ENERGY FACILITY SITE EVALUATION COUNCIL

DUKE ENERGY GRAYS HARBOR
SATSOP COMBUTION TURBINE (CT) PROJECT

PROPOSED MODIFICATION TO THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NO. WA-002496-1

FACT SHEET

September 8, 2003

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1. INTRODUCTION

The federal Clean Water Act establishes water quality goals for navigable (surface) waters of the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System (NPDES) permitting process, which is administered by the Environmental Protection Agency (EPA). The EPA has authorized the Energy Facility Site Evaluation Council (EFSEC or Council), on the basis of Washington Administrative Code (WAC) Chapters 80.50 and Revised Code of Washington (RCW) Chapter 90.48, to administer NPDES permits for energy facilities greater than 350 megawatts.

The regulations adopted by the state include procedures for issuing permits (Chapter 463-38 WAC), water quality criteria for surface and ground waters (Chapters 173-201A and 173-200 WAC), and sediment management standards (Chapter 173-204 WAC). These regulations require that a permit be issued before water can be discharged into waters of the state.

One of the requirements (WAC 463-38-033 and 034) for issuing a permit or permit amendment under the NPDES permit program is the preparation of a tentative determination or draft permit and an accompanying fact sheet. Public notice of the availability of the draft permit is required at least 30 days before the permit is issued (WAC 463-38-034). This fact sheet and the draft permit are available for review (see Appendix A, Public Involvement, for more detail on the public notice procedures).

General information about the project is listed in Table 1. A glossary of terms used in this Fact Sheet is included in Appendix B.

TABLE 1: General Information

Permit Holder	Energy Northwest and Duke Energy Grays Harbor, LLC
Mailing Address	Energy Northwest P.O. Box 1223 Elma, WA 98541 Duke Energy Grays Harbor, LLC P.O. Box 26 Satsop, WA 98583
Physical Address	Satsop Combustion Turbine Project (Grays Harbor Energy Facility) 401 Keys Road Elma, WA 98541
Type of Facility	Steam Electric Generating Facility
SIC Code	4911
Discharge Location	Outfall 001: Chehalis River (River Mile 19.7) Latitude: 46° 58’ 30” N Longitude: 123° 29’19” W
Discharge Location	Outfall 002B: Grays Harbor Public Development Authority C-1 Pond Latitude: 46° 58’ 18” N Longitude: 123° 28’53” W
Chehalis River Water Body ID Number	WA-22-4040

The permit holder has requested an amendment to the existing permit, issued December 9, 2002, to allow the discharge of stormwater in accordance with Washington Department of Ecology's (Ecology) "National Pollutant Discharge Elimination System and State Waste Discharge General Permit for Stormwater Discharges Associated with Construction Activities" (General Permit for Construction) during construction of the Satsop Combustion Turbine (CT) Project and Ecology's "The Industrial Stormwater General Permit, A National Pollutant Discharge Elimination System and State Waste Discharge General Permit for Stormwater Discharges Associated with Industrial Activities" (Industrial Stormwater General Permit) when commercial operation commences.

Staff proposes in the draft permit to require the permit holder to meet the requirements of Ecology's General Permit for Construction and Industrial Stormwater General Permit. The draft permit also reflects the stormwater pollution prevention plans required for each stage, matches Operation and Maintenance Manual requirements with Ecology requirements, and deletes the C-1 pond evaluation, as this has been completed. Additionally, the permit has been revised to reflect a previously approved submittal date change for the process water engineering evaluation.

The permit holder has reviewed the fact sheet and draft permit. Errors and omissions identified during this review have been corrected before going to public notice. After the public comment period has closed, the Council will summarize the substantive comments and respond to each comment. The summary and response to comments will become part of the file on the permit, and parties submitting comments will receive a copy of the Council's response. This fact sheet will not be revised. **Comments should be restricted to the permit modifications being proposed, which primarily addresses stormwater discharges**. Comments and the resulting changes to the permit will be summarized in Appendix C, Response to Comments.

2. BACKGROUND

2.1 Definitions

Bonneville Power Administration (BPA) – Operators of the northwest U.S. electric power grid including transmission lines to the Satsop CT Project site.

Duke Energy Grays Harbor LLC (Duke Energy) – A subsidiary of Duke Energy North America. Duke Energy owns the Satsop CT Project site and will construct Satsop CT Project.

Energy Facility Site Evaluation Council (EFSEC or Council) – The Council coordinates all of the evaluation and licensing steps for siting major energy facilities in Washington. If a project is approved, EFSEC specifies the conditions of construction and operation, issues permits in lieu of any other individual state or local agency authority, and manages an environmental and safety oversight program of facility and site operations.

Energy Northwest – Energy Northwest will operate the Satsop CT Project. Energy Northwest is previously known as Washington Public Power Supply System (WPPSS). WPPSS is the original Site Certification Agreement holder and site owner for the Satsop Nuclear Power Projects No. 3 (WNP-3) and 5 (WNP-5).

Grays Harbor Public Development Authority (PDA) – A public corporation composed of Grays Harbor County, Public Utilities District No. 1 of Grays Harbor County, and the Port of Grays Harbor that was established to oversee the Satsop Development Park.

2.2 History

Site Location and Description

The Satsop Combustion Turbine Project, for which a permit amendment has been requested, is located on 22 acres within a former construction staging area that was originally developed for the Satsop Power Plant in the late 1970s. Duke Energy Grays Harbor, LLC (Duke) owns and will construct the project. Energy Northwest will operate the project. The Grays Harbor Public Development Authority (PDA) now owns and administers most of the former Satsop Power Plant site, now called the Satsop Development Park. (See Figure 1.) Construction of the Satsop CT Project began in September 2001, and was placed in deferred construction in August 2002.

The existing NPDES permit, issued by the Council on December 9, 2002 does not permit discharge of stormwater to the Chehalis River. The permit allows stormwater discharges to the PDA's C-1 Pond through Outfall 002B (Lat. 46°58'18" N, Long. 123°28'53"W), provided that any deficiencies in the pond and pretreatment structures were corrected prior to discharge. The permit holder was required to prepare an evaluation of the C-1 Pond (Special Condition S10 of the existing permit) because the dam forming the pond was allowing stormwater to pass through the dam, and because the pond no longer met Ecology's best management practices.

The permit holder completed an evaluation of the pond, which was submitted to the Council on February 27, 2003. The evaluation described deficiencies with both the pond size and discharge design. As a result of the evaluation, the permit holder proposed improvements to the pond to allow controlled discharge consistent with Ecology's Stormwater Management Manual for Western Washington and the Western Washington Hydraulics Model. The proposed design was reviewed and agreed to by EFSEC and Washington Department of Fish and Wildlife staff. The proposed design was also reviewed by the EFSEC Executive Committee on July 21, 2003. Because the pond is owned by the PDA, the permit holder also obtained PDA approval; however PDA approval was contingent upon EFSEC approving amendments to the NPDES permit to require compliance with Ecology's general permits for stormwater discharges. The C-1 Pond renovation is scheduled for completion in September-October, 2003.

The permit holder prepared and submitted a Construction Stormwater Pollution Prevention Plan (Construction SWPPP) as required by the existing permit, Special Condition S8. The permit holder also prepared and submitted the Stormwater System Operations and Maintenance Manual as required by the existing permit, Special Condition S4.

On April 8, 2003, the Council approved a request by the permit holder to revise the timing requirement for submission of the process water engineering evaluation required by Special Condition S11. The evaluation is required at least 180 days prior to commercial operations.

3. PROPOSED STORMWATER PERMIT LIMITATIONS

The Council proposes to require that the permit holder comply with Ecology's "National Pollutant Discharge Elimination System and State Waste Discharge General Permit for Stormwater Discharges Associated with Construction Activities" during construction and construction deferment, and to comply with Ecology's "The Industrial Stormwater General Permit, A National Pollutant Discharge Elimination System and State Waste Discharge General Permit for Stormwater Discharges Associated with Industrial Activities". This is consistent with the requirements for other steam electric generating facilities in the State of Washington, including other facilities permitted by EFSEC.

Compliance during construction of the Satsop CT Project shall be determined where the C-1 Pond discharges to the Chehalis River. Compliance during operations shall be determined at Discharge 002B, where the Satsop Combustion Turbine Project discharges into the C-1 Pond.

Table 1 provides the benchmark values given in Ecology's Industrial Stormwater General Permit.

Table 1: Stormwater Benchmark Values during Operations

Parameter	Benchmark Values
Turbidity	25 NTU
Total Zinc (ug/L)	117
Petroleum - Oil and grease (mg/L)	15
pH	Between 6 and 9 at all times

The permit holder may suspend stormwater sampling and analysis for turbidity, pH, zinc, and petroleum oil and grease based on consistent attainment of benchmark values. Consistent attainment is defined as eight consecutive quarters (any quarter with no stormwater discharge is not counted) where the reported values are equal to or less than the benchmark values. Benchmark values are not water quality standards and are not permit limits. They are indicator values.

Additional metal sampling may be required if the value for total zinc exceeds the benchmark value for two consecutive quarters, beginning with the next sampling quarter. The permit holder shall sample and analyze for total copper and total lead, and shall also sample for hardness. The benchmark values for total copper and total lead are shown in Table 2. Analysis of these parameters will be required for the remainder of the permit term unless the permit holder becomes eligible to suspend monitoring through consistent attainment of benchmark values. Consistent attainment is defined as eight consecutive quarters (any quarter with no stormwater discharge is not counted) where the reported values are equal to or less than the benchmark values.

Table 2: Stormwater Additional Metal Sampling if ZincExceeds Benchmark Value

Parameter	Benchmark Value
Total Copper	63.6 ug/L
Total Lead	81.6 ug/L
Hardness	NA

4. PROPOSED REPORTING REQUIREMENT CHANGES

Reporting requirements related to stormwater monitoring have been revised to match the requirements in Ecology's Industrial Stormwater General Permit. Reports are due within 45 days of the end of the quarter as follows:

- First Quarter: January, February, March report to be submitted not later than May 15;
- Second Quarter: April, May, June report to be submitted not later than August 14;
- Third Quarter: July, August, September report to be submitted not later than November 14; and
- Fourth Quarter: October, November, December report to be submitted not later than February 14.

Submission of the process water evaluation has been modified to be at least 180 days prior to commercial operation.

5. PLAN REQUIREMENTS

As required by the existing permit (Special Condition S8.B) and because changes have occurred that affect existing plans, the permit holder will revise the Construction SWPPP describing changes related to the C-1 Pond improvements. Because there are no mechanical components to the stormwater system, no changes are required to the Stormwater System Operations and Maintenance Manual. However, the permit holder will review elements of the manual and include appropriate information in the Construction SWPPP. Changes made to Special Condition S4 requirements for submission and revision of an Operation and Maintenance Manual in the draft permit are consistent with the cited chapter of the Washington Administrative Code. The permit holder will be required to submit a SWPPP consistent with the requirements for industrial facilities sixty (60) days prior to commercial operations.

6. PERMIT AMENDMENT

6.1 Permit Modifications

The Council may modify this permit to impose numerical limitations, if necessary to meet Water Quality Standards for Surface Waters, Sediment Quality Standards, or Water Quality Standards for Ground Waters, based on new information obtained from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies.

The Council may also modify this permit as a result of new or amended state or federal regulations.

6.2 Recommendation for Permit Amendment

This proposed permit amendment meets all statutory requirements for authorizing a stormwater discharge, including those limitations and conditions believed necessary to control pollutants and protect human health, aquatic life, and beneficial uses of waters of the state of Washington. The Council proposes that this amendment not extend the expiration date of the existing NPDES permit (December 9, 2007).

APPENDIX A: PUBLIC INVOLVEMENT INFORMATION

The Council tentatively plans to issue a modified permit to the permit holder listed on page 2 of this fact sheet. The draft permit contains the proposed changes to conditions and effluent limitations, which are described in this fact sheet.

The Council has published a Public Notice on the proposed modification to the Satsop CT Project NPDES permit in local newspapers and direct mailed to interested persons to inform the public that a draft permit and fact sheet are available for review. Interested parties are invited to submit written comments regarding the draft permit. The draft permit and fact sheet are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the office listed below. Written comments should be mailed to:

Mike Mills
Energy Facility Site Evaluation Council
PO Box 43172
Olympia, Washington 98504-3172

The Council will also conduct a public hearing in this matter to be held at 1:30 p.m., Monday, October 13, 2003, at the Rowe Six Conference Center, Building 1, 4224 6th Avenue SE, Lacey, Washington. After the close of the public hearing, Council will consider all the information before it and may reach a decision on modifying the permit in such form as it considers appropriate.

Comments should be restricted to the proposed permit modifications being proposed. Comments will be accepted through the close of the public hearing scheduled for 1:30 p.m., October 13, 2003. The Council's response to all significant comments will be available upon request.

Further information may be obtained from the Council by telephone at (360) 956-2151 or by writing to the address listed above.

APPENDIX B: GLOSSARY

Ambient Water Quality--The existing environmental condition of the water in a receiving water body.

Average Monthly Discharge Limitation--The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

Bypass--The intentional diversion of waste streams from any portion of a treatment facility.

Clean Water Act (CWA)--The federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity--Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring--Uninterrupted, unless otherwise noted in the permit.

Critical Condition--The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

Grab Sample--A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial Wastewater--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Major Facility--A facility discharging to surface water with an EPA rating score of > 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Maximum Daily Discharge Limitation--The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Minor Facility--A facility discharging to surface water with an EPA rating score of < 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

National Pollutant Discharge Elimination System (NPDES)--The NPDES (Section 402 of the Clean Water Act) is the federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the state of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/state permits issued under both state and federal laws.

pH--The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Responsible Corporate Officer--A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

State Waters--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Upset--An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the applicant. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

Water Quality-based Effluent Limit--A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C: RESPONSE TO COMMENTS