

Site Certification Agreement

Between

The State of Washington

and

The Washington Public Power Supply System



Satsop Combustion Turbine Project

and

Associated Natural Gas Pipeline

Grays Harbor County, Washington

Thurston County, Washington

Amendment #3

(Executed October 27, 1976; Amended March 18, 1982;
Amended May 21, 1996; Amended ~~8/12~~ 8/12, 1999)

Energy Facility Site Evaluation Council

Olympia, Washington

Site Certification Agreement
Between
The State of Washington
and
The Washington Public Power Supply System
for the
Satsop Combustion Turbine Project

Located in:
Grays Harbor County, Washington
Thurston County, Washington

This Site Certification Agreement is made and entered into pursuant to Chapter 80.50 of the Revised Code of Washington by and between the State of Washington (which is also referred to as the "State" in this document), acting by and through the Governor of the State of Washington, and the Washington Public Power Supply System (also referred to in this document as the "Supply System"), a municipal corporation and a joint operating agency of the State of Washington organized in January 1957 pursuant to Chapter 43.52 of the Revised Code of Washington.

The initial Site Certification Agreement was executed on October 27, 1976, and provided for construction and operation of Nuclear Projects No. 3 and No. 5. On March 18, 1982, the Governor approved Amendment No. 1, which included changes to the terms for the operation of emergency diesel generators for Projects No. 3 and No. 5. On May 21, 1996, the Governor approved an Amended Site Certification Agreement incorporating Amendment No. 2, which provided authorization and the terms and conditions for construction and operation of the Satsop Combustion Turbine Project. On _____, 1999, the Governor approved Amendment No. 3 which removed the terms and conditions for Nuclear Projects No. 3 and No. 5 (WNP-3 and WNP-5), but retained the terms and conditions for the Satsop Combustion Turbine Project.

The Satsop Combustion Turbine Project consists of two combined cycle combustion turbine power plant units and an associated natural gas pipeline. The Project is located on a 20-acre site within an existing construction laydown area on the former Satsop Power Plant Site. The balance of the site has been transferred to a political subdivision(s) of the Grays Harbor County to pursue economic development activity pursuant to county ordinances and RCW 80.50.300. The Supply System retains ownership of the Satsop Combustion Turbine Project site and has agreements with the county corporation to ensure that all facilities and/or systems necessary to support the construction and operation of the combustion turbine project are available.

This Site Certification Agreement is administered on behalf of the State by the Energy Facility Site Evaluation Council (also referred to as "EFSEC" or the "Council" in this document).

The parties hereto now desire to set forth all terms, conditions, and covenants relating to such site certification in this Site Certification Agreement pursuant to the provisions of RCW 80.50.100 (1).

ARTICLE I. SITE CERTIFICATION

A. Site Description

1. The site for the Satsop Combustion Turbine Project is located in Grays Harbor County, Washington, south of the Chehalis River near the town of Satsop, and is more particularly described in Attachment I, which is incorporated herein by reference.
2. The natural gas pipeline is to be located in Grays Harbor and Thurston counties, in the approximate location identified in the Application. The Supply System shall provide the Council with a legal description of the natural gas pipeline within six (6) months after pipeline construction is completed.

B. Site Certification

1. The State hereby authorizes the Supply System's combined cycle combustion turbine generating project, known as the Satsop Combustion Turbine Project, and as described below, to be located, constructed, and operated in the locations described in Section I.A.1 and I.A.2 hereof.
 - a. The Satsop Combustion Turbine Project consists of two natural gas fired combined cycle combustion turbine units and an associated natural gas pipeline.
 - b. The combustion turbine generator (CTG) for each unit is a Westinghouse 501 F model. Each combustion turbine unit will generate an average electrical output of 245 megawatts and shall have a heat recovery steam generator (HRSG) and a steam turbine generator (STG). Dry Low NOx Combustors in combination with Selective Catalytic Reduction (SCR) shall be used to minimize the formation of nitrogen oxides (NOx). An oxidation catalyst shall be used to control carbon monoxide (CO) and volatile organic compounds (VOC) emissions. Cooling will be provided by a cooling tower consisting of four cells.
 - c. Natural gas shall be used as the primary fuel. Natural gas will be supplied through a 48-mile pipeline, approximately 16 – 20 inches in diameter, connecting to the Northwest Pipeline Corporation's mainline near Vail, Washington. Low sulfur No. 2 fuel oil will be used as backup fuel. Use of fuel oil is limited to 360 hours of operation per unit per year.
 - d. The electrical output of each unit of the Satsop Combustion Turbine Project will be delivered through the Bonneville Power Administration's high-voltage system to the existing Bonneville Power Administration Satsop substation.

2. Construction of either or both units of the Satsop Combustion Turbine Project may begin within ten (10) years from May 21, 1996, which is the date of signing the Second Amended Site Certification Agreement (Amendment No. 2) authorizing the construction and operation of the Combustion Turbine Project. Construction of each unit may begin separately or simultaneously within that ten-year period. Construction is deemed to begin upon the start of construction of a unit's major components (i.e., the combustion turbine or the natural gas pipeline), excluding site preparation, upon a schedule and with the intention of completing construction within eighteen months after commencement. If construction of either unit's major components has not commenced within ten (10) years of the signing of Amendment No. 2, i.e., May 20, 2006, rights under the Site Certification Agreement to construct and operate the combustion turbine unit that has not commenced construction shall cease.

3. Six months before beginning construction, the Supply System:
 - (a) during the first five years¹ after execution of Amendment No. 2 shall identify to the Council any substantial relevant change or certify the lack of substantial change in relevant environmental conditions, regulatory environment, or economically available technology, and

 - (b) during the second five years² shall certify that the representations of the application, environmental conditions, pertinent technology, and regulatory conditions remain current, or identify any changes and propose 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 necessary or appropriate changes.

4. Not less than six months prior to beginning construction of each generating unit of the combustion turbine project, the Supply System must provide EFSEC with evidence that the Supply System has satisfied its obligations under this Site Certification Agreement as follows:
 - a. That it has entered into one or more power purchase agreements that provide in the aggregate for the purchase and sale of at least 60 percent of the design capacity of the unit or units being constructed.

¹ May 21, 1996 through May 20, 2001

² May 21, 2001 through May 20, 2006

- b. That any such power purchase agreement shall have a term of at least five (5) years.
- c. That with respect to any purchaser entering into a power purchase agreement for more than 40 percent of the capacity of the generating unit, the Supply System must ensure that the following conditions are met:
 - i. If the 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.
 - ii. If the purchaser has not formally adopted an integrated resource plan, then either:
 - (a) the purchaser must have reviewed commercially available supply and demand side resources,
 - (b) 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.c.i., or
 - (c) 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.

ARTICLE II. GENERAL CONDITIONS

A. Legal Relationship

1. This Site Certification Agreement is made in lieu of any permit, certificate or similar document required by any department, agency, division, bureau, commission, board, or political subdivision of this state.
2. The Supply System agrees to enter into a lease with the State Department of Natural Resources for use of certain public state land if needed for the Satsop Combustion Turbine Project and associated pipeline.
3. Liquid discharges from the Satsop Combustion Turbine Project to navigable waters shall be made in accordance with the National Pollution Discharge Elimination System (NPDES) permit issued by the Council (Attachment II or as reissued by the Council).

4. Discharges from the Satsop Combustion Turbine Project into the atmosphere of gases or substances shall be made in accordance with the Prevention of Significant Deterioration (PSD) permit issued by the Council (Attachment V or as reissued by the Council).
5. This Site Certification Agreement shall bind the Supply System and the State and its departments, agencies, divisions, bureaus, commissions, boards, and political subdivisions subject to all the terms and conditions set forth herein.
6. This Site Certification Agreement is subject to federal law and regulations applicable to the project and to the terms and conditions of any permits and licenses which may be issued to Supply System by appropriate federal agencies.
7. This Site Certification Agreement constitutes the whole and complete agreement between the parties and supersedes any other negotiations, representations or agreements, either written or oral, and not set forth herein, *Provided*, that any representations and/or commitments made of or on behalf of the Supply System in the application and on the record during the adjudicative proceeding, are incorporated herein by this reference and made a part hereof as though set forth herein.
8. The Supply System agrees to submit any requests for waivers from the requirements found at Section 480-93-020 and -030, Washington Administrative Code, for the natural gas pipeline to the Council. The Council will act upon any such request after considering any relevant information or recommendation presented by the Supply System, by the Washington Utilities and Transportation Commission (WUTC) or its authorized Staff, and by any other interested person or persons.
9. The Supply System shall assure that measures are taken during construction and operations at the Satsop Combustion Turbine Project and pipeline route that will protect public health and safety from flood hazards. Such measures include minimizing impacts at river and stream crossings and other areas within the 100-year floodplain and floodway, as identified by Federal Emergency Management Agency maps, to provide for adequate conveyance of flood waters, including the assurance of no significant rise in base flood elevations.

B. Enforcement

1. This Site Certification Agreement may be enforced by resort to all remedies available at law or in equity.

2. This Site Certification Agreement may be revoked, suspended, or modified by the State for failure by Supply System to comply with any of the terms and conditions herein, or for violations of Chapter 80.50 RCW, regulations issued thereunder, any other applicable state or federal laws or regulations, or for violation of any order of the Council, pursuant to the provisions of Chapters 80.50 and 34.05 RCW and Title 463 WAC.
3. When any action of the Council is required by or authorized in this Site Certification Agreement, the Council may, but shall not be required to, conduct a hearing pursuant to Chapter 34.05 RCW. If the Council withholds or refuses approval of a required or requested action and the Council grants a hearing, it shall be conducted pursuant to Chapter 34.05 RCW.

C. Notices and Filings

Filing of any document or notice required by this Site Certification Agreement with the Council shall be deemed to have been duly made when delivered to the Council's offices in Olympia, Washington. Notice to be served upon the Supply System shall be deemed to have been duly made when deposited in first class mail, postage prepaid, addressed to the office of the Chief Executive Officer of the Supply System.

D. Right of Inspection

The Supply System agrees to provide access to the Satsop Combustion Turbine Project site and all associated facilities, and to all records regarding the construction and operation of project facilities, to designated representatives of the Council in the performance of their official duties.

E. Site Certification Agreement Compliance Monitoring and Costs

The Supply System shall pay to the Council such reasonable costs as are actually and necessarily incurred for monitoring and compliance activities during the construction and operation of the Satsop Combustion Turbine Project, including the natural gas pipeline, as authorized in this Site Certification Agreement and as required in Chapter 80.50 RCW. EFSEC shall prescribe the amount and manner of such payment subject to applicable rules and procedures.

F. EFSEC Liaison

The Supply System shall designate a person to act as a liaison between the Council and the Supply System for matters relating to the Satsop Combustion Turbine Project.

G. Site Restoration

The Supply System is responsible for site restoration pursuant to Council rules. At least six months prior to beginning construction, the Supply System shall present to the Council its initial site restoration plan. Construction may not begin until the Council has approved a

plan adequately providing for site restoration and for the funding of site restoration in the event of the Satsop Combustion Turbine Project being terminated before it has completed its planned useful operating life. A detailed Satsop Combustion Turbine Project site restoration plan shall be submitted to the Council, consistent with its rules.

H. Modification of Site Certification Agreement

1. This Site Certification Agreement may be amended pursuant to Council rules and procedures then in effect, and in like manner as the development of the original Site Certification Agreement, including, but not limited to, obtaining approval of the Governor. Any such amendments to this Site Certification Agreement shall be made in writing.
2. Any change of the terms or conditions of a PSD or NPDES Permit or this Site Certification Agreement required by federal law or regulations shall be governed by applicable law and regulation and shall not require modification of this Site Certification Agreement in the manner prescribed in H.1, above. Any changes in the terms or conditions of Attachment I–Site Legal Description; Attachment III–Water Withdrawal Authorization; and Attachment IV–Mitigation Measures and Project Conditions; shall not require modification of this Site Certification Agreement in the manner prescribed in H.1 above, unless otherwise required by Council rules or regulations.
3. In circumstances where a significant degree of adverse impact on the environment exists or is imminent, the Council may impose specific conditions or requirements upon the Supply System in addition to the terms and conditions of the Site Certification Agreement as a consequence of those circumstances. Such additional conditions or requirements shall be effective only while needed to protect the public health, safety or welfare from the adverse circumstances, for not more than 90 days, and may be extended for additional 90-day periods if deemed necessary by the Council.

ARTICLE III. PROJECT CONSTRUCTION

A. Construction Commencement and Reporting

1. Pre-construction requirements: At least six months prior to beginning construction, the Supply System shall provide to the Council the following documents for the Council's review and approval, and it shall not begin construction until it receives approval to do so:
 - a. Pipeline design and location plans, drawings, and other appropriate materials.

- b. Reports as to validity of environmental, regulatory, and technological requirements of the Site Certification Agreement.
- c. Initial site restoration plan, as provided in II. G., above
- d. The Supply System shall submit other documents at the appropriate times as required under the terms of this Site Certification Agreement (See, e.g., section A.3.a, below.)

2. Construction Schedule

- a. Thirty days prior to beginning construction, the Supply System shall submit an overall construction schedule. The Supply System shall submit a quarterly Construction Progress Report to the Council, within 30 days after the end of the quarter, during the construction period.
- b. The Supply System agrees to:
 - i. notify the Council immediately in the event of any significant change in the construction schedules on file with the Council, and
 - ii. serve copies on the Council of all "Notices to Proceed" which are issued to contractors with respect to contracts requiring work in the Chehalis River.

3. Plans and specifications

- a. The Supply System shall submit to EFSEC or its designated representative for approval, at the appropriate time, those design documents that demonstrate compliance with the conditions of this Site Certification Agreement. The design documents shall include, but are not limited to, conceptual design studies, flow diagrams, system descriptions, detailed design drawings and specifications as appropriate, and vendor guarantees for equipment and processes.
- b. The Supply System shall design the proposed facility to comply with requirements for construction in Seismic Zone 3.
- c. Project buildings and structures shall comply with requirements of the Grays Harbor County construction codes and with Section 301(a) of the Uniform Building Code (UBC). Buildings and structures are defined in Sections 403 and 420 of the UBC. Work exempt from compliance is defined in UBC Section 301(b) or by approval of the Council.

B. Aesthetics and Landscaping

1. The Supply System agrees to construct the Satsop Combustion Turbine Project in a manner aesthetically compatible with the adjacent area.
2. The Supply System agrees to landscape Satsop Combustion Turbine Project lands within the fenced perimeter in a manner compatible with the surroundings, using indigenous plants and vegetation where possible.
3. Two screening berms will be built between the Satsop Combustion Turbine Project and Keys Road. The berms will be vegetated with indigenous plant species in a random arrangement to simulate native patterns.
4. The Supply System agrees to comply with the mitigation measures set forth in Attachment IV.

C. Surface Run-off and Erosion Control

1. During construction, the Supply System agrees to require its contractors to employ all means necessary to meet standards set forth in this Site Certification Agreement and to use any other reasonable means in order to avoid soil erosion. The Supply System agrees to set forth such conditions as are necessary for compliance thereto in its bidding documents, plans, and contracts, which will be developed in consultation with the Council.
2. Sedimentation, erosion control, dust control, and related construction plans pertaining to work on the site, permanent and/or temporary roads and the natural gas pipeline must conform to requirements set forth in Attachment IV or alternative plans submitted by the Supply System to, and accepted by, the Council.
3. The Supply System agrees to make available all sedimentation and erosion control system plans to the Council for its approval upon request.
4. In the event of unforeseen surface water runoff during construction, the Supply System agrees to comply with all pertinent industry standards for control of such runoff during construction. The Supply System further agrees to take such actions as are deemed necessary and reasonable by the Council to control said runoff. The Supply System agrees to promptly notify the Council of the occurrence or likely occurrence of any surface water runoff problem.
5. The Supply System shall take such steps as are necessary to assure that all construction activity will not result in a violation of applicable turbidity criteria in the State of Washington Water Quality Standards. The Council may, in its discretion, grant a temporary waiver of such standards upon request by Supply System.

D. Transmission Lines

1. Associated transmission lines for the Satsop Combustion Turbine Project will connect the project to the Northwest Power grid at the Bonneville Power Administration Satsop Substation. The transmission lines will be placed in the existing Bonneville Power Administration rights of way. Towers will be placed to avoid unstable areas along Fuller Creek.
2. All associated electrical transmission and service lines shall comply in design and construction with all applicable state, federal, and industry standards, including any applicable standards specified in earlier versions of this Site Certification Agreement to the extent that they have not been superseded. In the event of inconsistency among applicable standards, the most stringent standard shall apply.

E. Construction Clean-Up

The Supply System agrees upon completion of construction to dispose of all temporary structures not required for future use. The Supply System also agrees to dispose of used timber, brush, refuse or flammable material resulting from the clearing of lands or from the construction of the project in a manner approved by the Council.

F. As-Built Drawings

The Supply System agrees to allow access to the Council or its designated representatives, on request, to complete sets of as-built drawings for the following listed project components and for other components as the Council may require in the future:

1. Sedimentation and erosion control systems,
2. Sanitary waste disposal systems,
3. Cooling towers and condenser coolant loop,
4. All associated electrical transmission and service lines and substations,
5. River gauge station, and
6. Natural gas pipeline.

G. Archaeological Site Protection

1. The Supply System agrees to coordinate with the Council and local Tribes to develop an acceptable construction monitoring plan, and will implement the plan during construction of the Satsop Combustion Turbine Project, including the natural gas pipeline.
2. The Supply System agrees to halt relevant construction activity immediately and report to the Council all archaeological or historical findings made during the course of excavation and construction of any project authorized herein, including associated natural gas pipeline and electrical transmission lines.

3. The Supply System agrees to consult with the Council to arrange for preservation of artifacts and for interpretation of any archaeological or historical site discovered in the course of any construction.

H. Natural Gas Pipeline

1. The Supply System shall be permitted to construct and operate a natural gas pipeline associated with the Satsop Combustion Turbine Project. The Supply System agrees to design, construct, and operate the natural gas pipeline in accordance with pertinent state and federal regulations, including the requirements of Washington Utilities and Transportation regulations found at Chapter 480-93, Washington Administrative Code, and with the conditions and requirements stated in this Site Certification Agreement.
2. The Supply System agrees to consult with the Council or with its designated representatives in development of plans, bid documents, and contracts for construction of the natural gas pipeline, all of which Supply System agrees to make available to the Council upon request.
3. The Supply System agrees to submit in a timely manner, no later than six months prior to the anticipated beginning of construction, specific location plans, drawings and construction contracts for installation of the natural gas pipeline to the Council and its designated representatives for review and approval. If the Council has objections or concerns regarding any of the particulars of the materials submitted, it shall forthwith advise the Supply System of those objections, etc., and the reasons therefor. The Supply System agrees to take such corrective action as may be necessary to satisfy the objections before commencing any site preparation or construction of the natural gas pipeline. The Supply System will submit a pipeline safety plan for Council review and approval no less than three months before beginning pipeline operation.
4. Construction related activity within an active stream or river channel and/or within 50 feet of stream or river banks shall be limited to the period of July 1 to September 30, unless otherwise specifically authorized by the Council.
5. The Supply System agrees to comply with the mitigation measures identified in Attachment IV.
6. The Supply System shall apply the priority of mitigation principles (avoid, minimize, restore, and replace in that priority order) in its decisions and actions in planning, constructing, operating, and maintaining the natural gas pipeline.
7. The Supply System shall submit to the Council for its review and approval, no later than six months prior to beginning of combustion turbine operations, a five-year monitoring plan to assess mitigation success. The success of wetland and riparian

revegetation shall be monitored annually, with annual written reports to the Council and its designated representatives, until the Council terminates the requirement.

I. Construction Phase Spill Prevention

The Supply System shall submit for Council review and approval a spill prevention and countermeasure program that complies with the provisions of the Satsop Combustion Turbine Project's NPDES permit three months prior to beginning construction of the project. This program shall address oil/chemical storage, containment, site security and personnel training. The program shall also address measures that will be taken to control and contain discharge, cleanup actions, notification of appropriate agencies and a list of available cleanup materials.

J. Septic System for the Satsop Combustion Turbine Project

1. The Supply System shall be permitted to construct, maintain, and operate a septic system for the Satsop Combustion Turbine Project.
2. A preliminary report on the septic system design for the Satsop Combustion Turbine Project shall be prepared and submitted to the Council for its review and comment. The report shall include: site conditions, schedule of development, water balance analysis, and overall effects of the proposed system on the surrounding area.

K. Coastal Zone Management

The Supply System shall ensure consistency with the requirements of the Coastal Zone Management Program, the Shoreline master programs of Thurston and Grays Harbor counties, the Federal Water Pollution Control Act, and the State Water Pollution Control Act.

L. Noise

1. No construction activities are permitted on Sundays, legal holidays, or between 10:00 p.m. and 6:00 a.m. within 1000 feet of an occupied residential dwelling.
2. All construction equipment shall have noise control devices no less effective than those provided originally by the equipment's manufacturer.
3. Pile driving or blasting operations shall not be permitted within 3,000 feet of an occupied residential dwelling on Sundays or legal holidays or between 8:00 p.m. and 8:00 a.m. on other days.

ARTICLE IV. OPERATION OF THE PROJECT

A. Water Withdrawal

1. The Supply System is hereby authorized to withdraw water for operation of the Satsop Combustion Turbine Project as follows:

The two combustion turbine units are limited to a total of 9.5 cubic feet per second, of which 8.6 cubic feet per second will be for power production, including quench water to meet the temperature limits of the NPDES permit. The remaining 0.9 cubic feet per second is for quench water to cool the Satsop Combustion Turbine Project discharge below the temperature set in the NPDES Permit. Withdrawal is subject to the terms as more particularly described in Attachment III, attached hereto and incorporated by reference.

2. The Supply System is authorized to withdraw up to 300 gallons per minute from ground water in an area near the confluence of the Chehalis and Satsop rivers from a well known as the raw water well. Withdrawal of water from this well for any uses other than domestic supply and fire suppression will be limited to 300 gallons per minute and will be limited by restrictions set forth in Attachment III on withdrawals during periods of low flows.
3. Should the withdrawal for operation of the Satsop Combustion Turbine Project impair existing water rights, the Supply System agrees to compensate the holder of such rights for such impairment caused by the withdrawal, and to take necessary measures to prevent recurrence of such impairment.
4. Withdrawal of water for the Satsop Combustion Turbine Project from the Ranny wells shall be decreased (or stopped) as necessary to assure that the project does not affect the minimum base flows immediately downstream of the point of diversion. The required minimum base flows are established in Chapter 173-522-020, Washington Administrative Code, and set forth in Attachment III. All withdrawals are subject to the withdrawal restrictions set forth in Attachment III, and the additional 0.9 cubic feet per second of quench water withdrawal is also limited to periods in which an additional withdrawal will actually reduce the temperature of the discharge. This authorization is also subject to the provisions of Chapter 173-522 and Chapter 173-500, Washington Administrative Code.
5. The Supply System agrees that if it pursues future development on the former Satsop Power Plant Site, unrelated to any project authorized in this Site Certification Agreement, requiring water appropriation, the Supply System will apply for such appropriation to the Council or Department of Ecology, whichever has jurisdiction over the project. The priority date will be assigned at the time of application under applicable laws and regulations.

6. The Supply System shall limit its withdrawals to that total amount authorized by the Council and/or Washington Department of Ecology.
7. The Supply System may use stored water in order to provide the necessary water for the Satsop Combustion Turbine Project during the low flow periods set forth in Attachment III.
8. The Supply System shall install and maintain a Council approved measuring device in accordance with RCW 90.03.360 and WAC 508-64-020 through 040 for water use.
9. Not later than six months prior to the start of construction of the Satsop Combustion Turbine Project, the Supply System shall install a suitable river flow monitoring gauge at the location of Control Station No. 12.0350.02 (Chehalis River below the confluence with the Satsop River). The type, location, and installation of the gauge shall be approved by the Council in consultation with the Department of Ecology.

B. Water Discharge

All discharges by the Supply System to state waters shall be in accordance with Chapter 90.48 RCW, this Site Certification Agreement, and the NPDES Permit, as issued by the Council and attached hereto as Attachment II, and as may be later amended by the Council.

C. Discharge Into Air

1. The Supply System shall operate the Satsop Combustion Turbine Project so that all discharges to the atmosphere shall comply with the Approval of Notice of Construction and Prevention of Significant Deterioration Application as set forth in Attachment V, attached hereto and incorporated by reference.
2. The Supply System shall properly operate and maintain in good working order all air pollution control equipment and monitoring equipment required in Attachment V.
3. The Satsop Combustion Turbine Project shall be subject to the time limitations for construction and renewal conditions as set forth in the Final Approval Notice of Construction and Prevention of Significant Deterioration Permit (Attachment V).
4. The Supply System shall report immediately to the Council whenever the air monitoring programs disclose the existence of emergency conditions or conditions that might lead to a violation of the air emission permit as provided in Attachment V.

D. Vegetation, Fish, and Animal Life

1. The Supply System shall comply with mitigation measures relating to vegetation, fish and animal life as provided in Attachment IV – Mitigation Measures and Project Conditions, attached hereto and incorporated by reference.
2. The Supply System shall provide such additional measures for protection of wildlife, fish, and other aquatic life and the ecology of the area deemed necessary by the Council to minimize adverse impact from construction or operation of the project. The perimeter of the undeveloped lands protected under the 1994 Mitigation Agreement will be marked as appropriate to protect these lands.
3. The Supply System agrees to the following pipeline right-of-way practices:
 - a. Herbicides and pesticides will not be used within 100 feet of a water body.
 - b. Vegetation maintenance practices over the full width of the permanent right-of-way in wetlands and riparian areas are prohibited. However, to facilitate periodic pipeline surveys, a corridor centered on the pipeline up to ten feet wide may be maintained in a herbaceous state. In addition, trees that are located within fifteen feet of the pipeline and are greater than fifteen feet in height may be selectively cut and removed from the right of way.

E. Lighting

In specific locations where glare or light spillover would impact Keys Road or be obtrusive to nearby residences, lighting angles will be adjusted to minimize glare impacts, or supplemental light shields/vegetation will be used for extra screening.

F. Noise

1. The combustion turbines and other major sources of sound shall be enclosed within structures in which acoustical damping has been installed.
2. Acoustically absorptive silencers shall be installed on the combustion turbine air intake system, enclosure ventilating systems, and emergency relief valves.
3. Separate acoustical enclosures shall be installed for major noise sources including each combustion turbine and generator.
4. Acoustically absorptive insulation shall be installed in duct walls of the combustion turbine air intake and exhaust systems.

ARTICLE V. PUBLIC AND ENVIRONMENTAL PROTECTION

A. Emergency Plans

The Supply System shall develop an Emergency Response Plan describing the methods, means, and resources available to provide for employee safety in the event of emergencies including fire or explosions, in association with the Satsop Combustion Turbine Project and associated pipeline. No later than three months prior to operation of the combustion turbines and natural gas pipeline, the plan will be submitted for Council review and approval. In preparing the plan, the Supply System agrees to:

1. Coordinate such plan with local, state and federal agencies directly involved in implementing such a plan.
2. Follow the requirements of WAC 296-24-567 and 296-62-3112 and 29 CFR 1910.38, Emergency Action Plan.
3. Included detailed provisions for public health and safety, emergency medical treatment, special emergency training programs and prevention of property damage.
4. Periodically provide the Council with updated lists of emergency personnel, communication channels and procedures.
5. All employees, contractors, and visitors will be covered by the plan.

B. Security Plan

The Supply System will submit a comprehensive physical Security Plan for the protection of the site and project facilities.

C. Habitat Management Plan

The Supply System shall develop a management plan that will assure the protection and enhancement of wildlife values on the lands that are acquired to replace lost wetland and upland wildlife habitat values. The management plan will be fully implemented within five years of the commencement of operation of either combustion turbine unit. The Supply System shall provide a draft of the Habitat Management Plan to the Council and its designated representatives for review and approval no later than six months after either unit begins operations. The management plan shall incorporate the mitigation measures and project conditions specified in Attachment IV.

D. Spill Prevention and Countermeasure Plan

1. The Supply System shall prepare a Spill Prevention, Control and Countermeasure Plan (SPCC) for Council review and approval, consistent with the requirements of the NPDES Permit. The SPCC plan is to be approved by a Professional Engineer

and include the amount and type of oils(s) and hazardous materials to be stored at the project site, patterns of usage, transfer procedures and other factors which will indicate the magnitude of spill potential. The SPCC plan shall also describe procedures for securing valves, type of gauges, dike size and design, site security, lighting, alarms, spill response materials and equipment, inspection procedures, personnel training, emergency procedures and spill notification requirements. The SPCC plan will also include location and topographic maps, accurate diagrams of the storage tank, dike(s), piping, valves, transfer and other significant components of the oil storage and delivery system. This SPCC plan shall be submitted to the Council and its designated representatives within one year of beginning construction of the Satsop Combustion Turbine Project, and shall be updated a minimum of every two years.

2. Within the above ground 1.8 million gallon oil storage tank containment dikes, an impervious barrier will be installed to keep spilled oil from entering waters of the state. Design of the impervious tank containment must address stormwater management and be approved by a Professional Engineer.
3. If the oil transfer or loading area is located outside the storage tank containment areas, the area surrounding the oil transfer pad will be adequately curbed and sealed to prevent entry of any spilled oil into the soil, ground water or surface waters. In the alternative, the Supply System may raise the loading area with drainage directed into the diked tank storage area. Either approach selected must be approved by a Professional Engineer, and submitted to the Council for review and approval.

E. Explosions

The Satsop Combustion Turbine Project shall be equipped with detectors to provide warning of the release of flammable or explosive gases. The detection system will be described in the final design plans.

ARTICLE VI. MISCELLANEOUS PROVISIONS

A. Discharge of Pollutants

Nothing in this Site Certification Agreement shall be construed to authorize discharge of pollutants from the project to state waters in any fashion other than that authorized in an NPDES Permit issued by Council. All discharges must also comply with the requirements of Chapter 90.48 RCW or other applicable regulations.

B. Greenhouse Gases and Carbon Dioxide Mitigation

1. The Supply System shall prepare and submit a report to the Council no later than one year prior to each turbine coming on line, that presents and evaluates possible greenhouse gases and carbon dioxide mitigation techniques, and concentrates on those techniques that can offer cost-effective mitigation measures.

2. 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 that the Supply System has accomplished.

C. Attachments

Attachments hereto by this reference are included in the Site Certification Agreement:

- I. Site Legal Description
- II. National Pollution Discharge Elimination System Permit
- III. Water Withdrawal Authorization
- IV. Mitigation Measures and Project Conditions
- V. Final Approval Notice of Construction and Prevention of Significant Deterioration Application

SIGNATURES

Dated and effective this 12th day of August, 1999.

FOR THE STATE OF WASHINGTON



Gary Locke, Governor

FOR THE WASHINGTON PUBLIC POWER
SUPPLY SYSTEM



Chief Executive Officer

**ATTACHMENT I
SITE LEGAL DESCRIPTION**

The Satsop Combustion Turbine Project is located as follows:

All that portion of the southwest quarter of the southeast quarter of Section 7, Township 17 North, Range 6 West, W.M. described as follows:

Commencing at the south quarter corner of said Section 7;
Thence S88°58'07"E along the south line of said Section 7, a distance of 1026.55 feet;
Thence N03°30'07"E, 291.86 feet to a point on the north line of the Bonneville Power Administration (B.P.A.) right of way and the POINT OF BEGINNING;
Thence continuing N03°30'07"E, 545.21 feet;
Thence N86°29'56"W, 989.04 feet to a point on the east line of Keys Road right of way;
Thence S03°46'56"W along said east line of Keys Road, 595.78 feet to an intersection with said north line of the B.P.A. right of way.
Thence S88°48'12"E along said north line of the B.P.A. right of way, 904.96 feet;
Thence N84°19'49"E along said north line of the B.P.A. right of way, 88.86 feet to the POINT OF BEGINNING.

Situate in Grays Harbor County, Washington

And

All that portion of the southwest quarter of the southeast quarter of Section 7, Township 17 North, Range 6 West, W.M. described as follows:

Commencing at the south quarter corner of said Section 7;
Thence S88°58'07"E along the south line of said Section 7 a distance of 1026.55 feet;
Thence N03°30'07"E, 837.07 feet to the POINT OF THE BEGINNING;
Thence continuing N03°30'07"E, 319.39 feet;
Thence N86°29'53"W, 220.60 feet;
Thence N03°30'07"E, 107.60 feet;
Thence N86°29'53"W, 766.35 feet to a point on the east line of Keys Road right of way;
Thence S03°46'56"W along said east line of Keys Road, 427.00 feet;
Thence S86°29'53"E, 989.04 feet to the POINT OF BEGINNING.

Situate in Grays Harbor County, Washington

NATIONAL POLLUTANT DISCHARGE ELIMINATION
SYSTEM WASTE DISCHARGE PERMIT

State of Washington
Energy Facility Site Evaluation Council
Olympia, Washington 98504

In Compliance With the Provisions of
Chapters 80.50 and 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
P.O. Box 1223
Elma, Washington 98541-1223

| | |
|--|---|
| Plant Location: 471 Lambert Road Elma, Washington. 98541 | Receiving Water: Chehalis River |
| Industry Type: Combined Cycle Combustion Turbine Electric Generating Plant (CT Units No. 1 and No. 2) | Discharge Location: Outfall 001 at RM 19.7 Latitude: 46° 58'19" N Longitude: 123° 29'19" W |
| Water Body I D No. WA-22-4040 | Outfall 002 at RM 21.8 Latitude: 46° 58'30" N Longitude: 123° 27'15" W |

The above-named municipal corporation is authorized to discharge in accordance with the special and general conditions which follow.

Approved:

Date: 5/21/96

/s/ Frederick S. Adair
Chairman, Energy Facility Site Evaluation Council

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SPECIAL CONDITIONS

S1. EFFLUENT LIMITATIONS

A. Outfall 001: Industrial Wastewater

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

| <u>Parameter</u> | <u>Daily Maximum</u> | <u>Monthly Average</u> | <u>Minimum Frequency</u> | <u>Sample Type</u> |
|--|---------------------------------|----------------------------|------------------------------|------------------------|
| Ammonia, total as N | 930 mg/l, 1,008 lb/day | 46 mg/l, 50 lb/day | Weekly | 24-hour comp. |
| Chlorine, total Residual | 95µg/l, 0.10 lb/day | 47µg/l, 0.051 lb/day | Weekly | Grab |
| Cadmium, total | 5.8 µg/l, 0.063 lb/day | 2.9 µg/l, 0.003 lb/day | Weekly | 24-hour comp. |
| Copper, total | 30 µg/l, 0.0325 lb/day | 15 µg/l, 0.016 lb/day | Weekly | 24-hour comp. |
| Iron, total | 82 mg/l, 89 lb/day | 40 mg/l, 43.4 lb/day | Weekly | 24-hour comp. |
| Lead, total | 52,µg/l, 0.054 lb/day | 26µg/l, 0.028 lb/day | Weekly | 24-hour comp. |
| Zinc, total | 229 µg/l, 0.25 lb/day | 114 µg/l, 0.12 lb/day | Weekly | 24-hour comp. |
| Temperature (Note 1) | ---- | ---- | Continuous | Direct |
| pH (Note 2) | Between 6.0 and 8.5 (Note 3) | ---- | Continuous | Direct |
| Flow | 0.74 MGD | 0.66 MGD | Continuous | Direct |
| Polychlorinated biphenyl compounds (Note 4) | ---- | ---- | ---- | ---- |

- Note 1 The discharge temperature shall be such that the applicable Water Quality Standards for temperature will be complied with at the edge of the dilution zone. Temperature shall not exceed 18.0 degrees Centigrade. Temperature increases shall not, at any time, exceed $t=28/(T+7)$, as described in WAC 173-201A-030 for Class A waters. For purposes hereof, "t" represents the maximum permissible temperature increase measured at a mixing zone boundary and "T" represents the background temperature as measured at a point unaffected by the discharge and representative of the highest water temperature in the vicinity of the discharge. When natural conditions exceed 18.0 degrees Centigrade, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3 degree Centigrade.
- Note 2 Permittee shall include alarm systems for pH control to provide indication of any variance from established limits. If the continuous pH instrumentation malfunctions, grab samples taken every 6 to 10 hours shall be substituted.
- Note 3 The total time during which pH values are outside this range shall not exceed 7 hours and 26 minutes in any calendar month, and no individual excursion shall exceed 60 minutes. An excursion is an unintentional and temporary incident of pH exceedance. No excursions greater than 9.5 or lower than 5.5 are allowed.
- Note 4 There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

B. Outfall 001A: Low Volume Waste Sources

Discharge of low volume waste sources to Outfall 001 (Notes 5 and 6)

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

| <u>Parameter</u> | <u>Daily Maximum</u> | <u>Monthly Average</u> | <u>Minimum Frequency</u> | <u>Sample Type</u> |
|------------------------|----------------------|------------------------|--------------------------|--------------------|
| Total suspended solids | 100.0 mg/l | 30.0 mg/l | Each discharge | Grab |
| Oil and grease | 20.0 mg/l | 15.0 mg/l | Each discharge | Grab |

Note 5 The term "low volume waste sources" means, taken collectively as if from one source, wastewater from all sources except those for which specific limitations are otherwise established in 40 CFR 423. Low volume waste sources include, but are not limited to, wastewaters from wet scrubber air pollution control systems, ion exchange water treatment systems, water treatment evaporator blowdown, laboratory and sampling streams, boiler blowdown, floor drains, cooling tower basin cleaning wastes, and recirculating house service water systems. Sanitary and air conditioning wastes are not included.

Note 6 Permittee shall mix effluent from this source with cooling water blowdown when the cooling tower is operational. When the cooling tower is not operational, low volume wastes must be retained or a minimum dilution flow of 200 gpm must be provided from the recirculated cooling waste inventory or plant makeup water supply.

C. Outfall 001B: Metal Cleaning Wastes

Discharge of metal cleaning wastes to Outfall 001

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

| <u>Parameter</u> | <u>Daily Maximum</u> | <u>Monthly Average</u> | <u>Minimum Frequency</u> | <u>Sample Type</u> |
|------------------------|----------------------|------------------------|--------------------------|--------------------|
| Total suspended solids | 100.0 mg/l | 30.0 mg/l | Each discharge | Grab |
| Oil and grease | 20.0 mg/l | 15.0 mg/l | Each discharge | Grab |
| Copper, total | 1.0 mg/l | 1.0 mg/l | Each discharge | Grab |
| Iron, total | 1.0 mg/l | 1.0 mg/l | Each discharge | Grab |

D. Outfall 001C: Once Through Cooling Water

Discharge of once through cooling water to Outfall 001

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

| <u>Parameter</u> | <u>Maximum Concentration</u> | <u>Minimum Frequency</u> | <u>Sample Type</u> |
|----------------------------------|------------------------------|--------------------------|--------------------|
| Total residual chlorine (Note 7) | 0.20 mg/l | Weekly | 24-hour comp. |

Note 7 Total residual chlorine may not be discharged from any single generating unit for more than 2 hours per day unless the discharger demonstrates to the permitting authority that discharge for more than 2 hours is required for macroinvertebrate control. Simultaneous multi-unit chlorination is permitted.

E. Outfall 001 D: Cooling Tower Blowdown
 Discharge of cooling tower blowdown to Outfall 001

EFFLUENT LIMITATIONS MONITORING REQUIREMENTS

| <u>Parameter</u> | <u>Daily Maximum</u> | <u>Monthly Average</u> | <u>Minimum Frequency</u> | <u>Sample Type</u> |
|---|----------------------|------------------------|--|--------------------|
| Free available chlorine (Note 8) | 0.5 mg/l | 0.2 mg/l | Continuous or twice per treatment (Note 9) | Direct Grab |
| The 126 priority pollutants (Appendix A to 40 CFR 423) contained in chemicals added for cooling tower maintenance | (Note 10) | (Note 10) | Weekly | Grab |
| Except: Chromium, total | 0.2 µg/l | 0.2 µg/l | Weekly | Grab |
| Zinc, total | 1.0 µg/l | 1.0 µg/l | Weekly | Grab |

Note 8 Neither free available nor total residual chlorine may be discharge from any unit for more than 2 hours in any 1 day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Energy Facility Site Evaluation Council (EFSEC) that the units cannot operate below this level of chlorination.

Note 9 If discharge is continued during the chlorination cycle, continuous amperometric analysis shall be used. (If the monitoring equipment malfunctions, grab samples taken every 4 hours shall be substituted.) A grab sample shall be taken at least weekly to demonstrate continuous monitor performance. If discharge is terminated during chlorination chlorination, amperometric titration of grab samples may be used to verify the total residual chlorine concentration.

Note 10 No detectable amount

F. Outfall 002: Stormwater (Notes 11 and 12)

Beginning on the effective date of this permit and lasting through the expiration date, the Washington Public Power Supply System is authorized to discharge effluent from Outfall 002 subject to meeting the following limitations and monitoring requirements:

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

| <u>Parameter</u> | <u>Maximum Concentration</u> | <u>Minimum Frequency</u> | <u>Sample Type</u> |
|-------------------------------|----------------------------------|--------------------------|--------------------|
| Total suspended solids (mg/l) | 50 | Note 13 | Note 14 |
| Settleable solids (ml/l) | 0.1 | Note 13 | Note 14 |
| pH | Between 6.0 and 8.5 at all times | Note 13 | Note 14 |

Note 11 Any untreated overflow from facilities designed, constructed, and operated to treat the volume of material storage runoff and construction runoff which results from a 100-year 24-hour rainfall event (5.5 inches per 24 hours) shall not be subject to the limitations above for total suspended solids, settleable solids, and pH.

Note 12 During the preservation and deconstruction of Nuclear Project No. 3, accumulations of stormwater in any basins, tanks or sumps may be discharged to the equalization pond. Any non-stormwater discharges must meet the following limits prior to entering the equalization pond: copper 1.0 mg/l, chromium (total) 0.05 mg/l, zinc 5.0 mg/l, and iron 1.0 mg/l.

Note 13 Once per day when there is discharge from the storm collector basins.

Note 14 Grab within 2 hours after discharge begins.

S2. MONITORING AND REPORTING REQUIREMENTS

The Permittee shall monitor the operations and efficiency of all treatment and control facilities and the quantity and quality of the waste discharged as specified in Special Condition S1.

A. Reporting

Monitoring results obtained during the previous month shall be summarized and reported on a Discharge Monitoring Report (DMR) (EPA 3320-1) postmarked no later than the 28th day following the end of the month (or the end of the quarter during the preservation and deconstruction periods for Nuclear Project No. 3). Duplicate signed copies of the DMRs shall be submitted to the Council and EPA at the following addresses:

EFSEC
 P.O. Box 43172
 Olympia, WA 98504-3172

US. EPA Region X
 Attn: Water Compliance Section WD-135
 200 - 6th Avenue
 Seattle, WA 98101

B. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: 1) the date, exact location, and time of sampling; 2) the dates the analyses were performed; 3) who performed the analyses; 4) the analytical techniques or methods used; and 5) the results of all analyses.

C. Representative Sampling

Samples and measurements taken to meet the requirements of these conditions shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge conditions (e.g., bypasses, upsets, and maintenance-related conditions affecting effluent quality).

D. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless otherwise approved in writing by the Council, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136.

E. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of discharges with flow limitations. Each device shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendation or a minimum frequency of at least one calibration every 18 months.

F. Records Retention

The Permittee shall retain for a minimum of 3 years all records of monitoring activities and results, including all reports of recordings from continuous monitoring instrumentation. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Council.

G. Laboratory Accreditation

All monitoring data, except for flow, temperature, settleable solids, conductivity, pH, and internal process control parameters shall be prepared by a laboratory registered or accredited under the provisions of Accreditation of Environmental Laboratories, Chapter 173-50 WAC. Conductivity and pH shall be accredited if the laboratory must otherwise be registered and accredited.

S3. SOLID WASTE DISPOSAL

A. Residual Solids Handling

The Permittee shall handle and dispose of all solid waste material in a manner which prevents pollution of state ground or surface water.

B. Solid Waste Control Plan

The Permittee shall submit a revised solid waste control plan to the Council for review and approval no later than 12 months after permit is amended. This plan shall address all solid wastes with the exception of radioactive waste and those solid wastes regulated by Chapters 463-40 and 173-303 WAC (Dangerous Wastes). The plan shall include a general description and the composition, source, generation rate and frequency, and disposal methods of these solid wastes. This plan shall be consistent with Chapter 173-304 WAC and any approved local solid waste management plan. The Permittee shall comply with the plan as approved by the Council. The Permittee shall submit an update of the solid waste control plan with the application for permit renewal. This permit condition is based on state law, not federal NPDES program regulations.

C. Sanitary Wastes

Sanitary wastes generated on the main site area shall be collected and treated at the Supply System's package waste treatment plant. Alternatively, sanitary wastes may be diverted and treated at a septic tank system during the preservation and deconstruction periods for WNP-3. Sanitary wastes for the Combustion Turbine Project site shall be treated in a septic tank system and discharged to a drain field located at the Combustion Turbine Project site. Waste treatment and discharges to a drain field shall be in accordance with the manufacturer's instructions and Supply System procedures. All sewage effluent discharges shall meet current state regulatory standards in 248-90 WAC or 173-216 WAC.

S4. SPILL PLAN

A. SPCC Plan and Hazardous Waste Management Procedures

The Satsop Site Spill Prevention, Control, and Countermeasure Plan and Hazardous Waste Management Procedures were approved by Council Resolution No. 237. The spill plan shall be updated and submitted to the Council for review within 6 months after Notice to Proceed on the Combustion Turbine Project has been issued.

The SPCC Plan shall provide for the prevention, containment, and control of spills or unplanned discharges of: 1) petroleum (oil), 2) hazardous substances covered by 40 CFR Part 302, and 3) materials which when spilled or otherwise released into the environment are designated Dangerous Waste (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070. The SPCC Plan shall include the following elements:

1. A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
2. A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) intended to prevent, contain, or treat spills of these materials.
3. A list of all oil and chemicals used, processed, or stored at the facility which may potentially be spilled into state waters.

B. Plan Updates

The SPCC Plan shall be updated and submitted to the Council every 2 years. The plan and any supplements shall be followed throughout the term of the permit.

S5. SAMPLING FOR POLLUTANTS OF CONCERN

A. Priority Pollutant Scan

The permittee shall take a composite sample of the discharge from Outfall 001 and conduct a priority pollutant scan to determine the characteristics of the discharge water and report the results to the Council within 180 days from initiation of commercial operation of the Combustion Turbine Project. The results of the sampling shall be summarized and reported on a Discharge Monitoring Report (EPA 3320-1).

B. Future Monitoring Requirements

The Council will review the sample results to determine if additional testing or monitoring is required.

The Council, working with the Permittee, will take the necessary measures to identify effluent characteristics to ensure discharges are consistent with water quality standards and the conditions of this permit.

S6. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. Plan Development Deadlines

Prior to initiation of commercial operation of the Combustion Turbine Project, the Permittee shall develop, implement, and comply with a SWPPP. The Permittee shall implement all elements of the SWPPP including operational, treatment, and source control best management practices (BMPs), as well as erosion and sediment control BMPs determined necessary.

B. General Requirements

1. Submission, Retention, and Availability:

The Permittee shall submit a copy of the SWPPP to EFSEC for review, comment, and approval. The SWPPP shall be retained on-site and available throughout the operational life of the facility.

2. Modifications:

The Permittee shall modify the SWPPP whenever there is a change in design, construction, operation, or maintenance which causes the SWPPP to be less effective in controlling the pollutants. Whenever the description of potential pollutant sources or the pollution prevention measures and controls identified in the SWPPP are inadequate, the SWPPP shall be modified, as appropriate, within 2 weeks of such determination. The proposed modifications to the SWPPP shall be submitted to EFSEC at least 30 days in advance of implementing the proposed changes unless EFSEC; approves immediate implementation. The Permittee shall provide for implementation of any modifications to the SWPPP in a timely manner.

3. Preparation:

The Permittee shall prepare the SWPPP in accordance with the guidance provided in Stormwater Management for Industrial Facilities (EPA 1992, EPA 832-R-92-006). The plan shall contain the following elements:

- a. An assessment and description of existing and potential pollutant sources
- b. A description of the operational BMPs
- c. A description of selected source-control BMPs
- d. A description of erosion and sediment control BMPs
- e. A description of any treatment BMPs
- f. An implementation schedule

S7 EFFLUENT MIXING STUDY

A. Work Plan

The Permittee shall prepare a work plan for the determination of the dilution ratio of effluent to receiving water at the edge of the acute dilution zone and at the edge of the chronic dilution zone for Outfall 001. The plan shall include an evaluation of critical water conditions and shall describe how dilution will be determined for normal productions and critical receiving water conditions. The work plan shall be submitted to EFSEC for review and approval within 6 months after Notice to Proceed on the Combustion Turbine Project has been issued.

B. Mixing Study

The Permittee shall conduct the mixing study within 180 days after EFSEC approval or the start of commercial operation, whichever is later. The Permittee shall apply the dilution ratios determined through the study to effluent water quality data to estimate pollutant concentrations (including temperature) in the receiving water at the edges of the dilution zones. A written report documenting the study and study results shall be submitted to EFSEC within 90 days after the completion of the study:

S8. **OUTFALL EVALUATION**

The Permittee shall inspect the submerged portion of the outfall line and diffuser to evaluate and document its integrity. The outfall evaluation shall be submitted with the mixing study.

S9. **RECEIVING WATER STUDY**

The Permittee shall prepare a plan to monitor receiving water temperature in a location upstream of and unaffected by the outfalls. The purpose of the temperature monitoring is to allow the Permittee to estimate the effluent's effect on receiving water temperature. The proposal shall be submitted to EFSEC within 180 days after receiving Notice to Proceed. Receiving water temperature monitoring shall be implemented prior to commercial operation or within 180 of EFSEC approval of the proposal, whichever is later.

S10. **WHOLE EFFLUENT TOXICITY**

The Water Quality Standards for Surface Waters require that the effluent not cause toxic effects in the receiving waters. Many toxic pollutants cannot be detected using commonly available detection methods. However, toxicity can be measured directly by exposing living organisms to the wastewater in laboratory tests and measuring the response on the organisms. Toxicity tests measure the aggregate toxicity of the whole effluent, therefore this approach is called whole effluent toxicity (WET) testing. Some WET tests measure acute toxicity and other WET tests measure chronic toxicity.

S11. **ACUTE TOXICITY**

A. Effluent Characterization

The Permittee shall conduct acute toxicity testing on the final effluent to determine the presence and amount of acute (lethal) toxicity. All of the acute toxicity tests listed below shall be conducted on each sample taken for effluent characterization. Effluent characterization for acute toxicity shall be conducted quarterly for 1 year. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this section. The Permittee may perform acute toxicity effluent screening testing during effluent characterization using only 100% effluent and a control. If any effluent screening test has less than 80% survival in 100% effluent, the Permittee shall resample immediately and conduct another acute toxicity test using a dilution series consisting of a minimum of five concentrations and a control to estimate

the concentration lethal to 50% of the organisms (LC_{50}). The percent survival in 100% effluent shall also be reported from tests with a series of concentrations.

Testing shall begin within 60 days of the effective date of the permit. A written report shall be submitted to the Council within 60 days after each of the test results are final. A final effluent characterization summary report shall be submitted to EFSEC within 90 days after the last monitoring test results are final. This summary report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

Acute toxicity tests shall be conducted with the following species and protocols:

1. Fathead minnow, *Pimephales promelas* (96-hour static-renewal test, method: EPA/600/4-90/027F)
2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48-hour static test, method: EPA/600/4-90/027F). The Permittee shall choose one of the three species and use it consistently throughout effluent characterization.
3. Rainbow trout, *Oncorhynchus mykiss* (96-hour static-renewal test, method: EPA/600/4-90/027F).

The Permittee shall also conduct the rapid screening test listed in subsection E, below, on each sample during effluent characterization. The rapid screening test result shall be reported with the results of the acute toxicity tests conducted on that sample to provide a correlation.

B. Effluent Limit for Acute Toxicity

The Permittee has an effluent limit for acute toxicity if, after completing 1 year of effluent characterization, either:

1. The median survival of any species in 100% effluent is below 80%, or
2. Any one test of any species exhibits less than 65% survival in 100% effluent.

The effluent limit for acute toxicity is no acute toxicity in a test concentration representing the acute critical effluent concentration (ACEC). The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-100.

If the Permitted has an effluent limit for acute toxicity and the ACEC is not known, then effluent characterization for acute toxicity shall continue until the time an ACEC is known. Toxicity testing conducted during an effluent characterization extended past 1 year until an ACEC has been determined shall be performed using each one of the tests listed in subsection A above on a rotating basis. When an ACEC has been determined, the Permittee shall immediately complete

all applicable requirements in subsections C, D, and F.

If no effluent limit is required at the end of 1 year of effluent characterization, then the Permittee shall stop effluent characterization and begin to conduct the activities in, subsection E even if the ACEC is unknown.

C. Monitoring for Compliance With an Effluent Limit for Acute Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using, on a rotating basis, each of the species listed in subsection A. Monitoring shall be performed using 100% effluent, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless EFSEC notifies the Permittee in writing of another species rotation schedule. The percent survival in 100% effluent shall be reported for all compliance monitoring.

Compliance with the effluent limit for acute toxicity means no statistically significant difference in survival between the control and the test concentration representing the ACEC. The Permittee shall immediately implement subsection D if any acute toxicity test conducted for compliance monitoring determines a statistically significant difference in survival rates between the control and the ACEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance.

D. Response to Noncompliance With an Effluent Limit for Acute Toxicity

If the Permittee violates the acute toxicity limit in subsection B, the Permittee shall begin additional compliance monitoring within 1 week of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. Testing shall determine the LC₅₀ and effluent limit compliance. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by EFSEC as an anomalous test result, the Permittee may notify EFSEC that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from EFSEC before completing the additional monitoring required in this subsection. The notification to EFSEC shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by EFSEC that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by EFSEC that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to EFSEC on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to EFSEC within 60 days after test results are final. The TI/RE plan shall be based on 173-205-100(2) WAC. The TI/RE plan shall address areas where adequate guidance, procedures, or protocols are not available for implementation of the plan. The Permittee shall submit a revised TI/RE plan, in accordance with EFSEC comments, within 30 days after receipt of EFSEC comments.

E. Monitoring When There Is No Permit Limit for Acute Toxicity

The Permittee shall test final effluent once in the summer and once in the winter immediately prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by EFSEC shall be used and results submitted to EFSEC as a part of the permit renewal application process.

In consideration of the Permittee's potential to have toxicity occur and cause receiving water impacts the following monitoring is required. The Permittee shall conduct 24-hour acute rapid screening tests using:

1. *Brachionus sp.* (ASTM E 1440-91)
2. Fathead minnow, *Pimephales promelas* and a Daphnid (*Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna*) on an alternating schedule (24-hour static test, method: EPA/600/4-90/027F).

A minimum of 40 organisms shall be used in both the control and 100% effluent. Tests shall be conducted monthly and have a maximum acceptable mortality rate of 0.20 in 100% effluent. The mortality rate is determined by WAC 173-205-120(2)(b).

When a rapid screening test results in a mortality rate greater than 0.20, the Permittee shall retest with all species and durations used in the acute effluent characterization in subsection A and actively investigate the source of toxicity. The toxicity test and investigation results shall be reported to the EFSEC within 30 days of the rapid screening test failure.

S12. CHRONIC TOXICITY

A. Effluent Characterization

The Permittee shall conduct chronic toxicity testing on the final effluent. The chronic toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Testing shall begin within 60 days of the permit effective date. A written report shall be submitted to the Council within 60 days after each of the test results are final. A final effluent characterization summary report shall be submitted to the Council within 90 days after the last monitoring test results are final. This summary report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

Effluent testing for chronic toxicity shall be conducted biannually for 1 year. The Permittee shall conduct chronic toxicity testing during effluent characterization on serial dilutions of effluent in order to determine the IC_{50} or EC_{50} . This series of dilutions shall include the ACEC. The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the following species and the most recent version of the following protocols:

1. Fathead minnow, *Pimephales promelas* (EPA/600/4-89/001)
2. Water flea, *Ceriodaphnia dubia* (EPA/600/4-89/001)
3. Alga, *Selenastrum capricornutum* (EPA/600/4-89/001)

The Permittee shall also conduct the rapid screening test listed in subsection E, below, on each sample during effluent characterization. The rapid screening test result shall be reported with the results of the chronic toxicity tests conducted on that sample to provide a correlation.

B. Effluent Limit for Chronic Toxicity

After completion of effluent characterization, the Permittee has an effluent limit for chronic toxicity if any test conducted for effluent characterization shows a significant difference between the control and the ACEC at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001). In this event, the Permittee shall complete all applicable requirements in subsections C and D below.

If no significant difference is shown between the ACEC and the control in any of the chronic toxicity tests, the Permittee has no effluent limit for chronic toxicity and only subsection E applies.

The effluent limit for chronic toxicity is no toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC). CCEC means the maximum concentration of effluent allowable at the boundary of a mixing zone assigned pursuant to WAC 173-201A-100.

C. Monitoring Compliance With an Effluent Limit for Chronic Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted biannually for the remainder of the permit term using, on a rotating basis, each of the species listed in subsection A. Monitoring shall be performed using the CCEC, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless EFSEC notifies the Permittee in writing of another species rotation schedule.

Compliance with the effluent limit for chronic toxicity means no statistically significant difference in response between the control and the test concentration representing the CCEC. The Permittee shall immediately implement subsection D if any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the CCEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the CCEC is less than 20%, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the ACEC and the control.

D. Response to Noncompliance With an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection C determines a statistically significant difference in response between the CCEC and the control, the Permittee shall begin additional compliance monitoring within 1 week from the time of receiving the test results. This additional monitoring shall be conducted monthly for three consecutive months using the same test and species as the failed compliance test. Testing shall determine the IC50 or EC50 and effluent limit compliance. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by EFSEC as an anomalous test result, the Permittee may notify EFSEC that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from EFSEC before completing the additional monitoring required in this subsection. The notification to EFSEC shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by EFSEC that the compliance test result was not anomalous. If the one

additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by EFSEC that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to EFSEC on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/ Reduction Evaluation (TI/RE) plan to EFSEC within 60 days after test results are final. The TI/RE plan shall be based on WAC 173205-100(2). The TI/RE plan shall address areas where adequate guidance, procedures, or protocols are not available for implementation of the plan. The Permittee shall submit a revised TI/RE plan, in accordance with EFSEC comments, within 30 days after receipt of EFSEC's comments.

E. Monitoring When There Is No Permit Limit for Chronic Toxicity

The Permittee shall test final effluent once in the summer and once in the winter immediately prior to submission of the application for permit renewal. All species used in the initial chronic effluent characterization or substitutes approved by EFSEC shall be used and results submitted to EFSEC as a part of the permit renewal application process.

The Permittee shall conduct chronic rapid screening tests using:

1. Bacterial bioluminescence test (Microtox or approved alternate)
2. Rotifer life cycle test (Snell, Terry W. 1992. A 2-D Life Cycle Test With The Rotifer *Brachionus calyciflorus* Environ. Toxicol. Chem. 11: 1249-1257).

Tests shall be conducted monthly and shall be expected to have no statistically significant difference in response between the ACEC and the control using the method in Appendix H of EPA/600/4-89/001 or an equivalent method approved by EFSEC. Whenever a rapid screening test result has a statistically significant difference in response between the ACEC and the control, the Permittee shall retest with all species and durations used in the chronic effluent characterization in subsection A and actively investigate the source of toxicity. The chronic toxicity test and investigation results shall be reported to EFSEC within 30 days of the rapid screening test failure.

S13. PERMIT REOPENER

EFSEC may reopen this permit on the basis of monitoring results or other causes consistent with state and federal regulations and/or to modify or establish specific monitoring requirements, effluent limitations, or other conditions in the permit.

GENERAL CONDITIONS

G1. DISCHARGES AUTHORIZED

All discharges and activities authorized herein shall be consistent with the terms and conditions of this permit. Permittee is authorized to discharge those pollutants which are: 1) contained in the untreated water supply, 2) entrained from the atmosphere, or 3) identified in the permit application, except as modified or limited by the special or general conditions of this permit. However, the effluent concentrations in the Permittee's wastewater shall be determined on a gross basis and the effluent limitations in this permit mean gross concentrations, not net addition of pollutants. The discharge of any pollutant more frequently than or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit. The discharge of water treatment additives which were not identified in the permit application shall be subject to Council approval.

G2. PRIORITY POLLUTANTS

No discharge of polychlorinated. biphenyl compounds is permitted. There shall be no detectable discharge of priority pollutants (listed in 40 CFR Part 423, Appendix A) contained in chemicals added for water treatment.

G3. DILUTION ZONE

Permittee shall not discharge any effluent which will cause a violation of any applicable State of Washington Water Quality Standards contained in WAC 173-201, as they now exist or hereafter are amended outside the mixing zones whose boundaries are defined below.

A. Outfall Discharge Serial Number 001

1. The boundaries in the vertical plane shall extend from the receiving water surface to the riverbed;
2. The upstream and downstream boundaries shall be 50 feet and 100 feet, respectively, from the center line of the diffuser; and
3. The lateral boundaries shall be 25 feet from the midpoint of the diffuser.

B. Outfall Discharge Serial Number 002

There is no dilution zone for this outfall.

G4. DEFINITIONS.

As used in this permit, the following terms are as defined herein:

- A. The "daily maximum" discharge means the total discharge by weight or volume during any calendar day and, where specified, the maximum permissible pollutant concentration.
- B. The "daily average" discharge means the total discharge by weight or volume during a calendar month divided by the number of days in the month that the respective discharges occur. Where less than daily sampling is required by the permit, the daily average discharge shall be determined by the summation of the measured daily discharges by weight divided by the number of days during the calendar month when the measurements were made.
- C. A "composite sample" is a sample consisting of a minimum of six grab samples collected at regular intervals over a normal operating day and combined proportional to flow, or a sample continuously collected proportional to flow over a normal operating day.
- D. A "grab sample" is an individual sample collected in a time span of less than 15 minutes.
- E. A "direct sample" is an in situ immediate measurement.

G5. TOXIC POLLUTANT DISCHARGES

The Permittee will notify the Council as soon as it knows or has reason to believe that any toxic pollutant not limited by the special conditions of this permit will be discharged on a routine or frequent basis at levels exceeding the notification levels of 40 CFR 122.42(a)(1) or on a non-routine or infrequent basis at levels exceeding the notification levels of 40 CFR 122.42(a)(2).

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. DUTY TO MITIGATE

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

G8. PROPER OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes adequate funding, effective performance of preventive maintenance adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

G9. BYPASS OF TREATMENT FACILITIES

Per 40 CFR 122.4(m), the bypass or intentional diversion of waste streams from any portion of waste treatment facilities is prohibited except:

1. When the bypass does not cause effluent limitations to be exceeded and it is necessary to perform essential maintenance to assure efficient operation;
2. Where the bypass was unavoidable to prevent loss of life or severe property damage;
3. When there are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime.

Anticipated bypasses, other than those in 1) above, shall be reported to the Council as far in advance as possible for the Council's approval. Unanticipated bypasses shall be reported to the Council in accordance with the procedure specified in General Condition G11 below.

G10. UPSET CONDITIONS

According to 40 CFR 122.41 (n), an upset is an exceptional incident in which there is unintentional and temporary noncompliance with the technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with the technology-based permit effluent limitations if the Permittee can demonstrate through contemporaneous operating logs or other relevant evidence that:

1. An upset occurred and that the permittee can identify the cause(s) of the upset;
2. The facility was at the time being properly operated;
3. The permittee submitted notice of the upset as required by General Condition G11; and
4. The permittee complied with the remedial measures required under this permit.

Gil. NONCOMPLIANCE REPORTING

1. The following occurrences of noncompliance shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances:
 - a. Any noncompliance which may endanger health or the environment.
 - b. Any unanticipated bypass which exceeds any effluent limitation in the permit (see General Condition G9).
 - c. Any upset which exceeds any effluent limitation in the permit (see General Condition G10).
 - d. Violation of a maximum daily discharge limitation for any of the pollutants listed in Special Conditions S1.A, S1.B., S1.C., SI.E., or SI.A of this permit.
2. A written report of incidents required to be reported orally within 24 hours of occurrence shall be submitted to the Council within 5 working days of the time that the Permittee becomes aware of the circumstances. The written description shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been corrected; and
 - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
3. The Council may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

G12. OTHER NONCOMPLIANCE REPORTING

Instances of noncompliance not required to be reported within 24 hours shall be reported on the discharge monitoring reports (Special Condition S3.A). The reports shall contain the information listed in General Condition G11.

G13. INSPECTION AND ENTRY

The Permittee shall allow authorized representatives of EFSEC, upon the presentation of credentials and such other documents as required by law:

1. To enter the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit;
2. To have access to and copy at reasonable times any records that must be kept under the terms of this permit;
3. To inspect at reasonable times any monitoring equipment or method of monitoring required in this permit;
4. To inspect at reasonable times any collection, treatment, or discharge facilities; and
5. To sample at reasonable times any discharge of pollutants.

G14. PERMIT MODIFICATIONS

The Permittee shall notify EFSEC when facility expansions, production increases, or process modifications will 1) result in a new or substantially increased discharges of pollutants or a change in the nature of the discharge of pollutants, or 2) violate the terms and conditions of this permit.

G15. PERMIT MODIFIED OR REVOKED

This permit may be modified, revoked or reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation upon such pollutant in the permit, the Council shall institute proceedings to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

G16. DUTY TO PROVIDE INFORMATION

The Permittee shall furnish to EFSEC, within a reasonable time, any information which the Council may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Council, upon request, copies of records required to be kept by this permit.

G17. DUTY TO COMPLY

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

A. Toxic Pollutants

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

B. Penalties for Violations of Permit Conditions

Violations of conditions of this permit are subject to enforcement actions and penalties as provided for in Chapter 80.50 RCW. Except as provided in permit Conditions G9, Bypass of Treatment Facilities, and G10, Upset of Conditions, nothing in this permit shall be construed to relieve the Permittee of the civil or criminal penalties for noncompliance.

G18. DUTY TO REAPPLY

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.

G19. ADDITIONAL MONITORING

For good cause shown, the Council may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

The Permittee will notify the Council within 48 hours of the receipt of analytical results indicating downstream in-river monitoring concentrations of any parameter above water quality standards.

G20. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G21. TRANSFERS

This permit may be transferred to a new permittee if:

1. The current Permittee notifies the Council at least 30 days in advance of the proposed transfer date;
2. The notice includes a written agreement between the existing and new Permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
3. The Council does not notify the existing Permittee and the proposed new Permittees of its intent to modify or revoke the, reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (2) above.

G22. LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject.

G23. SIGNATORY REQUIREMENT

All applications, reports, or information submitted to the Council shall be signed and certified as provided for under 40 CFR 122.22.

G24. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

**ATTACHMENT III
WATER WITHDRAWAL AUTHORIZATION
FOR THE SATSOP COMBUSTION TURBINE PROJECT**

I. WATER WITHDRAWAL FROM THE RANNEY WELLS

A. PRIORITY DATE: December 17, 1973, pursuant to EFSEC authorization

B. SOURCE: Chehalis River

C. MAXIMUM QUANTITY:

Instantaneous: 9.2 cubic feet per second

Annual: 6,865.65 acre feet

D. PURPOSE OF USE:

9.2 cubic feet per second for power generation and to cool the discharge to the temperature set in the NPDES permit

E. PERIOD OF USE: Year-round

F. LOCATION OF WITHDRAWAL:

1400 feet east and 300 feet south of the northwest corner of Section 15, Township 17 N. Range 7 W., E.W.M. (also known as Ranney Well No. 1)

3100 feet east and 400 feet south of the northwest corner of Section 15, Township 17 N. Range 7 W., E.W.M. (also known as Ranney Well No. 3)

G. LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED:

Section 7, Township 17 N., Range 6 W., E.W.M. (and as further described in Attachment I of the Site Certification Agreement)

H. DESCRIPTION OF PROPOSED USE:

The Satsop Combustion Turbine Project consists of two natural gas-fired turbine units and a single steam turbine-generator.

I. DEVELOPMENT SCHEDULE:

1. Begin Project: within ten (10) years from the effective date of Amendment No. 2 to the Site Certification Agreement (SCA).
2. Complete Project: within five (5) years of beginning construction of both units.
3. Water put to beneficial use: within two (2) years of completion of project construction for both units.

II. WATER WITHDRAWAL FROM THE RAW WATER WELL:

A. PRIORITY DATE: December 17, 1973, pursuant to EFSEC authorization

B. SOURCE: Ground water

C. MAXIMUM QUANTITY: 300 gallons per minute

D. PERIOD OF USE: Year-round

E. LOCATION OF WITHDRAWAL:

Southeast Corner of the Southwest Corner of Section 6, Township 17N, Range 6W, E.W.M.

F. LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED:

Sections 7, 8, 17, and 18 in T. 17 N. R. 6 W., E.W.M.

G. DESCRIPTION OF PROPOSED USE:

Construction, restoration, domestic, and fire protection services.

H. DEVELOPMENT SCHEDULE: Water was put into use in 1977.

III. PROVISIONS

- A. Instream Flow - The rate of diversion for the Satsop Combustion Turbine Project is limited to a maximum of 9.2 cubic feet per second. However, the diversion shall be decreased (or stopped) as necessary to ensure that the Satsop Combustion Turbine Project does not affect the minimum base flows immediately downstream of the point of

diversion. The required minimum base flows are established in WAC 173-522-020 and set forth in subsection (B) below. All withdrawals for the Satsop Combustion Turbine Project are subject to the withdrawal restrictions set forth herein concerning periods of low flow.

- B. Standard Base Flow - This authorization is subject to the provisions of Chapter 173-522 Washington Administrative Code and the general rules of Ecology as specified under Chapter 173-500 Washington Administrative Code, and others. The base flows for the Satsop Combustion Turbine Project were established at monitoring station 12.0350.02, mile 20, Sec. 7, T.17N., R.6W., E.W.M., and are presented in the following table:

| <u>MONTH</u> | <u>DAY</u> | <u>BASE FLOW (cfs)</u> | <u>MONTH</u> | <u>DAY</u> | <u>BASE FLOW (cfs)</u> |
|--------------|------------|------------------------|--------------|------------|------------------------|
| January | 1 | 3800 | July | 1 | 1085 |
| January | 15 | 3800 | July | 15 | 860 |
| February | 1 | 3800 | August | 1 | 680 |
| February | 15 | 3800 | August | 15 | 550 |
| March | 1 | 3800 | September | 1 | 550 |
| March | 15 | 3800 | September | 15 | 550 |
| April | 1 | 3800 | October | 1 | 640 |
| April | 15 | 3800 | October | 15 | 750 |
| May | 1 | 2910 | November | 1 | 1305 |
| May | 15 | 2300 | November | 15 | 2220 |
| June | 1 | 1750 | December | 1 | 3800 |
| June | 15 | 1360 | December | 15 | 3800 |

Base flow hydrographs, found on page 81 of "Water Resources Management Program in the Chehalis River Basin," dated November 1975, shall be used for definition of base flows for the Satsop Combustion Turbine Project on those days not specifically identified in the above table. These base flows will also be established at Station 12.0350.02 (Chehalis River below confluence with Satsop River). No diversion of water under this authorization shall take place such that the flow of the river falls below the above flows.

- C. Pumps - Process water for the Satsop Combustion Turbine Project shall be provided through the Ranney wells by the Satsop Redevelopment Project (SRP), or its successors. If necessary to limit the withdrawal to the extent of the SRP's and the Satsop Combustion Turbine Projects withdrawal authorizations, the existing pumps may be replaced or modified.
- D. Meter - An approved measuring device shall be installed and maintained in accordance with RCW 90.03.360, WAC 508-64-020 through -040, for water use. Installation, operation, and maintenance requirements may be obtained from the Department of

Ecology's Southwest Regional Office, Water Resources Program. Meter readings shall be recorded at least once monthly.

- E. Water Resources Act - The Water Resources Act of 1971 specifies certain criteria regarding utilization and management of the waters of the Washington State in the best public interest. Favorable consideration of the application has been based on sufficient waters available. Ecology has not waived its right to request of the Energy Facility Site Evaluation Council that the use of water be subject to further regulation at certain times, based on the necessity to maintain water quantities for preservation of the natural environment.
- F. Water Resources - Under RCW 90.44.250 and 90.54.030, Ecology is directed to become informed about all aspects of the water resources of the State. Ecology is authorized to make such investigations as may be necessary to determine the location, extent, depth, volume, and flow of all ground waters within the State. Accordingly, the Certificate Holder shall monitor and provide an annual summary of the previous year's monthly static water level data and monthly totals of water pumped from the Ranney wells. This summary shall be submitted in tabular format to the Council and to Ecology's Southwest Regional Office annually, during the month of February, or more frequently if requested by Ecology.
- G. Ground Water Use - Withdrawal of water from ground water by the Certificate Holder in an area near the confluence of the Chehalis and Satsop rivers for any use other than domestic supply or fire suppression will be limited to 300 gallons per minute and will be limited by restrictions set forth in Section B during periods of low flows.
- H. Indian Rights - This authorization to make use of public water of the state is subject to existing rights, including existing rights held by the United States for the benefit of Tribes under treaty or settlement.
- I. Monitoring - A suitable gauge shall be installed at the location of Control Station No. 12.0350.02 (Chehalis River below the confluence with the Satsop River) to provide flow monitoring. The type, location and installation of the gauge shall be approved by the Council in consultation with the Department of Ecology's Southwest Regional Office, Water Resources Program.
- J. Hydrostatic Testing - Prior to performing hydrostatic testing in connection with construction of the proposed natural gas pipeline, the Certificate Holder obtain approval from the Council, in consultation with the Department of Ecology and the Department of Fish and Wildlife.

**ATTACHMENT IV
MITIGATION MEASURES AND PROJECT CONDITIONS**

This attachment to the Site Certification Amendment (SCA) incorporates agreements made with the Washington Department of Ecology (Ecology) and Department of Fish and Wildlife (WDFW), and mitigation measures included in the SCA Application.

PART I. GENERAL CONDITIONS

A. Mitigation Principles

The principles of impact assessment which have been applied to the currently expected impacts and which shall be applied to all unforeseen impacts are, in descending order of importance, 1) avoid the impact wherever possible; 2) minimize the impact; 3) provide on-site, in-kind mitigation; and lastly, 4) provide off-site compensatory mitigation.

The Certificate Holder shall, prior to construction of the natural gas pipeline, create a detailed pipeline construction plan which shall contain, at a minimum, the following mitigation measures including construction methodology, surface water runoff control, study schedules, and erosion and sedimentation control. To the extent that one or more of the following standards or requirements cannot be met, the Certificate Holder will confer with EFSEC and its designated representatives on the appropriate standard or requirement to be used.

B. Required Plans

The Certificate Holder agrees to develop the following in consultation with EFSEC and its designated representatives:

1. Natural Gas Pipeline Map

A detailed map showing right-of-way acquisition and land uses impacted within the right-of-way. If the final alignment of the pipeline deviates from the proposed corridor, additional field investigations of cultural resources, vegetation (including wetlands), wildlife, and aquatic resources will be conducted as necessary to document the affected environment and potential impacts and mitigation measures.

2. Environmental Protection Control Plan

An Environmental Protection Control Plan will be developed for the Satsop

CT Project, including the natural gas pipeline. The Environmental Checklist will include specifications for commitments made concerning the Satsop Combustion Turbine and the associated natural gas pipeline.

The Environmental Protection Control Plan will be implemented to provide adequate maintenance and inspection of the erosion and sediment control system. The plan will specify that control structures will be inspected at a frequency sufficient to provide adequate environmental protection. Such inspections will increase in frequency during rainfall periods.

3. Erosion and Sedimentation Control Plan

An Erosion and Sedimentation Control Plan for the natural gas pipeline will be prepared to address crossings of sensitive areas, and submitted to EFSEC for review and approval prior to construction. The plan will include emergency implementation and response, damage control, and restoration activities for stream and wetland crossings, and for riparian and habitat areas, and will include detailed drawings which will identify areas where accretion may occur, and specific mitigation measures to be used to prevent or limit accretion will be identified.

The plan will include detailed information in the following areas:

- a. Description - A description of the nature and extent of proposed land disturbing activities (e.g., clearing, trenching, and grading).
- b. Existing Site Conditions - A description of the existing topography, bed-rock lithology and structure, vegetation and drainage.
- c. Adjacent Areas - A description of neighboring streams, lakes, and drainage areas, which might be affected by the land disturbance.
- d. Soils - A detailed account of the soils within the pipeline construction corridor, including soil names, erodibility, permeability, depth, texture, and soil structure.
- e. Critical Areas - A description of areas within the pipeline construction corridor which have potentially serious erosion problems, for example, areas of past or present soil movement.
- f. Erosion and Sedimentation Control Measures - A description of the control methods to be used including vegetative and structural controls and management measures (e.g., staging construction so no areas remain exposed for unnecessarily long period of time). Methods will

be specific and include schedules and duration the control measure is expected to be used. An explanation will be included as to why selected methods are appropriate to the situation.

- g. Permanent stabilization - A detailed description, including specifications of how the corridor will be stabilized after completion of construction.
- h. Maintenance - An inspection schedule for all erosion control measures will be established. A maintenance schedule for erosion and sediment control structures will be set forth.
- i. Calculations - Any calculations made for the design of erosion control structures, such as sediment basins, will be included.
- j. Contingency Plans - Contingency plans for emergency situations and project abandonment will be outlined.
- k. Pipeline Construction Corridor Plan - High resolution maps of the construction corridor will be provided which will include: a vicinity map, existing contours, vegetation and soils, critical erosion areas, existing drainage patterns, limits of clearing and grading, location of control measures, and detailed drawings of control structures.

4. Blasting Plan.

5. Restoration of Natural Gas Pipeline Right of Way Plan

This plan will include restoration and maintenance practices, schedules, monitoring methods, contingencies, and noxious weed control measures.

6. Construction Water Use and Control Plan for the Natural Gas Pipeline.

7. Storm Water Control Plan

Storm water control for the natural gas pipeline and the site will be subject to the National Pollution Discharge Elimination System (NPDES) Permit. A storm water discharge plan for the pipeline will be submitted, or water quality waivers with proposed limitations will be requested of EFSEC if appropriate.

8. Spill Prevention, Control, and Countermeasure Plan

The Certificate Holder shall prepare a Spill Prevention, Control, and Countermeasure Plan (SPCC) that complies with the provisions of the NPDES Permit. The plan shall address oil/chemical storage, containment, personnel training, control and containment of discharges, cleanup actions, notification of appropriate agencies, and cleanup materials.

9. An Emergency Response Plan.

10. Army Corps of Engineers Approval

Army Corps of Engineers (ACOE) approval will be required for locating the gas pipeline where it would cross wetlands. A permit application has been made to the ACOE.

11. Wildlife Studies and Mitigation Plan

- a. Upon completion of the final route details for the gas pipeline and prior to construction, clarification will be sought from EFSEC concerning the need for additional wildlife studies.
- b. Prior to construction, a new survey for the presence of Bald Eagle nesting or feeding habitat areas will be made for the impact area of the gas pipeline. If nests or feeding habitat are found, a mitigation plan will be developed with consultation from state and federal agencies.
- c. The U.S. Fish and Wildlife Service will be contacted prior to construction of the project to update the list of endangered, threatened, and candidate species. If there are any new species listed, coordinate any possible mitigation measures with the appropriate agency.
- d. WDFW will be contacted periodically for updated information from the Natural Heritage Data Systems.

12. Geo-technical Studies

Detailed geo-technical studies will be performed to identify the final pipeline alignment and to provide input to the final design criteria.

13. Traffic and Transportation Plan

A Traffic and Transportation Plan, including proposed design or mitigation measures, will be prepared for the construction phase and submitted to EFSEC for review.

14. Historic Boundary Determination

A Historic Boundary Determination of HSN-2 will be made and a determination of eligibility requested if the gas pipeline route crosses through the site.

PART II. CONSTRUCTION METHODOLOGY

A. Erosion Control

1. Construction activities will be controlled to help limit erosion. Clearing, excavation and grading will be limited to those areas of the project absolutely necessary for construction of the project. Areas outside the construction limits will be marked in the field and equipment will not be allowed to enter areas or to disturb existing vegetation.
2. The Certificate Holder's construction contractors will implement an Erosion and Sedimentation Control Plan during construction to minimize soil loss due to surface water flows. Construction activities for access roads and extra working areas will be controlled to the extent possible to help limit erosion. Clearing, excavation, and grading will be limited to extra working areas and the construction of access roads. Best Management Practices (BMPs) will be designed and implemented for each extra working site construction. BMPs include limiting certain construction activities and installing control structures as described below.
 - a. Sediment Traps/Retention Ponds: Sediment traps/retention ponds will be constructed to intercept runoff from disturbed areas and will be located away from natural stream channels. A sufficient number of traps/ponds will be constructed to intercept runoff from the disturbed area, with sufficient capacity provided for the required storm event and accumulated sediment. The traps/ponds will not be constructed on fill material.
 - b. Silt Fences: Silt fences will be installed in locations where they will trap silt eroded from slopes during construction and prior to reestablishing vegetation. Silt fence construction specifications,

including fabric equivalent opening size, spacing and length will be determined by local conditions.

- c. Check Structures and Slope Ditches: Check structures such as dikes and swales will be used to reduce runoff velocity as well as divert surface runoff around and away from cut-and-fill slopes. A swale or slotted pipe will be provided on the upstream side to divert runoff from the dike and such runoff will be discharged to a sediment trap.
 - d. Temporary Water Conveyance Structures: Temporary pipe installed on the surface may be used for temporary drainage ways. Where piping is not possible, temporary earth channels will be constructed. All temporary drainage ways in disturbed areas will be protected to prevent erosion as specified in current standards.
 - e. Permanent Waterways: Some waterways that are to be part of the permanent storm water drainage system, will be constructed early during construction to carry construction runoff. Where applicable at the proposed plant site, existing storm water control ways may be utilized.
 - f. Vehicle Entrance Stabilization: Stabilized construction vehicle entrances will be established with tire wash provisions to reduce the amount of soil transported onto nearby roads and highways.
3. Surface runoff will be diverted around and away from cut and fill slopes and conveyed in pipes or protected channels. If the runoff is from disturbed areas, it will be directed to a sediment trap/retention pond prior to discharge.
 4. Vegetation will be re-established on all disturbed slopes. Seeding generally will be performed March 15 to June 30 and September 1 to October 30. All seeded areas will be protected against vehicle and pedestrian traffic. Straw mulch may be placed on disturbed slopes to provide additional protection, or placed on a disturbed slope if it is not possible to seed and the slope is to be left unworked for a long period of time.
 5. Geo-textiles will be used to minimize water migration in areas with potentially unstable slopes. French drains or other de-watering methods will be used for slopes that have the potential to become unstable due to their water content, and for areas with perched water in soils susceptible to liquefaction.
 6. In areas with relatively shallow problem soils, trenches will be excavated to a depth where suitable bedding materials are present.

7. The toe of unstable slopes will be stabilized through the use of gabions or retaining walls in areas of Class III or Class IV slope instability.
8. In areas where low permeability top soils occur at or near the surface, compaction of trench backfill will be completed using native soils compacted to match, as closely as possible, the density and permeability of the surrounding undisturbed soils.
9. Fuller Creek.

Particular care will be taken to prevent erosion from reaching Fuller Creek during plant construction. Construction runoff will be routed to existing pond C-1 or F-2 ponds.

B. Wetland and Aquatic Standards

1. Timing

- a. All "out of the water" soil or stream bed disturbing activities associated with wetland, stream, or river crossings shall occur during the dry portion of the year, typically late spring through early fall.
- b. Construction related activity within the active stream or river channel and/or within fifty feet of the bank shall be limited to the period of July 1 through September 30.

2. General Construction Procedures

- a. Notify EFSEC and its designated representatives at least 48 hours prior to commencement of pipe installation activities or blasting within each water body.
- b. In wetlands and riparian areas, limit the construction rights-of-way to fifty feet or less.
- c. In wetlands and riparian areas, vegetation that must be removed shall be cut at ground level, leaving existing root systems intact. Limit pulling of tree stumps and grading activities to those that would directly interfere with trenching, pipe installation and backfill.
- d. If standing water or saturated soils are present, use low ground weight construction equipment and/or operate on prefabricated equipment mats. Matting will be used in all cases where there is water within the

upper 18 inches of soil.

- e. In the event that matting is necessary, all construction activities will be carried out from the matting. Equipment will not be allowed in the wetland, off the mats, at any time. The mats will be inspected prior to placing in the wetland and mats with foreign material will not be used.
- f. Use trench plugs as necessary to prevent diversion of water into upland portions of the pipeline trench.
- g. Appropriate culvert size, placement and installation will be determined by site specific hydrology to ensure proper drainage regimes and that fish passage is maintained.
- h. Construct crossings as perpendicular to axis of stream channel as engineering and routing conditions permit.
- i. Maintain downstream flow rates at all times.
- j. Complete in-stream construction in minor streams within 24 hours of initiation.
- k. Install and maintain sediment filter devices at all stream banks.
- l. Perform daily inspection and repair as needed.
- m. Return stream bank to original contour where possible.
- n. Re-vegetate immediately after construction using vegetation that is fast to establish and plant native plants such as willows and cottonwood for long-term stabilization.
- o. Use log deflectors that create sediment deposition and plant establishment to stabilize banks where possible.
- p. Minimize the use of riprap to areas where flow conditions preempt vegetative stabilization.
- q. Locate all staging areas, additional spoil storage areas, and other additional work areas at least fifty feet away from the ordinary high water mark or wetland boundary. In no event shall vegetation be cleared between these areas and the water body or wetland. Limit size to minimum needed to construct the wetland or water body crossing.

- r. Limit the size of areas disturbed when constructing a stream crossing.
 - s. Avoid storing hazardous materials, chemicals, fuels, and lubricating oils, or perform concrete coating activities within floodplain (at least 100 feet from bank).
3. Access, Staging, and Ancillary Areas
- a. All equipment crossing a water body must use a construction bridge. Culvert crossings are not allowed.
 - b. All equipment bridges shall be designed to pass the maximum flow and be maintained to prevent flow restrictions during the period that the equipment bridge is in place.
 - c. The only access roads, other than the construction right of way, which may be used in wetlands are those existing roads that can be used with no modification and no impact on the wetland.
 - d. Locate all staging areas, additional spoil storage areas, and other additional work areas at least fifty feet away from the ordinary high water mark or wetland boundary. In no event shall vegetation be cleared between these areas and the water body or wetland. Limit size to minimum needed to construct the wetland or water body crossing.
 - e. Refuel all construction equipment at least 100 feet from water bodies or wetland boundaries.
 - f. All equipment will be cleaned and inspected prior to entering the wetland. Leaking equipment will not be allowed to enter the wetland.
 - g. Grading will not take place within the boundaries of any wetland, and disturbance will be kept to the minimum necessary to safely construct the pipeline.
 - h. All activities within the wetland will be kept to the minimum disturbance area possible. Pipe sufficient to cross the wetland will be welded on the right-of-way and X-rayed before being carried or pulled into the wetland and lowered into the trench. In long wetland stretches, it may be more feasible to weld up several joints of pipe, carry them into the trench leaving one end at the welding location, weld on additional lengths, pull them into the trench, and repeat this process until the entire wetland length has been crossed.

- i. The upper 6 to 12 inches of topsoil will be removed and protected throughout construction.
- j. The materials removed from the trench below the topsoil level are not to be placed on top of, or mixed with, the topsoil material previously removed.
- k. Once the pipe has been laid in the trench, the subsoil will be replaced, followed by the topsoil. Excess material will be transported out of the wetland and spread on the right-of-way outside the wetland boundaries.

4. Spoil Pile Placement and Control

All spoil material from water body crossings must be placed in the right of way at least ten feet away from the ordinary high water line, or in additional spoil storage areas located as required in paragraph II.B.3.d of this Agreement. At a minimum, all spoil shall be contained within sediment filter devices.

5. Specific Stream and River Crossing Methods¹

| <u>STREAM NAME</u> | <u>STREAM NO.</u> | <u>METHOD</u> |
|--------------------|-------------------|--------------------------------------|
| Fuller Creek | 22.0488 | Span |
| Unnamed | 22.0489 | Bore and Jack or Directionally Drill |
| Workman Creek | 22.0490 | Bore and Jack or Directionally Drill |
| Unnamed | N/A | Standard dry method with berms |
| Unnamed | 22.0520 | Standard dry method with berms |
| Chehalis River | 22.0190 | Bore and Jack or Directionally Drill |
| Unnamed | N/A | Standard dry method with berms |
| Sand Creek | 22.0534 | Standard dry method with berms |
| Mox Chehalis Creek | 22.0533 | Bore and Jack or Directionally Drill |
| Unnamed Tributary | 22.539 | Standard dry method with berms |
| Unnamed Tributary | 14.0018 | Standard dry method with berms |
| Unnamed Tributary | N/A | Standard dry method with berms |
| Kennedy Creek | 14.0012 | Standard dry method with berms |
| Unnamed | N/A | Standard dry method with berms |
| Unnamed | N/A | Standard dry method with berms |
| Swift Creek | 13.0139 | Standard dry method with berms |
| Cedar Flats Creek | 13.0141 | Bore and Jack or Directionally Drill |
| McLane Creek | 13.0138 | Standard dry method with berms |
| Unnamed Tributary | 13.0132 | Standard dry method with berms |

¹Subject to engineering feasibility and Army Corps of Engineer requirements.

| | | |
|---------------------|---------|--------------------------------------|
| Black Lake Drainage | 13.0030 | Bore and Jack or Directionally Drill |
| Unnamed | N/A | Standard dry method with berms |
| Unnamed | 23.0694 | Standard dry method with berms |
| Deschutes River | 13.0028 | Attach to county road bridge |
| Unnamed | N/A | Standard dry method with berms |

6. Hydrostatic Testing

- a. Perform 100 percent radiographic inspection of all section welds prior to installation under water bodies or wetlands.
- b. Screen the intake hose (1/8" mesh) to prevent entrainment of fish. The maximum approach velocity shall not exceed 0.4 feet/second.
- c. At least thirty days prior to use, provide to EFSEC a list of specific locations proposed for withdrawal and discharge of hydrostatic test water and allow EFSEC to review and comment on the list in consultation with WDFW and Ecology.
- d. Notify EFSEC and its designated representatives of intent to begin using specific sources at least 48 hours prior to testing.
- e. Maintain adequate flow rates at all times to protect aquatic life and provide for all other water body uses, including downstream withdrawals.
- f. Hydrostatic test manifolds shall be located outside wetlands and riparian areas.
- g. Regulate discharge rate and use energy dissipation device(s) in order to prevent erosion of upland areas, stream bottom scour, suspension of sediments, or excessive stream flow.
- h. When hydrostatic testing is complete, the test water will be analyzed and treated if necessary to make it suitable for discharge in compliance with the water withdrawal and discharge permits issued for the project. The water will be discharged into ponds or holding areas and discharged through filtering media before it enters any water course. Erosion protection measures will be incorporated into the water discharge procedures. Final discharge plans will be developed in consultation with EFSEC.
- i. Pipe that is prepared for stream crossings will be air tested before placement. Pipe installed in rivers will be hydro-statically tested prior

to installation. If leaks are detected, they will be repaired or the pipeline section replaced and the section re-tested.

7. Restoration, Stabilization, and Re-vegetation

- a. Immediately after pipeline crossing, placement to a minimum depth of one (1) foot of clean, round spawning gravel must be done in all disturbed streambed areas.
- b. Placement and securing of acceptable in-stream fish cover features at a maximum interval of ten (10) feet along disturbed banks must be done on both sides of the stream. In-stream cover features shall be woody debris including root wads or well-branched triple tree top bundles with the following specifications:

| | |
|--|---|
| <u>Stream Toe Width</u> <u>Length</u> | <u>Root Wad Diameter and</u> <u>Attached Trunk</u> |
|--|---|

| | | |
|-------------------|--------|---------|
| Up to 10 feet | 2 feet | 5 feet |
| 10 to 40 feet | 3 feet | 10 feet |
| More than 40 feet | 4 feet | 15 feet |

| | |
|-------------------------|---|
| <u>Stream Toe Width</u> | <u>Tree Top Diameter and</u> <u>Length</u> |
|-------------------------|---|

| | | |
|-------------------|----------|---------|
| Up to 10 feet | 4 inches | 5 feet |
| 10 to 40 feet | 6 inches | 10 feet |
| More than 40 feet | 8 inches | 15 feet |

- c. The in-stream cover features shall project into the low-flow water margin a minimum of the diameter of the required root wad.
- d. Suggested native species that may be used for re-vegetation in emergent wetlands include:

slough sedge (*Carex obnupta*)
 American bulrush (*Scirpus americanus*)
 small-fruited bulrush (*Scirpus microcarpus*)
 Watson's willow herb (*Epilobium watsonii*)
 spike rush (*Eleocharis palustris*)
 cattail (*Typha latifolia*)

speedwell (*Veronica*, spp)
mint (*Mentha arvensis*)
cut-leaved water horehound (*Lycopus americanus*, L.
unifora)
angelica (*Angelica*, spp.)
water parsley (*Oenanthe garmentosa*)
cow parsnip (*Heracleum lanatum*)

C. Upland Standards

1. Retain selected oak in protected "islands" within right of way.
2. Plant standard size apple and crabapple or other appropriate fruit producing trees along right of way in selected locations, more than fifteen feet from centerline of pipe.
3. Retain snags and allow for snag recruitment. Retain and replace down woody material.
4. During construction of the pipeline, if trees need to be removed at some right-of-way locations, the tree-line edge will be cut in an irregular pattern to reduce a linear swath appearance.
5. When pipeline construction is complete, the corridor will be replanted with (a) native, non-invasive plant species to prevent invasive plant species from becoming established and altering the plant community, or (b) returned to a condition agreed to by the landowner (for example, returned to a condition suitable for planting crops).
6. In areas where vegetation may need to be temporarily cleared for construction-related activities, removal of woody vegetation will be minimized by using the narrowest corridor possible and locating staging areas elsewhere. Construction in areas consisting of woody vegetation will be avoided whenever feasible, because areas temporarily cleared of herbaceous vegetation are more quickly restored over time.
7. Replanting will be done as soon as possible to prevent invasive species from becoming established and all species planted will be native to the region.
8. Reforestation of areas not maintained as right-of-way. Seedlings will be replanted to begin regeneration of forest habitat. A minimum of 300 seedlings per acre will be planted. Species included in the mix are Douglas fir, western hemlock, western red cedar, Sitka spruce, western white pine, red alder, and bigleaf maple. Species mixes will be appropriate to the area.

Factors affecting the species mix include geographic location, soil characteristics (including soil moisture regimes), and adjacent forested plant species composition.

9. Re-vegetation of shrubby areas not maintained as right-of-way. Shrubs will be replanted in areas currently composed of shrubby vegetation. The following species are included in the mix: red elderberry, hazel, Indian plum, oceanspray, and cascara. The species mix will increase the habitat value of the mitigation area, and will be appropriate to the area. Geographic location, soil characteristics, and adjacent shrubby vegetation composition are factors affecting the species mix. Root stock that is approximately 3 feet in height is preferred. If suitable size shrubs cannot be found, younger stock may be introduced in a nursery enclosure (to prevent deer browsing of young plants) until the shrubs are about 3 feet high.
10. Re-vegetation of grasslands in shaded areas. Seed will be broadcast in areas that will be shaded for most of the day. The species included in this seed mix are (the numbers in parentheses indicate the pounds per acre of that species): fine fescue (17.0), big trefoil (2.0), annual ryegrass (1.0), and white Dutch or subterranean clover (2.0) for a total of 22.0 pounds of seed mix per acre. This seed mix would also be broadcast in areas of shrub and tree plantings to minimize the potential for erosion between completion of pipeline construction and replanting (shrubs and seedlings will be planted at times to optimize their chances of survival which may not correspond with the construction schedule).
11. Re-vegetation of grasslands in open areas. The following seed mix will be broadcast to re-establish grassland habitat in open areas (the numbers in parentheses represent the number of pounds per acre of that species): perennial ryegrass (2.0), annual ryegrass (2.0), orchard grass (dwarf if available) (4.0), tall fescue (1.0), yellow sweet clover (4.0), red (white Dutch or subterranean) clover (2.0), and birdsfoot trefoil (5.0) for a total of 20.0 pounds of seed mix per acre.

D. White Top Aster

1. The narrowest construction corridor possible will be used in areas with White-Top Aster.
2. A turf cutter will be used over the trench corridor to remove the prairie turf with the white-top aster. The turf cutter should cut about 6 inches deep. The turf will be rolled up and stored until construction in the prairie habitat is complete. When the sub-soils and top-soils have been back-filled, the turf will be replaced. Rolled-up turf must be watered to prevent soil desiccation. The turf must be watered when replaced and watering may be necessary if precipitation levels are unseasonably low.
3. If feasible, construction will occur between mid-October and early April when the plant is dormant.
4. Top-soils excavated from the trench (6" to 18") will be stockpiled separately from the sub-soils and will be back-filled over the sub-soils when installation is complete.
5. The construction corridor will be re-vegetated, as necessary, with other plant species native to Tenalquot Prairie such as Idaho fescue (*Festuca idahoensis*). The plants used to re-vegetate the construction corridor will be native to the prairie so that the vegetation growing over the construction corridor resembles the naturally-occurring plant composition of the prairie.
6. Idaho fescue plugs will be collected, divided, and replanted, as necessary, to ensure survival of native prairie species and minimize the opportunity for invasive species to become established.
7. Invasive plant species (that are not native to the prairie) are adjacent to the pipeline corridor. Therefore, re-vegetation of the construction corridor will be conducted as soon as construction is complete to prevent invasive plants from becoming established.

E. Fugitive Dust

Fugitive dust will be controlled by spraying water on dry earth in the active construction areas.

PART III. CONSTRUCTION MITIGATION

A. General Wildlife Habitat

1. The Certificate Holder construction contractor for the pipeline will be required to replant disturbed habitats with native vegetation to reduce the duration of habitat disturbance. In areas requiring maintenance, they will plant native grassland species which need less frequent maintenance than native pioneer shrubs, thus reducing the frequency of human activity in this habitat.
2. The pipeline route was relocated in the vicinity of the Chehalis River to increase the distance of the pipeline from a bald eagle nest. The nest was approximately 1,000 feet from the original alignment, but is now approximately 2,000 feet from the proposed route. Because the nest is more than 0.25 mile from the nest, there will be no timing restrictions on construction, unless new nesting sites are determined (See I.C.13.a).
3. Transmission lines will be designed to be safe for raptors using techniques recommended by Olendorff et al. (1981), thus eliminating the potential hazard of electrocution for bald eagles as well as other raptors.
4. Native vegetation will be retained as much as possible in the impact area to preserve wildlife habitat and provide a buffer of vegetation from surrounding habitat areas. Shrub habitat will be maintained at low to medium vegetation heights in the rights-of-way.
5. Restore and re-vegetate the 25-foot wide construction easement with native plant species favorable to wildlife immediately following construction consistent with a site-specific vegetation plan and landowners agreements, as appropriate.
6. Relocate nest boxes for western bluebirds and wood ducks that will be disturbed by construction of the pipeline.

B. Wetland Habitat

1. Wetland restoration, creation and enhancement will not result in a net loss of wetland acreage and functions.
2. In-kind replacement of functions and values is preferred.

3. Where in-kind replacement is not feasible, substitute resources of equal or greater ecological value will be provided.
4. Biologists are continuing to work with the Army Corps of Engineers and other federal and state agencies to avoid wetlands, especially high quality wetlands and forested wetlands. Some route revisions may result based on wetland determinations.
5. Wetland mitigation for the project is focused on avoidance and restoration. Avoidance of impacts to wetlands and wetland functional values will occur by physically avoiding contact with the wetlands. Although it is not possible to avoid all of the wetlands in the construction corridor, wetlands have been avoided whenever feasible. An emphasis on avoidance has been made for high quality wetlands and wetland types, which are difficult to replicate (e.g., forested wetlands).
6. Where avoidance of wetlands is not possible, the following mitigation measures will be implemented:
 - a. Construction techniques for minimizing compaction and mixing of wetland soils.
 - b. Temporary erosion and sedimentation controls including use of hay bales and siltation/sedimentation fences.
 - c. Conducting construction activities during the dry season to the extent possible.
 - d. Avoiding scrub-shrub and forested portions of wetlands to the greatest extent possible.
 - e. Retaining and back-filling wetland top-soils.
 - f. Re-grading wetland basins to the original elevation and contour.
 - g. Re-vegetation of wetland types using native, non-invasive species.
 - h. Reestablishing hydrologic regimes (water inflow and outflow).
7. Compensation

A combination of wetland enhancement and creation to compensate for proposed wetland impacts will be implemented where avoidance of wetlands is not possible. Compensation for unavoidable losses will include:

- a. For wetlands filled and lost, wetland acreage shall be replaced by creation at a 3 to 1 replacement ratio by wetland type (ratio to be doubled for enhancement of existing wetlands).
- b. For wetlands that are disturbed but not lost, the following shall apply:
 1. Forested Wetlands. Disturbance impacts to forested wetlands shall be mitigated by both: restoration of the disturbed area to either forested wetland or scrub/shrub wetland; and either replacement with other forested wetland (restoration or creation) in an amount equal to the disturbed area, or enhancement of disturbed emergent herbaceous wetland to forested wetland in amount equal to twice the disturbed area.
 2. Scrub/Shrub Wetlands. Disturbance impacts to scrub/shrub wetlands shall be mitigated by both: restoration of the disturbed area to scrub/shrub wetland; and either replacement with other scrub/shrub wetland (restoration or creation) in an amount equal to one-half the disturbed area, or enhancement of disturbed emergent wetland to scrub/shrub wetland in an amount equal to the disturbed area.
 3. Emergent Wetlands. Disturbance impacts to emergent herbaceous wetlands shall be mitigated by restoration of the disturbed areas to native emergent herbaceous wetland.

C. Upland Habitat

1. Forest Habitat
 - a. For forest areas that are cleared and that cannot be restored to forest habitat, mitigation shall be by replacement of forest habitat (restoration or creation) in an amount equal to twice the unrestored forest area.
 - b. For forest areas that are restored in place to forest habitat, mitigation shall be by restoration or creation of additional forest habitat in an amount equal to one-half the restored forest area.
 - c. In either (1) or (2) above, planting of trees in formerly disturbed herbaceous sites (such as abandoned agricultural fields) shall qualify.
2. Shrub Habitat

- a. For shrub areas that are cleared and that cannot be restored to shrub habitat, mitigation shall be by replacement of shrub habitat (restoration or creation) in an amount equal to twice the unrestored shrub area.
- b. For shrub areas that are restored in place to shrub habitat, mitigation shall be by restoration or creation of additional shrub habitat in an amount equal to one-half the restored shrub area.
- c. In either (1) or (2) above, planting of shrubs in formerly disturbed herbaceous sites (such as abandoned agricultural fields) shall qualify.

3. Prairie and Native Oak Forest

The Certificate Holder shall fund, design and implement an off-site prairie restoration project in Thurston County to restore lost prairie habitat values. The specific location of the prairie enhancement efforts shall occur on existing public lands identified by the Prairie Landscape Working Group. The project shall consist of the following two actions:

- a. A controlled burn or mechanical removal (mowing) to accomplish the initial removal of scotch broom on an area of existing prairie equal to two times the area of prairie habitat affected by pipeline construction activities; and
- b. One-time removal of invading conifer growth on 25 acres of established native oak forest.

4. Herbaceous Habitat

Disturbance impacts to herbaceous habitat shall be mitigated by restoration of the disturbed areas in place with safeguards against weedy invasive species.

D. Pipeline Right-of-Way

1. Wherever feasible, construction activities will occur outside of the planting/growing/harvesting period to minimize cropland productivity impacts.
2. Negotiations with land owners for easement compensation will be conducted prior to construction. If the land owners refuse to grant the easements and if all reasonable efforts to satisfy their concerns have been exhausted, then the Certificate Holder will consider other options including minor re-route of the pipeline.

3. Compensation to farmers for crop removal and/or damage or lost productivity caused by the construction activities will be negotiated based on actual impact.
4. Compensation to farmers for land permanently removed from productive use by construction of the project will be negotiated based on the productive use of that land.
5. Equipment cleaning and washing procedures will be implemented to prevent the spread of noxious weeds.
6. The Certificate Holder will coordinate construction activities with farmers to ensure (a) livestock access to feeding and watering stations, and (b) continued access across the right-of-way for farm equipment.
7. Compacted soil will be loosened by tilling after the pipeline is installed and back-filled.
8. The pipeline corridor will be replanted with native vegetation after completion of construction.
9. Fences and gates removed during construction will be replaced.

E. Noise

The following construction sound abatement measures will be included in the project construction specifications to mitigate construction sound impacts:

1. Construction will not be performed within 1,000 feet of an occupied dwelling unit on Sundays, legal holidays, or between the hours of 10:00 P.M. and 6:00 A.M. on other days.
2. All construction equipment will have sound control devices no less effective than those provided on the original equipment. Equipment will not be operated with unmuffled exhaust systems.
3. Pile driving or blasting operations, if required, will not be performed within 3,000 feet of an occupied dwelling unit on Sundays, legal holidays, or between the hours of 8:00 P.M. and 8:00 A.M. on other days.
4. Notice of the proposed construction schedule and locations will be well publicized in the area, and nearby residents will be notified in advance of the anticipated schedule for construction activities.

F. Historic and Cultural Preservation

The Certificate Holder and their construction contractor will coordinate with EFSEC and local Tribes to develop an acceptable construction monitoring plan and will implement the plan during construction of the proposed project.

G. Traffic and Transportation

The natural gas pipeline will be installed under major roadways and under railroads using boring and drilling techniques to avoid roadway and rail disruptions. After pipeline installation across roadways, the subgrade and surface of the roadways will be returned to their pre-existing conditions in accordance with state and local requirements.

H. Commuter Trip Reduction Act

The Commuter Trip Reduction Act is implemented in the eight largest counties in Washington State. Grays Harbor County is exempt, but Thurston County is subject to the Act. The Commuter Trip Reduction Act requires carpooling or other transportation management measures in work situations where 100 or more workers will be arriving at the same site between 6:00 and 9:00 a.m. for 12 months or longer. In Thurston County, only pipeline construction will occur as part of the project, and it is not known at this time exactly how long workers will be arriving at a single site, nor how many workers. However, if the project is found to fall within the requirements of the Act, carpooling or other transportation management planning will take place.

PART IV. MITIGATION DURING OPERATIONS

A. Best Management Practices

1. Operational BMPs will consist of company policies, operating and maintenance procedures, personnel training, good housekeeping, prohibition of undesirable practices, and other administrative practices to prevent or reduce pollution of waters of the state. Source control BMPs will consist of physical, structural or mechanical devices or structures that are intended to prevent pollutants from entering stormwater.
2. Operational BMPs will be adopted to implement good housekeeping, preventive and corrective maintenance procedures, steps for spill prevention and emergency cleanup, employee training programs, and inspection and recordkeeping practices as needed to prevent stormwater pollution.

3. Existing stormwater catchbasins and detention systems will be used and will continue to be inspected at least annually as part of the site preventive maintenance program.
4. During periods of heavy rainfall and after primary storage tanks have been filled or emptied, secondary containment structures will be inspected for accumulations of water.
5. The Certificate Holder will periodically inspect the system to ascertain that the controls identified in the plan are adequate and to confirm that non-permitted discharges are not entering the stormwater system.
6. Source control BMPs consistent with those in the Stormwater Management Manual for Western Washington (SWMMWW) will be employed in the design of fueling stations; vehicle and equipment washing and steam cleaning areas; loading and unloading areas for liquid materials; aboveground storage tank systems; container storage facilities; outside storage areas; and outside manufacturing and maintenance areas.

B. Monitoring of Revegetation or Vegetation Replacement

The success of wetland and riparian revegetation will be monitored annually, with written reports to EFSEC and copies to WDFW and Ecology, for the first five years after construction. Revegetation of areas which are currently vegetated with native species is considered successful if the native herbaceous and/or woody cover is at least eighty percent of the total cover, and native species diversity is at least fifty percent of the diversity originally found in the wetland. If revegetation is not successful at the end of five years, the Certificate Holder shall develop and implement (in consultation with a professional wetlands ecologist and the Departments of Ecology and Fish and Wildlife) a plan to actively revegetate the wetland with native wetland herbaceous and woody plant species.

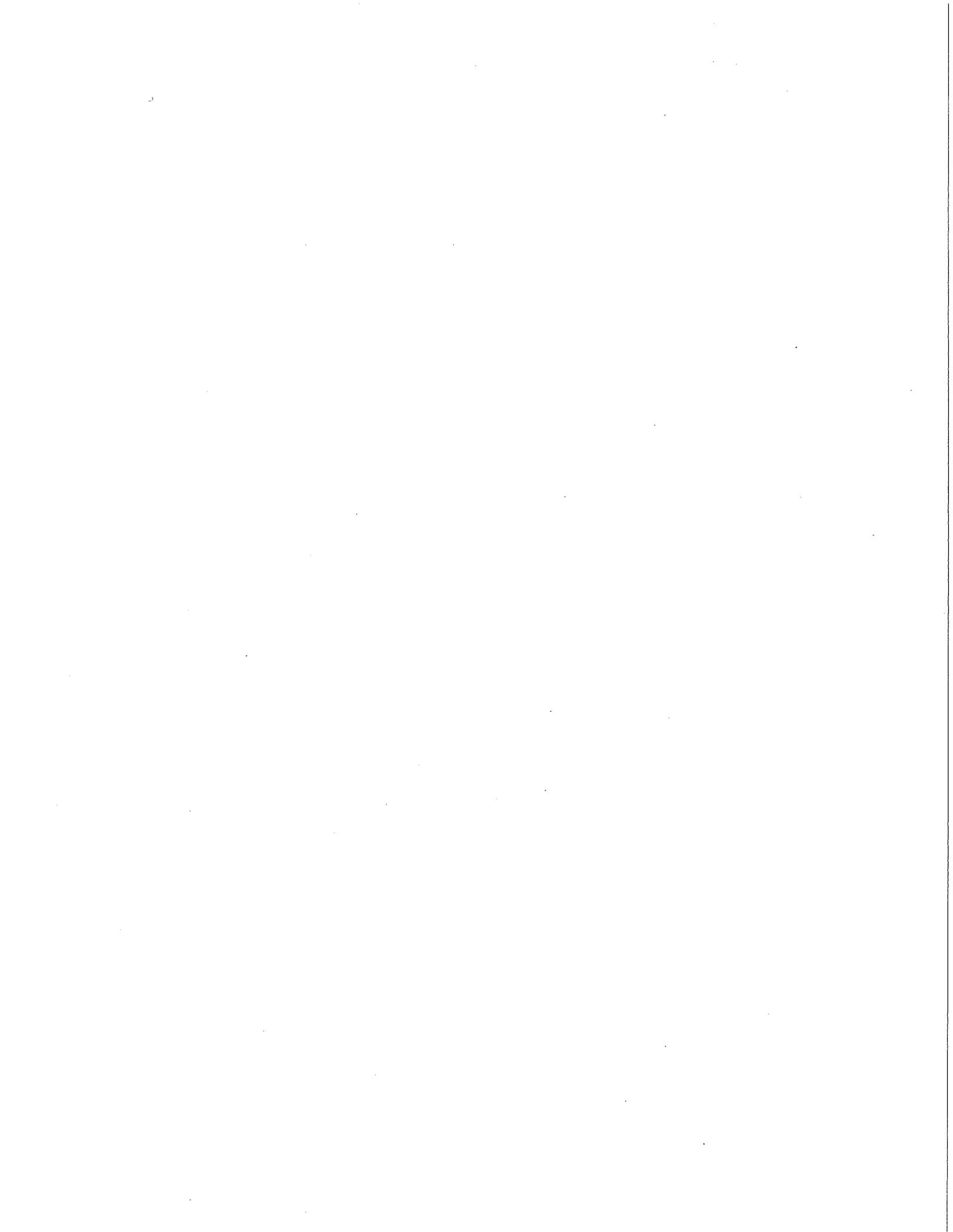
A five year monitoring plan shall be developed to assess mitigation success. For those restoration, creation or enhancement areas that do not meet the success standards provided in paragraph IV.B.3 after five years, additional replacement shall be provided as follows: an amount of forested wetland equal to three times the unsuccessfully restored forested wetland areas; and an amount of scrub/shrub or emergent wetland equal to two times the unsuccessfully restored scrub/shrub or emergent wetland areas.

1. A minimum five-year monitoring and contingency plan shall be required for all wetland impact and mitigation actions.

2. Development of the wetland compensatory mitigation plan will be based on the format and checklists specified in Ecology Publication #94-29, Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposals.

ATTACHMENT V

NOTICE OF CONSTRUCTION AND PREVENTION OF SIGNIFICANT DETERIORATION



**ENERGY FACILITY SITE EVALUATION COUNCIL
P.O. BOX 43172
OLYMPIA, WASHINGTON 98504-3172**

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IN THE MATTER OF:]
Satsop Combustion Turbine Project]
Electrical Generating Facility]
Elma, Washington]

**NO. EFSEC/95-01
EXTENSION-2
FINAL APPROVAL
NOTICE OF CONSTRUCTION
AND PREVENTION OF
SIGNIFICANT DETERIORATION
APPLICATION (EFFECTIVE
September 11, 1999)**

14 Pursuant to the Energy Facility Site Evaluation Council (Council) regulation for air permit applications
15 (Washington Administrative Code 463-42-385) and Washington Department of Ecology (Ecology)
16 regulations for new source review (Washington Administrative Code 173-400-110 and Chapter 174-460
17 WAC) and based upon the complete Notice of Construction Application (NOC), the second 18 month
18 extension application submitted by Energy Northwest and the technical analysis performed by Ecology for
19 the Council, the Council now finds the following:

20

21 **FINDINGS**

22

23 1. Energy Northwest has applied to construct the Satsop Combustion Turbine Project which is to be
24 located near Elma, Washington. The proposed project consists of two (2) separate, combined cycle,
25 natural gas fired power generation facilities, each rated at 245 Megawatts (MW). The project will
26 consist of the following major components:

27

- 28 1.1. Two Westinghouse 501F combustion turbine generators (CTG);
- 29 1.2. Two heat recovery steam generators (HRSG);
- 30 1.3. Two Westinghouse steam turbine generators (STG);

31

32 These stationary sources may be built separately or simultaneously. Requirements for timing of
33 separate construction shall be done in accordance with Approval Condition 20. They may be
34 operated independently.

35

36 2. Energy Northwest's second 18-month extension of the NOC/PSD application for the proposed

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37 project was determined to be complete on October 18, 1999, after Ecology's review of additional
38 information submitted by Energy Northwest.

39

40 3. The project is subject to permitting requirements under the Federal requirements of 40CFR 52.21(j)
41 and the state requirements of 173-400 WAC, 173-460 WAC, 40 CFR 60.330, and to emission
42 monitoring requirements under RCW 70.94, 173-400 WAC, 40 CFR 60 Appendices A, B, and F,
43 and 40 CFR 75.

44

45 4. The project will use natural gas as the primary fuel. No. 2 distillate fuel may be used as a backup
46 fuel during periods of natural gas curtailment and for limited testing purposes, not to exceed 360
47 hours, per combustion turbine generator per calendar year.

48

49 5. The site of the proposed project is within an area that is in attainment with regard to all pollutants
50 regulated by the National Ambient Air Quality Standards (NAAQS).

51

52 6. Best available control technology (BACT) as required under the federal requirements of 40 CFR
53 52.21 (j) and the state requirements of WAC 173-400-113 (2) and toxic best available control
54 technology (T-BACT) as required under WAC 173-460-060 will be used for the control of all air
55 pollutants which will be emitted by the proposed project.

56

57 7. The proposed project will have the potential to emit up to 203 tons per year of oxides of nitrogen
58 (NO_x).

59

60 8. The proposed project will have the potential to emit up to 567 tons per year of carbon monoxide
61 (CO).

62

63 9. The proposed project will have the potential to emit up to 54 tons per year of sulfur dioxide (SO₂).

64

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- 65 10. The proposed project will have the potential to emit up to 93 tons per year of volatile organic
66 compounds (VOCs).
67
- 68 11. The proposed project will have the potential to emit up to 115 tons per year of particulate matter less
69 than or equal to 10 microns aerodynamic equivalent diameter (PM₁₀).
70
- 71 12. The proposed project will have the potential to emit up to 22 tons per year of sulfuric acid mist.
72
- 73 13. The proposed project will have the potential to emit up to 220 tons per year of ammonia.
74
- 75 14. Allowable emissions from the new emissions units will not cause or contribute to air pollution in
76 violation of:
77
- 78 14.1. Any state or national ambient air quality standard
79 14.2. Any applicable maximum allowable increase (PSD increment) over the baseline ambient
80 concentration in any area.
81
- 82 15. Modeling indicates that there will be no significant impacts resulting from pollutant deposition on
83 soils and vegetation in either Mt. Rainier or Olympic National Parks.
84
- 85 16. Modeling indicates that during natural gas and No. 2 backup fuel firing, no significant degradation
86 of regional visibility or vistas from National Parks will occur.
87
- 88 17. No significant effect on industrial, commercial, or residential growth in the Elma area is anticipated
89 due to the project.
90
- 91 18. The Council finds that all requirements for new source review (NSR) and PSD are satisfied and that
92 as approved below, the new emissions units comply with all applicable federal new source

93 performance standards. Approval of the NOC application is granted subject to the following
94 conditions.

95

96 **APPROVAL CONDITIONS**

97

98 1. The combustion turbines shall be fueled only by pipeline quality natural gas except during periods
99 of natural gas curtailments and during limited test periods. During periods of natural gas
100 curtailment and during limited test periods, the combustion turbines may be fueled by "on-road
101 specification diesel fuel" (referred to as "oil" throughout the remainder of this Approval) containing
102 no more than 0.05 percent sulfur by weight, as specified in 40 CFR § 80.29, as amended through
103 July 1, 1992. Oil may be fired by each combustion turbine for a maximum of 360 hours in any
104 calendar year for the purposes of testing or operation during periods of natural gas curtailment.
105 Energy Northwest shall report any oil fired operations of the combustion turbines to the Council in
106 accordance with the reporting requirements in Approval Condition 16.

107

108 2. NO_x emissions from each CTG/HRSG exhaust stack of the project shall not exceed an hourly
109 average of 3.0 ppmv corrected to 15 percent oxygen at ISO standard day conditions (288 degrees
110 Kelvin, 60 percent relative humidity and 101.3 kilo Pascal pressure) and 9.2 kg per hour (20.3
111 lb/hour) when burning natural gas. NO_x emissions from each CTG/HRSG exhaust stack of the
112 project shall not exceed an hourly average of 12 ppmv corrected to 15 percent oxygen at ISO
113 conditions and 40.9 kg per hour (90.8 lb/hour) when burning oil.

114

115 Initial compliance shall be determined in accordance with 40 CFR Subpart GG and EPA Reference
116 Method 20, except that the instrument span shall be set between zero and 50 ppm. NO_x and O₂
117 concentrations shall be measured and recorded by a continuous emission monitoring system
118 (CEMS) which meets the requirements of Approval Condition 14.1. Such CEMS shall be used to
119 determine compliance with this Condition.

120

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121 3. Ammonia (NH₃) emissions from each CTG/HRSG exhaust stack of the project shall not exceed 10
122 ppmvd on an hourly average when either natural gas or oil are burned. Initial compliance shall be
123 determined by EPA Reference Method 5 with modifications to the impinger section or an equivalent
124 method agreed to in advance by EFSEC. NH₃ emissions from each CTG/HRSG exhaust stack shall
125 be measured and recorded by a continuous emission monitoring system (CEMS) which meets the
126 requirements of Approval Condition 14.2. Energy Northwest may propose alternative means for
127 continuous assessment and reporting of NH₃ emissions for approval by the Council. Any proposed
128 alternative NH₃ reporting shall be at a minimum equivalent to a continuous emission monitoring
129 system (CEMS) which meets the requirements of Condition 14.2. NH₃ emissions from each
130 CTG/HRSG exhaust stack of the project shall not exceed 28 pounds per hour.

131

132 4. CO emissions from each CTG/HRSG exhaust stack of the project shall not exceed 2 ppmvd (3.3
133 kg/hr (7.2 lb/hr)) from 75-100% CT load or 25 ppmvd (29.6 kg/hr (64.8 lb/hr)) for CT loads from
134 75 down to 60% at 15% oxygen on an hourly average when natural gas is burned. CO emissions
135 from each CTG/HRSG exhaust stack shall not exceed 18 ppmvd (29.3 kg/hr (64 lb/hr)) corrected to
136 15% oxygen on an hourly average when the No. 2 distillate is burned.

137

138 Initial compliance shall be determined by EPA Reference Method 10B or an equivalent method
139 agreed to in advance by the Council. The span and linearity calibration gas concentrations in
140 Method 10B shall be modified to a span gas concentration of 100 ppm with all other calibration gas
141 concentrations similarly reduced. CO emissions from each CTG/HRSG exhaust stack shall be
142 measured and recorded by a CEMS, which meets the requirements of Approval Condition 14.3.
143 Such CEMS shall be used to determine compliance with this Condition.

144

145 5. SO₂ emissions from each CTG/HRSG exhaust stack of the project shall not exceed 1 ppmvd (2
146 lb/hr) when natural gas is burned. SO₂ emissions from each CTG/HRSG exhaust stack of the
147 project shall not exceed 13 ppmvd (101 lb/hr) when oil is burned.

148

- 149 Initial compliance shall be determined by EPA Reference Method 20, or an equivalent method
150 approved in advance by the Council. If Method 6C is used, the instrument span shall be 100 ppm
151 and all span and calibration gases used shall follow in accordance with the method requirements.
152 Continuous emission monitoring of SO₂ is not required. Continuous compliance with the limit shall
153 be by means of fuel sulfur content reporting and fuel flow monitoring to each turbine.
154
- 155 6. Sulfuric acid (H₂SO₄) emissions from each CTG/HRSG exhaust stack shall not exceed 1 lb/hr
156 when natural gas is burned or 37.6 lb/hr when oil is burned. Initial compliance with the H₂SO₄
157 emission limits shall be determined by EPA Reference Method 8, or an equivalent method approved
158 by the Council.
159
- 160 7. Volatile Organic Compound emissions (VOCs) from each CTG/HRSG exhaust stack shall not
161 exceed 10.4 lb/hr when natural gas is burned or 14.2 lb/hr when oil is burned.
162
- 163 Initial compliance shall be determined by EPA Reference Method 25B, or an equivalent method
164 agreed to in advance by the Council.
165
- 166 8. PM₁₀ emissions from each CTG/HRSG exhaust stack of the project shall not exceed 175 pounds
167 per day when natural gas is burned or 2,285 pounds per day when oil is burned.
168 Initial compliance shall be determined by EPA Reference Method 201A or an equivalent method
169 agreed to in advance by the Council.
170
- 171 9. Opacity from each CTG/HRSG exhaust stack of the project shall not exceed 5 percent over a six-
172 minute average as measured by EPA Reference Method 9 when burning natural gas. Energy
173 Northwest shall propose an opacity test for oil firing which must be reviewed and approved in
174 advance by the Council. An opacity limit will be set based on the result of that test.
175
- 176 10. With the exception of PM₁₀, SO₂, H₂SO₄, NO_x, CO, and VOCs the net emissions increase of any

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177 pollutant regulated under the Federal Clean Air Act shall be less than the significant levels in 40
178 CFR 52.21(b)(23)(i).

179

180 11. All conditions apply except during CTG/HRSG startup and shutdown conditions. The duration of
181 startup or shutdown periods is limited to 3 hours per occurrence. Emissions during start-up and shut
182 down shall not exceed a total of 3313-lb CO per combustion turbine over the three-hour startup or
183 shutdown period when firing natural gas or oil.

184

185 12. Within 180 days after initial start-up of each combustion turbine, Energy Northwest shall conduct
186 performance tests for NO_x, ammonia, SO₂, opacity, VOC, CO, and PM₁₀ and H₂SO₄ on each
187 combustion turbine, to be performed by an independent testing firm. A test plan shall be submitted
188 for the Council's approval at least thirty-days prior to the testing. Initial start-up for each
189 combustion turbine is defined as the time when the first electricity from either CTG/HRSG and the
190 associated steam turbine generator is delivered to the electrical power grid.

191

192 13. Sampling ports and platforms shall be provided on each stack, after the final pollution control
193 device. The ports shall meet the requirements of 40 CFR, Part 60, Appendix A, and Method 20.
194 Adequate, permanent, and safe access to the test ports shall be provided. Other arrangements may
195 be acceptable if approved by the Council prior to installation.

196

197 14. Continuous Emission Monitoring Systems

198

199 14.1 CEMS for NO_x and O₂ compliance shall meet the requirements contained in 40 CFR 75,
200 Emissions Monitoring.

201 14.2 Any CEMS or alternative used by Energy Northwest to determine ammonia
202 emissions shall be evaluated for acceptability by means equivalent to the stringency
203 in EPA Title 40, Part 60, Appendix B Performance Standards.

204 14.3 Continuous emission monitoring systems (CEMS) for CO, shall, at a minimum

205 meet the requirements contained in 40 CFR, Part 60, Appendix B, Performance
206 Specifications and in 40 CFR, Part 60, Appendix F, Quality Assurance Procedures.

207

208

209 15. Compliance testing shall be performed for PM₁₀ and VOCs from each CTG/HRSG exhaust stack
210 biennially. Source testing for these parameters is to coincide with the Relative Accuracy Test Audit
211 required for each installed CEMS. If the compliance testing for 3 consecutive tests indicates that the
212 source can maintain compliance with a specific pollutant's (PM₁₀ and VOCs) emission limitations
213 and the Council agrees to allow a reduced frequency of compliance testing, then the compliance
214 testing frequency for that pollutant can be reduced to once every 4 years, until a test indicates
215 noncompliance. When a compliance test for a pollutant indicates noncompliance with the emissions
216 limitations, the frequency of testing will return to the biennial basis until the above criteria are met
217 again.

218

219 16. CEMS and process data shall be reported in written (or electronic if permitted by the Council) form
220 to the authorized representative of the Council at least monthly (unless a different testing and
221 reporting schedule has been approved by the Council) within thirty-days of the end of each calendar
222 month.

223

224 The format of the reporting shall match that required by EPA for demonstrating compliance with the
225 Title IV, Acid Rain Program reporting requirements. Pollutants not covered by that format shall be
226 in a format approved by the Council which shall include but not be limited to the following:

227

228 16.1. Process or control equipment operating parameters.

229 16.2. The hourly maximum and average concentration, in the units of the standard, for each
230 pollutant monitored.

231 16.3. The duration and nature of any monitor down time.

232 16.4. Results of any monitor audits or accuracy checks.

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- 233 16.5. Results of any stack tests.
234
- 235 17. For each occurrence of monitored emissions in excess of the standard, the monthly emissions report
236 (per Approval Condition 16) shall include the following:
237
- 238 17.1 For parameters subject to monitoring and reporting under the Title IV, Acid Rain Program,
239 the reporting requirements in that program shall govern excess emissions report content.
- 240 17.2 For all other pollutants:
- 241 17.2.1. The time of the occurrence.
242 17.2.2. Magnitude of the emission or process parameters excess.
243 17.2.3. The duration of the excess.
244 17.2.4. The probable cause.
245 17.2.5. Corrective actions taken or planned.
246 17.2.6. Any other agency contacted.
247
- 248 18. Operating and maintenance manuals for all equipment that has the potential to affect emissions to
249 the atmosphere shall be developed and followed within 180 days of initial start-up as defined in
250 Approval Condition 12. Copies of the manuals shall be available to the Council or the authorized
251 representative of the Council. Emissions that result from a failure to follow the requirements of the
252 manuals may be considered proof that the equipment was not properly operated and maintained.
253
- 254 19. Operation of the equipment that has the potential to affect emission to the atmosphere must be
255 conducted in compliance with all data and specifications submitted as part of the NOC application
256 unless otherwise approved by the Council.
257
- 258 20. This approval shall become void if construction of the project is not commenced within fifty four
259 (54) months after receipt of final approval dated September 12, 1996, or if construction of the
260 facility is discontinued for a period of eighteen (18) months.

Final Approval of the NOC/PSD the second 18-Month Extension Application
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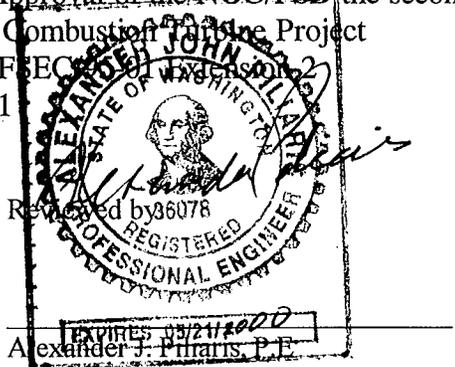
262 21. Any activity that is undertaken by Energy Northwest or others, in a manner that is inconsistent with
263 the application and this determination, shall be subject to Council enforcement under applicable
264 regulations. Nothing in this determination shall be construed so as to relieve Energy Northwest of
265 its obligations under any state, local, or federal laws or regulations.

266

267 22. Energy Northwest shall notify the Council in writing at least thirty-days prior to start-up of the
268 project.

269

270 23. Access to the source by the Council or the authorized representative of the Council shall be
271 permitted upon request for the purpose of compliance assurance inspections. Failure to allow access
272 is grounds for revocation of this determination of approval.

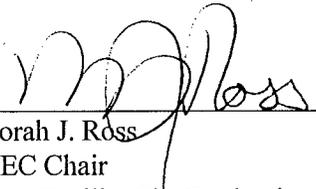


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Reviewed by
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Air Quality Program
Washington Department of Ecology

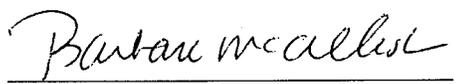
2/14/2000
Date

Approved by:


Deborah J. Ross
EFSEC Chair
Energy Facility Site Evaluation Council

2/17/00
Date

Approved by:


Barbara McAllister
Director
Office of Air Quality
U.S. Environmental Protection Agency
Region 10

3/1/00
Date