely to result in significant adverse impacts with the implementation of the mitigation measures proposed by the Applicant. Best management practices and mitigation implemented through the

requirements of the Wetlands Compensatory Mitigation Plan, the Wastewater Disposal and NPDES permits, and Sedimentation and Erosion plans required by the Site Certification Agreement, would be protective of fish and fish habitat.

The Project site is located approximately 1.65 miles west of the Birch Bay Great Blue Heron colony. During the hearing, Whatcom County presented testimony, expressing concern about the potential effects of Project noise, wetland degradation and the wetland enhancement activities on heron foraging activities. BP presented testimony indicating that heron did not utilize the Project site or wetland mitigation areas for foraging, and that neither Project noise nor the wetland enhancement activities would adversely affect heron.

As noted, subsequent to the December 2003, Adjudicative Proceedings, Whatcom County entered into a settlement agreement with BP that fully resolves the County's concerns about the heron colony. The settlement agreement limits the project noise in areas that may be utilized by heron for foraging, and modifies the wetland mitigation plan to include heron-related enhancements, which are noted in those discussions herein.

The Council concludes that the Project will not adversely affect the heron colony or other plant, fish or wildlife present in the area.

Climate Change / Greenhouse Gas Emissions

The Project will be fueled by natural gas. The burning of natural gas will result in the annual emission of about 2.47 million metric tonnes of carbon dioxide (CO_2), when operated at full capacity. There is a consensus in the international scientific community that various byproducts of human activity, including CO_2 and other gaseous emissions produced by the combustion of fossil fuels, and emissions of gases such as methane, contribute to global atmospheric warming through the so-called "greenhouse effect." Although there remains uncertainty with regard to the precise impacts and speed of onset, it is well understood that global warming has potentially profound consequences for all people, including citizens of Washington State.

The state of Washington recognizes the people's need for abundant power at reasonable cost. It is also the policy of the Legislature that the location and operation of energy facilities produce minimal adverse effects on the environment, ecology of the land and its wildlife, and the ecology of the waters and their aquatic life. RCW 80.50.010.

The burning of natural gas in the Project could result in maximum potential annual emissions at 100% operating factor of about 2.47 million metric tonnes of carbon dioxide (CO₂). The volume of actual emissions will depend upon how the facility is operated. The evidence in these proceedings indicated that the Project is more efficient than other fossil fuel-fired generating facilities that are operating or under construction in the region, and therefore, the Project would emit less CO₂ per unit of electricity produced than from other fossil-fueled thermal generating facilities.

The Applicant and the Counsel for the Environment entered into a settlement agreement addressing the mitigation of CO₂ emissions. The settlement agreement

included alternative provisions that would apply depending upon whether BP retained an equity interest in the Project.

In 1998, BP p.l.c. set a voluntary goal to reduce its greenhouse gas emissions 10% below its 1990 baseline emissions within ten years. BP p.l.c. achieved this goal in 2002, and made another voluntary company-wide commitment to hold greenhouse gas emissions throughout its worldwide operations at 2002 emission levels through 2012. In other words, the greenhouse gas emissions associated with any growth in the worldwide assets of BP p.l.c. must be offset by reductions somewhere within the company's operations. So long as BP retains an equity interest in the Project and does not make substantial changes in its voluntary mitigation commitment, BP has agreed to mitigate CO₂ emissions from the Project in a manner consistent with that voluntary company-wide commitment.

If BP sells the Project to a third party, or BP p.l.c. significantly changes its voluntary greenhouse gas emission commitment, the Certificate Holder would mitigate 23% of the Project's actual CO₂ emissions on an annual basis through boiler offsets at the Refinery, other mitigation projects, and/or the payment of \$0.87 per metric tonne (to be adjusted annually for inflation) to a qualifying organization such as the Climate Trust. If BP sells a portion of the Project to a third party, then assuming BP's voluntary policy is still in effect, BP proposes to voluntarily offset its ownership (equity) share of the Project's CO₂ emissions as provided in BP's voluntary company wide commitment, and the third-party Certificate Holder would mitigate its ownership (equity) share of the CO₂ emissions as provided above.

The Council heard testimony in support of the agreement from Mark Moore, BP's project manager, David Montgomery, an internationally recognized greenhouse gas expert, and David Sjoding, a representative from the Washington State Department of Community, Trade and Economic Development's energy office. Based on the testimony and evidence in the record of these proceedings, the Council concludes that the mitigation proposed is appropriate for this Project.

The Council finds that the Applicant's proposal with its revisions and settlement requirements creates an appropriate balance between encouraging the development of efficient generating facilities and recognizing that such thermal electric generating facilities impact the environment and are a source of greenhouse gas emissions.

Noise

The Project will be designed to meet applicable Washington State Environmental Noise Levels, Chapter 173-60 WAC, and Whatcom County noise ordinances.

During construction, the Applicant and its contractors and subcontractors will incorporate noise attenuation features such as appropriate mufflers on engine driven equipment, hearing protection for workers, and will limit loud construction activities, such as pile driving, to daytime hours only. The Applicant is also required to comply with the applicable requirements of WAC 173-60-040 during the hours of 10:00 p.m. and 7:00 a.m..

The operation of the proposed facility includes combustion gas turbine generators, heat recovery steam generators, steam turbine generators, cooling towers, and other components that generate noise, which must be mitigated to meet noise regulations. The Applicant has incorporated noise attenuation features, such as gas turbine inlet silencers, auxiliary boiler fan inlet silencers and steam turbine generator weatherproof enclosures, in the preliminary Project design. In addition, the facility will be equipped with stack silencers, and the three gas turbine generators and the steam turbine generator will be housed within enclosures.

The Project will be designed to meet applicable Washington State Environmental Noise Levels, Chapter 173-60 WAC. In addition, BP and Whatcom County have entered into a settlement agreement concerning project noise. Under the terms of that agreement, BP has agreed to accept conditions in the Site Certification Agreement that would more stringently regulate noise levels at five locations specified in the settlement agreement. BP and Whatcom County have also agreed upon a protocol for determining compliance with noise limits after the Project commences commercial operation.

Natural Gas Supply

The BP Project will be fueled by natural gas for power production. Natural gas is a non-renewable fossil fuel. The Council finds that BP is required to comply with applicable state and federal pipeline regulations for construction and operation of the 1400 foot natural gas supply pipeline. This finding applies to that distance of pipeline under EFSEC jurisdiction and that portion under FERC jurisdiction. Compliance with applicable state and federal pipeline regulations adequately protects the environment and the safety of the population.

Seismic/Volcanic Hazards

The Project site is located within Seismic Zone 3. The risks associated with ground movements due to seismicity were evaluated, and found to be low. This risk will be managed by incorporating appropriate seismic hazard considerations into the design of the proposed structures. Seismic design criteria based on the 1997 Uniform Building Code (UBC-97) were compared to the United States Geologic Survey's recent probabilistic seismic hazard assessment. The Council determines that UBC-97 criteria are conservative and appropriate for design of the proposed facilities. BP has also agreed to conduct a program of periodic structural integrity monitoring of the Project facilities. This will be the equivalent of the monitoring at the BP Refinery.

Although Whatcom County presented evidence during the hearing regarding seismic risks, that evidence was withdrawn pursuant to the settlement agreement entered into by BP and Whatcom County. As a result, the testimony of BP's expert, Sanjeev Malushte, Ph.D., concerning the steps BP is taking to address seismic risks, is uncontested. Accordingly, the Council finds that the risks associated with seismic are low and that the design requirements of the UBC are appropriate for this facility.

Traffic and Transportation

Construction of the Project will result in significant traffic to and from the Project site during several months of peak construction activities. The temporary increases in traffic would be similar in magnitude to the temporary increases in traffic that presently occur during periodic maintenance activities at the Refinery, but would be of longer duration.

BP has entered into a Letter of Understanding with the Washington State Department of Transportation to mitigate for all construction traffic impacts. Under the terms of that agreement, BP will install a permanent traffic light at the Grandview Road (SR548) - Portal Way intersection, and will install temporary left turn channelization at the intersection of Grandview Road and Blaine Road. In addition, BP will prepare and submit to EFSEC for approval a Construction Traffic Management Plan.

The incremental increase in traffic that would occur during the operating phase of the Project is not expected to be significant, so no mitigation is necessary for traffic during Project operation.

Based upon the record of these proceedings, the Council concludes that those measures will appropriately mitigate construction traffic impacts. The Council concludes that operation of the Project will not have a material effect on traffic.

Cultural and Archeological Resources

The construction and operation of a power generation facility and its ancillary components could impact cultural resources. Provision should be made to avoid impact with cultural resources. During construction, there should be an on-site cultural resource monitor, to avoid sites of archeological significance, if discovered and identified as such, and to develop mitigation measures for any significant non-avoidable sites.

A small area within Laydown Area No. 3 was identified as containing ephemeral lithic scatter. As a result of consultation with the Lummi Tribe, the Certificate Holder agreed to monitor any construction activities that occur within 30 meters of the location within construction laydown area #3, where scattered lithic materials were found. Monitoring would be directed by an experienced archaeologist. Should artifacts be discovered during excavation of this area, construction activities would be halted until the archeological features are secured and removed, in consultation with the Lummi Tribe.

Furthermore, prior to the beginning of construction, BP would develop a plan for addressing and responding to the discovery of archeological and cultural resources. The plan would include protocol for securing of resources, and notification of applicable tribal, local and state agencies.

The SCA directs that the Applicant prepare and implement a cultural resources monitoring and response plan, prior to beginning site preparation.

Visual Resources/Light and Glare

The Applicant has testified that the Project will have lights similar to those at the Refinery. Further, the Applicant asserts that the Refinery lights do not disturb neighbors or wildlife. The Applicant also claims that there will be no large lights, only lights on walkways and platforms. Finally, stacks and cooling towers on the Project are no higher than those at the Refinery, which the Applicant asserts create no visual resource problems.

To avoid visual impacts at the closest public viewpoints along Grandview and Blaine roads, the Applicant would undertake the following:

- Prepare and implement a site management plan to minimize overall visual impacts associated with construction of the proposed project.
- Cogeneration project elements would be painted gray. This color is intended to reduce surface glare from direct sunlight.
- The cogeneration facility would be located approximately 340 feet south of the centerline of Grandview Road, creating opportunities to plant screening trees, shrubs, and vines consistent with final approved landscape designs. In addition, existing trees between the road and the site would remain, based on the project description.
- Project site lighting would be designed to minimize light spillover and glare.

The Council concludes that the Applicant's mitigation measures are appropriate and should be included in the SCA.

Health and Safety/Public Services

The Applicant has proposed a number of plans and mitigation measures to protect the health and safety of employees, contractors and the public during construction and operation of the Project, including development of a Health and Safety Plan and Emergency and Security Plan for the Cogeneration Facility, in coordination with the Refinery's existing plans. In addition, the Applicant has testified it is willing to agree to the following mitigation:

- 1. BP will extend fire, security and emergency medical services from the Refinery to the Project to cover all but the most extreme matters.
- 2. BP will provide effective radio communications equipment to the Project.
- 3. BP will participate in the public/private consortium on emergency response in accordance with participating in the Specialized Emergency Response Program, as the Refinery has done.
- 4. BP will comply with the reporting aspects relating to emergency matters in accordance with the Emergency Planning and Community Right-to-

- Know Act (SARA Title III) and the Risk Management Program requirements of Section 112(r) of the Clean Air Act.
- 5. BP will prepare an emergency response plan prior to the start of operations. The plan would likely include descriptions for site access, perimeter control, notification, coordination with outside agencies, coordination with the Refinery, immediate actions, communication plan and incident command structure. BP will coordinate with local emergency management authorities in developing this plan.

With respect to public services, the Applicant has proposed to coordinate various aspects of construction and operation activities with local public service and governmental agencies, including:

- 1. Coordination of construction activities with local police and fire departments and emergency medical service providers to ensure access to all locations on the Site vicinity in the case of an emergency.
- 2. Using precautions during construction, to ensure that excavations do not damage underground utilities, including communications cables.
- 3. Complying with applicable federal and state safety regulations (including regulations promulgated under the Federal Occupational Safety and Health Act and the Washington Industrial Safety and Health Act) as well as local and industrial codes and standards (such as the Uniform Fire Code or those standards administered by the National Boiler Board and Pressure Vessel Inspectors). The Certificate Holder, its general contractor, and all subcontractors shall make every reasonable effort to maximize safety for individuals working at the Project.
- 4. Providing appropriate construction site fencing and control site access.
- 5. Providing, at the request of the Whatcom County Sheriff's Department, office space within the Cherry Point Industrial Area for the Sheriff's Department's use as a substation.
- 6. BP has agreed to reimburse Whatcom County for the Sheriff's Department reasonable overtime expenses, to be approved in advance, if construction of the Project requires that any unanticipated services need to be provided by the County.

The Council finds that these measures are appropriate, and these measures will be required of the Applicant in the Site Certification Agreement.

The Council finds that the Applicant has proposed sufficient mitigation to assure that there will be no significant adverse impact to public health and safety. The Council finds that the Applicant has also proposed sufficient mitigation to prevent significant adverse impacts on local public services.

Construction Procedure and Clean-up and Construction Material Reuse

As stipulated to between BP and CFE in their Settlement Agreement, and approved by EFSEC on December 8, 2003, the Applicant will develop and implement a plan to reuse construction waste materials. BP has agreed to deliver this plan to EFSEC for approval 90 days prior to the start of construction.

The Site Certification Agreement will further require the Applicant to conduct construction clean-up activities, including disposal of all temporary structures not intended for future use upon completion of construction, and disposal of used timber, brush, refuse or flammable materials resulting from the clearing of lands or from construction of the Project, in a manner approved by the Council

The Council determines that the foregoing construction clean-up and material reuse plans are appropriate and will include them in the SCA.

Site Restoration

WAC 463-42-655, as in effect the date of the Application, requires an applicant to provide a plan for site restoration in sufficient detail to identify, evaluate, and resolve all major environmental and public health and safety issues presently anticipated. The rule requires that the plan address provisions for funding or bonding arrangements to meet the site restoration or management costs.

In the Application, BP outlined an initial site restoration plan. As described in the plan, BP proposes that, after the useful life of the facility, the equipment would be removed and the Generation Facility site would be reserved for other industrial use.

The Applicant entered into settlement agreements with both the Counsel for the Environment and Whatcom County that contain provisions addressing site restoration. Under the terms of those agreements, the Certificate Holder will submit a Site Restoration Plan for the Council's approval at least ninety (90) days prior to beginning site preparation. The Certificate Holder would also submit for the Council's approval a Final Site Restoration Plan within twelve (12) months following the termination of the Project, and the Final Plan would provide for the restoration of the Site within a reasonable time frame, taking into account the restoration plan and anticipated future use of the Site.

BP and the Counsel for the Environment have agreed that the Certificate Holder should not be required to post a bond to secure site restoration so long as the Certificate Holder's Standard & Poor's credit rate does not fall below "BBB-/Stable or its Moody's credit rating does not fall below "Baa3/Stable." They have agreed that if the Certificate Holder's credit rating falls below those levels, the Certificate Holder must either provide a formal corporate guarantee from a corporate entity with a credit rate of at least those levels, or provide a bond to secure site restoration costs. The SCA further requires that the Council be notified of credit rating changes described above, and that the certificate

Holder file a plan for posting the require corporate guarantee or bond.

Based on the evidence presented in these proceedings, the Council concludes that the agreed upon provisions address future site restoration appropriately.

Term of the Site Certification Agreement

The Council finds that there is a benefit to the public to have permitted facilities ready to be constructed when it becomes known that more generation capacity is needed. It is in the state interest to provide abundant energy at reasonable cost.

Furthermore, permits conditioning air, wastewater and stormwater discharges attached to the SCA contain requirements that they be updated periodically or must be extended if construction is not underway. This review process assures that current environmental standards are satisfied at the time the facility is constructed.

Nonetheless, the Council recognizes that an unlimited build window is not appropriate. A ten year term to begin construction creates the balance necessary to protect the environment and the public as well as to recognize the need for facilities pursuant to the policy established in RCW 80.50.010. The Council requires that such a provision be contained in the SCA for the Cherry Point Cogeneration Project. The SCA for the Project will authorize the Certificate Holder to begin construction within 10 years of the effective date of the SCA.

Conclusion

The Council has carefully considered its statutory duties, applicable administrative rules, and all of the evidence in the record in exercising its duty to balance the state's need for energy at a reasonable cost with the need to protect the environment and the health and safety of the residents of the area.

One of the Council's principal duties is to ensure that the location of energy facilities will produce minimal adverse effects on the environment. We have considered the testimony of expert witnesses and the public and all the evidence not withdrawn, the settlement agreements and the Final EIS on whether this plant, as proposed with revisions, the requirements of the settlement agreements, and the conditions of the Site Certification Agreement and attached permits as appropriate for this location. As currently proposed, and with mitigation for a number of impacts, the plant would have a minimal impact on the environment. The Council is also aware that one of our duties is to ensure that the supply of energy, at a reasonable cost, is sufficient to ensure people's health and economic welfare; the record shows that this facility would serve those goals. The Council considered whether the total package of mitigation measures offset the environmental impacts of the Project. Viewed on balance, with respect to this Project, and in the context of mitigation proposed, the package offered by BP comports with the legislative policy of Chapter 80.50 RCW.

For all of the reasons discussed in the body of this Order, the Council recommends to the Governor that this project be approved for site certification.

FINDINGS OF FACT

Having discussed in detail above the facts relating to the material matters, as well as certain conclusions, the Council now makes the following findings of facts, conclusions of law and decision. Any findings of fact which are found to be conclusions of law will be considered as such.

Nature of Proceeding

This matter involves an Application to the Washington State Energy Site Evaluation Council (EFSEC or Council) for certification to construct and operate the Cherry Point Cogeneration Project (Project), a combined cycle natural gas-fired cogeneration facility located in Whatcom County, Washington.

Findings of Fact

The Application, the Applicant, the State Environmental Policy Act (SEPA) Process and the Adjudicative Hearing Process

- 1. The Applicant, BP West Coast products, LLC, (BP) is a wholly-owned subsidiary of BP, p.l.c. The Applicant manufactures and markets petroleum products in the Western United States. It owns two refineries, one at Cherry Point, Washington and another in Carson, California, and owns marketing assets including roughly 1700 service stations in five states.
- 2. EFSEC is the lead agency for environmental review under the State Environmental Policy Act, RCW Chapter 43.21C. The Council Manager is the SEPA responsible official. WAC 463-47-051.
- 3. After requesting that EFSEC conduct a Potential Site Study on March 1, 2002, and after a public information meeting was held on May 1, 2002, on June 10, 2002, the BP applied to the Council for certification to construct and operate the Cherry Point Cogeneration Project (Project) in Whatcom County, Washington.
 - 4. On October 1, 2002, EFSEC issued a Potential Site Study report.
- 5. BP's Application sought a Site Certification Agreement to construct and operate a 720 MW combined-cycle cogeneration facility. The facility's fuel source will be natural gas, except for minimal use of low sulfur diesel for an emergency generator and fire water pump.
- 6. The Council issued a Determination of Significance and request for comments on the scope of environmental impacts on June 13, 2002. The Council held a hearing on the scope of the Environmental Impact Statement (EIS) in Blaine, Washington, on July 9, 2002. The deadline for written comments on the scope of the EIS was August 16, 2002.

- 7. EFSEC duly published notices of receipt of the Application, public meetings, prehearing conferences, land use hearings, PSD hearing, SWD hearing, NPDES hearing, Draft EIS hearing, Recommendation for 401 Water Quality Certification hearing, and the adjudicative hearings regarding Application No. 2002-01.
- 8. The Council and the Bonneville Power Administration issued a SEPA/NEPA Draft Environmental Impact Statement (Draft EIS) on September 5, 2003. The Council accepted public comments regarding the Draft EIS through November 3, 2003, and held a public hearing regarding the Draft EIS on October 1, 2003, in Blaine, Washington.
- 9. Prior to formal adjudicative hearings on the Application, the Council held prehearing conferences on November 5, 2002, July 15, 2003, November 3, 2003 and December 8, 2003, and issued Prehearing Orders number 1 through 6 (Council Orders Nos. 773, 779, 780, 784, 785, and 787).
- 10. At the pre-hearing conference on December 8, 2003, the Council considered and approved the settlement agreement between BP and the Counsel for the Environment.
- 11. The Council held formal adjudicative hearings regarding the Application 2002-01 on December 8-11, 2003, in the city of Bellingham, Whatcom County, Washington, and recessed the proceedings for filing of post hearing briefs by the parties.
- 12. The Council held a public hearing regarding Application 2002-01 on December 9, 2003, in the city of Bellingham, Whatcom County, Washington. 17 members of the public offered comment.
- 13. EFSEC conducted a land use consistency hearing on December 9 and 10, 2003, in the city of Bellingham, Whatcom County, Washington, after which the proceeding was recessed for filing post-hearing briefs. The briefs were filed in January 2004.
- 14. On January 29, 2004, the Applicant requested that the post briefing schedule be delayed. At the Council's February 2, 2004, meeting. On February 9, 2004, the Council agreed to the request (Council Order 788). On June 30, 2004, BP and Whatcom County entered into a Stipulation and Settlement Agreement settling all issues between themselves.
- 15. On July 26, 2004, the land use hearing was recommenced in Seattle, King County, Washington. Based on the evidence and Whatcom County's certificate, the Council found the Project is consistent and in compliance with the relevant zoning ordinances and land use regulations.
- 16. On July 26, 2004, the Council also reopened the adjudicatory record to hear testimony and public comment regarding the BP-Whatcom County settlement agreement. The Council considered and approved the settlement agreement between BP and Whatcom County.

- 17. The Council issued a Draft Prevention of Significant Deterioration / Notice of Construction (PSD/NOC) air emissions permit and a Technical Support Document on November 7, 2003, and held a public hearing on the Draft PSD/NOC permit on December 9, 2003, in Blaine, Washington. The Council accepted written comments through March 1, 2003.
- 18. The Council issued a Draft State Waste Discharge (SWD) permit and a Fact Sheet on November 7, 2003, and held a public hearing on the Draft SWD permit on December 9, 2003, in Blaine, Washington. The Council accepted written comments through December 12, 2003.
- 19. The Council issued a Recommendation for 401 Water Quality Certification on November 7, 2003, and held a public hearing on the recommendation on December 9, 2003, in Blaine, Washington. The Council accepted written comments through December 12, 2003.
- 20. The Council issued a Draft National Pollution Discharge Elimination System (NPDES) permit and Fact Sheet on July 2, 2004, and held a public hearing on the Draft NPDES permit on August 5, 2004, in Blaine, Washington. The Council accepted written comments through August 6, 2004.
- 21. The Applicant was given an opportunity to submit Proposed Findings of Fact, Conclusions of Law, and Order and Proposed Site Certification Agreement, which were submitted to EFSEC on July 30, 2004.
- 22. On August 20, 2004, the Council and Bonneville issued the Final Environmental Impact Statement (Final EIS).
- 23. On September 24, 2004, the Council acted to recommend approval of the Project to the Governor of Washington State, and issued Council Order No. 803, Findings of Fact, Conclusions of Law, and Order Recommending Approval of Site Certification on Condition.
- 24. On October 7, 2004, the Applicant filed a Motion for Reconsideration of Council Order No. 803. The Council granted the motion on October 11, 2004.

Project Description

- 25. The Project is a nominal 720 MW gas-fired combined cycle, cogeneration facility. The Project will consist of three (3) General Electric Model 7FA combustion gas turbines, three (3) heat recovery steam generators (HRSG), and a steam turbine generator. Each combustion gas turbine is expected to have a nominal power rating of 174 MW at average annual ambient temperatures. The steam turbine generator will be rated to produce a nominal 216 MW when delivering 510,000 lbs/hr of steam to the Refinery. The HRSGs will be equipped with supplemental duct firing capability. Based on the foregoing output, the nominal power rating of the Project is 738 MW.
 - 26. A natural gas/air mixture is combusted in the combustion gas turbine

generator compressors. The hot combustion gases then exit the combustion gas turbine generator compressors and enter the HRSGs where these hot gases convert boiler feedwater into superheated steam. This steam is delivered to the steam turbine to produce additional electrical energy. The cooled combustion gases exit each HRSG through a 150-foot tall and 20-inch diameter steel exhaust stack.

27. The Project has been designed to deliver steam to the BP Refinery for use in refining processes. Steam from the HRSGs expands in the steam turbine, creating force to turn an electrical generator. A portion of this steam is extracted from the steam turbine for use in the Refinery. The remaining steam, now at very low pressure, exits from the steam turbine to a surface condenser that condenses this steam using cooling water. The condensate then is pumped back to the HRSG boiler feed water system for reuse. The cooling water from the condenser is pumped to the mechanical-draft cooling tower, where the water is cooled through evaporation.

Stipulations and Settlement Agreements

28. In connection with the Application No. 2002-01, the Applicant entered into settlement agreements and stipulations with all parties. The settlement agreements and stipulations are as follows: Amended Stipulation Between Counsel for the Environment and BP West Coast Products, LLC, (Exhibit 10.0 A to the adjudicative proceeding) and BP-Whatcom County Amended Stipulation and Settlement Agreement (Exhibit 11.0 A to the adjudicative proceeding).

Site Characteristics

- 29. The Applicant seeks to locate the facility on an approximately 33-acre site in the Cherry Point Industrial area of unincorporated Whatcom County, Washington. The Project site is adjacent to the BP Cherry Point Refinery. It is located approximately 15 miles north of Bellingham, Washington, 7 miles south of Blaine, Washington, and 8 miles south of the U.S.-Canada border.
- 30. The proposed site is located within a zone designated for Heavy Impact Industrial use.

Land Use Consistency

- 31. The Council is required to hold a public hearing to determine whether the proposed use of the site is consistent with county or regional land use plans or zoning ordinances at the time of the application. WAC 463-14-30. The Council held the required land use consistency hearing on December 9 and 10, 2003, in Bellingham, Washington, and on July 26, 2004, in Seattle, Washington.
- 32. During the July 26, 2004, hearing, the Council received a certificate from Whatcom County indicating that the Project is consistent with local land use plans and zoning ordinances. Representatives from Whatcom County also testified that the Project complied with Whatcom County land use plans and zoning ordinances. No testimony or evidence contradicted the certificate. In the absence of contradictory testimony, the

certificate provides prima facie proof of consistency and compliance with such zoning ordinances or land use plans. WAC 463-26-090. The Council finds that the proposed use is consistent and in compliance with the land use plans and zoning ordinances of Whatcom County.

Need and Consistency

- 33. There is a need for new electrical energy and generation capacity to meet future state and regional demands.
- 34. The project will benefit the state of Washington and the region by providing electricity at a reasonable cost, through high efficiency cogeneration. The Project will contribute to the diversification and reliability of the state's electrical generation capacity. The Project will minimize environmental impacts by generating electricity efficiently, reducing emissions at the adjacent Refinery steam host, and providing other mitigation measures.
- 35. The Project will provide economic benefits locally and state-wide, and will minimize environmental impact..

Air Quality

- 36. The Project is subject to federal and state air emissions control requirements: NOC Approval, PSD Approval, News Source Performance Standards, and air toxics standards.
- 37. The Project would be a major new source of air pollution under the PSD program because it has the capacity to emit more than 100 tons per year of any one of the following: nitrogen oxides (NO_x), carbon monoxide (CO), and particulate matter, or particulate matter less than or equal to 10 microns (PM_{10}).
- 38. Whatcom County and the immediate surrounding area is in attainment for all criteria pollutants, meaning that ambient air concentrations of all criteria air pollutants are below National and Washington Ambient Air Quality Standards.
- 39. The Applicant proposes exclusive use of natural gas for electric energy production and good combustion practice for VOC and PM_{10} emissions, except for minimal use of low sulfur diesel fuel in connection an emergency generator and fire water pump. VOC emissions shall not exceed 3.0 pounds per hour (lbs/hr) averaged over 24 hours per turbine with HRSG and duct burners. PM_{10} emissions shall not exceed 20.6 lbs/hr averaged over 24 hours per turbine with HRSG and duct burners.
- 40. The Applicant proposes to use Selective Catalytic Reduction (SCR) and catalytic oxidation as emission control techniques for NO_X and CO, respectively. The emission controls will be installed in each HRSG associated with each set of combustion gas turbine and HRSG duct burners. With the use of SCR, the NO_X emissions shall be limited to 2.5 ppm, averaged over three hours. Ammonia emissions shall not exceed 5 ppm, averaged over 24 hours, except for a short period of time during startup. CO

emissions shall be limited to 2.0 ppm, averaged over three hours during normal steady state operations.

- 41. The proposed emission controls are Best Available Control Technology for all criteria pollutants.
- 42. The Project's emissions of toxic air pollutants would result in concentrations that are below the Acceptable Source Impact Levels and are not considered to pose a significant risk to public health.
- 43. The Applicant's consultants have performed extensive air quality modeling to determine the impact of the emissions from the Project on ambient air quality. To be conservative, this modeling excluded the Refinery emission reductions, resulting from removal of three boilers. The modeling results show that, for each criteria pollutant, the maximum potential Project emission concentrations will be less than the U.S. EPA Significant Impact Levels, and thus would be considered to have an inconsequential effect on ambient air quality.
- 44. The Applicant's consultants have performed regional modeling to determine the effect of the Project's emissions on regional haze and visibility. The modeling indicates that the Project emissions will have no significant effect on visibility and regional haze.
- 45. Emissions from the Project will not cause Federal Class I increments to be exceeded. The Council has determined that the Project emissions will be consistent with making reasonable progress toward meeting the national goal of preventing any future, and remedying any existing, impairment of visibility by human-caused air pollution in mandatory Federal Class I areas.
- 46. The Applicant shall control fugitive dust emissions during construction, using Best Management Practices.
- 47. BP has agreed to decommission three utility boilers at the Refinery. Upon completion of the decommissioning, the certificate Holder shall provide EFSEC with written notification and assurances that those Refinery boilers have been decommissioned.
- 48. Through stipulation with the Counsel for the Environment, BP has agreed to fund one of two alternative air quality improvement projects: a Solar Connection School program, or a Commuter Trip Reduction program.
- 49. By providing steam to the adjacent Refinery, the Project will enable the Refinery to decommission three boilers. The Applicant has committed to removing three existing Refinery boilers within 6 months of the beginning of operations of the Project. The result will be a significant reduction in emissions from the Refinery. The Council concludes that, on balance, the Project would contribute to an improvement in regional air quality.

50. The Project will not adversely affect the ambient air quality in the airshed. The Council finds that the Project satisfies all requirements for PSD and NOC approval.

Water Quantity

- 51. The Project is expected to use an average of 2,244 to 2,316 gpm of water. The Applicant will purchase this water from Whatcom County Public Utility District No. 1 (PUD). The PUD has sufficient rights to withdraw water from the Nooksack River so that it can supply the Project as well as continuing to serve existing customers.
- 52. The Applicant has agreed to fund a water reuse facility to be implemented by the PUD. The project would allow 2,780 gpm of non-contact, once-through cooling water currently discharged from the Alcoa Intalco Aluminum Smelter to be reused at the Project and the BP Refinery.
- 53. Potable water required for drinking, personal washing and sanitation will be provided by the PUD or the Birch Bay Water and Sewer District.
- 54. The Council concludes that the Project's water supply will occur through certificated water rights held by the Whatcom County PUD. The council further concludes that the water reuse project will provide sufficient water for the Cogeneration Project, thus reducing the average amount of water withdrawn from the Nooksack River if both the Intalco Smelter and the Project were in operation.

Water Quality

- 55. The Project will discharge wastewater to the BP Refinery, where it will be treated along with Refinery wastewater before being discharged to the Strait of Georgia. Discharges from the Project shall be subject to the conditions of the Wastewater Disposal permit. The Refinery will need to amend its NPDES permit to allow for the additional waste stream from the Project.
- 56. Storm water from the project site shall be collected and routed to two retention ponds for treatment and discharge flow control. Stormwater collected from the generation facility site shall be routed to Stormwater Detention Pond 1, and then discharged to the wetland mitigation areas north of Grandview Road. Stormwater collected from the main laydown areas southwest of the intersection of Grandview and Blaine Roads, shall be routed to Stormwater Detention Pond 2, and then discharged to existing ditches west of the Project site. Any stormwater that appears to be contaminated shall be routed to the Refinery treatment system. Stormwater discharges shall be subject to the conditions of an NPDES permit.
- 57. The Project is expected to generate 1-5 gpm of sanitary wastewater. This wastewater shall be discharged to the Birch Bay Sewer & Water District.
- 58. Based on the evidence presented, the Council concludes that the Project will not adversely affect surface or marine waters.

Wetlands

- 59. The Project site and construction laydown areas will temporarily impact 4.86 acres of wetlands and permanently fill 30.51 acres of low value wetlands.
- 60. The Applicant proposes to restore and enhance the 4.86 acres of wetlands that will be temporarily impacted by Project construction, and to restore and enhance wetlands in two compensatory mitigation areas totaling 110 acres in size in order to compensate for the permanent fill of wetlands, in accordance with the proposed wetlands Final Compensatory Mitigation Plan.
- 61. The Project will be subject to a Clean Water Act Section 404 permit issued by the U.S. Army Corps of Engineers.
- 62. Based on the evidence presented, the Council concludes that the wetland mitigation offered by the Applicant, together with the additions under "Wetlands", supra, will compensate for the wetland impacts expected from the Project.

Wildlife

- 63. A moderate variety of native birds, mammals, reptiles and amphibians are expected to inhabit the grassland, shrubland, forested and wetland habitats in the project vicinity. However, the wildlife habitat characteristics associated with the project site do not provide conditions typically associated with high quality habitat for wildlife.
- 64. Overall, impacts on wildlife, habitat, and endangered species associated with the construction of the Project are expected to be small and are unlikely to result in significant adverse impacts with the implementation of the mitigation measures proposed by the Applicant.
- 65. The Council concludes that best management practices and mitigation implemented through the requirements of the wetlands Final Compensatory Mitigation Plan, the Wastewater Disposal and NPDES permits, and Sedimentation and Erosion plans required by the Site Certification Agreement, would be protective of fish and fish habitat.
- 66. The Project site is located approximately 1.65 miles west of the Birch Bay Great Blue Heron colony. BP and Whatcom County have entered into a settlement agreement addressing the Project's potential impacts to heron. With the requirements included in the settlement agreement, the Council concludes that the Project will not adversely affect the heron colony.

Climate Change / Greenhouse Gas Emissions

67. There is a consensus in the international scientific community that various byproducts of human activity, including carbon dioxide (CO₂) and other gaseous emissions produced by the combustion of fossil fuels, and emission of gases such as methane contribute to global atmospheric warming through the so-called "greenhouse effect." Although there remains an uncertainty with regard to the precise impacts and

speed of onset, it is well understood that global warming has potentially profound consequences for all people, including citizens of Washington State.

- 68. The state of Washington recognizes the need for power at reasonable cost. At the same time, it is the legislative policy of this state that the location and operation of power generating facilities, when properly regulated, produce minimal adverse effects on the environment, ecology of the land and its wildlife, and ecology of the water and its aquatic life.
- 69. The Project is fueled by natural gas, with the exception of minimal use of low sulfur diesel fuel. By burning natural gas, the operation of the Project could produce maximum potential annual emissions of 2.47 million metric tonnes of CO₂ at 100% operating factor. Actual emissions will depend upon how the facility is operated.
- 70. The Project is more efficient than other fossil-fuel generating facilities operating or under construction in the region, and will emit less CO₂ per unit of electricity produced than those other facilities.
- 71. As described above, BP has agreed to mitigate CO₂ emissions in a settlement agreement reached with the Counsel for the Environment.
- 72. The Council concludes that BP's proposed mitigation measures, including measures specific for greenhouse gas mitigation, strike a balance between encouraging the development of efficient generating facilities and recognizing that such thermal electric generating facilities impact the environment and are a source of greenhouse gas emissions.

Noise

- 73. The Project shall be designed to comply with applicable Washington State Environmental Noise Levels of WAC Chapter 173-60. The Applicant has incorporated various noise mitigation features into the Project design.
- 74. In addition, BP and Whatcom County have entered into a settlement agreement in which BP has committed to comply with more stringent noise limitations at five locations specified in the settlement agreement. BP and Whatcom County have also agreed upon a protocol for determining compliance with noise limits after the Project commences commercial operation. The SCA shall require noise monitoring pursuant to this agreed upon protocol. If, at any time, the Project is not in compliance with applicable noise standards, the SCA shall require investigation of the source of the noise and identification and implementation of mitigation measure to bring the Project back into compliance. In addition, the Certificate Holder shall implement the requirements under "Noise", supra.

Natural Gas Supply

75. The BP Project will be fueled by natural gas for power production, with minimal use of low sulfur diesel fuel in the emergency generator and firewater pump.

Natural gas is a non-renewable fossil fuel.

- 76. The design, construction, maintenance and operation of the 1400-foot natural gas supply pipeline shall comply with applicable state and federal pipeline regulations.
- 77. Compliance with applicable state and federal pipeline regulations adequately protects the environment and the safety of the population.

Seismic/Volcanic Hazards

- 78. The Project site is located within Seismic Zone 3. The risks associated with ground movement due to seismic activity were evaluated and found to be low. The seismic design criteria based on the 1997 Uniform Building Code (UBC-97) are conservative relative to the site-specific Probabilistic Seismic Hazard Assessment performed by the United States Geological Survey.
- 79. The Applicant proposes to design the Project in accordance with UBC-97 requirements applicable in Seismic Zone 3. The Council concludes that the Applicant has taken reasonable steps to address seismic risks.

Traffic and Transportation

- 80. In a Letter of Understanding (LOU) with the Washington State Department of Transportation (WSDOT), the Applicant has agreed to mitigate construction traffic impacts by installing a permanent traffic signal at the intersection of Grandview Road and Portal way, and to provide temporary left turn channelization on Grandview Road at the intersection with Blaine Road. The Council finds that the Letter of Understanding entered into by the Applicant with the WSDOT is deemed appropriate mitigation for all traffic impacts and the LOU conditions are included in the SCA.
- 81. The Council finds that the additional traffic that would occur during the operating phase of the Project is not material compared to existing traffic volumes, and therefore does not require mitigation.

Cultural and Archeological Resources

82. Based on the evidence and the appropriate laws and regulations, the Certificate Holder shall be required to comply with the requirements of "Cultural and Archeological Resources", supra.

Visual Resources/Light and Glare

83. Based on the testimony and evidence, the Applicant shall be required to implement the mitigation measures presented in its Application and testimony. The SCA shall also require the Applicant to prepare an aesthetics and landscaping plan.

Health and Safety/Public Services

84. Based on the testimony and evidence, the Applicant shall be required to carry out its agreed mitigation and the requirement under "Health and Safety/Public Services", supra.

Construction Clean-up/Construction Material Reuse

- 85. In accordance with the Stipulation and Settlement Agreement between Applicant and Counsel for the Environment, the Applicant shall be required to develop and implement a plan to reuse construction waste material and submit the plan to EFSEC for approval 90 days prior to start of construction.
- 86. Further, Certificate Holder shall comply with the Construction Clean-up requirements included in the SCA.

Site Restoration

- 87. WAC 463-42-655, as in effect the date of the Application, requires an Applicant to provide an initial plan for site restoration in sufficient detail to identify, evaluate and resolve all major environmental and public health and safety issues presently anticipated. The plan must address funding or bonding arrangements to meet site restoration or management costs.
- 88. The Applicant has outlined an initial site restoration plan in the Application. After the useful life of the facility, BP proposes that the equipment would be removed and the Generation Facility site would be converted to other industrial use.
- 89. The Applicant has entered into settlement agreements with both the Counsel for the Environment and Whatcom County that address site restoration. Under the terms of those agreements, the Certificate Holder shall submit for the Council's approval a more detailed Site Restoration Plan at least ninety (90) days prior to beginning site preparation. The Certificate Holder would also submit for the Council's approval a Final Site Restoration Plan within twelve (12) months following the termination of the Project, and the Final Plan would provide for the restoration of the Site within a reasonable time frame taking into account the restoration plan and anticipated future use of the Site.
- 90. BP and the Counsel for the Environment have agreed that the Certificate Holder should not be required to post a bond to secure site restoration so long as the Certificate Holder's Standard & Poor's credit rate does not fall below "BBB-/Stable or its Moody's credit rating does not fall below "Baa3/Stable." They have agreed that if the Certificate Holder's credit rating falls below those levels, the Certificate Holder must either provide a formal corporate guarantee from a corporate entity with a credit rate of at least those levels, or provide a bond to secure site restoration costs. The amount of the bond shall be determined at the time the Certificate Holder's credit rating changes as indicated above.
 - 91. Based on the evidence presented in these proceedings, the Council concludes

that the agreed upon provisions appropriately address future site restoration.

Term of the Site Certification Agreement

- 92. The Council finds that there is a benefit to the public in having permitted facilities ready to be constructed when it becomes known that additional generation is needed.
- 93. The Council finds that permits conditioning air, wastewater and stormwater discharges attached to the SCA contain requirements that they be updated periodically or must be extended if construction is not underway. This review process assures that current environmental standards are satisfied at the time the facility is constructed.
- 94. The Council therefore concludes that a ten year term to begin construction creates the balance necessary to protect the environment and the public as well as to recognize the need for facilities pursuant to the policy established in RCW 80.50.010.

CONCLUSIONS OF LAW

Based on the foregoing findings of fact, the testimony received,, and evidence admitted during the adjudicative and land use hearings, the environmental documents and environmental determinations made by the Council, the settlement agreements presented to, and approved by, the Council, and the record in this matter, the Council makes the following conclusions of law:

- 1. The Washington State Energy Facility Site Evaluation Council has jurisdiction over the persons and the subject matter of Application No. 2002-01, pursuant to Chapter 80.50 RCW and Chapter 34.05 RCW.
- 2. The Council conducted its review of the BP Application 2002-01 as adjudicative proceedings and land use hearings, pursuant to Chapter 34.05 RCW as required by RCW 80.50.090(3) and Chapter 463-30 WAC.
- 3. EFSEC is the lead agency for environmental review of BP's Application pursuant to the requirements of Chapter 43.21C RCW. Because the SEPA responsible official determined that the proposed action could have one or more significant adverse environmental impacts, an Environmental Impact Statement (EIS) was required. The Council complied with Chapter 43.21C RCW, Chapter 197-11 WAC, and Chapter 463-47 WAC, by issuing a Determination of Significance and Scoping notice, conducting a scoping hearing, issuing a Draft Environmental Impact Statement (Draft EIS) for public comment, conducting a public hearing and accepting written comments on the Draft EIS, and adopting a Final Environmental Impact Statement (Final EIS).
- 4. The Prevention of Significant Deterioration/Notice of Construction (PSD/NOC) air emissions procedure is established in Title 40 CFR Part 52. Federal rules require PSD review of new air pollution sources that meet certain criteria, which includes this Project. The Council is the PSD permitting authority for energy facilities, which are 350 MW or greater, sited in the state of Washington per Chapter 463-39 WAC. The

Council's permit contractor from the Washington Department of Ecology prepared a Draft PSD/NOC permit, which the Council issued for public comment. The Council has appended a Final PSD/NOC Permit as a part of the Site Certification Agreement. The PSD/NOC permit would become effective upon execution of the Site Certification Agreement by the Governor, and approval by U.S. Environmental Protection Agency, Region 10.

- 5. Pursuant to its authority under Chapter 80.50 RCW, the Council has jurisdiction over process wastewater discharges for energy facilities 350 MW or greater sited in the state of Washington. The Council's permit contractor from the Washington Department of Ecology prepared a Draft State Waste Discharge permit, which the Council issued for public comment. The Council has considered public comments received to the draft permit, and has appended a Wastewater Disposal permit as part of the Site Certification Agreement. The Wastewater Disposal permit would become effective upon execution of the Site Certification Agreement by the Governor.
- 6. The Council's procedure for National Pollutant Discharge Elimination System (NPDES) water permits is established in Chapter 463-38 WAC. State regulations require storm water discharges to surface waters or wetlands to meet certain criteria. The Council is the NPDES permitting authority for energy facilities 350 MW or greater sited in the state of Washington. The Council prepared a Draft NPDES permit, which the Council issued for public comment. The Council has appended a Final NPDES permit as part of the Site Certification Agreement. The NPDES permit would become effective upon execution of the Site Certification Agreement by the Governor.
- 7. Section 401 of the federal Clean Water Act, and the Washington State Water Pollution Control Act require that the Council consider the application of conditions to prevent adverse impacts to jurisdictional wetlands and waters of the state. Pursuant to Chapter 80.50 RCW, the Council is the regulatory authority for energy facilities 350 MW or greater sited in the state of Washington. The Council's independent consultant prepared a Recommendation for 401 Water Quality Certification Conditions, which the Council issued for public comment. The Council has included 401 Water Quality Certification conditions in the Site Certification Agreement, which it recommends the Governor execute.
- 8. The Council is required to determine whether a proposed Project site is consistent with county or regional land use plans or zoning ordinances. RCW 80.50.090; WAC 463-14-030. The Council concludes that the proposed use of the site is consistent and in compliance with county land use plans and zoning laws.
- 9. The legislature has recognized that the selection of sites for new large energy facilities will have a significant impact upon the welfare of the population, the location and growth of industry, and the use of the natural resources of the state. It is the policy of the state of Washington to recognize the pressing need for increased energy facilities and to ensure through available and reasonable methods that the location and operation of such facilities, so long as such facilities will produce minimal adverse effects on the environment, ecology of the land and its wildlife, and the ecology of state waters and

their aquatic life. RCW 80.50.010.

10. The Council concludes that the certification of the Cherry Point Cogeneration Project, as described in Application 2002-01, with requirements of the settlement agreements, will further the legislative intent to provide abundant energy at reasonable cost, with minimal adverse impact to the environment. At the same time, the mitigation measures and the conditions of the proposed Site Certification Agreement ensure that through available and reasonable methods, the construction and operation of the Project will produce minimal adverse effects to the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life.

ORDER AND RECOMMENDATION

Based on the findings of fact, conclusions of law, and the record in this matter, the Draft EIS and Final EIS, the Council issues the following Order.

- 1. The Council recommends that the Governor of the state of Washington approve certification for the construction and operation of the Cherry Point Cogeneration Project located in Whatcom County, Washington.
- 2. The Council orders that its recommendations as embodied in the findings of fact, conclusions of law and order, together with the Site Certification Agreement appended hereto, be reported and forwarded to the Governor of the state of Washington for consideration and action.

SIGNATURES

DATED and effective at Olympia, Washington, this day of October, 2004.			
James Oliver Luce, Chair			
Richard Fryhling, Department of Community, Trade and Economic Development	Hedia Adelsman, Department of Ecology		
Chris Towne, Department of Fish and Wildlife	Tony Ifie, P.E., Department of Natural Resources		
Tim Sweeney, Utilities and Transportation Commission	Dan McShane, Whatcom County		

NOTICE TO PARTIES: Administrative relief is not available through a petition for reconsideration.