

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

In re Application No. 94-1	)	<b>ORDER NO. 694 MODIFIED</b>
	)	<b>APRIL 15, 1996</b>
	)	<b>COUNCIL ORDER RECOMMENDING</b>
	)	<b>SITE CERTIFICATION, ON</b>
Washington Public Power Supply System	)	<b>CONDITION</b>
Satsop Combustion Turbine Project	)	
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**Nature of the Proceeding:** This matter involves an application for certification of a proposed site at Satsop, Grays Harbor County, Washington, for construction and operation of a natural gas-fueled combustion turbine facility to generate electrical energy. The Applicant, Washington Public Power Supply System (Supply System or Applicant), has requested the Energy Facility Site Evaluation Council (EFSEC or Council) to amend the Site Certification Agreement for Nuclear Power Projects Nos. 3 and 5 (WNP-3 and WNP-5) to permit the construction and operation of the Satsop Combustion Turbine Project, consisting of two separate and identical combined cycle combustion turbine power plants (Unit 1 and Unit 2) on a portion of the existing site in Grays Harbor County, Washington. Each proposed unit has a nominal maximum output of 245 megawatts for a project total of 490 megawatts (MW). The plants' fuel supply will be carried by a pipeline approximately 48 miles in length in Thurston and Grays Harbor, Washington, that will connect to the Northwest Pipeline Company's main line near Vail, Washington. Unit 1 is 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. The second unit is proposed to provide power for sale to any purchaser.

**Procedural Setting:** EFSEC's certification process for the Satsop Combustion Turbine Project involved the review of the Supply System's application, conducting hearings to determine whether the proposal complies with local land use regulations, holding both adjudicative and public comment hearings, the adoption of a related federal Environmental Impact Statement (EIS) and an accompanying addendum, and issuing required permits.

An adjudicative hearing conducted under the provisions of Chapter 34.05 RCW, the Administrative Procedure Act, before the Council began on August 7, 1995, following due and proper notice. The hearing concluded on August 17, 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 the certification of the project. Evidence from the Applicant and Counsel for the Environment was received in Olympia, Washington and Elma, Washington. Testimony from members of the public was taken at both Olympia and Elma, Washington. All parties who were granted intervention by the Council 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 briefs submitted by the Applicant and the CFE.

Chapter 80.50 RCW directs the Council to prepare a written report to the Governor recommending whether to approve or deny site certification. The Council enters this final Order containing Findings of Fact, Conclusions of Law, pertinent required Permits, and a proposed amendment to the Supply System's Site Certification Agreement. This Order, along with the Council's proposed amended Site Certification Agreement, and permits, forms the Council's "report" to the Governor.

**Appearances:** Applicant, Washington Public Power Supply System, by Charles R. Blumenfeld, Jeffrey W. Leppo, and Karen M. McGaffy, Bogle & Gates, Attorneys, Seattle; Counsel for the Environment, Thomas J. Young, Assistant Attorney General, Olympia; Washington Department of Ecology, by Jo Messex Casey and Tom Morrill, 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; Washington Utilities and Transportation Commission, by Jeffrey D. Goltz, Assistant Attorney General, Olympia. Other parties received intervenor status but did not participate in the hearing. These included the Bonneville Power Administration, by Preston D. Michie, attorney, Portland; North Fork Timber Company, by Michael Clark, planning facilitator, Centralia; Susan Elwanger, by Robert Parent, Thurston County, Washington; and Donald and Daphne Niemann, by Richard L. Ditlivsen, attorney, Olympia.

**The Council:** Council representatives who participated in this proceeding are the following: Chairman Fred Adair, citizen; Department of Agriculture, Walter Swenson; 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, Terry Strong; Department of Natural Resources, Nancy Joseph; Department of Transportation, Gary Ray; Utilities and Transportation, C. Robert Wallis, vice-chair; Grays Harbor County, Stan Lattin; and Thurston County, Marie Cameron.

## **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 has determined pursuant to

RCW 80.50.090(2) that the Satsop Combustion Turbine Project is consistent with local land use 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 bound 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 to the federal draft Environmental Impact Statement (EIS), issuing due and proper notice of adoption of the federal final EIS, adopting the final EIS, and 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 and the Addendum to the FEIS that it prepared pursuant to WAC 197-11-630. Pursuant to RCW 43.21C.150, the Council has utilized the FEIS and the addendum 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. Based upon the evidence presented in those applications and related comments and hearings, the Council grants the applications based upon the applicant's commitment to maintain discharge levels at the lowest feasible level.

The Council held hearing sessions specifically for members of the public, to allow such persons the opportunity to present any relevant comments directly to the Council. Among the persons testifying at hearing sessions set aside for public comment were the following: Leonard Woski, Olympia; Harold Holy, Tumwater; Beata Klein, Rainier, Washington; Charles Peace, Director, Olympic Air Pollution Authority; Lacey; and Eugene Rosolie, Director, Green Power Project, Northwest Environmental Advocates, Portland. Comments from citizens are an important adjunct to the hearing and are worthy of considering most carefully.

Finally, the Council took a view of the property, consistent with arrangements developed in conjunction with the parties.

## **B. The Sponsor and the Project**

The Supply System is a municipal corporation and joint operating agency of the State of Washington whose purpose is to construct and operate electrical generating plants and transmission lines for member and participating utilities. The Supply System has applied to construct two combined-cycle combustion turbine power plants fueled by natural gas on land it owns.

The proposed site is a 1600-acre parcel of land located south of the Chehalis River near the town of Elma, Washington. EFSEC had previously certified the site for construction and operation of two nuclear power projects, WNP-3 and WNP-5. The Applicant began construction of the nuclear projects in 1978 but halted construction before completion of

the nuclear facilities. The portion of the site designated for the power generating units is currently being used as a construction laydown area and is covered with a layer of gravel. The site also includes water wells, water and waste water distribution systems, erosion control facilities, and electrical and transportation infrastructure.

The Satsop Combustion Turbine Project (Satsop CT Project or Project) will be composed of two identical turbine generation units, to be constructed as need for each unit develops, and will produce electricity for sale to BPA and other interested power supply customers. Each turbine will produce about two-thirds of each unit'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 one-third of the plant's output.

Natural gas will be piped to the Project via a new pipeline about 48 miles long. The pipeline will connect the project with the Northwest Pipeline Company's main natural gas transmission pipeline near Vail, Washington.

Electricity produced by the plants will be carried through transmission lines connecting the plants to a BPA substation about 4,000 feet east of the project site. New power lines will be installed in the BPA right-of-way from the project site to the BPA substation.

### **C. Public Appearances**

The Council scheduled several hearing and meeting sessions in Thurston and Grays Harbor Counties to hear comments from and provide information to members of the public. These included the initial public informational meeting and land use hearing, environmental scoping sessions, 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 August 17 public hearing session in Elma, the Council heard comments from the following:<sup>1</sup> Eugene Rosolie, Director, Green Power Project, Northwest Environmental Advocates, Portland. Mr. Rosolie addressed water quality; need for power; air quality; greenhouse gases, and energy policy. Charles Peace, Director, Olympic Air Pollution Control Authority, Olympia. Mr. Peace urged a review of jurisdiction over air quality compliance.

At the August 9, 1995 session in Olympia, the following persons addressed the Council: Leonard Woski, Olympia, addressed need for power, the proposed pipeline route, the effect of the pipeline on his property; a preference for use of gas as a primary fuel rather than to fuel electricity production; air pollution from the Project; and preferred fuels. Harold Holy, Tumwater, age 83, urged completing nuclear projects at the Satsop site. Beata Klein, Rainier,

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<sup>1</sup> In addition, parties' and consultants' comments addressed draft NPDES and PSD permits.

Washington, addressed property owners' perceptions of difficulty in dealing with pipelines seeking easements.

Although the number of public witnesses at the hearing sessions was not large, 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**

Nearly all aspects of the Applicant's proposed project have remained uncontested by all intervenor parties. In fact, all of the parties granted intervention either settled before the hearing began or chose not to participate in the proceedings. However, Counsel for the Environment (CFE), the remaining participant in the proceeding, contests several aspects of the proposed project.

CFE argues that the Council should deny site certification for the Satsop CT Project because (1) the environmental impacts caused by the proposed project outweigh the need for additional power, and (2) the Satsop location is inappropriate. If, however, the Council recommends certification, CFE argues that following mitigation measures should be required: (a) The Applicant should be required to use an air cooling system; (b) The Applicant should be required to use a more efficient engine; (c) The Applicant should be required to mitigate carbon dioxide (CO<sub>2</sub>) emissions; and (d) The Applicant should be required to utilize specific pipeline safety techniques, including an automatic shutoff system.

The Applicant believes that the record shows that the Satsop CT Project responds to a need for power, and the project will avoid, minimize and mitigate substantive environmental impacts. Thus, the Applicant argues that the Council should recommend certification of the site for the proposed project by means of an amendment to its existing Satsop Nuclear Plant Site Certification Agreement.

### **A. Need for Power**

The Applicant argues that EFSEC's statute, RCW 80.50.010, assumes that there is a need for additional power and that the Council need not consider this issue. The Applicant further argues that, assuming the Council may consider need, the record proves that the power produced by the Satsop CT Project is needed to meet growing demands for electricity in the Pacific Northwest. CFE counters, arguing that the environmental impacts of the projects outweigh the need for the power the plants will produce.

In Prehearing Order No. 3, the Council ruled "...we decline to exclude the [issue of need] totally from the proceeding. This does not mean that the Council believes it may override the statutory statement of need, but only that it may use evidence of need while balancing need with environmental consequences." The Council finds no reason to revisit this ruling.

The Council will continue to consider the need for additional power in conjunction with a project's environmental effects. This does not mean that EFSEC must always review the current and future power markets in order to make a determination of need; rather, the Council will take need into account as one of the many factors it considers when reviewing environmental consequences and required conditions and mitigation measures.

In addition to claiming that EFSEC does not have the authority to consider need, the Applicant argues that regardless of EFSEC's authority, the record nonetheless reflects that there is a need for the power the Satsop CT Project will produce and the plants are consistent with regional energy plans.

The Applicant argues that the Satsop CT Project is part of the Bonneville Power Administration's Resource Contingency Plan and, thus, will provide insurance against uncertainties facing several BPA power generation facilities. The Applicant further argues that Supply System will only build Unit 1 when BPA and the Northwest Power Planning Council (NWPPC) conclude that the power is needed to serve BPA's firm loads in the Northwest.

Counsel for the Environment argues that the environmental damage the plants will cause outweighs the need for the power they will produce. Specifically, CFE argues that site certification should be denied because: (1) there is no need for power; (2) it is impossible to predict whether or when a need for power will develop; and (3) the environmental damage caused by the facility will be extensive. CFE quotes the testimony of Mr. Jeffrey King, a witness, who stated:

Although state electrical loads continue to grow at a modest rate, power to supply these needs for the next several years appears to be available from sources other than the construction of additional power generating facilities. These sources include new power plants presently under construction (including the Tenaska Washington II plant for which construction has been suspended), improved efficiency of operation of existing power plants serving the Western integrated electrical system, and finally, more extensive operation of existing natural gas-fueled steam-electrical power plants in California made more economically competitive because of declining natural gas prices.

CFE further argues that the Applicant's reliance on BPA's Resource Contingency Plan is misguided because it is based on a future need for power, i.e., it is an insurance policy for use only if the power from hydroelectric production, Washington Nuclear Project No. 2 (WNP-2), and low-cost surplus or imported energy become unavailable.

The Applicant counters CFE's arguments by pointing out that CFE sponsored an exhibit prepared by Mr. Ronald Holeman of BPA, indicating that demand for electricity will continue to grow in the Pacific Northwest, and at least 4900 MW of additional energy resources will be needed by the year 2005. In addition, the Applicant argues that the evidence indicates the Pacific Northwest already has a 700 MW resource deficit. Lastly, the Applicant disputes CFE's argument that EFSEC must wait until there is a current need for the Project as not supported by EFSEC's statute or the fact that it takes four or more years to bring a new plant from siting application into operation.

The Council is satisfied that the Project will not be built unless there is a need for the power they will produce. The record shows that Unit 1, if optioned by BPA, will not be built unless BPA conducts a "6(c) process" (as specified in the Pacific Northwest Electric Power Planning and Conservation Act at 16 U.S.C. Section 839(c)) and determines that the Project is both needed and consistent with the Northwest Power Planning Council's Power Plan. In addition, the applicant and the Washington State Energy Office (WSEO) have entered into a stipulation addressing need for power. The stipulation requires the Applicant to provide evidence to the Council 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% of the design capacity of the unit(s) being constructed and that such agreement(s) shall have a term of at least 5 years. The stipulation also requires that a buyer of more than 40% of the power must meet additional conditions aimed at assuring compliance with integrated resource plans<sup>2</sup>.

Moreover, the terms of the Applicant's agreement with the WSEO, which have been incorporated into the Site Certification Agreement, adequately address the issues of need

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<sup>2</sup>Section 3 states:

3. That with respect to any purchaser entering into a power purchasing agreement for more than 40% 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.

and consistency. Furthermore, the mitigation requirements contained in the Site Certification Agreement, the application for site certification, and the stipulations will assure that the environmental effects of the project do not outweigh the need for the power the plants will produce.

### **B. The Appropriateness of the Satsop Site for the Location of the Project**

The Applicant has chosen to locate the Satsop CT Project on a 20 acre portion of the Supply System's Satsop Power Plant property. In addition to the turbines themselves, the Applicant intends to construct a natural gas pipeline connecting the plant to the Northwest Pipeline Company's main line near Vail, Washington. The area on which the power units will be located has been cleared and graded and is currently being used as a construction laydown area. The pipeline route will not be approved until the Applicant presents detailed route plans in accordance the requirements of the Site Certification Agreement.

The Applicant argues that it considered seven factors during its site selection process. These include: (1) proximity to electricity consumers; (2) easy and inexpensive access to BPA's transmission lines and grid; (3) adequate water supply and discharge facilities; (4) sufficient reasonably-priced land suitable for the proposed use; (5) existing air quality that complies with Washington environmental regulations; (6) minimal cultural, environmental, and recreational impacts; and (7) easy, reasonably-priced access to a major natural gas pipeline. The Applicant contends that the Satsop site rates highly on all factors except the location of a natural gas source.

CFE contends that the Satsop location is inappropriate for the facility. CFE also contends that the Applicant's analysis of alternative locations is inadequate. He argues that the Project should have been located elsewhere, suggesting the Supply System's abandoned nuclear site in Hanford, Washington as one alternative.

The Applicant responds that the Satsop site compared favorably to other sites that were considered. The Applicant argues that the Hanford site proposed by CFE is inferior because the transfer of electricity from eastern Washington to western Washington load centers would reduce the plants' efficiency and increase construction costs by approximately 10%. The Applicant argues that a loss of less than 1 mill per kilowatt-hour determines whether or not a resource is selected by a power purchaser. The Applicant claims that a 2-3 mill/kWh increase for both 245 MW turbines would add over 10 million dollars per year to ratepayers' bills. In addition, the Applicant contends that the BPA prefers proposals located in western Washington. The Applicant further argues that the Hanford site would require a 33-mile natural gas pipeline and require a difficult crossing of the Columbia River.

CFE responds that the Applicant's arguments regarding the Hanford site are invalid because the analysis should consider the abandoned WNP 1 and 4 nuclear project sites, not the Hanford Generating Project. CFE states that no reliable data exists regarding the distance from the nuclear site to the main gas pipeline. He further contends that the additional



cost of transferring electricity to the western load centers is extremely small and no data were presented to show that such additional cost would render the project noncompetitive.

The Council is satisfied that alternative locations have been adequately considered during BPA's Resource Contingency Review, the Applicant's review of alternative sites, and within the Environmental Impact Statement (EIS) issued for the Project. In addition, the Council has issued an addendum to the EIS analyzing possible alternative routes for the pipeline.

The Council notes that the Hanford site CFE suggests as an alternative would (1) likely require the construction of a pipeline nearly equal to the length of the one proposed by Supply System, and (2) require the transfer of power over great distances resulting in further environmental damage and costs to consumers, reducing the benefits achieved for the environmental costs. The Council believes that available evidence fails to substantiate that the Hanford site is superior to the Satsop site.

In addition to his general objection to locating the plant at the Satsop site, CFE challenges the site because he believes it is too far from a natural gas source and the required pipeline will cause extensive environmental damage and be a threat to the public's safety.

CFE contends that construction and maintenance of the proposed 48-mile pipeline will cause extensive environmental damage and increase risks to the public from fire or explosion in the event of an earthquake. He argues that the environmental costs associated with the Satsop CT Project, including the pipeline, are high. CFE contends that these costs include the environmental effects associated with the construction of the pipeline and increased risks to the public from potential accidental rupture of the pipeline that may occur during an earthquake. CFE points out that the pipeline will pass within three miles of an earthquake fault that suffered a magnitude 7.0 earthquake in 1949. In addition, CFE suggests that risks are increased because the pipeline will pass through residential areas in Thurston County. CFE concludes that other sites that do not require the construction of a long pipeline are superior to the Satsop site.

The Applicant argues that it and its consultant have worked with state and federal agencies in order to address environmental and safety concerns related to the pipeline. The Applicant argues that its proposed route for the pipeline follows existing utility right-of-ways for nearly 80 percent of the route. The Applicant further argues that the pipeline deviates from these corridors in order to avoid environmentally sensitive areas. The Applicant states that because it will negotiate with land owners for easements, the exact pipeline route has not been determined. The Applicant further states that during negotiations, the landowners can make their concerns known in order to avoid sensitive areas and minimize disruptions to their land.

The Applicant contends that it worked closely with Washington Department of Fish and Wildlife (WDFW) and the U.S. Army Corps of Engineers so that the construction of the pipeline will cause as little environmental damage as possible. The Applicant points out that its agreement with the WDFW contains detailed requirements for restoration, revegetation and

replacement of disturbed areas, and requires the development of a management plan that will assure the protection and enhancement of wildlife values. The Applicant concludes that although the construction of the pipeline will cause some environmental disturbances, the record proves that the pipeline's long-term impacts should be minimal.

The Applicant also disputes CFE's contention that the pipeline will pose a threat to the public. The Applicant argues that while the Satsop pipeline will pass through some residential and seismic areas, it will nonetheless be constructed in compliance with state and federal regulations. The Applicant points out that even though the pipeline will pass through areas requiring only class 1 or 2 construction techniques, it has agreed to construct the entire pipeline to meet the requirements for Class 3 locations --the second-most-stringent design and construction level required under federal law.

The Applicant argues that damage to the pipeline caused by an earthquake will be unlikely because: (1) The pipeline route will be sited in order to minimize seismic impacts; (2) The pipeline route does not cross any known active faults; (3) When the pipeline does come close to a known active fault, it runs parallel but does not cross it. Therefore, the Applicant argues, the pipeline will not pose a threat to the public as a result of seismic activity.

The Council agrees with both CFE and the Applicant that the major disadvantage of locating the plant at the Satsop site is that a natural gas pipeline must be constructed to carry fuel from Vail, Washington. However, the Council is satisfied that BPA in its environmental review process under the Resource Contingency Plan, conducted an exhaustive analysis of many alternatives and chose the Satsop CT Project as part of the RCP because of its numerous advantages, including an existing infrastructure, a location close to load centers, and the availability of water. The Council also believes it is important that both the Department of Ecology and the Department of Fish and Wildlife are satisfied with the mitigation measures agreed to by the Applicant and, thus, withdrew their objections to the proposed project. Furthermore, the Council is satisfied that the record reflects that the pipeline, if properly constructed and maintained, will not pose a threat to the safety of nearby residents.<sup>3</sup> Thus the Council, after weighing the advantages of the Satsop site against its environmental drawbacks, finds that the site is an appropriate location for the proposed facility. The Council further concludes that it is appropriate and necessary for the Applicant to explore the possibility of constructing a pipeline large enough to accommodate additional potential natural gas users.<sup>4</sup>

In order to assure that all environmental impacts will be mitigated and proper safety measures are implemented, the Council has added appropriate language to the Site Certification Agreement and Findings of Fact to assure: (1) That the pipeline stays within existing utility corridors where possible; (2) Detailed plans outlining the exact pipeline route are

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<sup>3</sup> For further discussion of pipeline safety issues, see Section E below.

<sup>4</sup> The Council notes that no natural gas service is available in some portions of Grays Harbor and adjacent counties, and that making arrangements to share pipeline capacity might permit substantial savings and enhance development opportunities if timing and other factors permit doing so.

presented to the Council for its review and approval six months prior to beginning pipeline construction; (3) Every effort is made to assure that landowners (whether private or public) are properly compensated and satisfied that impacts have been avoided or mitigated (4) A pipeline safety plan is presented to the Council for its review and approval at least three months before the pipeline begins operation; (5) The Applicant reports to the Council at least six months before it begins construction regarding its efforts to find additional parties who are interested in sharing pipeline capacity; and (6) the entire pipeline will be built to meet at least the requirements for Class 3 locations.

### **C. 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 Satsop CT Project. 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 plant 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.

The Applicant suggests that use of a water cooling system has the following advantages: (1) Water cooled plants are more efficient (air cooling would cause a one percent decrease in efficiency and reduce power output by up to 6 MW per unit); (2) Water cooled plants have lower overall air emissions; (3) Water cooled plants are less expensive (an air cooled system may cost \$10 million more to install than a water cooled system); and (4) Water cooled plants are smaller, have a lower visual impact, and produce less noise than air cooled plants.

CFE argues that if the Council recommends site certification, the Council should require the Applicant to use an air cooling system. CFE contends that air cooling would eliminate the discharge of heated water into the river. CFE argues that the capital cost of \$10 million and loss of 1 percent efficiency to the plant is more than made up for by the beneficial effects such a system would have on the river.

The Applicant argues that even CFE's witnesses admit that water cooling might be appropriate for a location such as Satsop that has an adequate water supply. The Applicant argues that CFE's sole reason for the use of an air cooling system -- preventing the release of heated water into the Chehalis River -- is without merit. The Applicant points out that the water released from the plant will not exceed 64.4 degrees F (18 degrees C) and will be cooled further

with an additional 0.9 cfs of water, when conditions require. The Applicant also points out that the cooling water extracted from the Ranney Wells ranges in temperature between 10.4 degrees C and 10.8 degrees C and is therefore suitable as cooling water. According to the Applicant, the record demonstrates that no measurable change in the river temperature will result from the plant's discharge.

After considering the increased air emissions that would result if air cooling were chosen, the availability of sufficient water, and the return of water rights provided for in the Supply System's agreement with the Department of Ecology, the Council concludes that water cooling is the preferred cooling alternative for this project. The Supply System's existing Site Certification Agreement for the Satsop site allows the withdrawal of 80 cubic feet of water per second from the Ranney wells for the operation of WNP-3 and WNP-5. The Satsop CT Project will require a total of only 9.5 cfs water, 8.6 for operation of both of the project units plus up to 0.9 cfs to be used to cool water being discharged into the Chehalis River. Under the terms of the stipulation between Supply System and the Department of Ecology, which the Council incorporates into the Site Certification Agreement, the Applicant may not withdraw water during periods of low flow. In addition, the Supply System has agreed to relinquish rights to 30.5 cfs at the completion of the decommissioning and restoration of WNP No. 5 or five years from the effective date of the Site Certification Agreement amendment for the Project, whichever occurs first.

Finally, the Applicant has also agreed to relinquish 40 cfs of existing water rights at the completion of the decommissioning and restoration of WNP No. 3 or five years from the date of the Site Certification Agreement amendment for this project, whichever occurs first. In addition the two parties agreed, and the Council accepts, that the Department of Ecology will not challenge a request to retain 40 cfs for use in constructing and operating WNP-3 if the Supply System decides within five years after the effective date of the Site Certification Agreement amendment to resume construction of WNP-3. The Council agrees with the stipulation with one exception. In the event that decommissioning and restoration of either or both WNP-3 and WNP-5 have not been completed within five years after the effective date of the Site Certification Agreement amendment, the Council will require the applicant to retain sufficient water rights to permit the completion of decommissioning and site restoration of both nuclear facilities.

Witnesses presented by both CFE and the Applicant testified that the Satsop CT Project's water use will have little to no effect on the habitat or biological environment of the Chehalis River. The Council is satisfied that the effects on the Chehalis River from the release of the Satsop CT Project's cooling water after it is cooled to the temperature required in the NPDES will be almost nonexistent.

The Council is further convinced that the record proves that the use of an air cooling system at this site would lead to unneeded adverse environmental impacts. These include additional air emissions resulting from decreased efficiency, increased noise levels, and

increased visual impacts resulting from the larger size of the plant. Therefore, the Council finds that it would be counterproductive to require an air cooling system.

#### **D. CO<sub>2</sub> Emissions**

Power plants such as the Satsop CT Project, that produce energy from the combustion of fossil fuels, produce exhaust gases. One such exhaust gas that will be produced by the Satsop CT Project is carbon dioxide (CO<sub>2</sub>). CO<sub>2</sub> is considered a greenhouse gas because it causes infrared energy to be retained within the earth's atmosphere. The Satsop CT Project will 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 CO<sub>2</sub> and other greenhouse gas emissions. He presented evidence regarding the volume of greenhouse gases the plants will produce and the role the various gases may play in the warming of the earth. CFE states that each unit running full-time at full power will produce 889,000 tons of greenhouse gases each year; representing 0.6 percent of the CO<sub>2</sub> produced within the state of Washington each year and 0.007 percent of the present annual global increase. The largest percentage of these gases will be CO<sub>2</sub>, which CFE argues will total 1.5 million tons per year if both turbines run at their maximum capacity all year<sup>5</sup>. He contends that the earth will only absorb about 60% of the CO<sub>2</sub> emitted by the Project.

CFE argues that, based on the numbers provided by the Applicant, 1,250 tons of CO<sub>2</sub> per year may be absorbed by one square mile of young forest. Assuming 40% of the plant's CO<sub>2</sub> 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 CO<sub>2</sub>.

The Applicant argues that CO<sub>2</sub> mitigation should not be required. It points out that CO<sub>2</sub> is not a regulated pollutant and that combined cycle natural gas power plants emit less CO<sub>2</sub> than alternative fossil fuel fired systems. The Applicant further argues that because the carbon cycle is complex it is difficult to estimate how much CO<sub>2</sub> is absorbed by the planet and how much would contribute to global warming. The Applicant argues that the best way to decrease CO<sub>2</sub> emissions is to maximize efficiency, which Westinghouse, the turbine supplier is continually pursuing. In the alternative, the Applicant argues, that there is no CO<sub>2</sub> control technology available that could be practically employed at the Project.

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 Satsop CT Project will contribute to global warming. The Council finds that the Satsop CT Project uses the latest reasonable technology and that it will produce lower emissions of greenhouse gases than

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<sup>5</sup> For economic reasons, it is extremely unlikely that the Project will operate at full power during an entire consecutive twelve month period.

older natural gas combustion turbine facilities or other fossil fuel facilities. The Council finds, however, that there is uncertainty regarding how much the Satsop CT Project's emissions will add to the greenhouse effect. The Council further finds that CO<sub>2</sub> 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.

The issue is what extent, if any, the Council should now provide for the mitigation of greenhouse gases produced by the Satsop CT Project.

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 80.50.010<sup>6</sup>; 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 Satsop CT Project 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 report to the Council upon the state of regulation regarding greenhouse gases at the time the report is completed, and potential mitigation options that are available, identifying possible reasonable and economical mitigation proposals. The Applicant shall report to the Council no later than one year before construction is scheduled to begin on each turbine. 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 CO<sub>2</sub> produced by the Satsop CT Project. The Applicant is encouraged to investigate low-cost conservation efforts that will reduce the production of CO<sub>2</sub> 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.

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<sup>6</sup> 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.

### **E. Pipeline Safety<sup>7</sup>**

The Applicant has proposed to build a pipeline approximately 48 miles long to carry natural gas from an interstate natural gas pipeline at a point near Vail, Washington, to the site. The pipeline will be at least 16 inches in diameter, with the final size dependent upon the chosen gas pressure and the applicable state or federal requirements. The pipeline will require a cleared and maintained right-of-way. The Applicant proposes to locate approximately 21 miles of the pipeline directly adjacent to an existing pipeline. The Applicant proposes to locate an additional 13 miles along an existing BPA electrical transmission line right-of-way. In other areas, right-of-way easements will be negotiated with property owners.

CFE requests that if site certification is recommended, the Applicant should be required to use the following pipeline construction techniques: (a) Slack loops; (b) High grade steel sufficient to withstand the peak ground accelerations associated with an earthquake of magnitude 7.0; (c) A “smart-pig” to check for corrosion; and (d) An automatic shutdown system. CFE contends that the serious consequences of a leak and possible fire in populated areas of Thurston County justifies the use of these “extremely conservative” construction techniques.

The Applicant responds that it intends to construct the pipeline to meet or exceed all applicable state and federal regulations, to use construction materials and techniques (including slack loop techniques) where appropriate to minimize risks of rupture in the event of an earthquake, and to construct the pipeline to permit the use of “smart pig” inspections to examine the pipeline for corrosion. The Applicant argues that automatic shutdown systems are not generally allowed under Washington’s regulations and that they often do not function well. Thus, the Applicant argues that an automatic shutdown system should not be required.

The Applicant has agreed to use all of the protection procedures suggested by CFE with the exception of automatic shutoff. The Council believes that an automatic shutoff system should not be recommended unless it is required under either federal or state law because of problems with the operation of such valves with existing technology. Because the pipeline will be constructed in accordance with state and federal regulations and will meet the additional requirements set out in the Site Certification Agreement, the Council is satisfied that the pipeline will not pose a substantial threat to public safety if constructed consistent with the pertinent standards and the Applicant’s commitments.

The Council rejects the Applicant’s proposed stipulation with the Washington Utilities and Transportation Commission (WUTC) only to the extent that it purports to grant safety jurisdiction to the Commission under the stipulation. EFSEC, not the WUTC, has the authority and responsibility to review all safety aspects of pipeline construction and operation. The Council will rely on the WUTC and its staff to monitor safety aspects of the pipeline on behalf of the Council pursuant to RCW 80.50.040(a). The Council orders the Applicant to

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<sup>7</sup>This section addresses the Council’s resolution of issues dealing with pipeline safety. Additional discussion of the pipeline as it relates to the selection of the Satsop site appears in Section B, above.

submit a detailed pipeline design for the Council's review and approval at least six months prior to scheduled beginning of construction and orders the Applicant to submit a pipeline safety plan for review and approval at least three months prior to beginning pipeline operation.

#### **F. Engine Efficiency**

Counsel for the Environment argues that the Council should require the Applicant to use a more efficient engine and to use advanced dry-low nitrogen oxide pollution control technology. The Applicant responds that it would be inappropriate and counterproductive to require it to use untested engine and air emissions technologies.

The combustion of natural gas results in waste gases including nitrogen oxides (NO<sub>x</sub>). NO<sub>x</sub> and other air emissions are regulated under the Clean Air Act's Prevention of Significant Deterioration (PSD) and New Source Review (NSR) programs, in addition to several other programs. Under the PSD and NSR programs, the Applicant must use Best Available Control Technology (BACT) to minimize air emissions to acceptable levels for the area.

The Applicant submitted a PSD permit application proposing the use of dry low NO<sub>x</sub> (DLN) combustors and selective catalytic reduction (SCR) to control the NO<sub>x</sub> emissions. CFE opposes the use of DLN and SCR techniques, arguing that advanced dry low NO<sub>x</sub> (ADLN) is superior. The Council's consultant reviewed the PSD application and the Council approved the PSD permit on the date of this Order. CFE opposes the use of DLN with SCR because he believes that the Applicant should be required to choose a more advanced engine and to use ADLN control technology.

CFE argues that the Applicant should be required to use a more efficient engine of more recent design with advanced dry-low NO<sub>x</sub> (resulting in 9 PPM NO<sub>x</sub>) rather than the chosen engine with SCR (which he contends to be more expensive and to release ammonia). CFE argues that by the time the project will be built, a more efficient engine will be available. Therefore, CFE asks EFSEC to make the use of a more efficient engine a requirement of site certification.

The Applicant disputes CFE's argument that an "unidentified newer engine" would reduce NO<sub>x</sub> emissions to 9 PPM. The Applicant chose the Westinghouse 501F engine with both dry-low NO<sub>x</sub> combustors and SCR. BACT does not require the technology CFE is asking for. It argues that the record shows these newer engines to be inappropriate because they have not yet been proven dependable in commercial operation and because some are simply too big for this application. The Applicant argues that the 9 PPM emissions purportedly achievable by these engines is higher than the 7 PPM to be emitted by the engines (with controls) proposed by Supply System. Lastly, the Applicant argues that the ammonia emissions resulting from the use of SCR will be less than the 10 PPM regulatory standard.

The Council accepts the Applicant's proposed engine for purposes of this application. The record demonstrates that the other suggested engines may not be appropriate



from an engineering perspective, and that the chosen engine will meet present BACT requirements. The Council rejects CFE's suggestion that the Applicant use advanced dry-low NO<sub>x</sub> control technology because the controls chosen by the Applicant have proven sufficient to meet the BACT requirements. The Council notes that the Department of Ecology supported the use of DLN with SCR as BACT during the PSD permitting process.

If prior to the start of construction a more efficient engine meeting the Applicant's needs and resulting in lower environmental impacts becomes available, the Applicant is encouraged to pursue updated technology and petition for a modification of its Site Certification Agreement. The Council also notes that the PSD permit must be periodically reviewed and updated for the current BACT.

## **G. Other Issues**

### **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 Satsop CT Project 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 Satsop CT Project units to begin at any time within ten years from the effective date of the Site Certification Agreement, with certain conditions. The certificate holder may begin construction within the first five years of the Site Certification Agreement upon verifying to the Council that construction and operation will comply with the Site Certification Agreement and that no substantial change in environmental or regulatory conditions has occurred that would require a change in the Site Certification Agreement.

After five years from the effective date of the Site Certification Agreement, before beginning construction the certificate holder must advise the Council of its intention to begin construction, certify that the representations of the application and supporting applications regarding environmental conditions relevant to the Project, pertinent technology, and relevant regulatory conditions all remain current. The certification will be subject to Council review. Prior Council authorization will be required to begin construction, and shall be granted upon the Council's finding that no changes to the Site Certification Agreement are necessary or appropriate or upon the parties' acceptance of any appropriate changes.

### **Site Restoration**

The application fails to comply with WAC 463-42-655, requiring an application to contain an initial Site Restoration Plan. Given the nature of this proposal and the relative scope and complexity of the Project, the failure does not require rejection or delay of the application. Instead, the Applicant should be required to present its initial Site Restoration Plan (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 Project, and at least that element must be resolved and approved before construction may begin.

### **Publicly Managed Lands**

The Council is concerned that the interests of publicly managed lands have an equivalent voice to the voice of private landowners in the use of public land for pipeline construction, and that public interests thereby be appropriately protected. Accordingly, the Council will direct the Applicant to work with the managers of public lands to assure that the pipeline complies with pertinent state requirements.

### **Relinquished water rights**

The Council also acknowledges that it has no authority to require the Department of Ecology to transfer Water Rights from abandoned EFSEC projects. However, the Council encourages the Department of Ecology to consider the general goal of adaptive reuse when determining the fate of water rights relinquished by the Supply System.

## **H. 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.

## **I. Amended Site Certification Agreement**

The Applicant presented a proposed Amendment No. 2 to the Site Certification Agreement. In considering the proposed amendment, the Council made a number of changes in terms as specified herein and for the reasons specified herein, and in language, both to facilitate incorporations and to clarify existing language. The Council attaches an amended Site Certification Agreement to this Order and does not separately set out the amendment.

References to Amendment No. 2, therefore, depending on context, may refer either to the applicant's proposed amendment or the (second-amended) 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**

1. On August 8, 1994, the Washington Public Power Supply System (Supply System or Applicant) filed an Application for an Amendment to a Site Certification Agreement (the Application) with the Council. The Supply System seeks amendment of the Site Certification Agreement for its Nuclear Projects Nos. 3 and 5 at Satsop, Washington, to authorize the construction and operation of two combined-cycle, natural gas fired combustion turbine power plants and an associated natural gas pipeline, referred to collectively in this document as the Satsop Combustion Turbine Project.

2. The Applicant is a joint operating agency (JOA) of the State of Washington, established pursuant to Chapter 43.52 RCW. The Applicant has thirteen member utilities, including ten public utility districts and the cities of Richland, Seattle and Tacoma. The Supply System has the required financial and technical ability to construct and operate the proposed Project.

#### **Stipulations and Settlement Agreements**

3. The Applicant entered into settlement agreements with the Washington Department of Ecology (Ecology), the Washington Department of Fish & Wildlife (WDFW), the Washington State Energy Office (WSEO) and the Washington Utilities and Transportation Commission (WUTC). In exchange for the Applicant's acceptance of certain conditions in the amended Site Certification Agreement, Ecology, WDFW, WSEO, and WUTC found their interests satisfied and withdrew their contentions from the Council's proceedings. Substantial evidence in the record supports the inclusion of the revised conditions found in the Satsop Combustion Turbine Project Settlement Agreement, the Satsop Combustion Turbine Project Fish and Wildlife Resources Mitigation Agreement, the Settlement Agreement with the Washington State Energy Office and the Stipulation Regarding Compliance with Washington Utilities and Transportation Commission Regulations in the amended Site Certification Agreement, with the modifications described in the body of this Order as to the agreements between the Applicant and the Department of Ecology and between the applicant and the Utilities and Transportation Commission.

4. Each power unit will be constructed and operated in a combined cycle configuration, with a Westinghouse 501-F combustion turbine producing approximately two-thirds of an entire

unit's electrical output. Exhaust gases from the combustion turbine will produce steam in a heat recovery steam generator. The steam will then be piped to a steam turbine, which will generate the remaining one-third of the plant's electrical output. Each power unit will generate an average electrical output of 245 megawatts.

5. The Supply System will fuel the Project primarily with natural gas. The generating units will consume an alternate fuel, limited to low sulfur fuel oil, for no more than 15 days (360 hours) per unit, per year, during periods when its supply of natural gas is temporarily interrupted and for purposes of testing.

6. The Supply System will construct a pipeline approximately 48 miles long to connect the power plants with the Northwest Pipeline Company's main natural gas transmission line at a point near Vail, Washington.

7. Power produced by the Project will be transported from the Project through transmission lines connecting to the BPA Grid at the already existing Satsop substation. As part of the proposed Project, the Supply System will install new interconnecting power lines from the Project site to the substation.

### **Site Characteristics**

8. The Supply System will locate the Satsop CT Project's power units on a specific site of approximately 20 acres within the 1600-acre Satsop Power Plant property that the Supply System already owns in Grays Harbor County, Washington. The Application provides a legal description of the Satsop Combustion Turbine Project location within the larger site. The Project will also use certain of the associated infrastructure facilities initially constructed in conjunction with the construction of nuclear plants under a Site Certification Agreement with the Council.

9. The Supply System previously used the Satsop CT Project site as an equipment and construction material laydown area. The site is graded and has a surface of aggregate and asphalt.

10. Thurston and Grays Harbor Counties have certified to the Council that the proposed Satsop CT Project, including the associated natural gas pipeline, is consistent with applicable land use laws and regulations. The Council finds consistency.

11. The Applicant considered alternative locations for the proposed Satsop CT Project. The Bonneville Power Administration also considered the relative merit of alternative sites in its environmental review of the options program for which Unit I is proposed. The Supply System determined that the Satsop site would be the best location for the project. The site is near major western Washington population centers. Electrical transmission from the site to those population centers will be more efficient, less subject to risk of outage, and less subject to line loss than comparable transmission from a power project located further away. The Satsop site also provides direct, easy, and inexpensive access to the BPA transmission grid; an adequate water supply; and sufficient land suitable for use as a power project site. The site is located within an air quality

attainment area and, because the Supply System had already developed the portion of the site where the power units are to be located, its use for the Project will result in relatively few cultural, environmental and recreational impacts.

### **Associated Pipeline**

12. The Supply System proposes to construct a natural gas pipeline approximately 48 miles long, connecting the Satsop CT Project with the Northwest Pipeline Company's main natural gas transmission line at a point near Vail, Washington. The Application describes the pipeline route in general terms and evaluates the impact of the pipeline within a 2000 foot wide corridor. Precisely where the pipeline will be located within that corridor has largely not yet been determined and is subject to final approval by the Council. The pipeline route will depend upon, among other things, easements obtained through negotiations with property owners and regulations governing land under public management.

13. The proposed pipeline route follows existing pipeline or electrical transmission corridors where possible, but departs from such corridors when necessary for environmental or engineering reasons. Approximately 80% of the pipeline route lies within or adjacent to existing corridors.

14. The Applicant considered alternative routes for the proposed natural gas pipeline. EFSEC will review the final pipeline route in order to assure that the selected route will have minimal impact on the environment. The Applicant will construct the pipeline in accordance with pertinent state and federal regulations as administered by the Council. The Applicant will present a detailed pipeline design for Council review and approval no less than six months before it begins construction. The Applicant will submit a pipeline safety plan for Council review and approval no later than three months before beginning operation of the pipeline. The Applicant may not begin construction or operation, respectively, until the Council has approved the pertinent plan.

15. Managers of land under State control must have a voice in the use of state land for pipeline purposes to at least the same degree as private landowners. The Applicant will work with public land managers to assure that the pipeline complies with regulations and laws governing the use of state-owned land.

### **Associated Transmission Lines**

16. Existing transmission lines connect the BPA electrical substation, located on the Satsop Power Plant Site, with the Northwest Power Grid. As part of the Satsop CT Project, new transmission lines will be installed in the existing BPA transmission right of way. Wooden power poles will be replaced with steel transmission towers as described in the application.

### **Need for Power**

17. There is a present or future need for additional power resources in the Pacific Northwest. Considerable uncertainty exists about the supply of electricity, including the possibility of further restrictions on hydroelectric power generation to protect threatened or endangered fish species, the continued availability of hydro power in coordination with Canadian resources, the continued availability of power from the WNP-2 nuclear plant, and the continued availability of low-cost surplus or imported power. Increases in demand for electricity, and potential losses of supply resources, alone or in concert, will lead to immediate needs to construct additional generating facilities.

18. Unit 1 of the proposed Satsop CT Project was proposed in response to a request for proposals from the Bonneville Power Administration in connection with its Resource Contingency Program. Under the Resource Contingency Program, BPA options certain power projects, the suppliers perform pre-construction development activities and obtain federal and state permits, and then they put the projects "on the shelf" until BPA decides to move forward. By performing the pre-construction activities in advance, BPA hopes to reduce from four years to two years the time it typically takes to bring a new resource into operation. BPA developed the Resource Contingency Program as a means of addressing the uncertainties inherent in predicting future electricity demand and supply. Before exercising its option on Unit 1, BPA will have to make its own determination regarding the need for an additional power generating facility pursuant to section 6(c) of the Northwest Power Act (16 U.S.C. § 839(c)). Unit 2 of the proposed Project is intended to supply power to other potential power purchasers. The Supply System will not construct Unit 2 unless it has a commitment from one or more power purchasers to acquire the unit's output. In addition, neither unit will be constructed unless the Supply System satisfies the requirements relating to verification of need set out in Supply System's agreement with the Washington State Energy Office.

19. Protections required by terms of the Applicant's stipulation with the Washington State Energy Office assure that project construction and operation will not occur until there is a need for the power to be generated.

### **Environmental Impact of Power Plants**

#### **Land**

20. The application contains a comprehensive geologic evaluation that sufficiently identifies and defines the conditions of the site.

21. The Satsop site was previously developed as the site of proposed nuclear electrical generation facilities. Construction of the proposed combustion turbine power facilities will entail little further environmental impact.

22. The Supply System has an Erosion and Sedimentation Control Plan that has been adequately modified for the specific construction activities proposed in the Satsop CT Project. The

Supply System will utilize Best Management Practices for erosion and sediment control during construction, including but not limited to such practices that are detailed in the application. Attachment II to the Site Certification Agreement updates a previous analogous agreement to incorporate Council resolutions modifying the prior provisions and to incorporate the Applicant's commitments in the application.

23. Although the Satsop site is located in a region of historic seismicity there are no known active faults that could generate earthquakes of significant size in the immediate vicinity of the site. The proposed power plants will nonetheless be designed to meet the Uniform Building code requirements for construction in a Seismic Zone 3 area.

24. The Satsop CT Project power unit site is generally flat, with a change of about 25 feet of elevation across it. No higher land is near enough to affect the site. Avalanches and landslides will therefore not affect the power plants.

25. The Satsop CT Project power generation unit site is located more than 300 feet above the flood plain of the Chehalis River and will be unaffected by floods.

### **Water Quantity**

26. The existing Site Certification Agreement authorizes the Supply System to withdraw 80 cubic feet of water per second (cfs) from the Ranney wells for construction and operation of the WNP-3 and WNP-5 nuclear projects. The Council authorized the Supply System to withdraw 2 cfs during low flow periods to keep the nuclear projects in "hot standby" mode. The Supply System has agreed in a stipulation with the Department of Ecology to relinquish 30.5 cfs of its existing authorization at the completion of decommissioning and site restoration of WNP-5 or five years from the date the proposed amended Site Certification Agreement is signed, whichever occurs first. The Supply System also agreed to relinquish 40 cfs of the existing authorization at the completion of the decommissioning and site restoration of WNP-3, or five years from the date the proposed amended Site Certification Agreement is signed, whichever occurs first. Decommissioning and site restoration may extend beyond the stated times, however. The Applicant must reserve sufficient water from the relinquishment to accomplish site restoration. The Applicant has agreed to install new pumps or modify existing pumps at the Ranney wells so that the pumps are capable of limiting the withdrawals to the agreed levels.

27. The Satsop CT Project would require a total of 9.5 cfs water, a small fraction of the Supply System's existing water authorization. Of the 9.5 cfs, the Supply System would use 8.6 cfs to operate the power generation units for power productions, including quench water to meet the temperature limits of the NPDES permit, and would use the remaining 0.9 cfs for quench water to cool the discharge below the temperature set in the NPDES permit. The Supply System will cease water withdrawals for the Satsop CT Project as necessary to assure that base flows required by WAC 173-522-020 are met.

28. The proposed water withdrawals will not adversely affect the environment or the existing water rights of any present appropriator. There is sufficient water available at the Satsop Site

to use a water cooling system for the proposed Satsop CT Project. A water cooling system provides significant advantages over an air cooling system for the Project, as identified in the findings in the body of this Order.

### **Water Quality**

29. The Satsop CT Project has been designed to minimize waste water discharge. Water will be recycled through a closed-loop system as much as possible. As a result, not more than 3.35 cfs will be discharged through the existing discharge outfall and diffuser into the Chehalis River.

30. The Council issued a Fact Sheet for NPDES Permit No. WA-002496-1 explaining the nature of the proposed discharge, the Council's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions. The Council received an earlier version of the fact sheet into evidence. The Council takes official notice of the final document and the facts contained therein as part of the factual bases for the decision to issue the NPDES permit.

31. The NPDES permit for the Project regulates contaminants in the discharged water. Water discharged consistent with the NPDES permit will comply with federal and state law and will not adversely affect the environment. Water discharged pursuant to the conditions of the NPDES permit will not impair the quality of the Chehalis River receiving water and will not result in any adverse impacts on fish, wildlife, or the ecology of the Chehalis River.

32. The NPDES permit for the Project requires that discharge shall not exceed 18 degrees C (64.4 degrees F). The Supply System will use the 8.6 cfs to meet the temperature limits of the NPDES permit. An additional 0.9 cfs is available for use as quench water to cool the discharge below the temperature set in the NPDES permit.

33. The existing Site Certification Agreement provides the basis for the site's existing stormwater pollution control program. The Supply System will install a stormwater discharge system. The stormwater discharge system, together with the Erosion and Sedimentation Control Plan, Attachment II to this Order, will assure compliance with applicable water quality standards.

### **Air Quality**

34. The Satsop CT Project is subject to several federal and state air emissions control requirements: Prevention of Significant Deterioration (PSD) permitting, use of Best Available Control Technology (BACT), New Source Performance Standards (NSPS), visibility requirements and air toxics standards. The Satsop CT Project, operated in accordance with the terms of the PSD permit, will comply with all federal and state air quality requirements.

35. The Council issued a Final Fact Sheet for Prevention of Significant Deterioration (PSD) Permit, Satsop Combustion Turbine Project. The Fact Sheet explained the nature of the proposed discharge, the Council's decisions on limiting the pollutants in the discharges to the atmosphere, and the regulatory and technical bases for those decisions. The Council received an



earlier version of the fact sheet into evidence. The Council takes official notice of the final fact sheet and the facts contained therein as a part of the factual bases for its decision to issue the PSD permit.

36. Federal and state law require the Satsop CT Project to implement Best Available Control Technology to control air emissions. Available control technologies are ranked in descending order of effectiveness. The most effective alternative must be implemented unless a less effective control technology can be justified on technological, energy, environmental or economic grounds. The Satsop CT Project, operated in compliance with PSD requirements, will comply with BACT requirements as of the date of this Order.

37. The Satsop CT Project will use a combination of dry low NO<sub>x</sub> combustors (DLN) and Selective Catalytic Reduction (SCR) to reduce emissions of nitrogen oxides (NO<sub>x</sub>) to 7 ppmvd (parts per million by volume, dry) during natural gas firing and 12 ppmvd during oil firing. The combination of DLN and SCR is the Best Available Control Technology for this proposed Project.

38. The use of SCR results in a low level of ammonia emissions, but the record demonstrates that less than 10 ppmvd of ammonia will be emitted. That level is consistent with state and federal regulatory standards and will not result in a significant adverse impact.

39. Operation of the power plants will result in carbon dioxide (CO<sub>2</sub>) emissions. Although carbon dioxide has been associated with the greenhouse effect and global warming, it is not regulated under either federal or state laws. The proposed, gas-fired combustion turbine power plants emit substantially less CO<sub>2</sub> than many other power plants burning fossil fuels, including older natural gas-fired plants.

40. 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 turbine 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.

#### **Vegetation, Fish & Animal Life -- Power Units and Electric Transmission Lines**

41. Upland vegetation will not be adversely affected by power plant construction and operation because the Satsop CT Project site is not now vegetated. One wetland is located under the transmission lines, but will not be affected by construction of the transmission lines or towers. Most

of the plant species occurring in the grassland and shrubland areas under the transmission line are invasive and will not be adversely affected by the Project.

42. Construction and operation of the Satsop CT Project will not adversely affect wildlife. The site of the proposed power units is already highly disturbed and provides minimal value for wildlife.

43. Construction and operation of the Satsop CT Project will not adversely affect fisheries resources. The Supply System has agreed to employ Best Management Practices to minimize erosion and sedimentation that could adversely affect fish. NPDES permit conditions will limit temperature and contamination discharged in water to the extent necessary to protect fish resources.

44. The Applicant has taken into account the presence of endangered, threatened and candidate species in designing the proposed Project. The new transmission towers will be designed to be safe for raptors. Construction and operation of the proposed power generation facilities and transmission lines will not harm endangered, threatened or candidate species.

#### **Aesthetics, Visibility, Odor & Noise**

45. The Project includes the construction of two vegetated berms between the power plants and Keys Road. Each berm will be approximately 12 feet high and 80 feet wide. They will be 440 and 555 feet long respectively. The berms will provide partial visual screening for nearby residents and travelers along Keys Road. The proposed Project power units will not significantly affect visual aspects of the site.

46. Water vapor released from Project cooling towers may at times result in detectable fogging, misting or icing. These effects are likely to be infrequent, of short duration, and isolated to an area within a few hundred meters of the cooling towers.

47. The Applicant has credibly evaluated the effect of operating the proposed power plants on visibility at Class 1 areas including Mt. Rainier National Park, Goat Rocks Wilderness, Alpine Lakes Wilderness and Olympic National Park. Operation of the Project pursuant to the requirements of the PSD permit will not cause significant visibility impacts.

48. Operation of the Project will not result in any odor detectable at or beyond the site boundary.

49. The application commits the Applicant to the use of numerous design features to reduce sound levels near the Project, and provides credible results of acoustical modeling performed to predict sound levels at nearby residences. The Project will comply with state noise regulations. Sound levels at nearby residences will be at or below the levels typically found in residential areas.

### **Recreation & Cultural Heritage**

50. The Satsop CT Project combustion turbine generation units will be constructed on a defined portion of the Supply System's 1,600-acre Satsop property. Construction and operation will not, therefore, have any direct impact on recreational resources. Public demand for recreational resources may increase as a result of workforce presence during construction, but this effect will be temporary and relatively minor. After construction ends, the operation and maintenance of the Project will not affect access to or use of parks or recreation facilities in the vicinity.

51. Construction and operation of the Satsop CT Project will not adversely affect cultural and historical resources. The proposed generation unit site was previously developed and has been cleared, graded, covered with gravel, and in some places paved with asphalt. There are no recorded archaeological or historical sites on or adjacent to the proposed generation unit site.

### **Pipeline Construction and Operation**

52. The Supply System has agreed to use a variety of measures to reduce erosion and sedimentation during pipeline construction.

53. The Supply System has committed to take appropriate precautions during pipeline construction and operation to protect public health and safety from flood hazards. The Supply System will minimize impacts at river and stream crossings and other areas within the 100-year floodplain and floodway, and will provide for adequate conveyance of flood waters.

54. Although the pipeline is located in an area of some seismicity, the pipeline will not cross any known active faults. It will parallel the Olympic lineament, and would, therefore, be likely to experience relatively little differential ground movement in the event of an earthquake. The pipeline will be constructed with conservative seismic design features, using high strength steel and slack loop construction techniques, and will avoid side hill construction where possible. The risk of pipeline rupture due to an earthquake is low.

55. Pipeline design and construction techniques will also minimize the risk of pipeline rupture and damage due to landslides. Side hill construction in particular will be avoided. A pipeline rupture due to a landslide is unlikely.

### **Water Quality**

56. The entire pipeline will be hydrostatically tested in accordance with federal regulations. Water for testing will be obtained from local streams or rivers, and discharged back to the stream or river after testing. The Applicant will obtain approval to perform hydrostatic testing from EFSEC in consultation with Ecology and WDFW before withdrawing any water for testing.

57. In negotiation with the State Departments of Ecology and Fish and Wildlife and the U.S. Army Corps of Engineers, the Supply System has identified specific methods of crossing

streams and rivers along the pipeline route. Using these methods will minimize adverse effects upon water quality and will minimize damage to the stream and river environment.

58. The Supply System will not use herbicides or pesticides in or within 100 feet of any water body.

### **Vegetation, Fish & Animal Life**

59. The proposed pipeline route was selected in order to minimize environmental disturbance. By following existing utility corridors wherever feasible, adverse impact on vegetation, fish and animal life is reduced.

60. The width of the area required for pipeline construction will vary according to site-specific conditions. In general, the temporary construction rights of way will not exceed 75 feet in width. A permanent right of way 50 feet in width will be maintained in most areas. Trees greater than 15 feet in height located within 15 feet of the pipeline may be cut and removed. The Applicant will make all reasonable efforts to assure that rights of way are limited to the minimum width allowed by law, and the use of temporary construction rights of way will be avoided unless absolutely necessary.

61. The Applicant, Ecology and WDFW have agreed upon detailed requirements governing the construction and operation of the pipeline in wetland areas. To the extent that adverse impacts on wetlands cannot be avoided, the Applicant, Ecology and WDFW have also agreed upon wetland mitigation in the form of wetland restoration, creation, and enhancement. Construction, operation and maintenance of the pipeline consistent with these agreements will adequately protect wetland habitat. The Applicant will comply with Section 404 of the Federal Clean Water Act.

62. The Applicant, Ecology, and WDFW have also agreed upon pipeline construction and maintenance practices for upland areas. Among other things, the Applicant will retain selected areas of oak in protected islands, will plant fruit trees along the right of way, will retain snags, and will allow for snag recruitment. Construction, operation, and maintenance of the pipeline consistent with these agreements and requirements will adequately protect upland habitat.

63. The Applicant has taken into account the presence of endangered, threatened and candidate species in selection the pipeline route. Construction, operation, and maintenance of the proposed pipeline will not harm any endangered, threatened or candidate species.

64. The Applicant has also agreed to restore, revegetate and replace wetland and upland areas disturbed as a result of pipeline construction. The Applicant has also agreed to fund, design and implement an off-site prairie restoration project.

65. The long-term impact of pipeline construction and operation on the environment will be minimal.

### **Aesthetics**

66. Pipeline construction and maintenance will not have a significant adverse effect on area aesthetics. Much of the route traverses agricultural land, shrubland, grassland, developed areas, wetlands and open water habitats. In these areas, vegetation will be restored after construction and visual impact will be minimal. The most significant visual change will occur in forested areas, where some trees will have to be cleared. The pipeline route was chosen in part to minimize visual impacts. Tree clearing will not be visible from most locations due to hilly topography and other trees that will screen cleared areas from view.

### **Recreation & Cultural Heritage**

67. Construction and operation of the proposed pipeline will not result in significant adverse recreational impacts. The majority of the pipeline route is within or adjacent to existing corridors. The only public park land crossed by the proposed pipeline route is the Capitol State Forest. For the most part, the route crosses undeveloped forested areas. The Applicant will work with an off-road vehicle trail operator to minimize impact on off-road vehicle recreation. Public demand on recreational resources may increase as a result of the workforce presence during construction of the pipeline, but this is expected to be short-term and relatively minor. After construction, operation and maintenance of the pipeline will not affect access to or use of parks or other recreational facilities in the vicinity.

68. Construction, operation, and maintenance of the proposed pipeline will not adversely affect cultural and historical resources. Although a few cultural or historical sites are located near the proposed route, the pipeline will be designed and constructed to avoid any adverse impacts on these sites. A construction monitoring plan will also be implemented to avoid inadvertent damage to unknown cultural and historical sites. If any cultural or historical sites are discovered, construction will cease and the Applicant will immediately report to the Council or its designated agent the nature of its discovery.

69. The Applicant will present to the Council for its review and approval no later than six months before pipeline construction begins, a detailed plan setting forth the pipeline's location and design. Construction will begin only upon approval of the plan by EFSEC in consultation with its designated agent(s).

### **Health & Safety**

70. Methods of power plant and pipeline construction and operation are described in the application and the record of these hearings, constitute the Applicant's commitments, and are sufficient to ensure compliance with federal, state and local health and safety standards.

71. The risk of significant explosion during power plant construction or operation is extremely low. The Applicant will comply with applicable federal and state regulatory requirements and the commitments made in the course of this proceeding to minimize such risks.

72. The Supply System will develop a hazardous substance Prevention and Control Plan. Handling, storage and disposal of toxic and hazardous materials used in construction and operation will be in accordance with the Prevention and Control Plan and with applicable state and federal requirements.

73. The Supply System has a Spill Prevention Control and Countermeasure Plan for the Satsop site, and will modify it, subject to Council approval, prior to starting construction of the Satsop CT Project.

74. The Applicant proposes to construct the natural gas pipeline consistent with state and federal regulatory standards. Federal regulations define four classes of locations for pipelines based upon the number and types of occupied buildings or outside public areas that are present. The higher the class number, the more stringent the design and construction requirements. The Applicant proposes to design and construct a pipeline that complies with Class 3 requirements along its entire length, even though much of the pipeline will pass through Class 1 and Class 2 areas. No portion of the proposed pipeline will pass through Class 4 areas. The Applicant's agreement with the WUTC should be rejected, to the extent that it purports to preserve original jurisdiction in the WUTC rather than the Council.

75. WUTC regulations require setbacks from occupied facilities. The Applicant has no present intention to seek a waiver of those requirements. If need for such a waiver materializes, the Applicant will seek a waiver from the Council.

76. Evidence in the record identifies a variety of methods that will be utilized to reduce the risk of pipeline rupture. Substantial evidence in the record demonstrates that a pipeline rupture is not likely to occur if these methods are used.

### **Socioeconomic Impact**

77. The proposed Project will have a positive overall impact on the local socioeconomic environment. It will generate local employment, additional business for local service and material providers, and additional tax revenues for Grays Harbor and Thurston Counties and the state of Washington.

78. The proposed Project is unlikely to have any significant adverse effect on property values. Property in the vicinity of the proposed power plants has already been affected by the nearby nuclear power plants, electrical substation and electrical transmission lines. The majority of the pipeline route lies within or adjacent to existing corridors. Much of the route passes through sparsely populated rural areas. The pipeline will not result in long-term visual changes or require changes in property use.

### **Site Restoration**

79. 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.

### **Summary Findings**

80. The terms and conditions of the attached amended Site Certification Agreement, provisions in the Revised Application for Site Certification No. 94-1, commitments made on the record of the hearing, and provisions in the Council's NPDES and PSD permits and other Attachments to the Site Certification Agreement assure the Council and the public that citizens of the state of Washington will be adequately protected during construction and operation of the Project.

81. Construction, maintenance, and operation of the proposed Project, according to the terms and conditions of the attached amended Site Certification Agreement, provisions found in the Revised Application for Site Certification No. 94-1, commitments made on the record of the hearing, the NPDES permit issued in this matter, and the Council's PSD permit, will not detract from the public's opportunity to enjoy the aesthetic and recreational benefits of air, water, or land resources, will not impair air cleanliness, and will cause no significant detrimental changes in the environment.

82. Construction and operation of the proposed Project will help to provide abundant energy at reasonable cost.

83. Any and all fees required by RCW 80.50.070 in connection with the filing of Application 94-1 pursuant to the provisions of Chapter 80.50 RCW and WAC 463-08-020 that have been heretofore charged to the Applicant have been paid and received by the State Treasurer.

84. Each and every condition stated in the attached amended Site Certification Agreement has been drawn within the Council's scope of authority and is found essential to the lawful construction and operation of the proposed Project.

85. Each and every provision of the Revised Application for Site Certification No. 94-1 and each and every commitment made by the applicant or its authorized agents upon the record of the proceeding is within the Council's scope of authority and is essential to the lawful construction and operation of the proposed Project.

86. Each and every condition stated in the NPDES permit issued by the Council in this matter is found to be essential to the lawful operation of the proposed Project.

87. Each and every condition stated in the PSD permit issued by the Council in this matter is found to be essential to the lawful operation of the proposed Project.

88. The parties agree and the Council finds that the Supply System will not begin construction of either unit immediately upon execution of the amended 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.

89. The Council has complied with the processes required in Chapter 43.21C, the Washington State Environmental Policy Act, by participating in the federal scoping process, commenting to the federal draft Environmental Impact Statement (EIS), issuing due and proper notice of adoption of the federal final EIS, adopting the final EIS, and 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 and the Addendum to the FEIS that it prepared pursuant to WAC 197-11-630. Pursuant to RCW 43.21C.150, the Council has utilized the FEIS and the addendum in lieu of a separately prepared statement before reaching this decision.

90. The Governor of the State of Washington will act within the purposes of Chapter 80.50 RCW by approving the attached amended Site Certification Agreement, conditioned upon the implementation of its terms and upon provisions of the Revised Application for Site Certification No. 94-1, the Applicant's commitments made upon the record of the hearing, the NPDES permit issued by the Council, and the Approval of the Notice of Construction and Prevention of Significant Deterioration Application.



Based on the above Findings of Fact, the Council hereby makes and enters the following Conclusions of Law:

### **CONCLUSIONS OF LAW**

1. Jurisdiction. The Washington State Energy Facility Site Evaluation Council has jurisdiction over the persons and the subject matter of Application No. 94-1.
2. Stipulations. The Stipulations entered into between the Applicant and other parties to this proceeding are approved and accepted by the Council and by this Order are made conditions of the Site Certification Agreement, with the following exceptions. To the extent of these exceptions, the Stipulations are rejected:
  - a. The Stipulation between the Applicant and the Department of Ecology should be rejected to the extent that it fails to reserve to the Supply System sufficient water rights to complete decommissioning and site restoration of Nuclear Power Projects Nos. 3 and 5; and
  - b. The Stipulation between the Applicant and the Utilities and Transportation Commission is rejected to the extent that it purports to vest any jurisdiction in the Commission, rather than the Council as provided in state law for pipeline construction and operation.
3. Compliance with regulation. Application No. 94-1, as amended to reflect all commitments made by the Applicant during the adjudicative proceeding, complies with the requirements of Chapter 463-12 WAC.
4. Site restoration. Given the nature of this proposal and the relative scope and complexity of the Project, the Applicant should be allowed to comply with WAC 463-42-655 by presenting its initial Site Restoration 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 Project, and at least that element shall be resolved and approved before construction may begin.
5. The Site Certification Agreement shall provide that the certificate holder will be bound by future Council rules adopted under the state Administrative Procedure Act and by lawfully prepared policy or interpretive statements, unless the Project is specifically exempted in the rule or statement or under waiver requested by the Supply System and granted by the Council.

6. Having evaluated Application No. 94-1, as amended, and the oral and documentary evidence on the hearing record, the Council concludes that construction and operation of the proposed Satsop CT Project pursuant to the terms and conditions of the Site Certification Agreement will comply with the Council's topical guidelines and 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.

7. State Environmental Policy Act (SEPA). The Council is the SEPA lead agency for the proposed action. As Council Manager, Jason Zeller is the SEPA responsible official pursuant to WAC 463-47-051. Because the SEPA responsible official determined that the proposed action may have a significant adverse environmental impact, an environmental impact statement (EIS) is required. The Council satisfies the SEPA EIS requirement by adopting existing environmental documents prepared under the National Environmental Policy Act (NEPA). WAC 463-47-020; WAC 197-11-610. This approach is encouraged by the Council's rules. WAC 463-47-150. Adequate notices and a hearing opportunity were given of the Council's intention to adopt the federal and final EIS and Addendum prepared pursuant to WAC 197-11-630.

The environmental documents and other materials adopted by the Council are adequate and meet all of the Council's responsibilities under SEPA, satisfying the requirements of Chapter 43.21 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 Satsop Combustion Turbine Project and alternatives and describe potential measures to mitigate those impacts. The cumulative impacts of the Project are adequately addressed by the adopted environmental review and mitigated by the conditions contained in the Site Certification Agreement.

8. Recommendation. Having balanced the demands for energy facility location and operation with the broad interests of the public, the Council should recommend that the Governor of the State of Washington approve Application No. 94-1, as amended, and approve the attached amended Site Certification Agreement, including all Attachments, between the State of Washington and the Washington Public Power Supply System to permit construction and operation of the Satsop Combustion Turbine Project. The effect of the amended Site Certification Agreement is contingent upon execution by the Governor and the Applicant.

9. Duration of certificate. 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. 88 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.

Based on the foregoing Findings of Fact and Conclusions of Law, the Council makes and enters the following Recommendation and Order:

**RECOMMENDATION AND ORDER**

The Energy Facility Site Evaluation Council Orders:

1. The Council hereby Reports to the Governor of the State of Washington that Application No. 94-1 as amended for Site Certification for the Satsop Combustion Turbine Project is in compliance with applicable laws and regulations.
2. The Council recommends that the Governor approve the attached Amended Site Certification Agreement, with all Attachments, upon the terms and conditions set out therein, and in so doing approve the certification of the Satsop Power Plant Site for construction and operation of the Satsop Combustion Turbine Project.
3. This Report and Recommendation, along with the attached proposed 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.

DATED at Olympia, Washington and effective this \_\_\_\_\_ day of March, 1996.

THE WASHINGTON STATE ENERGY FACILITY  
SITE EVALUATION COUNCIL

\_\_\_\_\_  
Frederick S. Adair, Chair

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Walter Swenson, Department of Agriculture

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Terry Strong, Department of Health

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Ron Skinnerland, Department of Ecology

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Gary Ray, Department of Transportation

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Doug Kilpatrick, Washington State Energy Office  
Transportation

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C. Robert Wallis, Utilities and  
Commission

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Jo Roller, Department of Fish and Wildlife

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Stan Lattin, Grays Harbor County

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Nancy Joseph, Department of Natural Resources

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Marie Cameron, Thurston County

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David McCraney, Department of Community,  
Trade and Economic Development

