

**BEFORE THE STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL**

In re Application No. 94-2

Chehalis Power Generating,
Limited Partnership
Chehalis Generation Facility

COUNCIL ORDER NO. 698

ORDER GRANTING SITE
SITE CERTIFICATION, ON
CONDITION

Nature of the Proceeding: This matter involves an application to the Washington State Energy Facility Site Evaluation Council for certification of a proposed site near Chehalis, Lewis County, Washington for construction and operation of a natural gas-fueled combustion turbine Facility to generate electrical energy. The Applicant, Chehalis Power Generating, Limited Partnership (Applicant or Chehalis Power) has requested the Energy Facility Site Evaluation Council (EFSEC or the Council¹) to issue a Site Certification Agreement for the Chehalis Generation Facility (CGF or Facility²) that would permit the construction and operation of two separate and identical combined cycle combustion turbine power generation units with a nominal maximum output of 230 megawatts each, for a total of 460 megawatts (MW). Both of the units are proposed as part of the Bonneville Power Administration's (BPA) Resource Contingency Program (RCP), which was developed to ensure that resources would be available to meet the highest potential regional load growth.

Procedural Setting: EFSEC's certification process for the CGF involved the review of Chehalis Power's application, hearings to determine if the proposal complies with local land use regulations, the adoption of an Environmental Impact Statement (EIS), the issuance of required permits, and both formal adjudicative and public comment hearings.

An adjudicative evidentiary hearing began on September 18, 1995, pursuant to notice duly given testimony was taken and exhibits entered. The hearing concluded on September 21, 1995. Counsel for the Environment (CFE), who is appointed by the Attorney General to represent the public and its interest in protecting the quality of the environment, participated in the hearing and filed a post-hearing brief opposing certification of the project. In addition the Critical Issues Council, (CIC), a group of concerned citizens who live near the proposed site and who were granted intervention by the Council, participated in the hearing and filed a post-hearing brief opposing certification. Evidence from the Applicant, CFE, and CIC was received in Olympia, Washington and Chehalis, Washington. Testimony from members of the public was taken at Chehalis, Washington. All intervenors, with the exception of the CIC, either settled with the Applicant prior to the hearing or chose not to participate in the hearing. The issues that remained unresolved at the close of the adjudicative hearing were argued in

¹ This order will also refer to EFSEC as "the Council". Other "councils" are relevant to the order, including the Critical Issues Council, an intervenor, and the Northwest Power Planning Council. Those entities will be referred to by their full names or by initials, and not as "the Council".

² A glossary of terms and acronyms appears at the end of this Order.

briefs submitted by the Applicant, Counsel for the Environment, and the Critical Issues Council. The Department of Ecology, which entered into a settlement agreement with the Applicant, also submitted a post-hearing brief.

Chapter 80.50 RCW directs the Council to prepare a written "report" to the governor recommending whether to approve or deny site certification. This Order, along with the Council's proposed Site Certification Agreement, including attachments, forms the Council's "report" and recommendation to the Governor.

Appearances: Applicant, Chehalis Generation Facility by Elizabeth Thomas, Thomas Eli Backer, and J. Alan Clark, Attorneys, Preston Gates & Ellis, Seattle; Counsel for the Environment, Thomas J. Young, Assistant Attorney General, Olympia; Washington Department of Ecology, by Ronald L. Lavigne and Mary Sue Wilson, Assistant Attorneys General, Olympia; Washington State Energy Office, by Thomas Prud'Homme, Assistant Attorney General, Olympia; Washington Department of Fish and Wildlife, by William C. Frymire, Assistant Attorney General, Olympia; Critical Issues Council by Allen T. Miller, Attorney, Connolly, Holm, Tacon & Meserve, Olympia, and John T. Mudge, President.

The Council: Council representatives who participated in this proceeding are the following: Chairman Fred Adair, citizen; Department of Agriculture, Walter Swenson; Department of Community, Trade and Economic Development, David McCraney; Department of Ecology, Ron Skinnarland; Washington State Energy Office, Doug Kilpatrick; Department of Fish and Wildlife, Jo Roller; Department of Health, Ellen Haars; Department of Natural Resources, Nancy Joseph; Department of Transportation, Gary Ray; Utilities and Transportation Commission, C. Robert Wallis; Lewis County, John Nacht; and the City of Chehalis, Mark Scheibmeir.

MEMORANDUM

The Council sets out its findings and conclusions upon contested issues and the Council's reasons and bases therefor in the memorandum portion of this document

I. INTRODUCTION

A. The Process

The Council is obliged to follow relevant Washington law in determining whether to recommend a proposed project to the Governor. The Council determined pursuant to RCW 80.50.090(2) that the Chehalis Generation Facility is consistent with local land use plans and regulations. The Council has conducted its review of the application as an adjudicative proceeding pursuant to Chapter 34.05 RCW as required by RCW 80.50.090(3).

The Council is also obligated to comply with Chapter 43.21C RCW, the State Environmental Policy Act, or SEPA. It has complied with that process by participating in the federal scoping process, commenting on the federal draft Environmental Impact Statement (EIS),

by issuing due and proper notice of adoption of the federal final EIS, by adopting the final EIS, and by issuing due and proper notice and holding a hearing on the adequacy of the federal EIS. Pursuant to RCW 34.05.452(5), the Council takes official notice of the Final Environmental Impact Statement (FEIS) that the Council adopted pursuant to RCW 43.21C.150 and WAC 197-11-610. Pursuant to RCW 43.21C.150, the Council has utilized the FEIS in lieu of a separately prepared statement before reaching this decision.

In conjunction with the adjudicative proceeding, the Council considered the applications for Prevention of Significant Deterioration (PSD) and National Pollutant Discharge Elimination System (NPDES) permits.

The Council viewed the proposed site and its vicinity with representatives of the parties in accordance with arrangements that were developed by the affected parties.

B. The Sponsor and the Project

The application for site certification was filed by Chehalis Power Limited Partnership (Chehalis Power), a Delaware Limited Partnership qualified to do business in the state of Washington. Chehalis Power will own the Chehalis Generation Facility (CGF). All of the partnership interests of Chehalis Power will be owned by CRSS Capital, Inc. either directly or through Chehalis Power, Inc. (CPI). CPI is a Delaware corporation, incorporated in August 1993, and is a wholly-owned subsidiary of CRSS Capital, Inc. CPI will be the sole general partner of Chehalis Power and will manage all of the affairs of Chehalis Power. CRSS Capital, Inc. is a wholly-owned subsidiary of CRSS, Inc., which is a wholly-owned subsidiary of American Tractebel.

The proposed CGF site is a 33-acre parcel of land located south of the City of Chehalis and east of Interstate 5 within the Chehalis Industrial Park. The proposed site is currently being used for agricultural purposes. Electricity produced by the Facility will be transmitted from the site via the Bonneville Power Administration's (BPA) existing Paul-Allston 500 kilovolt (kV) Line No. 1 to BPA customers. The Applicant has proposed that the Facility will be interconnected to the BPA transmission system through an onsite switchyard at the CGF and a short line connecting the power plant to BPA's larger transmission grid.

The Applicant proposes to use both reclaimed water and raw municipal water for cooling. Raw municipal water would only be used when reclaimed water is unavailable. The transfer of water to and from the Facility will require the construction of three water pipelines along a route approximately 5.5 miles long between the CGF and the City of Chehalis' (City) Wastewater Treatment Plant. Two of the proposed pipelines will supply water to the Facility for cooling purposes (one for reclaimed water and the other for municipal water), and the third pipeline will return the CGF's wastewater to the City's discharge line below the wastewater treatment plant.

Natural gas will be delivered to the Facility by a pipeline to be constructed by the Northwest Pipeline Company. Regulation of the proposed natural gas pipeline falls exclusively under the jurisdiction of the Federal Energy Regulatory Commission (FERC).

The CGF will be composed of two identical combustion turbine generation units and will produce electricity to be sold to BPA or other interested power supply customers. The combustion turbines will produce about two-thirds of the plant's electrical output. Exhaust gases from the combustion turbines will be used to produce steam in a heat recovery steam generator. The high energy steam will then be piped to a steam turbine in order to generate the remaining one-third of the CGF's output.

C. Public Appearances

The Council scheduled several hearing and meeting sessions in Lewis County to hear comments from and provide information to members of the public. These included the initial public information meeting and land use hearing, environmental scoping, a session in the adjudicative hearing specifically set aside for comment from members of the public on any matter related to the application, and a session devoted to comment on the proposal to adopt the final federal Environmental Impact Statement.

At the September 21, 1995, public hearing session in Chehalis, the Council heard comments from the following:³ Eugene Rosolie, Director, Green Power Project, Northwest Environmental Advocates, Portland, addressed water quality, need for power, air quality, greenhouse gases, and energy policy. John Bargel addressed the issues relating to the natural gas pipeline. Carol Bezy addressed economic issues. Duane Rader addressed issues regarding utilizing natural gas and site restoration. Degge Freeman addressed issues regarding water withdrawal and taxes. Barry Heid, City of Chehalis Public Works Director, addressed water discharge issues. John Mudge addressed issues regarding site location and power acquisition. Brian Dow, Lewis County Carpenter's Local 2127, addressed use of local workers. William Lotto, Executive Director of the Lewis County Economic Development Council, addressed CGF's benefits to the community. Richard DeBolt, representing the Twin City Chamber of Commerce, addressed economic impact. Peter West, on behalf of Renewable Northwest Project, addressed air issues. Peter Touhy addressed economic issues. Barbara Bishop addressed economic, light and glare, noise, traffic, and electromagnetic field (EMF) issues. Rose Spogen addressed water withdrawal issues. Robert Thode addressed water withdrawal and property rights issues. Saline Mudge addressed economic concerns. David Spogen summarized his feelings regarding EFSEC and the CGF.

Testimony supporting the CGF was heard by the Council at the September 21, 1995 public hearing by Scott Hamilton, Chehalis City Council Member and Chairman of the Lewis County Flood Control District; Gail Shaw, Chairman of the Chehalis Industrial Commission; Tom Jackson; Dave Frankovitch; Fred W. Rider, President of the Chamber of Commerce; Ted Sprague; William H. Fuller; C. A. Buck Hubberd, President of the Chehalis Industrial

³ In addition, parties' and consultants' comments addressed draft NPDES and PSD permits.

Commission; Bob A. Spahr, Chehalis City Council Member; Ed Merl; Ted Chytil; Larry Get; Thomas Bradley; John Alexander; Norman Forsyth; and Dennis Calkins.

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

Finally, the Council also received and considered written comments from members of the public in conjunction with its decision.

II. CONTESTED ISSUES

Many aspects of the Applicant's proposed project have remained uncontested by all intervenor parties. In fact, all of the intervenors except the CIC either settled before the hearing began or chose not to participate. The CIC and Counsel for the Environment, the remaining participants in the proceeding, contest several aspects of the proposed project. In addition, the Department of Ecology, while not actively participating in the adjudicative hearing, filed a post-hearing brief limited to a single issue.

A. Summary Arguments

The Applicant contends that the CGF represents a unique opportunity for the citizens of Washington to have access to sufficient power at a reasonable cost via a facility that has no significant adverse environmental impacts. In addition, the Applicant contends that residents near the plant will benefit from the jobs created by the Facility and the Applicant's commitment to use reclaimed water.

Counsel for the Environment argues that site certification should be denied because the CGF's potential environmental damage outweighs the need for the power the Facility will produce. CFE argues that the environmental impacts of the Facility outweigh need because (1) there is no need for additional power in Washington; (2) it is impossible to predict whether and when a need will develop; and (3) the environmental damage caused by the CGF will be extensive. In addition, CFE contends (4) the Facility will cause detrimental impacts to air quality, (5) the Facility will have a significant detrimental impact on the water quality and quantity in the Chehalis River, and (6) the Facility will have negative socioeconomic impacts on surrounding property values. If, however, the EFSEC grants site certification, CFE argues that the Applicant should be required to (a) use air rather than water cooling, and (b) mitigate CO₂ emissions.

The Critical Issues Council (CIC) also argues that EFSEC should deny site certification, contending that the CGF is incompatible with the proposed site. In addition, CIC presents several specific objections to various aspects of the Applicant's proposal. These are discussed separately below.

Finally, Ecology argues that the Council should make it a requirement for site certification that the Applicant treat the City's wastewater during the entire year, not just during the months it will be in operation.

In the memorandum portion of this Order, the Council will individually address the issues raised by the Applicant, Counsel for the Environment, Critical Issues Council, and the Department of Ecology.

B. Need for Power

The Applicant contended at an earlier stage in the proceeding that the Council is precluded from considering need for power for any purpose, being bound by a recitation in its enabling law that there is "a pressing need for abundant energy." RCW 80.50.010. The Council ruled in Prehearing Conference Order No. 3 that it could properly consider need for power when balancing the benefits of energy production with the costs of that production and when deciding the conditions and mitigation it will require of an applicant for site certification. It is therefore appropriate to consider whether, and under what circumstances, need for power may require the CGF to be built.

The Applicant argues that the Council should recommend site certification because the CGF is part of BPA's Resource Contingency Plan, which is designed to "ensure that the region does not commit to unneeded resources, while providing for a quick response if power is needed." The Applicant argues that the CGF will not be constructed until BPA completes the Section 6(c) process under the Northwest Power Act. This, the Applicant contends, will assure that BPA needs the CGF's power and that the project is consistent with the Northwest Conservation and Electric Power Plan.

CFE argues that it is "undisputed" that there is no need for power and, in fact, that there is currently a glut of power on the market. Citing testimony of Mr. King, a staff member of the Northwest Power Planning Council, CFE argues that current regional need is available from sources other than the construction of additional power plants. These include a Tenaska plant (on which construction has been suspended), improved efficiency of operation of existing plants, and power from mostly older California natural gas plants that have become more economically competitive because of declining natural gas prices.

CFE argues that the Applicant's reliance on BPA's RCP, which projects a future need for power, is flawed because (1) there is no guarantee BPA will execute the notice to proceed with construction of the CGF and (2) the balancing required under EFSEC's statute of need versus environmental damage must be based on the current need not on predictions of future need for power. Thus, CFE argues that EFSEC can only balance need against damage when there is a present measurable need for power.

CFE argues that predictions of future power needs are unreliable for the following reasons: (1) BPA's predictions are unreliable because BPA provides less than half of the electricity used in the Northwest; (2) The energy market is changing because of competition and

deregulation; and (3) There is no guarantee that the CGF will remain part of BPA's RCP, which expired in December, 1995, and may not be continued.

CIC argues that the Council should not rely on BPA's 6(c) process⁴ because BPA's option to purchase power from one of the Facility's units expired on December 31, 1995, and the Applicant is likely to sell the power to a party other than BPA.

The Council is satisfied that the Chehalis Generation Facility will not be built unless there is a need for the power it will produce. The Council notes that the Applicant has agreed with WSEO to a condition in the Site Certification Agreement that ensures a demonstration of need before construction begins. Even if BPA never exercises its option, other protections assure a demonstration of need. The Council rejects CFE's contention that immediate need must exist before an SCA may be authorized; siting potential projects is a valid way to assure abundant energy at reasonable cost when need exists. The Council is not relying on predictions of need to authorize construction, but actual evidence of need at the time construction begins.

The record shows that the plant which is optioned by BPA will not be built for Bonneville until it conducts a 6(c) process and determines that the project is both needed and consistent with the Northwest Power Planning Council's Power Plan. The Applicant and the Washington State Energy Office (WSEO) have entered into a settlement agreement authorizing and requiring Site Certification Agreement provisions addressing need for power. The settlement agreement requires the Applicant to provide evidence to the Council (1) that it has entered into one or more power purchase agreements that provide in the aggregate for the purchase and sale of at least 60 percent of the design capacity of the unit(s) being constructed, and (2) that such agreement(s) shall have a term of at least 5 years. The settlement agreement also requires that a buyer of more than 40 percent of the power must meet additional conditions aimed at assuring compliance with integrated resource plans⁵.

⁴ The "6(c) process is specified in the Pacific Northwest Electric Power Planning and Conservation Act at 116 U.S.C. Section 839(c). It requires BPA to study the need for additional electrical resources before acquiring them.

⁵ Section 3 of the settlement agreement states:

That with respect to any purchaser entering into a power purchasing agreement for more than 40 percent of the capacity of the generating unit, the following conditions are met:

- a. If a purchaser has developed an integrated resource plan as defined in 16 U.S.C. 2621(d)(7) & 2602(19), then the combustion turbine project must be of the type included in the purchaser's preferred resource acquisition strategy.
- b. If the purchaser has not formally adopted an integrated resource plan, then either (i) the purchaser must have reviewed commercially available supply and demand side resources, (ii) the purchaser must be located in the service territory of a utility that has an integrated resource plan meeting the criteria set forth in section I.B.6.a. above, or (iii) the combustion turbine project must be consistent with the priorities and principles expressed in the Northwest Conservation and Electric Power Plan promulgated by the Northwest Power Planning Council.

The Council finds that the terms of the Applicant's settlement agreement, which have been incorporated into the Site Certification Agreement (SCA), adequately address the issues of need and consistency. The Council concludes that the conditions and mitigation requirements contained in the SCA, the commitments in the application for site certification, and the settlement agreements will assure that the environmental effects of the Facility do not outweigh the need for the power the plant will produce.

C. Project Consistency with Land Use Laws

Under RCW 80.50.090, the Council must make a determination that the proposed project is consistent with local land use laws. On December 21, 1994, the Council determined that the CGF is consistent with Lewis County and the City of Chehalis' land use regulations. The CIC continues to challenge the Council's determination of consistency.

The CIC argues that the Facility is not a sound land use for the proposed site. CIC contends that the CGF is not consistent with the current residential and agricultural uses and other businesses would be a better fit for the site. Thus, CIC asks the Council to deny site certification so that another more suitable business may be located at the site.

The Applicant argues that Lewis County and the City of Chehalis have determined that because the CGF's proposed location is within an industrial park that has existing urban services, the CGF and its associated facilities are consistent with the Lewis County Comprehensive Land Use Plan's goals, policies and location guidelines (subject to completion of environmental review), and are consistent with the City of Chehalis' Comprehensive Land Use Plan. As such, under WAC 463-26-090, Lewis County's and the City of Chehalis' determination is prima facie proof of consistency and compliance with the land use plan absent a contrary demonstration. Since no contrary demonstration has been made, the Applicant argues that as a matter of law, the CGF is consistent with local land use plans and regulations.

The CIC argues that the proposed Facility is inconsistent with surrounding land uses such as light industrial, agricultural, and residential.

The statutory test, RCW 80.50.090(2), charges the Council with determining the consistency of the proposed project with existing land use plans and zoning ordinances. Moreover, it is apparent on viewing the site and from aerial and other photos, that the surrounding properties are commercial, industrial, and transitional. In addition, there are several residences in the immediate vicinity of the plant

The Council finds no reason to change its determination that the CGF and its associated facilities are consistent with local land use regulations. The Council received written determinations from local officials that, subject to the Council's environmental review, the project is consistent with local regulations. The matter has been resolved, and resolved appropriately.

D. The Appropriateness of the Chehalis Site for the Location of the Facility

The Applicant has chosen to locate the CGF on a 33-acre site within the Chehalis Industrial Park (Park). The Applicant argues that it chose this site because of the availability of reclaimed water; the designation of the Park for industrial use; the plant's proximity to load centers; and its proximity to existing natural gas pipelines and the electric transmission network. The Applicant points out that the Bonneville Power Administration (BPA) selected the CGF for its Resource Contingency Program (RCP) after two rounds of review, covering over 60 originally proposed projects. Both CFE and CIC argue that the Chehalis site is an inappropriate location for the CGF.

The Applicant argues that off-site alternatives for the CGF were analyzed by both BPA and Chehalis Power. The Applicant argues that BPA's RCP selection process compared the CGF with detailed proposals for 63 alternative projects, including coal, wind, and geothermal resources as well as gas-fired combustion turbines. The Applicant also argues that it considered a number of additional sites including some in the vicinity of Satsop, Washington, sites near the Centralia Steam Plant, and the nearby abandoned Pittsburgh Plate Glass (PPG) plant. The Applicant argues that all of these were rejected, for various valid reasons.

CFE argues that EFSEC should not recommend site certification because the Chehalis site is not appropriate. CFE argues that (1) there is insufficient water available from the Chehalis River and (2) the site is too close to surrounding residences. CFE also argues that the Applicant's analysis of alternative sites was inadequate.

CFE argues that the Applicant is required to analyze alternatives under WAC 463-42-645 and the State Environmental Policy Act (SEPA). CFE argues that the discussion of alternatives in the Application merely describes the criteria used to select the Chehalis site and does not identify potential alternative sites. CFE argues that the full extent of the Applicant's review of alternative sites consisted of it looking briefly at an unknown Satsop site and an unknown Centralia site, and, then, concentrating on the Chehalis Industrial Park.

CFE argues that the Applicant's discussion of alternatives is inadequate under the Washington State Supreme Court's interpretation of SEPA found in Weyerhaeuser v. Pierce County, 124 Wn.2d 26(1994)⁶. CFE cites Weyerhaeuser as requiring a description of the alternative sites or the precise location of the alternative sites and analysis specific enough to allow for meaningful comparisons. CFE argues that at the very least, the Applicant should be required to analyze the PPG site. CFE argues that the PPG site is superior to the site chosen by the Applicant because it is larger, more centrally located in the Chehalis Industrial Park, is not as close to residences, and because it is larger, it can accommodate larger buffers.

CFE disputes the argument that the Environmental Impact Statement issued under BPA's Resource Contingency Plan review provides adequate discussion of off-site alternatives.

⁶ The holding in Weyerhaeuser pertains to the adequacy of discussion of alternatives in a EIS issued for a proposed landfill.

CFE argues that BPA's analysis is not part of the record and thus is of no use. In addition, CFE argues that BPA's analysis was not directed at finding alternative sites for the CGF, but instead was directed toward consideration of other projects for selection in the RCP.

CIC also argues that the Applicant's analysis of alternative sites is inadequate. CIC argues that because BPA is the prime mover in the Facility, the CGF is of a public nature. As such, CIC argues that Chehalis Power should have conducted analysis of off-site alternatives. CIC further argues that the analysis done by the Applicant is cursory and superficial, consisting mainly of retroactive reasoning after the Chehalis site had been chosen and the issue of alternatives was raised.

On rebuttal, the Applicant responds that its post-hearing brief and evidence in the record demonstrate that its alternative analysis was more than adequate.

The Council finds that alternative locations have been adequately considered during BPA's Resource Contingency Review, the Applicant's review of alternative sites, and the preparation of the Environmental Impact Statement (EIS) issued for the Facility. The Council is not convinced that the CGF is a public project such as would be within the holding in Weyerhaeuser. Therefore, the Applicant is not required to conduct specific off-site alternative analyses. The Council notes that the PPG glass factory site CFE has suggested as an alternative was not available when the Applicant conducted its review of potential sites.

The Council concludes that the Chehalis site is an appropriate location for the CGF despite the challenges that have been raised against it. Adequate water exists from the City in the form of reclaimed and raw municipal water. The facilities for the transportation of electricity from the site, the transportation of natural gas to the site, and the transfer of water to and from the site can be easily obtained. The proposed location is in an area of industrial use and is appropriate for the construction of a power plant. The Council finds that residences near the proposed site will not suffer any significant negative economic effects resulting from construction and operation of the CGF. The Council also concludes that the Applicant will comply with the Site Certification Agreement and thus will perform adequate mitigation measures that protect local residences from adverse effects of the CGF.

E. Air and Water Issues

The principal environmental issues raised by the parties include those relating to air and water quality, the extent of emissions into air and discharges into water by the proposed Facility, and the consequences of those releases. The availability of water for plant purposes is also an issue. We will begin the discussion of contested issues by dealing with issues regarding available water; discussing the choice between air and water cooling; looking at the quality of discharged water; and concluding with a discussion of air impacts and the question of mitigating for carbon dioxide (CO₂) emissions.

1. Water Availability

The withdrawal of moderate amounts of water from the Chehalis River for use by the CGF was perhaps the most hotly contested issue during the adjudicative hearing. In order to reduce the CGF's use of raw municipal water, the Applicant has proposed to acquire and treat wastewater from the City of Chehalis. The Applicant has committed to using reclaimed water to meet its needs unless an insufficient supply of reclaimed water is available or operational conditions temporarily preclude the use of reclaimed water. In addition, the Applicant has entered into an agreement with the Department of Ecology that requires it to acquire surface water rights as a mitigation for the raw municipal water it acquires from the City.

The Applicant argues that its water use plan will benefit the Chehalis River and the Community because the treated outfall will be substantially better in quality than the prior discharge and better than the quality of the river water it enters. CFE and CIC oppose the Applicant's proposed use of reclaimed water and oppose some elements of the Applicant's agreement with the Department of Ecology. Ecology requests that the Council require the Applicant to treat the City's wastewater year-round.

The Applicant argues that its proposal to use reclaimed water serves the public interest and does something positive for its host community. The Applicant points out that the Department of Health, which has been assigned the leadership role in implementing reclaimed water statutes, has endorsed CGF's water plan because it will further water conservation and water policy goals, and it will provide substantial long-term regional benefits. In fact, the Applicant points out that Mr. Schlender, a program manager for Department of Health, views the project as possibly the first significant industrial user of reclaimed water.

The Applicant argues that it is committed to use reclaimed water to the extent it is available. Furthermore, the Applicant argues that its settlement agreement with the Department of Ecology provides a strong incentive to use reclaimed water because if it uses enough reclaimed water it will not need to purchase municipal water from the City. The Applicant argues that, at a maximum, the CGF will require 4.6 cubic feet per second (cfs) of water. The Applicant states that the plant will operate very little in the summer months and thus reclaimed water alone may meet its needs. The Applicant further argues that the purchase of municipal water will be limited further when additional reclaimed water becomes available as the city grows, i.e., the plant could have to purchase less municipal water overall and there would be additional months of the year where reclaimed water would become the sole source of water for the plant.

The Applicant argues that the Chehalis River will be protected by the Applicant's agreement with Ecology which amounts to a one-to-one offset for the plant's expected consumption of municipal water⁷. The Applicant points out that it has committed to acquire and dedicate 50 acre feet of surface water rights prior to operation of the first unit and promises to

⁷ Settlement Agreement Between Chehalis Power and the Washington State Department of Ecology, Exhibit 103 page 2 section A(1)-(5).

acquire up to an additional 103 acre feet of surface water rights to meet its expected use of municipal water during low flow periods for this unit. In addition, the Applicant's agreement requires it to acquire up to 374 acre feet of surface water rights to meet its expected use of municipal water by the second unit during low flows periods. The Applicant further argues that even without this mitigation measure, operation of the CGF would have no significant adverse impacts on flow-related characteristics of the Chehalis River, on fisheries resources, or municipal water service to other City customers.

CFE argues that the plant will need 3.0 cfs from the City's municipal water supply at times during the summer when adequate reclaimed water is not available. According to CFE this means that the Facility must purchase 3.0 cfs from the City to meet the Facility's total need of 4.6 cfs.; the balance of the Facility's demand being met by reclaimed water. CFE argues that the Chehalis River can ill afford to lose this water because it frequently fails to meet minimum instream flow requirements set by the State Department of Ecology. CFE cites Ecology's Initial Watershed assessment as stating that the river has been extensively over-permitted and that water rights plus claims exceed the critical low flow level by about 400 percent. The watershed assessment also states that "fish and wildlife habitat is impaired in various areas of the watershed due to seasonably low flows, high temperatures, and low dissolved oxygen concentrations."

CFE argues that the Chehalis River reaches a critical low level approximately every ten years of 58.9 cfs (called the "7Q10 event"). At the present time, the City's and CGF's withdrawals at the 7Q10 event will reduce the river to 58.9 minus 4.2 or 54.7 cfs. This, CFE argues, is dangerously close to the 50 cfs minimum allowed for the river under the City's water permit. CFE argues these numbers are more alarming when the growth forecast for the City over the next 20 years could result in a low flow of 52.1 cfs [58.9 cfs - 6.8 cfs (5.0 peak demand for the City and 1.8 cfs for the CGF at full capacity)].

CFE disputes the Applicant's suggestion that storing water can alleviate low flow problems and states that it is not good public policy. Additionally, CFE argues that growth estimates may be lower than actual growth, putting greater demands on water resources than are now expected. CFE also challenges the Applicant's reliance on 88 cfs as the 7Q10 event, both because it is based on complex mathematical calculations using very old data and because it is subject to different interpretations. CFE concludes that the Applicant has left virtually no margin for error when it comes to water use during the 7Q10 event.

CFE argues that several problems exist with the Applicant's and Ecology's water mitigation settlement agreement, including the following: (1) It is very difficult to determine if rights are in "beneficial use"; (2) It is not clear whether the retirement of rights that are in beneficial use will actually help the Chehalis River because you cannot expect that there will be a one-to-one correspondence between the water rights retired by the Applicant and the water it uses for the Facility; and (3) In general, the settlement agreement, at best, only shifts use for agriculture applications to industrial consumption without any real reduction of use and no net benefit to the river.

The Applicant argues on rebuttal that the settlement agreement with Ecology will protect against the CGF's potential impact on in-stream flows. The Applicant argues that under the agreement it must acquire 50 acre feet of water, regardless of whether it ever uses any municipal water during low flow periods. This, along with the other commitments made by the Applicant, allow the Applicant to conclude that the CGF will not harm the river's instream flows.

The Council finds that the operation of the CGF in accordance with the commitments made by the Applicant will not have a significant negative effect on the Chehalis River's instream flows. The Applicant has committed to using the City's reclaimed water in order to reduce the amount of water it will remove from the Chehalis River. In addition, the Applicant's proposal will somewhat reduce the amount of wastewater currently being released into the river. The Council is satisfied that the Applicant's settlement agreement with Ecology, which has been incorporated into its Site Certification Agreement (SCA), will adequately mitigate any reductions in instream flow that may result from the operation of the CGF. The Council finds no conclusive evidence suggesting the operation of the CGF will result in any significant negative impacts to the Chehalis River.

In order to assure that the commitments made by the Applicant are fulfilled, the Council has added language to the SCA requiring the Applicant to present to the Council evidence proving that any surface water rights acquired as part of the agreed to mitigation are in beneficial use. The Council has determined that the settlement agreement's language does not properly reflect the Council's jurisdiction, therefore the Council, not Ecology will review the surface water rights acquired under the settlement agreement.

CIC argues that the problem in determining the 7Q10 low flow (88 cfs versus 59 cfs) can be eliminated by gauging the Chehalis River. Thus, CIC argues that the SCA should be conditioned on gauging the river because "CPI possible usage is large and variable, depending on power requirements." CIC further argues that there are clams just a few inches below the surface of the Chehalis River. CIC contends that the clams could be eliminated by lower flow levels. Lastly, CIC argues that the SCA should include the following language found in the revised application: "CGF water use will be designed to meet the Chehalis River System minimum instream flow requirements, or offset CGF's impact levels, and maintain or improve river quality conditions."

CIC objects to specific parts of the Applicant's settlement agreement with the Department of Ecology. CIC contends that the Section III A(2) regarding the acquisition of water rights as mitigation is vague and impossible to administer. CIC argues that the settlement agreement should measure water in cubic feet per second, not acre feet. Therefore, CIC asks that CGF retire 2.9 cfs for both units (524 acre feet pumped over a 90 day period).

CIC also argues that the settlement agreement does not assure that the water rights retired by the CGF will have been in use during the critical time during the late summer. CIC further asks that any water right acquired by the Applicant should be verified as to current

use and the seller of such right should agree to forego drilling more than one new well exempt under the 5000 gallon per day limit.

In addition, the CIC asks that the following changes be made to the part III(3)(A)(4) of the settlement agreement requiring the Applicant to pay \$10,000 per year for 10 years to the Chehalis River Council: (1) The option to pay in materials and services should be eliminated; (2) CIC should be added as one of the parties who must agree to the terms of the provision; and (3) The Applicant should not be allowed to undertake a project or projects valued at \$100,000 to be completed within 10 years in lieu of funding the Chehalis River Council; (4) The Applicant should have no involvement in selecting the project(s) and (5) the Chehalis River Council must agree to spend the funds for projects benefiting the upper Chehalis River above Grand Mound after securing advanced approval from the Department of Ecology. Last, CIC argues that the CGF should be required to treat the City's wastewater year-round or, in the alternative, it should be required to use air cooling.

The Applicant argues that the changes CIC has requested be made to the settlement agreement with Ecology will not benefit the Chehalis River. The Applicant argues that the language requiring water rights acquired by Chehalis Power be dedicated to the Chehalis River by retirement or by other methods mutually agreed upon by the parties should remain because it provides flexibility to use Washington's Trust Water Rights Program. The Applicant argues that under this program, dedicated water rights are subject to greater oversight, not subject to relinquishment, and may only be used for certain purposes. As such, the Applicant argues that the river may be better protected under this program. The Applicant also argues that striking the language is pointless because the Applicant could not use the program if Ecology did not agree to its use.

The Applicant also disputes CIC's claim that the language in the settlement agreement with Ecology is vague by noting that Ecology, the agency responsible for administering water rights, helped craft the language and agreed to its final iteration. The Applicant further argues that CIC's request to add language requiring parties relinquishing water rights not to drill wells is not supported by any evidence in the record. The Applicant concludes that the Council and the public would not be well served if an agreement between the parties is allowed to be altered by CIC.

The Applicant argues that CIC's suggestion to substitute 58 cfs at the point of diversion for 165 cfs at Grand Mound as the low flow measurement under the settlement agreement is unworkable because: (1) There is no regulatory in-stream flow requirement at the City's point of diversion (WAC 173-522 sets 165 cfs as "low flow" for the Grand Mound); (2) There is no flow gauge at the City's point of diversion; and (3) CIC's choice of 58.9 cfs is based on the 7Q10 event which is an estimate of the lowest flow that would be sustained over a seven day period--not the same as an instream-flow. In fact, the Applicant argues that use of the 7Q10 event would probably result in Chehalis Power having to dedicate less water because the 7Q10 event occurs only about once every ten years.

The Applicant argues that the CIC's suggestion that the settlement agreement should use cfs instead of acre feet as a measurement is inappropriate. The Applicant argues that most surface water rights held for irrigation purposes contain limits on both instantaneous demand (cfs) and on annual volume (acre feet). As such, the holder of 1 cfs right could withdraw up to 1 cfs only until reaching the acre-foot limitation, and then would have to stop for the rest of the year. Moreover the Chehalis River is at low flow only about 20 percent of the year, and, thus, there is no need for increased flows during the other 80 percent of the year. However, expressing the obligation in cfs would effectively require Chehalis Power to dedicate water to the river 100 percent of the year. The Applicant concludes that at present, the settlement agreement's dedication requirements matches its consumption of untreated municipal water during low flow periods.

The Applicant argues that it should not be required to install a river gauge. The Applicant contends that the only reason for the gauge would be to ensure that Chehalis Power does not purchase or receive municipal water when such purchase or receipt would cause a violation of the City's 50 cfs in-stream flow requirement. Because this requirement applies to the City's exercise of its water right, the City should determine whether a gauge is needed, and if so, it may seek compensation from Chehalis Power. The Applicant further argues that the record reflects that it is extremely unlikely that Chehalis Power's purchase of water will ever bring flows below 50 cfs, even during a 7Q10 event. Lastly, the Applicant argues that because Chehalis Power will use reclaimed water during the critical summer months, a river measurement is irrelevant.

The Applicant argues that CIC has not presented any credible evidence substantiating its claim that clams will be harmed by the CGF's use of water. The Applicant further argues that its settlement agreements with Ecology and Fish & Wildlife provide for complete mitigation for potential impacts to all aquatic resources.

The Applicant argues that CIC's requested revisions to section III(A)(4) of the settlement agreement with Ecology should be rejected. The Applicant contends that the CIC's suggested revisions, are self-serving, lack evidentiary support, and will make Chehalis Power's ability to contribute to the most appropriate, cost-effective projects more difficult.

It is neither necessary nor proper for the Council to rewrite the settlement agreement between the Applicant and the Department of Ecology. The settlement agreement is the result of negotiations between the Applicant and the state agency with the greatest expertise regarding water rights and use. The Council declines to change the settlement agreement as CIC has requested.

The Council finds that the CIC has not presented any credible evidence to support its contention that river clams will be threatened by the CGF's use of water. Without any basis in the record supporting CIC's claims, the Council declines to consider whether appropriate mitigation is necessary.

With regards to CIC's request that the Applicant be required to install a gauge on the Chehalis River in order to properly measure instream flows in the Centralia Reach, the Council finds that such a gauge will be necessary in order to measure accurately the instream flow. The Council will direct the Applicant to consult with the City of Chehalis, Ecology, U.S. Geological Survey, and Council staff in order to determine the means by which the affected reach of the Chehalis River can best be gauged. The Applicant shall report to the Council the result of the consultation within six months after the execution of the Site Certification Agreement. The Council may then take whatever action it deems appropriate.

The Department of Ecology submitted a post-hearing brief in response to the Applicant's initial submission. In addition to the request that the Applicant treat the City's wastewater all year discussed above, Ecology presented non-substantive observations in its post-hearing brief.

The Department of Ecology urges EFSEC to adopt the language contained in its settlement agreement with the Applicant. In addition, Ecology responds to two points made by the Applicant in its first brief. First, Ecology points out that while the Applicant argues in its post-hearing brief that it is "committed to using reclaimed water" the settlement agreement makes the use of reclaimed water a requirement unless insufficient reclaimed water is available. Second, Ecology points out that it does not agree with the Applicant's statement that "even without the water right acquisition [required by the settlement agreement], the project would have no significant adverse impacts on flow-related elements of the river." Ecology argues that the Applicant has agreed to meet the requirements of the settlement agreement, regardless of whether any party proves that the Facility will impact flow conditions in the river.

The Council agrees that the language found in the Applicant's settlement agreement with Ecology, which has been incorporated in the Site Certification Agreement, makes the use of reclaimed wastewater mandatory unless supplies are insufficient or operational conditions at the treatment Facility temporarily preclude the use of reclaimed water. The Council finds it unnecessary to make a determination whether the Facility would have a negative effect on instream flows if the mitigation measures required under the Applicant's settlement agreement with Ecology are not met. This argument is moot because the Applicant has agreed to meet the requirements of the settlement agreement and these requirements have been incorporated into the Site Certification Agreement. The required mitigation measures will become part of the Applicant's permit and the Applicant must comply with the requirements to the Council's satisfaction.

2. Water Quality Issues

The Centralia Reach portion of the Chehalis River is currently experiencing water quality problems during certain times of the year stemming in part from wastewater released into the river by the City of Chehalis. The Applicant plans to treat and use the City of Chehalis' wastewater as its main source of cooling water. When sufficient quantities of the City's wastewater is unavailable, the Applicant proposes to purchase and use raw municipal water supplied by the City. The Applicant contends that the CGF will treat all the water it receives

from the City of Chehalis prior to use in the facility and will also treat all water discharged from the facility to the City's outfall.

The CIC argues that various salts and metals are concentrated in the evaporative cooling process and that the potential effects of these concentrated salts and metals have not been addressed. The CIC also challenges the CGF's plan to discharge treated wastewater, contending that because no additional pollutants can be discharged under the City's NPDES permit, the Council should not allow a new source of pollution.

CFE argues that the Chehalis River in the Centralia Reach is polluted and suffers elevated temperatures during the summer months, which contributes to a lack of dissolved oxygen. The Department of Ecology contends that any permit issued to Chehalis Power must be consistent with the Upper Chehalis River Total Maximum Daily Load study (TMDL study or TMDL) which would require that the discharge limits for BOD (Biological Oxygen Demand) and ammonia be zero, at least during the period May through October. In addition, CFE supports Ecology's recommendation that trees be planted along the Chehalis River to mitigate any temperature increase that may result from the plant's outflows.

The Applicant admits that the Chehalis Reach suffers from water quality problems. However, the Applicant argues that Ecology determined that the removal of the waste discharges during low flow period are more significant than the negative effects likely to be associated with the resulting reduction in flow. The Applicant argues that on balance, the removal of the effluent from the Chehalis River for use in the CGF is better than the City's current practice of returning water directly from the waste treatment facility.

CFE alleges three major flaws in the Applicant's argument that it will improve water quality in the Chehalis River by treating the City's wastewater: 1) the CGF has not committed to treating the City's wastewater during the summer months, the time of the greatest concern; 2) it is technically impossible for the CGF to treat the wastewater to the point where BOD and ammonia reach zero and, thus, the recommendations found in Ecology's TMDL study will not be met regardless of whether water is treated year round; and 3) from a policy perspective, it is wiser to allow the City to upgrade its wastewater treatment plant or move the outfall than allow the CGF to treat the water.

In its reply brief, the Applicant argues that water quality concerns raised by CFE are addressed in the revised draft NPDES permit.

In its post-hearing brief, the Department of Ecology disputes the Applicant's claim that the treatment of the City's wastewater will result in a net environmental benefit to the Chehalis River⁸. Ecology argues that unless the Applicant agrees to treat the City's wastewater during the critical low flow period of May through October it is impossible to make the

⁸ By Order No 5, the Council granted Chehalis Power's request to exclude a limited segment of the Department of Ecology's response to the Applicant's post-hearing brief. The portion struck disputes Chehalis Power's contention about the beneficial effect of this project on the Chehalis River. The Council did not consider the struck portions of Ecology's brief in resolving this issue.

determination that the plant will benefit the Chehalis River. Thus, Ecology argues that EFSEC should consider placing a requirement on CGF to remove the City's effluent from the River during May through October regardless of whether the plant is operating during this time.

The Applicant opposes Ecology's request that the CGF be required to treat the City's wastewater year round⁹. The Applicant contends that such a requirement would preempt the comprehensive process currently underway by the entire community affected by the Chehalis Reach's water quality problems. The Applicant further argues that Ecology's arguments should be rejected because they violate Ecology's express agreement not to seek additional mitigation under its settlement agreement with the Applicant. Last, the Applicant argues that it should not be required to fix water quality problems that are complex, broad, and not Chehalis Power's fault. The decision of how to deal with all the area's problems should and will be solved during the TMDL process and EFSEC should not preempt this comprehensive review.

The Applicant argues that Ecology attempts at pages 7-8 of its brief to rewrite its settlement agreement with the Applicant, and that the attempt should be rejected because WAC 463-30-310(6) only allows modification of a settlement agreement upon a sufficient showing, and only then before the record is closed. The Applicant argues that Ecology made no such request.

The Council finds that the NPDES permit it will issue for the CGF will assure that the Chehalis River is adequately protected. The Council is aware that the Chehalis River's problems cannot be effectively addressed until the City of Chehalis' and other dischargers long-term wastewater treatment plans have been resolved by an overall regional solution. The Council notes that the Applicant has agreed to take the City's waste water during low flow periods and when the plant is not operating. However, the Council concludes that it would be inappropriate to require the Applicant to fix the City's waste disposal problems. The Council declines to require the Applicant to treat the City's wastewater during the times it is not in operation but will rely on the Applicant to fulfill its commitment to the City to take waste water year round.

The CIC argues that several problems exist with the Applicant's plan to use the City's wastewater. First, CIC contends that because the Applicant has not agreed to clean the City's water year round, the City will either have to discontinue discharging wastewater into the Chehalis River or move the outfall below the Skookumchuck River in order to meet the pollutant levels determined by the TMDL study. Second, CIC points out that trace minerals may be concentrated by the evaporation process, possibly mixed with wastewater, and discharged in high concentrations. CIC contends that the concentration of these trace minerals has not been addressed by the Applicant.

The Applicant argues that the CIC's concern over the reuse of wastewater and the asserted "increase in toxicity" that the CIC believes will result is based on a misunderstanding of

⁹ At a NPDES Permit hearing on April 10, 1995, the Applicant stated that the CGF would receive and process treated water from the City of Chehalis Waste Water Treatment Facility all year, to the capacity of the CGF (approximately 3 million gallons per day) regardless of the CGF generating status.

the project. The Applicant points out that the wastewater resulting from operation of the Facility will be treated on-site and then discharged to the Chehalis River via the City's outfall. Chehalis Power plans to employ a variety of wastewater treatment techniques, including the use of a biological retention pond, pH adjustment, metal sulfite precipitation, coalescer filters, acid/caustic addition, and the addition of cooling tower make-up water. The water will not, as the CIC suggests, be discharged to the City's wastewater treatment plant and then sent back to the Facility. Thus, the Applicant contends, the CIC's argument on this point should be disregarded because it is based on a misunderstanding of the project.

The Council finds that CIC's contention of increased concentration of trace minerals does not represent a threat to the environment. With effective treatment as prescribed in the NPDES permit, the discharge is well within allowable standards.

Chehalis Power testified that the CGF will evaporate approximately 94% of the reclaimed water it uses, returning only 6% to the Chehalis River. Through treating and using water that has been reclaimed from the WWTP, the CGF will remove approximately 85-90% (by weight) of the BOD and ammonia contained in the WWTP's effluent. However, the CGF cannot practicably remove 100% of the BOD and ammonia that it receives from the WWTP and some BOD and ammonia will pass through to be discharged to the Chehalis River.

The CGF will be a benefit to the region by using the City's waste water as its water source rather than raw municipal water. For the CGF to provide a beneficial use of the City of Chehalis' wastewater the CGF must be able to run and discharge its wastewater. To require the CGF to meet the wasteload allocations for zero discharge of BOD and ammonia as determined by the TMDL study would eliminate the ability of the CGF to operate during the months of May through October.

In addition the Council recognizes its authority to provide regulatory oversight to the CGF as provided in Chapters 80.50 and 90.48 RCW. This regulatory oversight allows the Council to match the needs of the state with the requirements for wastewater discharge.

However the Council notes the NPDES permit requirements do not contemplate use of reclaimed water use by new energy facilities (e.g. new sources). This causes the Council to consider whether it is in the state's best interest to allow discharge from the CGF while using reclaimed water even though there will be residual BOD and ammonia in CGF's discharge which would violate the NPDES permit requirements.

In developing a condition for the CGF waste discharge the Council recognizes that the City wastewater treatment facility's NPDES permit is in the process of being revised. The City's draft NPDES permit requires a monthly average discharge of 20 mg/l for BOD and 17 mg/l for ammonia between the months of May through October. The Council also recognizes that the Department of Ecology issued Administrative Order No. DE 95 WQ-S395 which sets a schedule for the City of Chehalis to take certain actions over time to meet the Upper Chehalis River TMDL waste load allocations of zero discharge for BOD and ammonia during the period of low flow in the Chehalis River from May through October by the year 2003.

The Council finds it necessary and appropriate to require the applicant to work with the City of Chehalis, the Department of Ecology, and the Environmental Protection Agency to seek a regional solution to pollution problems of the Chehalis Reach. Until such regional solution is determined the Council finds it to be in the state's interest to allow the CGF to discharge BOD and ammonia in excess of the limits allowed under a NPDES Permit. The discharge of BOD and ammonia will be limited to 10% by weight of the discharge the City is allowed through its NPDES Permit. The CGF will also be required to reduce its discharge over time and reach the zero discharge of BOD and ammonia by the same date as the City's discharge.

The Council notes the intense concern over water quality and quantity in the Chehalis River. Accordingly, an early review of the water situation is specified in section II.E.4. below.

3. Air Impacts

The combustion of natural gas and oil by the CGF will result in the emission of several air pollutants. With the exception of Carbon Dioxide (CO₂), these pollutants will be regulated under both state and federal statutes and rules. The Applicant argues that these air emissions will be adequately controlled under these regulations. CFE argues that any emissions from the CGF are unnecessary because the power to be produced by the CGF is unneeded.

CFE points out that the Facility will emit large volumes of CO₂ (587,000 tons annually, or about .005 percent of the global annual increase, less what is absorbed by the environment). In addition, CFE argues that the Facility will emit significant amounts of Sulfur Dioxide (SO₂), Carbon Monoxide (CO), and Nitrogen Oxides (NO_x) --100 tons, 700 tons, and 700 tons per year respectively. CFE points out that these amounts are significant regardless of emission controls required under state and federal law. CFE cites the comment letter from the U.S. Department of Interior, National Park Service (Exhibit 126), which states that the Facility may threaten Olympic and Mount Rainier National Parks as further evidence of the Facility's effects on air quality¹⁰. CFE also argues that sulfuric acid emitted by the Facility when it is running on fuel oil instead of natural gas may result in health effects including tooth erosion, eye irritation and respiratory problems. CFE admits that, although SO₂ will be emitted in levels below what is considered to be a health hazard, any risks are unwarranted because the Facility is not needed.

¹⁰The U.S. Department of Interior, National Park Service (NPS) submitted a letter during the public comment period for the Prevention of Significant Deterioration (PSD) permit process. In this letter, the NPS argues that the Applicant's modeling for potential impacts to the Olympic National Park (ONP) indicate that impacts to ONP are greater than the NPS Class I increment significant levels for SO₂ and NO₂ for all averaging periods. The NPS also argues that impacts at ONP are greater than the proposed Class I significant levels found in EPA's draft New Source Review Reform package. NPS further argues that potential impacts of NO₂ produced by the CGF on the Mount Rainier National Park are greater than the NPS significance levels. In sum, NPS requests that the Applicant be required to include in its PSD application a cumulative analysis of potential impacts on aquatic and terrestrial resources at the Olympic and Mount Rainier National Parks.

The Applicant responds that impacts to air quality will be minimized through the use of natural gas and Best Available Control Technology (BACT) emission controls which are required by law. The Applicant contends that the CGF will result in no unacceptable adverse impacts to air quality and that all state and federal regulatory requirements will be satisfied.

The Applicant argues that the concerns raised by the National Park Service were considered during the Prevention of Significant Deterioration (PSD) regulatory process in June of 1995. The Applicant argues that the National Park Service's concerns are based on stale information that does not reflect Chehalis Power's current proposal. The Applicant argues that this issue is moot. The Applicant also states that its expert witnesses have concluded that the CGF will not have any significant impacts on Class I wilderness areas. The Applicant's witness, Mr. Eric Hansen, calculated that concentrations of PM₁₀ and oxides of nitrogen will be less than 5 percent of the Class 1 increments and that oxides of sulfur will be less than 30 percent of Class 1 increments affecting nearby Class I wilderness areas. Mr. Hansen concluded that these pollutants were a small fraction of the U.S. Forest Service's recommended levels for protection of sensitive vegetation, and that deposition of secondary aerosols from the Facility were "less than U.S. Forest Service (USFS) significance criteria for pristine areas." Mr. Hansen further concluded that the Facility's impacts on visibility and regional haze during normal operations are expected to be negligible. Thus, the Applicant contends that National Park Service's concerns have been addressed.

The Council acknowledges that on this record there may not be a present and immediate need for the power to be produced by the CGF. The Council finds, however, that the Facility will not be built until a need exists. Therefore, the Council is not convinced that any emissions would result from an unneeded project. Moreover, the Council finds that the permit it will issue under the Prevention of Significant Deterioration (PSD) program will assure that adequate emission controls are in place prior to operation of the CGF.

The Council has considered both CFE's and CIC's arguments regarding the comment letter submitted by the U.S. Department of the Interior, National Park Service. After reviewing the evidence presented during the adjudicative hearing and in the comments to the Applicant's PSD application, the Council finds Mr. Hansen's testimony to be credible and persuasive. The Council concludes that operation of the CGF with proper emission controls will not result in any significant impacts to the Class 1 wilderness areas, nor to the Olympic and Mt. Rainier National Parks. The Council will not require the Applicant to conduct the cumulative impact analysis requested by the Park Service in this proceeding, but reserves the authority to require such a study in a future PSD proceeding or as a part of pre-construction review.

4. Air Versus Water Cooling

Combined cycle combustion turbine plants require a coolant to condense steam turbine exhaust. Cooling may be accomplished either through the use of air or water cooling systems. Each process has its advantages and disadvantages. The Applicant has proposed the

use of a water-cooling system for the Chehalis Generation Facility. CFE argues that air cooling is more appropriate.

The Applicant's proposal calls for the construction and use of cooling towers to receive heated cooling water. Heated water will enter the towers from the top and will be sprayed downward through each tower, cooling as it descends from the effects of evaporation. Water that does not evaporate will be sent back to the Facility for reuse. In addition, a portion of the water will be discharged in accordance with a National Pollutant Discharge Elimination System (NPDES) permit because evaporation will cause a concentration of unwanted constituents. Finally, makeup water will be drawn into the system to replace both evaporation losses and waste water discharges.

CFE argues that if EFSEC recommends site certification, an air cooling system should be required to mitigate negative effects on the Chehalis River that stem from the withdrawal and return of water. CFE argues that water withdrawal will contribute to the further degradation of the river through decreasing flows, reducing fish habitat, and increasing the pollution problem the Chehalis River already experiences. CFE argues that the pollution problems include increased level of fecal coliform bacteria, increased temperatures, and increased BOD. CFE argues that these problems will not be fixed by the CGF because even under its plan to treat the City's water, these pollutants cannot be reduced to the levels indicated by the draft TMDL study.

CFE contends that the Applicant's objections to using an air cooled system (its additional cost, and depriving the City of assistance with its wastewater) are not justified. CFE argues that the Applicant has admitted that the capital costs of the air-cooled system are approximately equal to the costs associated with the construction of the water system. CFE thus argues that the Applicant's real concern is over the loss of efficiency which CFE contends will be only 1 percent during winter.¹¹

CFE also argues that the increased costs of operation that result from decreases in efficiency may be mitigated if the Applicant enters into a favorable natural gas purchase contract. CFE argues that because no natural gas purchase contract has been negotiated to date, the Applicant cannot argue that it is at a competitive disadvantage until a gas price has been set. Last, CFE argues that the Applicant's argument that requiring air-cooling will deprive the City of the opportunity to clean up its wastewater ignores the fact that even if the Facility treats the water it will not meet the TMDL's recommendation of zero ammonia and BOD. Thus, CFE argues that the Chehalis River may be better off if the outfall is moved out of the Centralia Reach.

The CIC argues that the TMDL study, the Initial Watershed Assessment issued by the Department of Ecology, proves that the Chehalis River does not meet minimum baseflow requirements several days each year. CIC argues that the Applicant has admitted that the

¹¹ The Applicant argues that the loss will be approximately 3 percent. CFE argues that this relates to operation in the summer when temperatures are higher.

operation of the CGF will increase the mean number of days below baseflows by 2.5 to 73.4, and the median will increase by 3 to 65 days. Based on these estimates, CIC argues that because the CGF will worsen an already marginal situation, air-cooling should be required.

In reply, the Applicant argues that undesirable features of the air-cooling alternative are so great, and the impact on flows even with water cooling is so minimal, that the air-cooling alternative should be rejected. The Applicant argues that the air-cooling system would increase construction costs by approximately \$10 million, reduce efficiency by 3 percent, increase air emissions by 3 percent, increase the Facility's size and visual impact, slightly increase the Facility's noise levels, and remove the benefits associated with reclaiming and reusing the City's wastewater.

After considering the increased air emissions that will result if air cooling is required, the availability of sufficient water, and the return of water rights required in Chehalis Power's settlement agreement with the Department of Ecology, the Council finds that water cooling is the preferred cooling alternative for this Facility. The extra visual impact of air cooling vis-à-vis water cooling would exacerbate the CIC's stated concerns regarding the visual impact of the CGF. The CGF's maximum water demand will be 4.6 cubic feet per second (cfs). The Applicant has agreed to use reclaimed water to satisfy the majority of its water needs. Only when sufficient quantities of reclaimed waters are not available to allow for normal plant operations will the Applicant purchase municipal water from the City. Under the terms of the settlement agreement between Chehalis Power and the Department of Ecology, which has been incorporated into the SCA, the Applicant will acquire 50 acre feet of surface water rights prior to beginning operation. In addition, the Applicant has agreed to acquire up to 103 acre feet for the first unit and 374 acre feet for the second unit, in order to meet its expected use of municipal water during low flow periods.

The Council concludes that the use of reclaimed water in conjunction with the commitments by the Applicant to acquire and dedicate surface water rights, will assure that the Chehalis River is adequately protected. The Council finds that using an air cooling system at this site would decrease the plant's efficiency, increase its noise levels, and increase the plant's visual impacts and would, therefore, create additional unnecessary adverse environmental impacts compared to water cooling. These include additional air emissions resulting from the decreased efficiency of the plant. Therefore, the Council finds that it would be counterproductive to require the Applicant to use an air cooled system.

As noted earlier, the Council expresses concern over Chehalis River water quality and quantity, with particular concern during low-flow periods. Accordingly, the Council will revisit the water situation 3 years from the date of approval of the Site Certification Agreement, or 9 months prior to commencement of plant construction, whichever comes first. During this period, the Applicant is urged to explore mitigation measures including possible additional sources of reclaimed water and water use minimization technologies.

5. CO₂ Emissions

Power plants such as the CGF that produce energy from the combustion of fossil fuels produce exhaust gases. One such exhaust gas that will be produced by the CGF is carbon dioxide (CO₂). CO₂ is considered a greenhouse gas because it traps infrared energy within the earth's atmosphere. In addition to CO₂, the CGF also produce a number of other greenhouse gases but in much smaller amounts.

Counsel for the Environment argues that the Applicant should be required to mitigate CO₂ and other greenhouse gas emissions. He presented evidence regarding the volume of greenhouse gases the plant will produce and the role the various gases may play in the warming of the earth. CFE's witness stated that the facility will produce about 587,000 tons of CO₂ per year; representing 0.4 percent of the CO₂ produced within the state of Washington each year and 0.005 percent of the present annual global increase¹². He contends that although the earth will absorb a substantial fraction of the CO₂ emitted by the Project, much of it will remain in the atmosphere.

CFE argues that, based on the evidence, 1,250 tons of CO₂ per year may be absorbed by one square mile of young forest. Assuming 40% of the plant's CO₂ is not absorbed by the earth, CFE urges that the Applicant be required to plant 280 square miles of young forest or, in the alternative, prevent a similar amount of forest from being cut down. CFE argues that WAC 463-47-110(d) and SEPA provide authority to the Council to mitigate CO₂.

The Applicant argues that neither federal or state law regulates CO₂ emissions. The Applicant contends that any effort by EFSEC to do so would be misplaced because it is a complex, international issue. The Applicant points out that under the Clinton Administration's Climate Change Action Plan, the CGF is a mitigation if it replaces less efficient, more polluting facilities. The Applicant argues that because there is no scientific consensus on the qualitative and quantitative impact CO₂ has on the environment, it will be impossible for EFSEC to formulate an appropriate offset for the CO₂ the CGF emits. Thus, the Applicant argues that a thoughtful, scientifically valid and comprehensive approach by agencies with appropriate jurisdiction would be superior to any efforts by the Council.

The Council finds that the evidence demonstrates that the threat of global warming is real. The Council further finds that greenhouse gases produced by the CGF will contribute to global warming. The Council finds that the CGF project uses the latest reasonable technology and that it will produce lower emissions of greenhouse gases than older natural gas combustion turbine facilities or other fossil fuel facilities. The Council finds, however, that there is uncertainty regarding how much the CGF's emissions will add to the greenhouse effect. The Council further finds that CO₂ is not a regulated pollutant. However, the Council believes that if it becomes one, it is likely to be regulated by the federal or state government under the Prevention of Significant Deterioration (PSD) permitting process or a similar program.

¹² For economic reasons, it is extremely unlikely that the Project will operate at full power during an entire consecutive twelve month period.

The issue is to what extent, if at all, the Council should now provide for the mitigation of greenhouse gases produced by the CGF.

The Council finds that although there is uncertainty in the scientific community regarding the rate of global warming and the effects warming will have on the environment, the threat of global warming to the quality of the environment that the Council has the duty to protect is substantial. The Council believes that the threat should not be ignored; that it has the authority to address the issues under RCW 80.50.010¹³; and that the Applicant should be required to explore mitigation.

The new technology and the relatively low emission rate for combustion turbines proposed for the CGF offer advantages over the use of older and other fossil fuel facilities. In considering mitigation proposals, the Council does not wish to place the Applicant at a competitive disadvantage within the power producing market.

The Council therefore will direct the Applicant to prepare a report to the Council upon the state of regulation regarding greenhouse gases at the time the report is prepared, and potential mitigation options that are available, identifying possible reasonable and economical mitigation proposals. The Applicant shall provide this report to the Council no later than one year before commencement of construction on each of the two plants. The Council encourages the Applicant to explore in the report innovative public or private cost-effective programs that will mitigate portions or all of the CO₂ produced by the CGF. The Applicant is encouraged to investigate low-cost conservation efforts that will reduce the production of CO₂ and other greenhouse gases emitted from other sources. The Council is willing to facilitate the Applicant's efforts. The Council encourages the Applicant to adopt mitigation measures that it identifies in its report.

Finally, if a federal or state mitigation program is implemented, the Council reserves the right to exercise its authority under that program, considering and appropriately crediting, if permitted by law, any measures that the Applicant has accomplished under this Order.

F. Socioeconomic Impacts

Throughout the adjudicative process the Applicant has contended that the CGF will have a positive economic effect on the community surrounding the Facility. CFE, on the other hand, argues that the positive economic effects of the CGF will be offset by the decline in value of the property surrounding the Facility. CIC also argues that the CGF will negatively affect the property values of nearby homes.

¹³ RCW 80.50.010 provides, in part, "It is the policy of the State of Washington . . . to ensure through available and reasonable methods that the location and operation of [energy] facilities will produce minimal adverse effects on the environment, . . ." The statute directs the Council to seek courses of action based in part on the premise that "operational safeguards are at least as stringent as the criteria established by the federal government", and states that the Council is to "preserve and protect the quality of the environment . . ." Emphasis is added. Chapter 43.21C, SEPA, also provides for the mitigation of adverse environmental effects.

The Applicant argues that the CGF will bring substantial positive economic benefits to the Chehalis area, with or without annexation of the site by the City of Chehalis. The asserted benefits include \$38 million from construction tax revenues and as much as a 50 percent decline in property tax rates. The Applicant asserts that local governments will incur few additional expenses as a result of construction or operation.

The Applicant contends that properties in the immediate vicinity of the Chehalis Industrial Park have historically increased in value at a faster rate than typical residential properties in other parts of Chehalis. The Applicant cites witness Daniel Marlarkey, Managing Director of the Seattle office of ECO Northwest, an economic consulting firm, who testified that the CGF is likely to have a positive effect on property values for nearby properties that are available or suitable for commercial or industrial use. Mr. Marlarkey further testified that property values will not be affected by the change in view because the market has already accounted for the existence of the Chehalis Industrial Park.

CFE argues that the Facility is located inappropriately close to residential areas -- those along Bishop Road within one-quarter mile of the site, and Ms. Hatfield's within 100 yards of the site. CFE argues that the location of the Facility will have a negative effect on property values. CFE further argues that the plans to buffer the Facility may not succeed because the site is so small that only limited buffering will be possible. CFE contends that the employment of about 20 people is too small to be of major significance; tax benefits are offset by the reduction in property values of nearby residences; and any tax benefits to Lewis County may be lost upon annexation of the site to the City. In sum, CFE argues that socioeconomic benefits are questionable.

CIC argues that the decline of property values for residents near to the CGF is an issue. CIC contends that the Applicant's witness, Mr. Marlarkey, is not an appraiser and thus his opinion regarding the effect of the project on property values should be disregarded.

The Applicant replies that the CGF will have a positive impact on the area regardless of whether the land is annexed by the City. In fact, the Applicant argues that the impacts will be more beneficial if the land is annexed. The Applicant accuses CFE of improperly characterizing the evidence regarding the number of persons the Facility will employ. The Applicant argues that the Facility will have total direct payroll for the operational workforce of more than \$1,000,000 per year (22 full time employees plus the equivalent of four full-time for routine maintenance). In addition, the Applicant argues that during construction the Facility will employ 100 full time workers, who will support 60-plus jobs in the local economy during two different 18 month construction phases. The Applicant argues that other benefits include an increase in the tax base, \$10 million a year in increased spending by CGF workers, and little to no effect on neighboring property values.

The Applicant disputes the CIC's contention that property values will decline as a result of the Facility. The Applicant points to the testimony of Barbara Bishop, who is seeking \$219,000 for her home when the assessed value of the property is less than \$150,000.

The Council finds that the record fails to prove that the Facility will have either a net positive or a net negative effect on surrounding property values. While the value of some properties near the Facility may decline in value for residential use, they may also increase in value as commercial/industrial property. The record is inconclusive on this point.

The Council finds that, overall, the Facility will have a positive economic effect on the local community. The CGF will result in additional jobs directly and indirectly related to the Facility, an increase to the local tax base, and the possible reduction of local taxes because of the increased tax base. The Council believes that the record proves that the CGF will be a benefit to the economic viability of the City of Chehalis and Lewis County.

G. Aesthetics

The Applicant proposed that all site areas not needed for CGF facilities, roadways, drainage or cooling ponds will be planted with trees and shrubs, including native species to the maximum extent feasible to provide visual buffering, and to provide feeding, foraging and nesting opportunities. Landscaped areas will primarily be located on the south perimeter between the Facility and Bishop Road, along the western perimeter south of the transmission lines, and on the eastern perimeter south of the cooling towers.

The Council finds that the Applicant's proposal is appropriate. In addition the exterior of major building components shall be painted with neutral, natural colors to reduce glare and enhance aesthetics. Chehalis Power will partially screen the Facility by placing screen walls around ancillary elements and planting dense evergreen trees along the northern and southeast property lines.

The Applicant will limit outdoor lighting to the level necessary to maintain safe conditions. Directional lighting will be pointed downward. Stair lighting will be manually engaged so that stairs will be unlighted when not in use.

The Applicant provided sufficient un rebutted evidence and the Council finds that operation of the CGF will not result in any odor detectable at or beyond the site boundary and that no off-site vibration will be discernible from operation of the CGF.

H. Noise

The Applicant provided sufficient un rebutted evidence and the Council finds that the CGF will not audibly increase noise levels during daytime hours for either industrial or residential neighbors, and that the CGF will have only a slight impact on noise levels during nighttime hours at nearby residential locations. The maximum increase in noise levels projected for any residential location is two decibels during nighttime hours.

The Council will require the CGF to be designed and constructed to meet applicable state and local noise standards. After Facility start-up, noise monitoring will be

conducted to verify model-predicted noise levels described in the Application. If necessary, additional mitigation measures will be developed. During construction, on-site construction equipment will use noise attenuation controls where feasible.

III. OTHER ISSUES

A. Duration of Certification

Because both site conditions and the technology of mitigation and energy production change over time, it is obvious that the Site Certification Agreement approved in this Order should not permit construction of the Chehalis Generation Facility to begin at any time indefinitely into the future.

The Applicant proposes a ten-year certification period, and suggests that during the latter half of the period it should certify before beginning construction that the conditions of the application are still current. The Council finds the basic suggestion to be acceptable, with minor modification providing for Council review to assure that environmental circumstances and technological advances are fully considered.

The Council approves certification to allow construction of either or both of the Chehalis Generation Facility units to begin at any time within ten years from the effective date of the Site Certification Agreement, with certain conditions. During the first five years following execution of the Site Certification Agreement, the site certificate holder must report to the Council six months before beginning construction any substantial relevant change, or verify the lack of substantial change in relevant environmental conditions, regulatory environment, or economically available technology that would require a change in the Site Certification Agreement.

After five years from the effective date of the Site Certification Agreement the certificate holder must report to the Council six months before commencement of construction and certify that the representations of the application, environmental conditions, pertinent technology, and regulatory conditions remain current, or identify any changes and proposes appropriate resulting changes in the Site Certification Agreement to deal with changes. Construction may begin only upon prior Council authorization, upon the Council's finding that no changes to the Site Certification Agreement are necessary or appropriate or upon the effect of any appropriate changes.

B. Site Restoration

The application fails to comply with WAC 463-42-655, requiring an application to contain an adequate initial Site Restoration Plan. Given the nature of this proposal and the relative scope and complexity of the Facility, the failure does not require rejection or delay of the application. Instead, the Applicant should be required to present its initial Site Restoration Plan six months prior to the planned commencement of construction. Doing so will allow the Council to review and approve the proposed initial Plan. The Plan must address site restoration in the

event construction is halted prior to completion of the Facility, and at least that element must be resolved and approved before construction may begin. The Site Restoration Plan will include a provision for financial guarantees to ensure site restoration will take place in the event of cancellation of the Facility either during or after completion of construction.

C. Settlement Agreements/Stipulations

The Council has reviewed the settlement agreements and stipulations entered between the Applicant and the various participants. It finds that those agreements are sufficiently supported and, with one exception, are consistent with the public interest and protective of the public health, safety, and welfare.

The exception relates to two provisions in the settlement agreement between the applicant and Ecology. In Section III(A)(3), the Council reserves the right to determine if water rights acquired by the applicant are in beneficial use instead of Ecology; and in Section III (A)(4), Lewis County shall be added as a party who must approve the applicant's proposed expenditures for water resource impact mitigation. These changes are necessary to reflect the Council's jurisdiction over the Project and to secure involvement of a local elected body in decisions affecting their jurisdiction and the public welfare.

D. Other Siting Requirements

The Council has reviewed the information presented by all parties in light of all the Council's rules on environmental effects and mitigation requirements. The Council has also completed the required review under the State Environmental Policy Act. The Council is satisfied that the impacts to aesthetics, visibility, odor, noise, cultural heritage, recreation, socioeconomics, and health and safety will be properly and sufficiently mitigated through procedures agreed to by the Applicant in the application and conditions of the Site Certification Agreement.

FINDINGS OF FACT

Having heretofore stated the Council's findings and conclusions upon contested issues and the Council's reasons and bases therefor, the Council now enters the following ultimate findings of fact and conclusions of law based upon the evidence of record and matters officially noticed. To the extent necessary and appropriate, the Council incorporates the above findings, conclusions, and reasons in the following statement of findings and conclusions.

The Applicant and the Application

Part 1: General

The Applicant, the Application, and the Application Review and Hearing Process

1. EFSEC, through its consultant Jones & Stokes Associates, Inc., prepared a preliminary site study for the CGF, at the request of Chehalis Power, pursuant to RCW 80.50.175. The preliminary site study was completed in April 1994.
2. On September 12, 1994, Chehalis Power filed an application for site certification (the Application), including an application for a PSD permit, with the Council. Chehalis Power seeks to construct and operate two natural-gas fired combined-cycle electrical generation units and associated facilities, designated the Chehalis Generation Facility (CGF).
3. EFSEC published notice of a public land use hearing and public information meeting that was held regarding the Application on November 9, 1994.
4. On December 12, 1994, the Council made a finding that the Chehalis Generation Facility is consistent with Lewis County's land use requirements and zoning ordinances and the City of Chehalis land use plans and zoning ordinances.
5. Chehalis Power filed an addendum to the Application entitled Air Cooled Alternative on March 13, 1995.
6. Chehalis Power revised certain pages of the Application on June 12, 1995.
7. Chehalis Power filed an NPDES permit application on June 30, 1995. In conjunction with that application, the Applicant revised several tables in the Application.
8. On July 10, 1995, the Council found the Application to be sufficient to begin an adjudicative hearing.
9. Council members, together with representatives of the parties, viewed the proposed site, including the water pipeline route and the vicinity of the generating unit site, on September 7, 1995. EFSEC published due and proper notice of the site visit.
10. EFSEC published due and proper notice of the adjudicative hearing commencing on September 18, 1995.
11. EFSEC published due and proper notice of the public hearing held on September 21, 1995 for the combined purposes of receiving comments on the draft NPDES and draft PSD permits, and to conduct the public hearing portion of the adjudicative hearing.

The Applicant

12. The Application for site certification was filed by Chehalis Power Generating, Limited Partnership (Chehalis Power), a Delaware Limited Partnership qualified to do business in the State of Washington. Chehalis Power will own the CGF. All of the partnership interests of Chehalis Power will be owned by CRSS Capital, Inc. either directly or through Chehalis Power, Inc. (CPI). CPI is a Delaware corporation, incorporated in August 1993, and is a wholly-owned subsidiary of CRSS Capital, Inc. CPI will be the sole general partner of Chehalis Power and will manage all of the affairs of Chehalis Power. CRSS Capital, Inc. is a wholly-owned subsidiary of CRSS, Inc., which is a wholly-owned subsidiary of American Tractebel.

Fees

13. Chehalis Power has paid all fees required by RCW 80.50.070 in conjunction with the filing of the Application that have been presented for payment to the date of this Order, pursuant to chapter 80.50 RCW and WAC 463-08-020.

Stipulated Agreements

14. On September 11, 1995, Chehalis Power and the Washington Department of Fish and Wildlife (WDFW) entered into a "Fish and Wildlife Resource Mitigation Agreement.", Ex. 101. Based on the commitments made by Chehalis Power in that agreement, WDFW stipulated to withdraw from the adjudicative hearing all issues that it had raised, as contained in Consolidated Issues List No. 3.

15. On September 11, 1995, Chehalis Power and the Washington State Energy Office (WSEO) entered into a settlement agreement. Ex. 102. Based on the commitments made by Chehalis Power in that agreement, WSEO stipulated to withdraw from the adjudicative hearing all issues relating to the need for the CGF and to consistency with the Northwest Power Planning Council's Power Plan and the Washington State Energy Strategy.

16. On September 14, 1995, Chehalis Power and the Critical Issues Council (CIC) entered into four settlement agreements addressing the deposition of sludge, water usage metering, use of groundwater and surface water runoff. Exs. 119; 120; 121; and 122.

17. On September 15, 1995, Chehalis Power and Ecology entered into a settlement agreement. Ex. 103. Based on the commitments made by Chehalis Power in that agreement, Ecology stipulated to withdraw from the adjudicative hearing all issues that it had raised, as contained in Consolidated Issues List No. 3.

Environmental Documentation

18. In September 1993, the Bonneville Power Administration (BPA) published a Notice of Intent to prepare an Environmental Impact Statement (EIS) on three proposed natural gas-fired combustion turbine projects, including the CGF. These projects are part of BPA's Resource Contingency Program (RCP).

19. The RCP is part of BPA's larger Resource Program, which broadly identifies alternatives for meeting the Pacific Northwest's future energy needs. Exs. 81 and 82. In 1993, BPA prepared an EIS on the Resource Program, which analyzes the environmental impacts of thirteen alternative "resource stacks" for meeting future energy needs. Ex. 83. The preferred alternative identified in the EIS, the "emphasize conservation alternative," includes the development of the "optioned" energy resources of the RCP. Ex. 83.

20. BPA's Resource Program was updated in 1994 and is now known as the Strategic Business Plan. Ex. 85. BPA prepared an EIS on the Business Plan that was issued in final form in June 1995. Ex. 80. Under the Business Plan, optioned resources remain a means for BPA to meet future needs for power. Ex. 80, p. F-52.

21. In February 1995, BPA issued a draft EIS on the RCP. Exs. 79 (Oster), p. 9, line 10; 87, and 134. The draft EIS was prepared pursuant to the National Environmental Policy Act (NEPA) and applicable regulations. The draft EIS analyzes the environmental effects of constructing and operating the three RCP energy facilities, including the CGF. Ex. 134.

22. Public hearings were held on the draft EIS in March 1995, including a hearing in Chehalis, Washington. Written comments were received through April 20, 1995. Exs. 135 and 79 (Oster), p. 9, lines 10-13.

23. BPA issued the final EIS on the RCP in November, 1995. The final EIS responds to public and agency comments received by BPA on the draft EIS. Ex. 136.

24. EFSEC independently reviewed the content of the BPA EIS for the Resource Program (Ex. 83), the Business Plan (Ex. 80), and the Resource Contingency Program (Ex. 136), along with the testimony and evidence admitted during the adjudicative hearing. In particular, EFSEC reviewed the analysis of alternatives contained in Exhibits 1, 6, 21, 79, 81, 82, 84 and 85. EFSEC determined that the materials meet EFSEC's environmental review standards and needs for the CGF.

25. EFSEC adopted the BPA EIS and related materials on January 30, 1996, pursuant to the requirements of Chapter 463-47 WAC and WAC sections 197-11-600, -610, -630, and -965. The notice of adoption was circulated and made publicly available. The Council gave due and proper notice of an opportunity to comment on its adoption of the FEIS. It received such comments at Chehalis on February 28, 1996. Considering the comments offered to it and the information identified above, the Council reaffirmed its adoption of the BPA FEIS at its regularly scheduled meeting of May 13, 1996. The Council takes official notice of the adopted documents.

Part 2: The Proposed Project

Project Description

26. BPA selected the CGF as one of three projects to option under BPA's Resource Contingency Program.

27. The CGF consists of two natural gas-fired combined-cycle combustion turbine generator units and associated facilities. Each generator will have a nominal output of 230 megawatts (MW). Each combustion turbine is expected to have a nominal power rating of 159 MW at average annual ambient temperatures and the associated steam turbine a rating of 80 MW.

28. The CGF's primary fuel will be natural gas, which will be delivered to a metering station on the eastern boundary of the site by an interstate gas line regulated by the Federal Energy Regulatory Commission (FERC).

29. In the event that natural gas is unavailable, the CGF will burn low sulfur (\leq 0.5 percent) No. 2 diesel fuel. Use of low sulfur No. 2 diesel fuel will be limited to 360 hours per year, per unit, or 720 hours per year.

30. Exhaust gases from the combustion turbines will produce steam in a heat recovery steam generator. The steam will be collected in a manifold and directed to a condensing steam turbine rated to produce a nominal 80 MW. The steam turbine will be provided with a steam extraction system to supply steam for a future steam host.

31. A circulating water system will provide cooling water to the steam turbine condenser and to a heat exchanger serving the auxiliary (closed) cooling water system. The heated circulating water will be sent to the cooling towers where temperature is reduced through evaporative cooling.

32. The CGF will use two sources of water supply for its process and cooling water: (1) reclaimed water from the City of Chehalis' Wastewater Treatment Plant, comprised of effluent from the City of Chehalis that has been treated to Class A standards for re-use and normally is discharged to the Chehalis River; and (2) municipal water from the City of Chehalis' Chehalis River Water Pumping Station. To the extent that reclaimed water is available, reclaimed water will be the CGF's primary water source. Municipal water will be obtained from the City of Chehalis through the City's existing water rights permit.

33. Once the reclaimed water reaches the CGF, Chehalis Power will treat it to Class A reclaimed water standards, as required by the Departments of Health and Ecology. The sludge produced through treatment of wastewater and from demineralizing feed water will be tested for hazardous or dangerous wastes, and if found, will be deposited at a site that is allowed by law to receive such material. Ex. 120, p. 1, lines 14-17.

34. Sanitary wastewater from the CGF will be discharged to the City of Chehalis' municipal sewage collection system in the industrial park and will be treated at the Chehalis Wastewater Treatment Plant.

35. The CGF will be interconnected to BPA's 500 kV transmission system through a new switchyard located at the CGF. The 500 kV switchyard will be connected into BPA's Paul-Allston 500 kV Line No. 1 through new transmission lines approximately 1700 feet long, following a route selected to minimize length and avoid significant adverse environmental impacts.

36. The CGF is designed to be fully dispatchable and displaceable, based on seasonal, annual or temporary need for power.

37. The CGF may be developed in two phases. The applicant expects that the first phase will consist of a single 230 MW combined-cycle generator unit. The second phase may add the second 230 MW unit.

Water Pipelines

38. The settlement agreement between Chehalis Power and WDFW provides a detailed discussion of the water pipeline construction methodology. Ex. 101.

39. As part of the CGF, three water pipelines will be constructed along an approximately 5.5 mile long alignment from the Chehalis Wastewater Treatment Plant and the Chehalis River to the CGF.

40. Two of the pipelines will supply water to the CGF for cooling purposes: one of these will convey reclaimed water from the Chehalis Wastewater Treatment Plant, and the other will convey municipal water from the Chehalis River Pumping Station located downstream of the Newaukum River confluence with the Chehalis River. A third pipeline will return wastewater discharge from the CGF to the City of Chehalis' discharge line, downstream of the Chehalis Wastewater Treatment Plant. The pipeline conveying reclaimed water will be of sufficient size and capacity to serve the reclaimed water needs of both turbine units.

41. The three pipelines will be parallel to each other and within a single corridor except for the northern-most portions of the two supply lines. The water pipeline route is mostly within existing rights-of-way, but departs from existing rights-of-way when necessary for environmental or engineering reasons. A detailed description of the rights-of-way appears in the application.

Site Characteristics

42. The CGF site is located within the Chehalis Industrial Park in Lewis County, Washington. Adjacent and neighboring properties are used for commercial, residential, or industrial purposes. The neighborhood is in transition from agricultural and some residential uses to commercial and industrial uses, and a number of nearby residences or onsite buildings

are used for commercial or industrial purposes. Some nearby structures appear to be used exclusively as residences.

43. The Facility site consists of a 33-acre open field currently used for agricultural purposes. The site is located south of the City of Chehalis and east of Interstate 5, with access from Bishop Road.

44. The CGF site is strategically located between the Portland and Seattle load centers and near BPA's transmission lines, the interstate gas pipeline and the Jackson Prairie natural gas storage field.

Part 3: Natural Environment

Land

45. The CGF site and water pipeline route lie on a nearly flat surface about 250 feet above mean sea level. Landslides or other forms of mass movement are unlikely to occur because of the gentle gradient of the land on which the Facility is located.

46. Four volcanoes in the region have reported historic activity. Lava flows and mudflows are unlikely to affect the CGF because of its distance from these volcanoes. However, ash carried aloft may reach the CGF location.

47. The CGF site is located in a seismic hazard zone. The CGF's design will comply with the Uniform Building Code requirements for a Seismic Zone 3 level of seismic protection.

48. Chehalis Power will develop an Erosion and Sediment Control Plan for CGF's construction and operation. Ex. 101, p. 7. Chehalis Power will use Best Management Practices for erosion and sediment control during construction, including such practices as detailed in the Application and in the settlement agreements between Chehalis Power and WDFW and between Chehalis Power and Ecology.

49. The CGF site is not located in a floodplain, as defined by the Federal Emergency Management Agency. The water pipeline route occupies portions of the 100-year floodplain where it crosses Dillenbaugh Creek and along Interstate 5. Construction of the water pipelines will occur during the dry season when it is unlikely that rivers and creeks will flood. Following construction, the water pipelines will not inhibit floodplain functions. Chehalis Power will minimize impacts at stream crossings and other areas within the 100-year floodplain and floodway to provide for adequate conveyance of flood waters, including the assurance of no significant rise in base flood elevations. No further mitigation is needed for impacts of the water pipeline route and construction in the floodplain.

50. The CGF will permanently remove approximately 33 acres of farmland from potential production. However, the CGF site has been planned for industrial use, and, therefore,

its removal from farm production will have a low impact. The settlement agreement between Chehalis Power and WDFW addresses and adequately mitigates the loss of farmland.

Air

51. The CGF is subject to federal and state air emissions control requirements: Notice of Construction (NOC) approval; Prevention of Significant Deterioration (PSD), which requires the use of Best Available Control Technology (BACT); New Source Performance Standards (NSPS); and visibility requirements and air toxic standards. The CGF, operating consistently with the PSD permit, will comply with all applicable air emissions requirements and will not result in any significant air quality impacts.

52. To demonstrate compliance with the applicable requirements, Chehalis Power used a combination of on-site monitoring and air emissions modeling. Actual site specific data was collected for 12 months on the relevant pollutants, providing an assessment of weather conditions and the current impacts of all existing sources of air pollutants in the vicinity of the CGF. This baseline monitoring information was used as an input to the emissions modeling, which evaluated the cumulative effect of adding the CGF to existing conditions.

53. A BACT analysis was conducted to evaluate pollution control technologies and operating practices. Based on the BACT analysis, Chehalis Power selected "advanced" dry-low NO_x (ADLN) combustor technology, in conjunction with natural gas as a base fuel, for emissions control. ADLN technology can achieve low NO_x emissions without the ammonia emissions from SCR technologies.

54. Use of natural gas as a base fuel results in lower emissions of air pollutants than does the combustion of any other fossil fuel. National policy encourages use of natural gas as a pollution control strategy.

55. Proper operation of the CGF and the ADLN technology will maximize the efficiency of the combustion process and minimize the emissions produced per unit of electrical energy generated. Losses of generating efficiency result directly in increases in emissions per unit of energy generated.

56. Emissions from the CGF will not exceed ambient air quality standards or the applicable PSD increments. Emissions will not impair visibility, or adversely impact soils, vegetation, or other air quality related values in National Parks or Wilderness areas. Toxic air pollutant emissions from the CGF are within allowable state and federal limits and are sufficiently low to protect human health and safety from potential adverse effects. The Council may request the Applicant to study the cumulative effects of emissions on National Park visibility in conjunction with future PSD permit renewals.

57. Operation of the CGF will result in the emission of carbon dioxide (CO₂). CO₂ is not regulated under federal, state or local laws or regulations. Although CO₂ emissions have

been associated with global warming, the relative impact of CO₂ on global warming is both uncertain and controversial.

58. Replacing electricity generated at plants using fossil fuels other than natural gas with electricity generated by natural gas-fired plants is a strategy approved by the Clinton Administration for reducing CO₂ emissions.

59. The threat of global warming is real and should not be ignored. The production and release of greenhouse gases pose a real threat to the quality of the environment that the Council has the duty to protect. Burdensome greenhouse gas mitigation, however, could place the Applicant at a competitive disadvantage within the power producing market and deprive the market of a very efficient power producing facility. Balancing the respective interests, and recognizing that emission technology will advance and greenhouse mitigation measures may be enhanced as time passes, the Council will impose no fixed requirement upon the Applicant. The Council will order the Applicant to provide a report to the Council no later than one year prior to each of the two plants coming on line, that presents and evaluates possible mitigation techniques, and concentrates on those techniques that can offer cost-effective mitigation measures. If a comprehensive federal or state mitigation program is implemented, the Council reserves the right to exercise its authority under that program, considering and appropriately crediting any measures required under this Order

60. Air emissions from the CGF will not have any significant adverse environmental impacts. This remains true if the cumulative impact of the CGF's emissions are considered together with existing sources of emissions in the CGF's airshed.

Water

61. The CGF is subject to several federal and state water quality requirements including a National Pollution Discharge Elimination System (NPDES) permit. The public interest will be served, and the environment will be preserved and protected, by establishment of interim effluent limitations and a compliance schedule for the CGF that are consistent with the schedule and interim limitations for the City in order to allow the CGF to use reclaimed water, and thereby reduce amounts of BOD and ammonia in conjunction with the NPDES Permit.

62. Chehalis Power will develop and implement a Storm Water Pollution Prevention plan for the CGF. The plan will incorporate Best Management Practices for stormwater management of on-site runoff, as set out in the Stormwater Management Manual for the Puget Sound Basin, February 1992 (WDOE 1992). Ex. 122, p. 1, lines 15-17.

63. An Environmental Protection Control Plan will be developed to control runoff during construction. Ex. 36, p. 3., lines 8-9.

64. Water pipelines will be hydrostatically tested. Ex. 101, p. 6.

65. At 100 percent operation of both units, the CGF's combined demand for reclaimed and municipal water will not exceed 4.6 cubic feet per second (cfs).

66. At 100 percent operation of both units, .3 cfs of water will be returned to the Chehalis River via the City of Chehalis' wastewater discharge outfall.

67. Chehalis Power will use reclaimed water from the City of Chehalis to meet its needs for process and cooling water. Chehalis Power may also purchase untreated municipal water from the City of Chehalis to meet its needs for process and cooling water, but will do so only when reclaimed water from the City of Chehalis is insufficient to meet such needs or when operational conditions at the CGF temporarily preclude the use of reclaimed water. Chehalis Power will take all practicable steps to minimize its use of untreated municipal water. Ex. 103, p. 2, lines 9-12.

68. Chehalis Power will seek additional sources of reclaimed water for use in the CGF. The Council has directed a review of the water situation in three years.

69. The CGF's use of reclaimed water will have a beneficial impact on certain water quality parameters in the Chehalis River through the consumptive use of wastewater that would be otherwise discharged to the river, and through treatment at the plant before being returned to the city's outfall.

70. The CGF will not use groundwater from wells for cooling or process water. Ex. 121, p. 1, lines 14-16.

71. Chehalis Power is not requesting that EFSEC issue it a water right. Instead, Chehalis Power will acquire any required water from the City of Chehalis (City). The City will supply this water under the City's existing water right permit for 15 cfs on the Chehalis River. The City's exercise of this right is subject to a 50 cfs in-stream flow requirement. The City has a reasonable expectation that it will be able to retain or perfect this water right in the amount of 15 cfs through installation of diversion and distribution facilities to serve expected growth.

72. Chehalis Power will not purchase or receive untreated municipal water from the City at any time when such purchase or receipt would cause the City to violate the 50 cfs in-stream flow requirement.

73. Chehalis Power's purchase or receipt of untreated municipal water from the City is unlikely to cause in-stream flows to fall below 50 cfs, even after taking into account the City's projected 20-year growth in demand for municipal water.

74. To protect against potential impacts on the Chehalis River from the use of municipal water during low flow periods (defined as flow below 165 cfs, as measured at Grand Mound), Chehalis Power will do the following: (1) prior to commercial operation of the first unit, Chehalis Power will acquire surface water rights of 50 acre feet; (2) as additional mitigation for operation of the first unit, Chehalis Power will acquire up to 103 acre feet of additional

surface water rights to meet its expected use of municipal water during low flow period; and (3) as additional mitigation for operation of the second unit, Chehalis Power will acquire up to 374 acre feet of surface water rights to meet its expected use of municipal water during low flow periods. Ex. 103, p. 2, lines 13-19.

75. Water rights acquired by Chehalis Power to protect against potential impacts on the Chehalis River from the use of municipal water during low flow periods will (1) be dedicated to the Chehalis River by retirement or other mechanism mutually agreed upon by Chehalis Power and Ecology; (2) be upstream from the point of the City of Chehalis' Chehalis River Pumping Station; (3) be in beneficial use; and (4) have priority dates earlier than April 9, 1976. Ex. 103, p. 2, lines 20-22. Ecology has the right to review and approve water rights acquired by Chehalis Power to ensure that said rights are consistent with these requirements. Ex. 103, p. 2, lines 22-24.

76. To further mitigate the potential impact of the CGF on water resources, Chehalis Power will undertake the additional mitigation measures set forth in Section III.A.(4) of the settlement agreement between Chehalis Power and Ecology. Ex. 103, p. 2, line 25 to p. 3, line 6.

77. Water use at the CGF will be metered, and the meter readings will be available to the public. Ex. 119, p. 1, lines 14-16.

78. Chehalis Power's plan for water use will not impair the availability of water to local residents using shallow wells.

79. Chehalis Power's plan for water use is consistent with the findings and recommendations of the draft Upper Chehalis River Dry Season Total Maximum Daily Load Study (TMDL Study), released in July 1994.

80. The settlement agreements between Chehalis Power and WDFW and between Chehalis Power and Ecology address water quality and quantity issues. By operating with a water cooling system that is consistent with these agreements, the CGF will have minimal adverse environmental impacts on water quality and quantity.

81. The Council's cumulative analysis of water impacts is derived from the TMDL Study, the low flow calculations, the watershed assessment and other information regarding municipal and industrial uses of the river.

Plants and Animals

82. The settlement agreements between the Applicant and WDFW and between the Applicant and Ecology contain detailed provisions for impact avoidance and minimization, mitigation measures and unforeseen habitat losses. By operating consistently with these agreements, the CGF will have minimal impacts on plants and animals.

83. The Applicant will conduct a fish and wildlife resource survey, specifically; updating prior surveys for bald eagles, red legged frogs and other candidate and listed species; (a) if required by EFSEC in consultation with WDFW and Ecology; (b) if construction of the CGF begins more than two years following the issuance of the Site Certification Agreement or, (c) if state resource agencies identify new information regarding these species. Ex. 101, p. 7.

84. Transmission lines will be designed and constructed to reduce the potential for raptor electrocution in accordance with the provisions of the WDFW agreement.

85. The Applicant will develop a plan for restoration of the construction area that includes provisions which address restoration, revegetation and noxious weed control measures. Ex. 101, p. 7.

86. All areas at the Facility site not needed for CGF facilities will be planted with trees and shrubs including native species to the maximum extent feasible, to provide feeding, foraging and nesting opportunities for wildlife species. Ex. 101, p. 8.

Wetlands

87. The settlement agreements between Chehalis Power and WDFW and between Chehalis Power and Ecology contain detailed provisions for impact avoidance and minimization, mitigation measures and wetlands. If the CGF is operated consistent with these agreements, then impacts to wetlands will be adequately mitigated.

88. The principles of impact assessment that will apply to all unanticipated impacts are, in descending order of importance: (a) avoid the impact wherever possible; (b) minimize the impact; (c) provide on-site, in-kind mitigation; and (d) provide off-site compensatory mitigation. Ex. 101, p. 12.

89. The water pipeline has been routed to minimize the crossing and disturbance of wetlands, waterbody ecosystems and other sensitive areas. Ex. 101, p. 9. As a result, a maximum of 12.7 acres of wetlands will be affected.

90. To avoid and minimize impacts to wetlands, Chehalis Power will develop a detailed construction management plan for the water pipelines and CGF site that is consistent with the provisions of the settlement agreements with WDFW and Ecology. Ex. 101, p. 2.

91. To mitigate for wetlands filled and lost, and for the loss of agricultural lands at the generating Facility site, Chehalis Power will enhance the stormwater detention areas and on-site landscaping in accordance with the provisions of the settlement agreement with WDFW. Ex. 101, pp. 8-9.

92. To mitigate impacts to the water pipeline corridor wetlands and uplands, Chehalis Power will generally locate its water pipelines in or along existing pipeline right-of-way corridors. Ex. 101, p. 8. Pipeline installation across Dillenbaugh Creek will be accomplished by

directionally drilling or boring and jacking methods to avoid impacts, where those construction techniques are feasible. Ex. 101, pp. 5-6 and 8.

93. Chehalis Power will monitor the success of wetland, riparian and upland revegetation annually. For restoration, creation or enhancement areas that do not meet applicable restoration criteria, Chehalis Power will undertake additional mitigation measures. Ex. 101, pp. 8-9.

94. Chehalis Power will develop a management plan that will assure the protection and enhancement of wildlife values on the lands that are acquired to replace lost wetland and upland wildlife habitat values. Ex. 101, p. 11.

Energy

95. The settlement agreement between Chehalis Power and WSEO contains detailed provisions relating to the need for power and consistency with the Northwest Conservation and Electric Power Plan Regional Power Plan (Power Plan) and the Washington State Energy Strategy. If the CGF is operated consistently with this agreement, it will be built only upon a sufficient showing of need for power and the consistency with the Power Plan and the Washington State Energy Strategy. Ex. 102.

96. A need for the power in the Northwest could develop quickly due to high levels of uncertainty regarding the operating constraints that have been and may be imposed upon the region's hydro-electric generating system; the economic viability of large, older thermal resources; and other variables affecting future loads and resources.

97. At least six months prior to beginning construction of the CGF, Chehalis Power will provide EFSEC with sufficient evidence to enable EFSEC to determine that Chehalis Power has satisfied its obligations under the WSEO agreement relating to need and consistency. Within three months after receiving such evidence, EFSEC will determine whether such obligations have been satisfied. EFSEC's failure to make an express determination within three months will be deemed to be a determination that the obligations have been satisfied. Ex. 102, p. 3, lines 3-8.

Part 4: Environmental Health and Safety

Noise

98. The CGF will not audibly increase noise levels during daytime hours for either industrial or residential neighbors, and the CGF will have only a slight impact during nighttime hours at nearby residential locations. Ex. 24(a) (Hansen), p. 11, lines 7-8; Ex. 36 (Seitzinger), p. 7, lines 4-15. The maximum increase in noise levels projected for any residential location is two decibels during nighttime hours. Ex. 24(a) (Hansen), p. 11, lines 7-10; Ex. 36 (Seitzinger), pp. 7-8.

99. The CGF will be designed and constructed to meet applicable state and local noise standards. After Facility start-up, noise monitoring will be conducted to verify model-predicted noise levels described in the Application. If necessary, additional mitigation measures will be developed.

100. During construction, on-site construction equipment will use noise attenuation controls where feasible.

Risk of Fire or Explosion

101. The risk of significant explosion during construction and operation is extremely low. Ex. 1 (Schattner), p. 12, line 12; Ex. 4 (Schattner), p. 15, lines 18-25. Chehalis Power will comply with all applicable federal, state and local regulatory requirements to minimize such risks.

102. The CGF is designed to minimize the risk of on-site natural gas explosions or gas pipeline ruptures through (1) reducing the pressures to those required at the pipeline source, (2) leak detection equipment, (3) multiple safety valve venting, and (4) automatic shutoffs and isolation.

103. Construction activities will be coordinated with local police, fire departments and emergency medical service providers to ensure access to all locations in the Facility site vicinity and along the water pipelines.

Releases or Potential Releases to the Environment

104. Chehalis Power will prepare a Spill Prevention, Control and Countermeasure (SPCC) Plan approved by a Professional Engineer that meets applicable requirements of 40 CFR 112 and that includes the amount and type of oil(s) to be stored at the Facility site, patterns of usage, transfer procedures and other factors that will indicate the magnitude of spill potential. The SPCC plan will also describe procedures for securing valves, type of gauges, dike size and design, site security, lighting, alarms, spill response materials and equipment, inspection procedures, personnel training, emergency procedures and spill notification requirements. It will also include location and topographic maps, diagrams of the storage tank, dike(s), piping, valves, transfer pad and other significant components of the oil storage and delivery system. Ex. 103, p. 4, lines 21-25.

105. All bulk oil storage tanks will be contained in a manner consistent with 40 CFR 112. Where containment is by a containment dike, a barrier will be installed that is sufficiently impervious to keep spilled oil from entering waters of the state following any failure of the primary containment. Design of the tank containment will address stormwater management and will be approved by a Professional Engineer. Ex. 103, p. 5, lines 2-4.

106. If the oil transfer or loading area is located outside of the storage tank containment area, the area surrounding the oil transfer pad will be adequately curbed and sealed

to prevent entry of any spilled oil into waters of the state. In the alternative, Chehalis Power may raise the loading area with drainage directed into the diked tank storage area. The approach selected will be approved by a Professional Engineer. Ex. 103, p. 5, lines 6-8.

Electromagnetic Fields

107. No party introduced evidence relating to electromagnetic fields.

Part 5: Built Environment

Land Use

108. The CGF site is located in an area designated as "heavy industrial" by the Port of Chehalis Comprehensive Scheme of Development.

109. The Council determined in Council Order No. 671 (December 19, 1994) that the CGF is consistent with and in compliance with applicable land use plans or zoning ordinances for Lewis County and the City of Chehalis. This determination was based on information provided by Mike Zengel of the County and Robert Nacht of the City.

110. Lewis County has an applicable comprehensive plan but no zoning ordinances. The CGF is consistent with the County's plan. The County has determined that, due to the CGF's location within an industrial park and existing urban services, the CGF is consistent with the goals, policies and locational guidelines of the plan, subject to completion of the CGF's EIS.

111. The City of Chehalis has zoning ordinances, and the portions of the pipelines that are within the City limits are consistent with these zoning ordinances. Pursuant to the Growth Management Act, the City has developed and submitted to Lewis County a proposed urban growth area, which encompasses the CGF site.

Light, Glare, Odor and Aesthetics

112. Chehalis Power will limit outdoor lighting to the level necessary to maintain safe conditions. Directional lighting will be pointed downward. Stair lighting will be manually engaged so that stairs will be unlighted when not in use.

113. Operation of the CGF will not result in any odor detectable at or beyond the Facility site boundary.

114. No off-site vibration will be discernible from operation of the CGF.

115. The exterior of major building components will be painted with neutral, natural colors to reduce glare and enhance aesthetics. Chehalis Power will partially screen the Facility by placing screen walls around ancillary elements and planting dense evergreen trees along the northern and southeast property lines.

116. All site areas not needed for CGF facilities, roadways, parking, drainage or cooling ponds will be planted with trees and shrubs, including native species to the maximum extent feasible to provide visual buffering, and to provide feeding, foraging and nesting opportunities. Landscaped areas will primarily be located on the south perimeter between the Facility and Bishop Road, along the western perimeter south of the transmission lines, and on the eastern perimeter south of the cooling towers.

Part 6: Additional Impact Analysis - Construction

117. Construction impacts are addressed throughout the Application and in the settlement agreement with WDFW (Ex. 101). No further mitigation for construction impacts is required.

Part 7: Emergency Plans

118. Chehalis Power will establish an emergency response plan for the CGF prior to completion of construction to ensure employee safety for on-site chemical releases, floods, earthquakes, medical emergencies, major power losses, fire, extreme weather, volcanic eruptions and bomb threats.

119. All personnel working at the CGF will receive special training on the handling of hazardous and dangerous materials. This training will be extended to the First Responders in the City of Chehalis and Lewis County on an annual basis. Special personnel and leak repair equipment will be supplied and maintained by Chehalis Power for such response teams.

Part 8: Socioeconomics

120. Construction and operation of the CGF will result in a variety of beneficial socioeconomic impacts in the form of additional jobs, increased spending in the local economy, and increased tax revenues. No mitigation is required for the CGF's impact on housing, population, income and employment, or property values.

121. The Facility site is unlikely to have a positive or negative effect on surrounding property values. The value of property in the vicinity of the Facility site has already taken into account the proximity of such property to the Chehalis Industrial Park, including existing industrial park facilities such as PPG, Fred Meyer and Circuit City, potential future industrial facilities, and BPA's high-voltage electric transmission lines.

122. The water pipeline route is unlikely to have a significant adverse effect on property values. The majority of the pipeline route lies within or adjacent to existing rights-of-way or utility corridors. The pipeline will not result in long-term visual changes or require significant changes in property use.

Part 9: Analysis of Alternatives

123. BPA considered numerous alternative locations and technologies in developing its Resource Programs, Business Plan, and Resource Contingency Program (RCP). In selecting the three projects optioned under the RCP, BPA based its selection, in part, on an analysis of the environmental impacts of over 60 alternative projects.

124. One reason BPA selected the CGF for the RCP is the CGF's high level of dispatchability and displaceability relative to other alternatives that produce non-firm power or are designed to operate in a baseload capacity, such as renewable resources, conservation, and other types of thermal generating resources. This high level of dispatchability and displaceability has a positive impact upon the region's ability to operate its electric power system in a manner that is consistent with protection of fisheries resources that are adversely affected by the operation of hydro-electric generation resources at certain times of the year. The CGF's high level of dispatchability and displaceability makes it better able to function as a back-up resource, available to meet unexpected or short-term needs for power, than could a resource utilizing an alternative electric generation technology, such as wind, hydro, coal, nuclear, geothermal or solar.

125. The CGF's location west of the Cascade Mountains and between the Seattle and Portland load centers reduces the region's current need to construct additional transmission facilities better than a similar project at an alternate location. The CGF's location also results in lower transmission line losses to serve the Seattle and Portland load centers than would result from a similar project in an alternate location.

126. Chehalis Power's use of combined-cycle combustion turbines results in higher efficiency, and therefore in lower emissions on a per-kilowatt hour basis, than would use of other fossil fueled combustion technologies.

127. Chehalis Power considered several alternative locations within and outside Lewis County but reasonably determined, based in part on consideration of environmental impacts, that the proposed location best suited the requirements of the CGF.

128. Chehalis Power considered in detail a number of on-site alternatives to the CGF. These on-site alternatives included, but were not limited to, a Facility using an air cooling system; a Facility relying (in part) on groundwater for cooling and process water; a Facility with a newly constructed wastewater discharge system and outfall; a Facility using artificially constructed wetlands for wastewater discharge; Facility configurations using a number of different wastewater treatment alternatives; and a Facility using dry low NO_x with selective catalytic reduction instead of ADLN to control emissions of NO_x.

129. The air cooled alternative would significantly reduce the efficiency and overall output of the CGF. The decreased efficiency would result in corresponding increases in environmental impacts that are associated with the amount of fuel that is burned. An air cooling system would result in substantially higher operating costs than the proposed water cooling

system. Air cooling would require more space, increase the visual impact of the CGF and increase the noise associated with the CGF. The air cooled alternative would preclude the CGF from helping to improve certain water quality parameters of the Chehalis River through the use of reclaimed water.

130. Under a no action alternative, the CGF would not be built and would therefore have no impacts. Because the CGF will not be built unless and until there is a need for power, if the CGF is not built when there is such a need it is likely that some other resource will be built. That other resource will have environmental impacts that are presently impossible to ascertain. Therefore, it is impossible to determine whether the no action alternative would have greater or lesser environmental impacts than the CGF.

Part 10: Historic and Cultural Preservation

131. No cultural resources have been identified on the Facility site or along the water pipeline route.

132. Chehalis Power will monitor construction for potential discovery of cultural resources to ensure their proper identification, evaluation, and, if necessary, mitigation.

Part 11: Transportation

133. The work schedules of CGF construction workers will be coordinated to the extent practical to avoid periods of peak traffic at the vicinity. The transportation of construction materials will be scheduled at non-peak traffic hours to the extent practical. Chehalis Power will provide adequate traffic control and signage, indicating closures and alternative routes.

134. Chehalis Power will conduct a transportation study prior to construction. Additional mitigation measures may be required following completion of this study.

135. Traffic impacts will be primarily limited to the construction phase of the CGF. No mitigation is necessary for effects on rail traffic, parking or traffic hazards.

Part 12: Public Service and Utilities

136. Impacts from the construction and operation of the CGF on schools, maintenance, communications, or other public services and utilities are minimal, and no mitigation is required. The revenue impacts of the CGF on public schools and public services are beneficial.

137. During construction, precautions will be used to ensure that excavations do not damage underground utilities, including communications cables.

Part 13: Certificate Duration

138. The Applicant is not expected to begin construction of either unit immediately upon execution of the Site Certification Agreement. The appropriate duration of the Site Certification Agreement entered pursuant to this Order is a maximum of ten years, *i.e.*, construction of any generation unit authorized in the Site Certification Agreement must begin within ten years of the effective date of the Site Certification Agreement. The interests of the public and the environment will be protected from unforeseen changes in conditions if, six months before beginning construction, the site certificate holder (a) during the first five years following execution of the Site Certification Agreement identifies to the Council any substantial relevant change or verifies the lack of substantial change in relevant environmental conditions, regulatory environment, or economically available technology, and (b) during the second five years certifies that the representations of the application, environmental conditions, pertinent technology, and regulatory conditions remain current, or identifies any changes and proposes appropriate resulting changes in the Site Certification Agreement to deal with changes. Construction may begin only upon prior Council authorization, upon the Council's finding that no changes to the Site Certification Agreement are necessary or appropriate or upon the effect of any appropriate changes.

Part 14: Site Restoration

139. The application does not contain an initial Site Restoration Plan. The certificate holder may cure the failure by presenting its initial Site Restoration Plan six months prior to the planned commencement of construction.

Part 15: Summary

140. Approval of all the settlement agreements and settlement agreements between Chehalis Power and WSEO, Ecology, WDFW and the CIC will promote the public interest.

141. Balancing the interests sought to be protected and promoted by chapter 80.50 RCW in light of all the evidence and environmental review documents, the Council finds that issuing Chehalis Power a site certificate for the Chehalis Generation Facility, as set forth in the attached draft Site Certification Agreement, will promote the public interest.

CONCLUSIONS OF LAW

Based on the foregoing findings of fact, the Council makes the following conclusions of law.

1. The Washington State Energy Facility Site Evaluation Council has jurisdiction over the parties to and the subject matter of this proceeding pursuant to Chapter 80.50 RCW and Chapter 34.05 RCW.

2. As set forth in Prehearing Conference Order No. 3, EFSEC has no jurisdiction over the natural gas pipeline.

3. As set forth in Prehearing Conference Order No. 3, EFSEC has no jurisdiction over the upstream impacts of withdrawing natural gas outside the state of Washington.

4. Application No. 94-2, as amended and as reflected in the attached draft Site Certification Agreement, complies with the guidelines contained in chapter 463-42 WAC for applications for site certification.

5. The settlement agreements and stipulations entered into between Chehalis Power and WSEO, Ecology, Fish and Wildlife and the CIC should be approved and should be incorporated into the Site Certification Agreement for the CGF. WAC 463-30-250.

6. Because the CGF uses high-efficiency gas-fired turbines, will only be built upon a showing of need and consistency, and is highly dispatchable and displaceable, the CGF will promote resource diversity and efficiency, and will help ensure availability of sufficient electrical energy resources. RCW 43.21F. 015(1), (2) and (3).

7. The conditions in the Site Certification Agreement will protect the interests of state and local governments and of the local community affected by the construction and operation of the CGF within the meaning of RCW 80.50.100.

8. The conditions in the Site Certification Agreement recognize and effectuate the purposes of the laws and ordinances, and of the rules and regulations promulgated thereunder, that are preempted or superseded pursuant to RCW 80.50.110. *See* RCW 80.50.100(1).

9. The terms, conditions and contents of the air emissions (PSD) permit contained in Attachment 3 to the Site Certification Agreement comply with the requirements of chapter 463-39 WAC.

10. The terms, conditions and contents of the NPDES permit contained in Attachment 4 to the Site Certification Agreement comply with the requirements of chapter 463-38 WAC. Effluent limitations and a compliance schedule for wastewater discharges of BOD and ammonia are hereby ordered and are contained in Attachment 9 to the Site Certification Agreement.

11. The proposed CGF site is consistent with and in compliance with applicable zoning ordinances and land use plans of the City of Chehalis and Lewis County, within the meaning of RCW 80.50.020(15) & (16), RCW 80.50.090(2), and chapter 463-26 WAC.

12. Chehalis Power's proposed construction and operation of the CGF constitutes an "action" and is not "categorically exempt" from the State Environmental Policy Act (SEPA) within the meaning of WAC 463-47-060.

13. EFSEC is the SEPA lead agency for the proposed action. As Council Manager, Jason Zeller is the SEPA responsible official. WAC 463-47-051.

14. Because the SEPA responsible official determined that the proposed action may have a probable significant adverse environmental impact, an environmental impact statement (EIS) is required.

15. EFSEC may satisfy the SEPA EIS requirement by adopting existing environmental documents prepared under NEPA. WAC 463-47-020; WAC 197-11-610. This approach is encouraged by EFSEC's rules. WAC 463-47-150.

16. The environmental documents and other materials adopted by EFSEC are adequate and meet all of EFSEC's responsibilities under SEPA, satisfying the requirements of Chapter 43.21C RCW, Chapter 463-47 RCW and Chapter 197-11 WAC. The adopted documents reasonably disclose, discuss and substantiate the probable significant adverse impacts of the CGF and alternatives and describe potential measures to mitigate those impacts.

17. The cumulative impacts of the CGF are adequately addressed by the adopted environmental review and mitigated by the conditions contained in the Site Certification Agreement.

18. It is not necessary for the Council to determine whether the CGF constitutes a "public project" or a "private project" within the meaning of WAC 197-11-440(5)(d), because the environmental documents and other materials adopted by EFSEC contain detailed discussions of on-site alternatives (including but not limited to water cooling), off-site alternatives (including but not limited to alternate locations and alternate technologies) and the no action alternative to the CGF. This discussion is sufficient to satisfy the requirements of RCW 43.21C.030 and chapter WAC 463-47, even as to a public project.

19. The CGF's use of reclaimed water is consistent with the Water Reclamation and Reuse Interim Standards issues by the departments of Health and Ecology. Chapter 90.46 RCW; SSB 5606 (1995 Laws, Chapter 342); Ecology's "Policy on Water Rights for Reclaimed Water." Ex. 30.

20. The CGF's use of reclaimed water is consistent with the antidegradation policies contained in the state Water Resources Act and Water Pollution Control Act. RCW 90.46.005.

21. The CGF's use of reclaimed water and Chehalis Power's acquisition of water rights will enhance the public's opportunity to enjoy the aesthetic and recreational benefits of the Chehalis River. RCW 80.50.010(2).

22. Given the nature of this proposal and the relative scope and complexity of the Facility, the Applicant should be allowed to comply with WAC 463-42-655 by presenting its initial Site Restoration Plan (Plan) six months prior to planned commencement of construction and allow the Council to review the proposed initial Plan before beginning construction. The

initial Plan must address aspects of site restoration, including funding, in the event construction is halted prior to completion of the Facility, and at least that element shall be resolved and approved before construction may begin.

23. The mitigation measures contained in the Site Certification Agreement and in the Application provide mitigation for probable significant adverse impacts that may result from construction and operation of the CGF.

24. The CGF will promote beneficial changes in the environment by promoting flexible operation of the region's hydro-electric generating system. Chehalis Power will also promote beneficial changes in the environment by implementing the "Further Mitigation Measures" set forth in Part V of Attachment 6 to the Site Certification Agreement. RCW 80.50.010(2).

25. Granting site certification upon the terms contained in the draft Site Certification Agreement is consistent with the Council's policy to avoid or mitigate adverse environmental impacts. WAC 463-47-110(1)(a).

26. Granting site certification upon the terms contained in the Site Certification Agreement is a practicable means of promoting the objectives contained in WAC 463-47-110(1)(b).

27. Granting site certification upon the terms contained in the Site Certification Agreement is consistent with each person's right to a healthful environment and each person's responsibility to contribute to environmental preservation and enhancement. WAC 463-47-110(1)(c).

28. In imposing the conditions contained in the Site Certification Agreement, the Council is giving appropriate consideration to presently unquantified environmental amenities and values, as well as economic and technical considerations. WAC 463-47-110(1)(d).

29. Construction and operation of the CGF consistent with the terms of the Site Certification Agreement will produce minimal adverse effects on the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life. RCW 80.50.010.

30. The Site Certification Agreement should be approved at this time, despite the fact that there may not be an immediate need for the CGF's power. The Site Certification Agreement prohibits construction until Chehalis Power demonstrates that the CGF's power is needed and that the project is consistent with certain power planning documents. RCW 43.21F.015(7); RCW 80.50.010; WAC 463-14-020. The Site Certification Agreement will allow construction to begin within ten years of the Site Certification Agreement's execution, with appropriate conditions as set out in Finding of Fact No. 138 to assure that the terms and conditions of the Site Certification Agreement remain sufficient to protect the public and the environment. The

Site Certification Agreement should provide that Council authorization be required prior to beginning construction.

31. Having balanced the demands for energy Facility location and operation with the broad interests of the public, the Council recommends that the Governor of the State of Washington approve the attached Site Certification Agreement between the State of Washington and Chehalis Power to permit construction and operation of the Chehalis Generation Facility. The binding effect of the Site Certification Agreement is contingent upon execution by the Governor of the State of Washington and Chehalis Power.

RECOMMENDATION AND ORDER

Based on the foregoing findings of fact and conclusions of law, the parties' briefs, and the record in this matter, the Council issues the following Order:

1. The Council hereby Reports to the Governor of the State of Washington that Application No. 94-2 as amended for Site Certification for the Chehalis Generation Facility is in compliance with applicable laws and regulations.

2. The Council recommends that the Governor approve the attached Draft Site Certification Agreement, with all Attachments, upon the terms and conditions set out therein, and in so doing approve the certification of the Chehalis Generation Facility Site for construction and operation of the Chehalis Generation Facility.

3. This Report and Recommendation, along with the attached Draft Site Certification Agreement and its Attachments, shall be and the same are hereby forwarded forthwith to the Governor of the State of Washington for his consideration and action.

NOTICE TO PARTIES

This is a final order of the Council. In addition to judicial review, administrative relief may be available through a petition for reconsideration, filed within ten days of the service of this order, pursuant to RCW 34.05.470 and filed with the Council Manager pursuant to WAC 463-30-335.

Glossary of Terms and Acronyms:

The following descriptions and definitions are presented to assist the reader in following the foregoing text while accommodating the Council's need for manageable word volumes.

6(c) process	Section 6(c) of the Pacific Northwest Electric Power Planning and Conservation Act of 1980 outlines a process which requires the Bonneville Power Administration to determine if acquisition of a major energy resource is consistent with the Act.
7Q10	The seven-day low flow with an average recurrence of 10 years.
BACT	Best Available Control Technology, required for new sources of air emissions under federal and state law.
BOD	Biological Oxygen Demand, a measure of water quality.
BPA	Bonneville Power Administration, a federal agency seeking an option to purchase power from the proposed Facility in the event the power is needed.
CFE	Counsel for the Environment, appointed by the Attorney General. In this proceeding the CFE is Mr. Thomas Young, Asst. Atty. General.
CGF	Chehalis Generation Facility, the proposed Project.
CIC	Critical Issues Council, intervenor.
Council	EFSEC, the Washington State Energy Facility Site Evaluation Council.
Ecology	Washington State Department of Ecology, a Council member agency and an intervenor in the application proceeding.
EIS	Environmental Impact Statement, a review of environmental consequences of proposed actions, required for certain proposals under terms of the National Environmental Policy Act and the Washington State Environmental Policy Act at the federal and state levels respectively.
EFSEC	Washington State Energy Facility Site Evaluation Council.
kV	Kilovolts, a measure of electrical current that is 1,000 volts.
MW	Megawatts, a measure of electrical energy that is 1,000,000 watts.

Order No. 698, Application No. 94-2

NPDES	National Pollution Discharge Elimination System, a federal program under which the Council is authorized to issue a permit allowing discharges from the site in water.
NPS	National Park Service, a part of the United States Dept. of the Interior.
NWPPC	Northwest Power Planning Council, a body comprised of representatives of the states of Washington, Oregon, Idaho and Montana to address power and conservation issues under the Pacific Northwest Electric Power Planning and Conservation Act of 1980.
Power Plan	An electrical energy load and resource study published periodically by the NWPPC.
PSD	Prevention of Significant Deterioration, a federal program under which the Council is authorized to issue a permit allowing discharges into the air.
RCP	Resource contingency program, under which BPA selected the Chehalis project for licensing.
RCW	Revised Code of Washington, the codification of Washington statute law.
RFP	Request for Proposals, a procedure in which government agencies may ask potential suppliers to offer proposals to meet specified requirements. An RFP issued by BPA led to its selection of the applicant to provide an optioned Facility.
SCA	Site Certification Agreement
TMDL	Total Maximum Daily Load. A determination of pollutant loading capacity for water quality limited segments of a river. The TMDL for the Upper Chehalis River was determined in a study performed by the Department of Ecology to evaluate dry season water quality.
USFS	United States Forest Service.
WAC	Washington Administrative Code, the codification of the regulations of Washington State agencies.
WSEO	Washington State Energy Office, a Council member agency and an intervenor in the application proceeding.
WDFW	Washington Department of Fish and Wildlife, a Council member agency and intervenor in the application proceeding.