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July 13, 2009
GO1-09-0016

Allen J. Fiksdal, Manager
Energy Facility Site Evaluation Council
P.O Box 43172
Olympia, WA 98504-3172

Dear Mr. Fiksdal:

Subject: **ENERGY NORTHWEST WNP 1/ 4
REQUEST FOR SITE CERTIFICATION AGREEMENT AMENDMENT**

- References:
- 1) Energy Facility Site Evaluation Council Resolution 302, "Energy Northwest Nuclear Projects Nos. 1 and 4 Site Restoration Plan," dated December 15 2003
 - 2) Letter dated January 29, 2003, from Bonneville Power Administration to Energy Northwest, Energy Facility Site Evaluation Council, and Department of Energy-Richland Operations, "WNP-1/4 Site Restoration Plan and Four Party Funding Agreement"

The purpose of this letter is to request an amendment to the Site Certification Agreement (SCA) for the Energy Northwest facilities known as Washington Nuclear Projects No 1 and No 4 (WNP1/4), located in Benton County. Energy Northwest seeks to amend the WNP 1/ 4 SCA with the Energy Facility Site Evaluation Council (EFSEC) in order to update the terms and conditions within the agreement to more accurately reflect our plans to pursue facility reuse opportunities and the future final phase of site restoration. The SCA has not been substantially amended since its original inception in 1975 wherein the "project" referenced in the 1975 SCA is described as the construction and operation of two nuclear generating units. Since the construction of these two units has been terminated, an amendment to the SCA is warranted.

This letter provides a description of the requested amendment and explains why the amendment satisfies the requirements set forth in regulations governing EFSEC review of SCAs, including compliance with the State Environmental Policy Act (SEPA). As part of our transmittal package, we have provided a red/blue-line mark up of the SCA showing the requested changes and a completed SEPA Environmental Checklist to assist the Council in reviewing this request.

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Amendment Requested

Energy Northwest requests an amendment to the SCA to accurately reflect the plans to pursue facility reuse opportunities and the future final phase of site restoration. As originally permitted, the project consisted of construction and operation of two nuclear generating units. Each of the units was to include a water reactor with a maximum rate output of approximately 3779 megawatts (thermal), and all of the associated facilities required for the potential generation and transmission of electric power of approximately 1267 megawatts.

Since terminating the construction of both units, each unit has, in varying degrees of completion, a reactor building, reactor auxiliary building, turbine-generator building, electrical switchyard, pumphouses, cooling towers, office and warehouse buildings, storage tanks, and the supporting infrastructure of roads, parking lots, storage yards, and service connections (water, sewer, electricity, firewater).

Under the terms of Resolution 302 (Reference 1), EFSEC approved Energy Northwest's Site Restoration Plan. The plan provides that restoration will occur in two phases (near-term restoration and final restoration). The near-term site restoration has been completed. Final restoration is deferred to the future to allow for possible reuse and to accumulate sufficient funds to complete the final restoration activities. The utility infrastructure, warehouses, office buildings, and potentially some of the plant buildings still have a significant useful life for reuse. Additionally, many of these buildings and other site resources are currently being used to support Columbia Generating Station activities. Deferral of the final phase of restoration activities allows an investment real rate of return, leverages multiple site restoration efficiencies, and maximizes reuse potential.

As specified in Reference 1, upon completion of the near-term restoration, Energy Northwest will request to amend the SCA. The resolution provides that the amended SCA shall include only the requirements as EFSEC, in the reasonable exercise of its discretion, deems necessary to assure completion of the agreed site restoration actions. Further, those requirements will replace any and all requirements in the existing SCA.

This amendment request includes modifications to the requirements and provisions of the existing SCA to pursue site re-use opportunities and achieve the future final phase of restoration. In summary, the requested amendment modifies the SCA as follows:

- Revised Site Certification (Section I, Part B) to describe reuse and future final restoration;
- Removed requirements related to the construction of transmission lines (Section III, Part E);
- Removed requirements related to the construction and operation of the intake system from the Columbia River (Section III, Part F);
- Removed requirements related to the construction and operation of the discharge system (Section III, Part G);
- Removed requirements related to construction clean-up (Section III, Part H);

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- Modified the requirements for maintaining as-built drawings (Section III, Part I);
- Modified the requirements for archaeological site protection (Section III, Part J);
- Removed the authorization to withdraw water from the Columbia River; added the provision to continue to withdraw groundwater from two on-site wells (Section IV, Part A, 1-3);
- Removed the air discharge provisions (Section IV, Part C);
- Modified the requirements for ecosystem replacement to align with the provisions in the Four Party Agreement (Reference 2) (Section IV, Part D);
- Removed additional protective measures of wildlife, fish, and other aquatic organisms (Section IV, Part E);
- Removed Emergency Plan, Security Plan, and Monitoring Program requirements (Section V, Part A-C);
- Removed the provisions to allow project visitation (Section VI, Part A);
- Removed the discussion related to social and economic impacts (Section VI, Part B);
- Removed the NPDES permit (no longer active) as an attachment;
- Removed the Environmental Monitoring Plan as an attachment;
- The Four Party Funding Agreement for site restoration activities, Reference 2 in this letter, has been added as Attachment I to the SCA Amendment;
- EFSEC Resolution 302, Reference 1 in this letter, has been added as Attachment II to the SCA Amendment.

Regulatory Requirements

Pursuant to the Washington Administrative Code (WAC) 463-66-040, EFSEC considers whether SCA amendment proposals are consistent with:

1. The intention of the original SCA;
2. Applicable laws and rules;
3. The public health, safety, and welfare; and
4. The provisions of WAC 463-72.

The requested amendment is consistent with the above as follows.

First, the intent of the SCA is to grant state authorization to a certificate holder to construct and operate an energy project that has been determined to be in the state interest. As the certificate holder, Energy Northwest has committed itself to comply with the terms of the SCA, which include (i) conditions governing construction, (ii) conditions governing operation, (iii) conditions to mitigate for the environmental effects of construction and operation, and (iv) conditions EFSEC may impose for site restoration. Although Energy Northwest has chosen not to proceed with the construction and operation of the project, the agreed upon site restoration plan and reuse activities are consistent with the original intent of the SCA.

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Second, under WAC 463-66-040, the Council must consider applicable laws and rules, including the Revised Code of Washington (RCW) 43.21C and WAC 197-11 (SEPA), and WAC 463-66-070 through 080 (SCA approval by Council action). To facilitate SEPA review and Council action consideration under WAC 463-66-070, Energy Northwest has provided a completed SEPA checklist. The checklist documents that the requested amendment would not result in significant adverse effects on the environment. Concurring with these findings allows for Council approval in the form of a resolution.

Third, the Council must consider whether the proposed amendment protects public health and safety, and protects environmental aspects of the public welfare. As stated in Reference 2, the agreed upon site restoration plan was designed to meet the priority objectives of protecting the public's health and safety and being environmentally responsible.

Finally, restoration plans have been carefully evaluated and developed in accordance with the requirements outlined in WAC 463-72. The required plan elements and initial and detailed plans have been submitted to and approved by EFSEC in Reference 2 and Reference 1.

For the foregoing reasons, Energy Northwest requests that the Council amend the SCA as suggested in Enclosure 1. If you have any questions concerning this amendment request, please contact SE Khounnala at (509) 377-8639.

Respectfully,



GV Cullen
Manager, Regulatory Programs

Enclosures: 1) Site Certification Agreement Amendment with Attachments
2) SEPA Checklist

ENERGY NORTHWEST WNP 1/ 4
REQUEST FOR SITE CERTIFICATION AGREEMENT AMENDMENT
Enclosure 1

Site Certification Agreement Amendment with Attachments

SITE CERTIFICATION AGREEMENT
FOR ~~WPPSS~~ NUCLEAR PROJECTS NO. 1 AND NO. 4
(WNP 1 AND 4)
BETWEEN
THE STATE OF WASHINGTON
AND

~~THE WASHINGTON PUBLIC POWER SUPPLY SYSTEM~~ ENERGY NORTHWEST

This certification agreement was made and entered into pursuant to chapter 80.50 of the Revised Code of Washington by and between the State of Washington, acting by and through the Governor of the State of Washington, and ~~the Washington Public Power Supply System ("Supply System")~~ Energy Northwest, 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

I. SITE CERTIFICATION

A. Site and Project Description

1. The site ~~at, on and~~ in which the project ~~is~~ identified as WNP 1 and 4, ~~was~~ is to be constructed and operated, ~~is~~ is located in Benton County, Washington. The site is located entirely within the federally-owned area known as the Hanford Operations Area, United States Department of Energy Research and Development Administration, and is adjacent to the Columbia River. The site is described as follows:

A parcel of land lying in Section 4 of Township 11 North, Range 28 East, Willamette Meridian, described as follows:

Beginning at the Southwest corner of Section 11, Township 11 North Range 28 East, W.M., (said corner being located by reference to Washington State Coordinate System South Zone at coordinates North 408,335.30 and East 2,307,653.50) thence North 65° - 17'-03" West 12,113.14 feet to the TRUE POINT OF BEGINNING (said point being located by reference to the Washington State Coordinate System South Zone at coordinates North 413,400.00 and East 2,296,650.00); thence North 01°-01'-28" West 3000.48 feet to a point; thence East 5280.00 feet to a point; South 01° -01'-23" East 3000.48 feet more or less to the TRUE POINT OF BEGINNING, containing 363.69 acres more or less, and

A parcel of land lying in Sections ~~33~~ and ~~34~~ of ~~T~~ township 11 North, Range 28 East, and Sections 33 and 34 of Township 12 North, Range 28 East, Willamette Meridian, described as follows:

Beginning at the Southwest corner of Section 11, Township 11 North, Range 28 East, W.M., (said corner being located by reference to the Washington State Coordinate System South Zone at coordinates North 408,355.30 and East 2,307,653.50) thence North 50° -42'-00" West 14,311.63 feet to the TRUE POINT OF BEGINNING (said point being located by reference to the Washington State Coordinate System South Zone at coordinates North 417,00.00 and East 2,296,578.57); thence North 01°-01'-023" West 3000.48 feet to a point; thence East 5280.00 feet

to a point; thence South 01°-01'-023" East 1200.19 feet to a point; thence West 11,189.29 feet more or less to the TRUE POINT OF BEGINNING, containing 609.15 acres more or less.

The bearings used herein are Grid Bearings based on the Washington State Coordinate System, South Zone.

Energy Northwest terminated the construction of the WNP-1 and WNP-4 nuclear projects leaving the projects partially constructed.

B. Site Certification

~~1. The nuclear electric generating project is authorized to be located, constructed and operated on the site described in Section I.A.1. hereof. The "project" consists of two nuclear generating units. Each of the units includes a water reactor with a maximum rate output of approximately 3779 megawatts (thermal), a turbine generator, a mechanical draft evaporative cooling tower system, a control and recycle facility, pump house, associated facilities required for the generation and transmission of electric power which are reasonably necessary and economically practicable for achieving a net electric generation capacity of approximately 1267 megawatts.~~

2-1. The nuclear generating project was authorized to be located, constructed, and operated on the site described in Section I.A.1, hereof.

2. The restoration and/or reuse of the partially completed project are to be conducted in accordance with the agreement between Energy Northwest, Bonneville Power Administration, U.S. Department of Energy, and the State of Washington (referred to as the Four Party Agreement, Attachment I). The specific details for the site restoration are found in Energy Facility Site Evaluation Council, herein referred to as the "Council", Resolution No. 302 (Attachment II).

3. This certification agreement certifies, to the extent authorized by law, that within and on the above site Energy Northwest may restore and/or reuse the project subject to the terms and conditions of this certification agreement.

4. The remainder of the project subject to restoration is as follows:

WNP-1

- a. One spray pond and pump house
- b. Three cooling towers
- c. One turbine generator building, condensate tank and transformer yard
- d. One waste treatment facility
- e. One circulating water pump house
- f. Two air intake structures
- g. Minor structures and slabs as referenced in Resolution No. 302.

WNP-4

- a. One spray pond and pump house
- b. Three cooling towers

5. In accordance with the requirements of the Four Party Agreement and Resolution No. 302, when any portion of the site (section I.B.4), is incorporated into a reuse, then that portion of the site will be removed from the requirements of this agreement for restoration.
6. The entire site will be considered to be reused when 70% of the structures (section I.B.4) have been placed into long term reuse. The entire site will also be considered to be reused when a business line takes over responsibility of the land from DOE and BPA. This business could be a new entity, not part of the Four Party Agreement, or it could be a business line of Energy Northwest.
7. This agreement will be terminated once restoration of the structures in section I.B.4 has been completed in accordance with Resolution No. 302 or the entire site has been designated for reuse, or any combination of both.
3. ~~This certification agreement certifies, to the extent authorized by state law, that within and on the above site the Supply System may construct and operate the project subject to the terms and conditions of this certification agreement.~~

II. GENERAL CONDITIONS

A. Legal Relationship

1. This certification agreement is in lieu of any permit, certificate or similar document required by any department, agency, division, bureau, commission or board of this state.
2. ~~The Supply System~~Energy Northwest agrees to ~~enter into a~~maintain its lease with the State Department of Natural Resources for use of certain public state land needed for this project.
3. This agreement ratifies and incorporates the State of Washington's, acting by and through the Council, certification on May 5, 1975, that ~~the Supply System's~~Energy Northwest's discharge from WNP 1 and 4 to navigable waters will comply with the applicable provisions of §§1311, 1312, 1316, 1317, Title 33, United States Code.
4. This certification agreement shall bind the applicant and the state or any of its departments, agencies, divisions, bureaus, commissions or boards subject to all the terms and conditions set forth herein.
5. This certification agreement is subject to federal laws and regulations applicable to the project and to the terms and conditions of any permits and licenses which may be issued to ~~the Supply System~~Energy Northwest by pertinent federal agencies.
6. This certification agreement together with those commitments made by the applicant expressed in its application constitute the whole and complete agreement between the parties and supersedes any other negotiations, representations or agreements, either written or oral.

B. Enforcement of Compliance

1. This certification agreement is subject to all the penalties and remedies available at law, or in equity, to any person.
2. This certification agreement may be revoked, suspended or modified pursuant to the provisions of chapter 34.04 RCW for failure to comply with any of the terms and conditions herein, and for violations of chapter 80.50 RCW, regulations issued hereunder, any other applicable state or federal laws or regulations, and any other applicable state or federal laws or regulations, and any order of the Council.
3. Where approval or agreement of the Council is required by this agreement, the Council may, but is not required to, conduct a hearing pursuant to RCW 34.04.

C. Notices and Filings

1. Filings of any document or notice with the ~~Thermal Power Plant Site Evaluation Council ("Council")~~ shall be deemed to have been duly made when delivered to the Council at the offices of the Council in Olympia, Washington. Notices to be served upon ~~the Supply System~~Energy Northwest shall be deemed to have been duly made when delivered to the office of the ~~Managing Director~~Chief Executive Officer of the Supply SystemEnergy Northwest.

D. Right of Inspection

1. ~~The Supply System~~Energy Northwest shall provide access, subject to applicable health and safety regulations, to designated representatives of the Council in the performance of official duties to the project and all of its environs herein described.

III. CONSTRUCTION OF THE PROJECT

A. Construction Schedule

1. ~~The Supply System agrees to submit quarterly a Summary of Construction Progress Report to the Council.~~Deleted

B. Access Roads

1. All permanent primary roads constructed by ~~the Supply System~~Energy Northwest or its contractors for servicing the plant's central facilities will be constructed so as to meet or exceed Washington State Standards and U.S. ~~ERDS-DOE~~ design guidelines for such roads.

C. Aesthetics and Landscaping

1. ~~The Supply System agrees to construct the project in a manner which is aesthetically compatible with the adjacent area.~~Deleted
2. ~~The Supply System~~Energy Northwest agrees to landscape the project lands within the fenced perimeter in a manner which is compatible with its surroundings.

3. Should any vegetation be disturbed as a direct result of any maintenance or construction done by ~~the Supply System~~Energy Northwest, ~~the Supply System~~Energy Northwest agrees to restore vegetation in so far as practicable. This will be done by returning the area as nearly as possible to its original topography and topsoil conditions in order to promote revegetation of indigenous plant species.

D. Surface Runoff and Erosion Control

1. During all ~~construction~~restoration work, ~~the Supply System~~Energy Northwest agrees to require its contractors to employ all reasonable means in order to avoid soil erosion. ~~The Supply System~~Energy Northwest agrees to set forth such conditions for achieving these purposes in its bidding documents.
2. ~~The Supply System~~Energy Northwest shall put in its present ~~construction~~restoration contracts the following provisions relative to excavation and erosion control:
 - a. Topsoil shall be stripped to a depth of three inches from the areas of the site and shall be removed to the disposal areas.
 - b. Topsoil shall be placed in banks not exceeding six feet in height and having side slopes of at least 2:1 (H to V), at the spot in the disposal area.
 - c. The contractor shall provide during the entire construction period dust control from the construction roads, temporary parking lots, spoil areas and disposal areas, as required, by wetting or by using other acceptable methods. Wetting shall be done with water by using sprinkler trucks or other means.
 - d. When excavation exposes material likely to reavel, or to result in a dusty condition when exposed to the wind, the contractor shall place a four inch gravel blanket over the area. The gravel blanket shall consist of pit-run gravel, maximum size three inches. The contractor shall also keep slopes and the floor of the excavation watered to alleviate dusting or use other approved methods for dust control.
 - e. Slopes of cuts, and other areas covered by this work, where the exposed surface is composed of sand or is otherwise susceptible to wind erosion, shall be stabilized with a four inch layer of pit-run gravel containing gravel no larger than three inches. The stabilization material shall be spread uniformly over areas to be covered and trimmed to the required lines. No additional cutting to care for the gravel blanket is intended.
3. ~~Applicant shall have the hill slope and the pipeline corridor of the intake and discharge pipe returned as near as possible to the original topography, with topsoil replaced so as to encourage the return of natural vegetation.~~Deleted

4. Applicant will include provisions to replace topsoil and grade disturbed areas in such a way as to encourage the return of natural vegetation.
5. Should any unforeseen surface water runoff problems arise during construction of the project, ~~the Supply System~~Energy Northwest agrees to comply with the pertinent industry standards for such control and agrees to take whatever actions are necessary to correct and avoid runoff which detrimentally affects water quality.

~~E. —~~ Transmission Lines

1. ~~Transmission lines for the project to be constructed by the Supply System are those distribution and service lines wholly contained within the site and running from the project to the Howard J Ashe Substation, U.S. Department of the Interior, Bonneville Power Administration.~~Deleted
2. ~~All transmission and service lines will be constructed so as to comply, insofar as practicable, with the February 1970, "Environmental Criteria For Electrical Transmission Systems," published by the U.S. Department of the Interior and the U.S. Department of Agriculture.~~Deleted

~~F. —~~ Intake System

1. ~~The Supply System shall be permitted to construct and maintain an intake system on the shoreline of, and in the bed of, the Columbia River as required for construction and operation of the project subject to relevant conditions of this agreement.~~Deleted
2. ~~The Supply System agrees to consult with the Council and its designated representatives in development of plans and bid documents for construction of the intake system.~~Deleted
3. ~~The Supply System further agrees to submit specific location plans, drawings and construction contracts for installation of the intake system to the Council for timely review and study. If the Council does not approve such submittal, it agrees to respond with comments to such proposal of the Supply System within twenty days of receipt of the proposal.~~Deleted
4. ~~The Supply System shall schedule the construction of the intake structure in the portions of the river bed during the period after July 31 and before October 1. Any work at other times directly in the stream bed of the Columbia River shall require specific approval of the Council.~~Deleted
5. ~~The Council agrees to provide a suitable waiver of the turbidity criteria of the water quality standards of the State of Washington, if demonstrated by the Supply System to be necessary, during construction of the water intake system.~~Deleted
6. ~~The Supply System agrees to install the permanent power supply to the river water pump house by means of an underground circuit from the generating plant.~~Deleted

7. ~~The Council may require modification to the intake system if monitoring establishes that the intake system causes fish losses.~~Deleted

~~G.~~ Discharge System

1. ~~The Supply System shall be permitted to construct, maintain and operate a discharge system on the shoreline of, and the on the bed of, the Columbia River within the site as required for operation of the project subject to the related conditions in this agreement.~~Deleted
2. ~~The Supply System agrees to consult with the Council and its designated representatives in the development of plans and bid documents for construction of the discharge system on the shoreline of, and in the bed of, the Columbia River.~~Deleted
3. ~~The Supply System further agrees to submit specific location plans, drawings and construction contracts for installation of the discharge system to the Council for timely review and study. If the Council does not approve such submittal, it agrees to respond with any adverse comments to such proposal of the Supply System within twenty days of receipt of the proposal.~~Deleted
4. ~~The Supply System shall schedule the construction of the discharge structure in the portions of the river bed during the period after July 31 and before October 1. Any work at other times directly in the stream bed of the Columbia River shall require specific approval of the Council.~~Deleted
5. ~~The Council agrees to provide a suitable waiver of the turbidity criteria of the water quality standards of the State of Washington, if demonstrated by the Supply System to be necessary, during construction of the water discharge system.~~Deleted
6. ~~The outfall shall include features as required to achieve the requirements of G.4. of Attachment I hereof.~~Deleted

~~H.~~ Construction Clean Up

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

~~I.~~ As-Built Drawings

1. ~~The Supply System~~Energy Northwest agrees to maintain on file as-built drawings for the following project components:
 - a. water intake system;
 - b. water discharge system;
 - c. ~~sanitary waste disposal system;~~deleted
 - d. cooling towers and condenser coolant loop;
 - e. ~~demineralized water system~~deleted;
 - f. ~~radwaste system~~deleted;

- g. electrical transmission and service lines;
- h. ~~Ashe Substation~~deleted;
- i. ~~environmental monitoring installations; and~~ deleted
- j. ~~such other project features as have direct relationship to the project's impact on the environment~~ deleted.

J. Archaeological Site Protection

- 1. ~~The Supply System agrees to retain the services of a competent archaeologist to inspect the construction site in the course of the construction excavation of the project to determine whether archaeological or historical sites are being invaded or disturbed and to preserve and provide for interpretation of any historical or archaeological artifacts which may be discovered in the course of excavation and/or construction.~~Deleted
- 2. ~~The Supply System~~Energy Northwest agrees to report to the Council all archaeological finds made during the course of any construction, excavation and/or construction restoration of the project and ~~the transmission lines constructed by the Supply System.~~
- 3. ~~The Supply System~~Energy Northwest agrees to consult with the Council to arrange for preservation of artifacts for interpretation of any archaeological site discovered in the course of any construction or restoration.

K. Surface Mining

- 1. If the extent of the construction activities of ~~the Supply System~~Energy Northwest falls within the jurisdiction of the Surface Mining Reclamation Act, ~~the System~~Energy Northwest agrees to comply with the policies and requirements of the Act and to submit a Reclamation Plan to the Council for its approval prior to initiating construction. If the Council does not approve, it agrees to respond with comments to such proposal within twenty days of receipt of the proposal.

IV. OPERATION OF THE PROJECT

A. Water Withdrawal

- 1. ~~The Supply System is hereby authorized to withdraw a maximum of 72,000,000 gallons per day from the Columbia River and a 30-day average of 55,200,000 gallons per day from the Columbia River for industrial uses.~~Deleted
- 2. Energy Northwest is hereby authorized to withdraw ground out of the two on-site wells. Withdraw will occur at a maximum rate of 2.3 CFS and an annual withdrawal of 1,290 acre feet.
- 2.3. The above water withdrawal will support the reuse of WNP-1 and 4 sites as an Industrial Development Complex.

B. Water Discharge

- 1. All discharges by ~~the Supply System~~Energy Northwest to the waters of the United States shall be subject to the terms and conditions of the valid National

Pollutant Discharge Elimination System permit which is attached hereto as Attachment I and by this reference is incorporated herein.

C. Discharge Into Air

1. ~~The Supply System agrees to construct and operate the project in such a manner as to not discharge nor cause to be discharged into the ambient air materials resulting from the operation of the auxiliary boilers and emergency diesel engines which, measured at the point of discharge, will directly result in:~~Deleted
 - a. Nitrous oxides, measured as nitrogen dioxide, in excess of 0.3 lbs/10⁶ BTU;
 - b. Sulfur dioxide in excess of 0.8 lbs/10⁶ BTU; or
 - c. Ash in excess of 0.2 lbs/10⁶ BTU.
2. ~~The Supply System agrees to incorporate all known, available and reasonable technology in the design of the cooling towers and to operate so as to minimize fogging and icing effects on the surrounding area.~~Deleted
3. ~~Levels of radioactive discharges to the atmosphere shall be as low as practicable and shall not exceed the applicable federal standards.~~Deleted

D. Ecosystem Replacement

1. ~~The Supply System agrees to provide replacement and/or compensation as found to be necessary by the Council for any wildlife, fish and other aquatic life and ecosystem damage or loss caused by the project construction and operation.~~Refer to the requirements of the Four Party Agreement (Attachment II).

E. Additional Protective Measures

1. ~~The Supply System agrees to provide such additional measures for the protection of wildlife, fish and other aquatic life and the ecology of the area environs, based upon analysis and results of the monitoring programs, as found to be necessary by the Council.~~Deleted.

V. PUBLIC AND ENVIRONMENT PROTECTION

A. Emergency Plan

1. ~~The Supply System will develop an Emergency Plan in accordance with 10 CFR 50.34a and 10 CFR 50 Appendix E. In preparing that plan the Supply System shall in addition:~~Deleted
 - a. ~~Coordinate such development with local, state and federal agencies directly involved in implementing such plan.~~
 - b. ~~Include detailed provisions in the Emergency Plan for the health and safety of the people, emergency treatment, special training programs and prevention of property damage.~~

~~e. Comply with relevant obligations which are applicable and as set forth in the Washington State Department of Emergency Services' Radiological Emergency Response Plan.~~

~~d. Periodically contact the Council as to provide the Council with current lists of responsible Individuals, communication channels and procedures.~~

- ~~2. Should any portion of the Supply System's Emergency Plan be dependent upon any program which is currently conducted by the United States Energy Research and Development Administration and/or another nuclear operator in the Hanford Operations Area and such other program is terminated, then the Supply System agrees to re-activate such portion of the program as is appropriate and necessary. Deleted.~~

~~B. Security Plan~~

- ~~1. The Supply System will submit a comprehensive physical Security Plan for the protection of the project against acts of industrial sabotage in accordance with the Nuclear Regulatory Commission as a part of the USNRC's operating licensing process. Deleted.~~
- ~~2. A short description of the Security Plan will be published in Section 13.7 of the Final Safety Analysis Report, which will be available for public review; however, the actual Security Plan will be withheld from public disclosure pursuant to 10 CFR 2.790d. Deleted.~~

~~C. Monitoring Program~~

- ~~1. The Supply System agrees to initiate and maintain Environmental Monitoring Programs as described in Attachment II of this agreement. The programs shall be developed and implemented in close consultation with the Council and reasonable modifications shall be made, with concurrence of the Council. Deleted.~~
- ~~2. The Radiological Monitoring Program shall be designed and maintained to provide for measurement of radioactive releases from the facility and to provide for a reliable assessment and record of their distribution and retention in the environment within the area as described in Attachment II. Deleted.~~
- ~~3. The Supply System may retain or employ a qualified consultant or firm of consultants to carry out all or any portion of the environmental monitoring studies required to effect the Monitoring Program set forth in Attachment II hereof. The Supply System agrees to submit the requirements for the consultant's qualifications to the Council for comment prior to solicitation of proposals from any such consultant. Deleted.~~
- ~~4. The Supply System agrees to provide the Council full access to information and data recorded by the Supply System's Monitoring Program for the purpose of assuring the Supply System's continued compliance with the conditions of this certification agreement. The Project Monitoring Program will be coordinated with the Monitoring Program will be coordinated with the Monitoring Program of~~

~~WPPSS Nuclear Project No. 2 inasmuch as the programs are the same in purpose, design and monitoring area.~~Deleted.

- ~~5. The Supply System agrees to submit to the Council, upon request, a copy or copies of reports and data from the Monitoring Programs required to be filed by the Nuclear Regulatory Commission's construction permit, operating license or other regulations at the time as when submitted to the Nuclear Regulatory Commission.~~Deleted.
- ~~6. In carrying out the Monitoring Programs described in Attachment II of this agreement, the Supply System will establish sampling locations on the project site and within present or future regions of high population density located within a ten-mile radius of the project's reactor building so as to provide a representative sampling of Environmental effects in the surrounding area.~~Deleted.
- ~~7. Should any element of the Supply System's Monitoring Program be terminated, the Supply System agrees to report such termination to the Council and to re-activate so much of any such program as is appropriate and necessary as determined by the Council.~~Deleted.
- ~~8. Requirements of the Monitoring Program may be changed upon a showing by the Supply System of the Council that the degree of off-site monitoring is not commensurate with the results of such efforts. Such changes shall be effected by mutual agreement of the Council and the Supply System. Such changes shall be governed by the procedures in this paragraph and shall not be subject to the modification procedures specified in Section IV.C hereof.~~Deleted.
- ~~9. At the time of start up of WNP 2, a report shall be prepared summarizing all pre-operational monitoring data and establishing baseline reference values for all parameters. This report shall be submitted to the Council within 90 days after start up of WNP 2. Annual reports shall be submitted thereafter summarizing operational data, anomalies therein and comparisons to previously established baseline data. These annual reports shall be on a calendar year basis and shall be submitted by March 31 of each year.~~Deleted.

VI. MISCELLANEOUS PROVISIONS

A. Project Visitation and Recreation

- ~~1. The Supply System agrees to provide visitor information facilities to service WNP 1 and 4. At this time, a visitor information center to serve WNP 1 and 4 and WNP 2 is planned to be located in the City of Richland.~~Deleted.
- ~~2. The Supply System agrees to provide replacement of recreational opportunities which are shown to be adversely affected as direct consequence of project activity when found necessary by the Council.~~Deleted.
- ~~3. If the Hanford Operations Area should be opened to the public by ERDA, access by the public to any rights-of-way outside the project security area would be permitted subject to security regulations and such limitations as the Supply~~

~~System deem reasonably necessary for the health, safety and welfare of the public and for protection of the facility.~~Deleted.

~~B. Social and Economic Impacts~~

- ~~1. The Supply System agrees to undertake a supplemental Socioeconomic Impact Study beginning at the time of initial construction and to be completed within three years from the date of the execution of this agreement.~~Deleted.
- ~~2. The Supply System agrees to evaluate, negotiate in good faith, and to honor those claims by counties, school districts and other taxing districts for compensation due to an increase financial burden where such claim is demonstrated to be caused by the construction of the project.~~Deleted.
- ~~3. It is mutually agreed that any dispute arising out of this section VI.B. shall be determined by a hearing before the Thermal Power Plant Site Evaluation Council pursuant to RCW 34.04 and Administrative Regulations adopted pursuant thereto.~~Deleted.

~~C. Modification Of Agreement~~

- ~~1. This certification agreement may be amended by initiation of either the Council or the Supply System~~Energy Northwest. Such amendatory activity shall be accomplished pursuant to Council rules and procedures then in effect in a like manner as the development of this original certification agreement, including, but not limited to, the obtaining of the approval of the Governor. Any such amendments to this agreement shall be made in writing.
- ~~2. In certain circumstances where a dangerous degree of impact on the environment exists or is imminent, the Council may impose specific conditions or requirements upon the applicant in addition to the terms and conditions of the certification agreement as a consequence of any said emergency situation. The Administrative Procedure Act in RCW 34.04.170(2) contains authority for the Council to find that the public health, safety or welfare may imperatively require such emergency action.~~

Attachments (2)

~~I – NPDES Permit~~Deleted

~~II – Environmental Monitoring Program~~Deleted

~~I- Site Restoration Plan/Four Party Agreement~~

~~II- EFSEC Resolution No. 302~~

Dated at Olympia, Washington this 8th day of August, 1975

FOR THE STATE OF WASHINGTON

/s/
Daniel J. Evans, Governor

FOR THE WASHINGTON PUBLIC
POWER SUPPLY SYSTEM ENERGY NORTHWEST

/s/
J.J. Stein, Managing Director

Approved as to form this
8th day of August, 1975

/s/
Darrel L. Peoples,
Assistant Attorney General

ATTACHMENT II
WNP 1 AND WNP 4 SITE CERTIFICATION AGREEMENT
ENVIRONMENTAL MONITORING PROGRAM

I. GENERAL DESCRIPTION

The Environmental Monitoring Program established by the Supply System will have as its objective the determination of the effects of the project's operation on the environment. The monitored items will include the physical effects on land, adjacent water and effects on terrestrial and aquatic ecosystem. The program will provide an environmental measurement history for evaluation by the Supply System and the Council. Such a program will use reasonable and available methods and techniques and be maintained at the necessary level throughout the life of the project.

The Environmental Monitoring Program will be flexible and may be modified with concurrence of the Council as detailed information is acquired from the program. Any modifications will be based upon: (a) project effects, if any, on the terrestrial and aquatic ecology including the wildlife, fish and other aquatic life in the project influence area, (b) informational inputs obtained during the preoperational monitoring, (c) siting by others of nuclear or other facilities in areas surrounding the site, (d) technological developments in the field of environmental monitoring, (e) changes in type and abundance of natural vegetation, and (f) changes in conditions which relate to the pathways which lead to human radiation exposure.

The Environmental Monitoring Program is actually a part of a single comprehensive integrated program for monitoring preoperational, construction and operational phases of all three nuclear power stations (WNP 2 and WNP 1 and WNP 4) presently planned for the site. The overlap of the monitoring programs for the three plants is illustrated in Figure 1. The intensity of effort on the monitoring program will vary as the different plants come into operation with increasing activity immediately before and after each initial operation.

The Monitoring Program shall be governed by the following gradient concept to avoid non-discovery of excessive variance in values of the parameters monitored. The frequency of data collection and reporting shall be increased according to the following schedule when (a) limits exist for monitored parameter and the last value approaches a limiting value and the preceding value, or (b) no limits exist for monitored parameter and the difference between the last value and the preceding value exceeds 150% of the difference between the preceding value and the next preceding value when both differences are in the same direction or 200% if in a contrary direction.

Changes, supplements or revisions to the Environmental Monitoring Program will be submitted to the Council for its review and concurrence.

II. ENVIRONMENTAL RADIOLOGICAL MONITORING PROGRAM

A. Program Elements

1. Air sampling locations will be established onsite and within present or future regions of high population density within a ten-mile radius of WNP 1, WNP 2, and WNP 4. Special attention will be given to location of air samplers within five miles of the plant. The zone five to ten miles from the site is emphasized where populations are more concentrated.
2. In the terrestrial monitoring part of this program (vegetation, soil, and farm products), the area within a ten-mile radius of the site will be of primary concern. The predominant use of this area is for agriculture in the Franklin County area where the major crops are wheat, alfalfa hay, sugar beets, and potatoes, and the major livestock forms are beef cattle, hogs and sheep. Particular emphasis will be placed on the collection of these primary food

~~chain components which lead to man. Soil samples, native and cultivated vegetation, and dairy and poultry products (milk and eggs) will be sampled. Also sampled will be the fleshy portions (meat) of domestic animals normally consumed by man such as chickens, beef cattle and hogs, and of wildlife such as deer and pheasants (if available).~~

~~3. In the aquatic program, sampling will include ground water samples and surface water samples from the Columbia River. One of the sources of the municipal water supply for the City of Richland is the Columbia River; the intake for his supply, approximately eleven miles downstream from the site, will be one of the Columbia River sample stations. The aquatic food chain constituents included in this program will be taken from the Columbia River and will include the collection of bottom sediments and organisms, plankton, periphyton and fish. Sampling frequencies will depend upon weather, growing season, animal and fish activity and other considerations deemed appropriate in each case.~~

B. Surveillance Levels

~~The radiological monitoring program outlined in Table 1 represents the level of surveillance during the pre-operational phase (two years) and for one year of the operational phase.~~

~~Radiochemical analyses will be performed using accepted analytical procedures such as those recommended by the U.S. Public Health Service in "Radioassay Procedures for Environmental Samples," January 1967.~~

Table 1
 Sampling Summary
 (Ref. SSA Table 150(3)-1)

Sample Type	Stations	Sampling Frequency	Analysis
1. Background			
a. Gamma Sensitive Detector	3	Continuous Recording	{Background Gamma
b. TLD Dosimeters	13	Monthly ——— Quarterly Annually	{Readout and Record {at Noted Frequency
2. Air			
a. Particulates	10	Weekly	{Gross Alpha {Gross Beta {Gross Scan
b. Iodine	10	Weekly	{Radio Iodine
3. Plant Discharge Water	1 (per Unit)	Continuously	{Gamma Activity
	1 (per Unit)	Weekly	{Suspended Gross Alpha {————— Gross Beta {Dissolved — Gross Alpha {————— Gross Beta {Gamma Scan {————— & Tritium
4. River Water (Includes Richland Water ——— Plant Intake)	8	Monthly	{Suspended Gross Alpha {————— Gross Beta {Dissolved — Gross Alpha {————— Gross Beta {Gamma Scan {————— & Tritium
5. Groundwater ——— And ——— Rainwater (As Available)	6 3	Semiannually Monthly	{Gross Alpha {Gross Beta {Gamma Scan {————— & Tritium
6. Vegetation & Livestock			
a. Natural Vegetation	10	3 Samples Annually During Growing Season	{Gross Beta
b. Food & Feed Crops	10	During Growing Season	{90 Sr {137 Cs {131 I
c. Food Animals	5	During Growing Season	{Gamma Scan
7. Soil	13	Quarterly	{Gross Alpha {Gross Beta {90 Sr {137 Cs {Gamma Scan
8. Sediment	5	Quarterly	{Gross Alpha {Gross Beta {90 Sr {Gamma Scan
9. Milk	4	Monthly	{131 I {90 Sr {137 Cs {Elemental Calcium
10. Aquatic Biota			
a. Animal	3	Semiannually	{Gross Beta {40K
b. Vegetation	3	Semiannually	{90 Sr {Gamma Scan
11. Wildlife			

a. Rabbits or Substitute	5	Annually	(Thyroid—131I (Femur—90Sr
b. Waterfowl	5	Annually	(Gamma Scan (Muscle—32p' 65 Sr

~~The Supply System will furnish the Council or its designated representatives, upon request, half samples of specimens for their evaluation and analysis.~~

~~Sample stations are described in the following discussion of sample types and are located approximately in Figure 2.~~

~~1. Atmosphere~~

~~a. Gamma Detectors: (Δ in Figure 2)~~

~~The atmosphere will be continuously monitored and recorded for gamma radiation. These stations will be at three positions on the site boundary. These locations shown on the map in Figure 2 are tentative and subject to modification in the future depending on data on prevailing wind directions~~

~~b. TLD Dosimeters: (Δ, — in Figure 2)~~

~~Background levels of external radiation will be established by exposing thermo luminescent dosimeters (TLD) for various periods in time at thirteen locations, twelve within a ten-mile radius of the site and a control located at Sunnyside, Washington. Four dosimeters will be maintained at each station: one dosimeter is changed and read monthly; one dosimeter is changed and read quarterly, while the other dosimeters are changed and read annually. The dosimeters will be located at each air sampling station.~~

~~2. Airborne Particulates and Iodine: (Δ, — in Figure 2)~~

~~Airborne particulates will be collected on a weekly basis at ten of the TLD stations. The filters will be changed weekly. The filter housings will be located 6-8 feet above ground level to reduce dust loading of the filters and minimize the influence on sample activity of radon and its daughters emanating from the soil.~~

~~3. Plant Discharge Water~~

~~Water will be monitored continuously for gamma activity for each plant. A weekly sample will be taken for more detailed analysis and for calibration of the continuous gamma monitor.~~

~~4. River Water (— in Figure 2).~~

~~Sampling of the Columbia River will be performed on a monthly basis from eight locations extending from about five miles above the plant intake to 15 miles below the plant. The intake to the Richland water plant is sampled at Station 7.~~

~~5. Groundwater and Rainwater~~

~~a. Groundwater:~~

~~Sampling of groundwater will be performed semiannually from wells near the station. The wells are identified by the following numbers: 15-15, 27-8, 24-1, 20-E12, 10-E12, and S6-E14.~~

b. Rainwater: (Δ in Figure 2)

Sampling of rainwater will be performed monthly or as possible at these locations. These stations are located on the site boundaries, and are common to the continuous gamma monitors and recorders as well as air samplers.

6. Vegetation and Livestock Sampling

a. Natural Vegetation at Air Sampling Station

Samples of the leafy portions of natural vegetation available at ten TLD stations will be collected annually. Samples will be taken throughout the growing season with the predominant vegetation at the station being the sample collected.

b. Food and Feed Crops

Edible portions of food and feed crops will be sampled at ten locations within a ten-mile radius of the station. Four of the TLD will be used along with the milk stations, and three other samples will be collected at random within the ten-mile radius. These samples should be collected throughout the growing season.

c. Food Animals Samples

Food animal samples will be collected near five TLD stations. These food samples need only be a small portion of a large animal and can be obtained from farmers and ranchers as incidental to their personal or commercial butchering.

7. Soil

Soil samples will be collected quarterly at the TLD locations 4, 5, 9, 10 and milk stations M-2, and at eight other locations.

8. Sediment Samples

Samples of the Columbia River bottom sediment will be collected quarterly at or near the five Columbia River water collection stations and at other such plant locations as may be required by plant design.

9. Milk Samples (M-1, M-2, M-3 and M-C in Figure 2).

Milk will be sampled monthly from the bulk cooling tanks of three milk producers within ten miles of the plant. In the selection of milk samples locations, an attempt will be made to select established milk producers who are likely to remain in the business of milk production during succeeding years of plant operation. Information regarding source of feed must be included with milk sample results. A control station at Sunnyside will also be sampled monthly.

10. Aquatic Biota

a. Animals

Aquatic animals will be collected semiannually from the Columbia River at three locations, river water sampling stations 1, 3, and 8, (Figure 2) and at such plant effluent locations as may be required by plant design.

b. Vegetation

Rooted aquatic plants and slime growths on submerged surfaces in littoral locations will be collected semiannually.

11. Wildlife

a. Five rabbits will be collected annually from land adjacent to the site. An effort will be made to take these animals from different locations.

b. Five waterfowl will be collected annually near the site. It is desirable to obtain resident birds, so the collection should be made when migrations are not underway.

III. METEOROLOGICAL PROGRAM AND AIR QUALITY

A. Pre-Operational Onsite Meteorological Program

In support of the Nuclear Regulatory Commission's nuclear generating plant licensing requirements, the Supply System will maintain a meteorological tower to establish meteorological characteristics of WNP 2 over a period of at least two years prior to start-up. This data is in addition to the data available for the Hanford Reservation. Detailed measurements of wind speed, direction, low level stability and humidity will be gathered. Following this intensive two-year data collection period, the Supply System will maintain wind speed and direction instrumentation.

B. Operational Meteorological Monitoring Program

The WNP 1 and 4 operational meteorological monitoring programs will utilize data collected at the WNP 2 meteorological tower. This data will be recorded in the control rooms of both the WNP 1 and 4 Projects and will be collected and analyzed so as to meet the requirements of U.S. Nuclear Regulatory Commission's Regulatory Guide 1.21.

C. Air Quality Monitoring Program

Stack Monitoring will be conducted when the diesel generators or auxiliary boilers are being operated.

IV. AQUATIC MONITORING PROGRAM

The aquatic monitoring program will be an integrated program for monitoring pre-operational, construction and operational phases of WNP 2 and WNP 1 and 4 phases of the site. The relationship of these monitoring programs will be as illustrated in Figure 1. The intensity of effort on the monitoring program will vary as the different plants come into operation with increasing activity immediately before and after the initial operation of each project. Continuous evaluation of monitoring data will be accomplished to produce a more efficient environmental surveillance program. Portions of the program may be adjusted depending upon an evaluation of program results.

A. Pre-Operational Aquatic Monitoring Program

The pre-operational monitoring program for WNP 1 and 4 will consist of that data collected for the pre-operational program for WNP 2 as specified in the "Site Certification Agreement Between the State of Washington and the Washington Public Power Supply System for Hanford No. 2" as amended, and such data as is available from the operational monitoring program for the WNP 2 Project.

As a minimum, sampling will be conducted prior to the operation of each project as follows:

1. For fish and plankton at two locations — above the intake and downstream of the mixing zone.

2. For benthos at three locations—above the intake, at the discharge just outside the mixing zone, and downstream of the mixing zone.

B. Operational Aquatic Monitoring

The operational aquatic monitoring program will be a continuation of the pre-operational preliminary sampling program. The scope of the operational aquatic monitoring program will be determined as the results of the preliminary survey are developed. This program will be developed by the Supply System and concurred in by the Council.

V. WATER QUALITY MONITORING PROGRAM

This program will be established to monitor water quality parameters. Data obtained by this program will also supply necessary information to the study of the aquatic life in the river.

A. Pre-Operational Survey

1. Surface Water

Since WNP 1 and 4 have been placed on the same site as WNP 2, the water quality monitoring program established for WNP 2 will provide the basic necessary information required for WNP 1 and WNP 4.

Measurements of suspended sediment concentrations and turbidity will be performed at river cross-sections 300 feet down stream of the out fall structures. The measurements will be conducted weekly during construction of the river bank facilities. The sampling areas and frequency may be modified according to the sampling results. Sediment concentrations will be measured by a conventional suspended sediment sampler.

2. Ground Water

Extensive environmental monitoring programs concerning the physical, chemical and radiological characteristics of groundwater have been conducted under ERDA auspices. It is expected that these monitoring programs will be continued routinely as a part of the ERDA program. The applicant, however, will undertake a limited groundwater monitoring program in the vicinity of the site as described above in the Radiological Monitoring Program

B. Operational Monitoring

The pre-operational program discussed above will serve as the basis for the operational program.

1. Chemical Effluent Monitoring

Water quality parameters, locations, and frequencies of measurements are shown in Table 2. The measuring locations are also shown in Figure 3.

Periodic samples collected at points where effluent concentrations in the river are expected to be higher, will be compared with samples collected concurrently at points unaffected by the project. Comparisons of samples will provide a basis for distinguishing any measureable impacts on the environment. The program will be subject to future modification to place greater emphasis on potential problem areas and decreased emphasis on non-problem areas according to the sampling results.

2. Thermal Effluent Monitoring

Temperature of the river, makeup, blowdown, and ground waters will be monitored at various locations and intervals. Frequency and locations of these measurements are presented in Table 2

Table 2
Surface Water Monitoring Programs

Measured Items	WNP 1 & 4 Intake System Location 3	WNP 1 & 4 Discharge System Location 4	WNP 2 Intake System Location 3	WNP 2 Discharge System Location 4
Quantity	C	C	C	C
Water Table Elevation				
Temperature	C	C	C	C
Dissolved Oxygen	D	D	D	D
Total Dissolve Gas	D	D	D	D
Ph	C	C	C	C
Turbidity	C	C	C	C
Chlorine	C	C	C	C
Coli form Bacteria	W	W	W	W
Total Alkalinity	W	W	W	W
Dissolved Solid	W	W	W	W
BOD				
Conductivity				
Mg				
Fe				
Cu				
Ca				
Se4				
Si				
N2				
NH4				
NO2			C - Continuous	M - Monthly
Ne3			D - Daily	Q - Quarterly
PO4			W - Weekly	A - Annually

TABLE 2—Continued

Measured Items	One Mile upstream of project site Location 2	300-foot downstream of WNP 1 discharge Location 5	300-foot downstream of WNP 4 discharge Location 3	Richland Location 7	Wells in the vicinity of the Plant Site
Quantity					
Water Table Elevation					A
Temperature	M	M	M	M	A
Dissolved Oxygen	M	M	M	M	
Total Dissolve Gas	M	M	M	M	
Ph	M	M	M	M	A
Turbidity	M	M	M	M	
Chlorine	M	M	M	M	A
Coli form Bacteria	M	M	M	M	A
Total Alkalinity	M	M	M	M	
Dissolved Solid	M	M	M	M	
BOD	M	M	M	M	
Conductivity	M	M	M	M	
Mg	Q	Q	Q	Q	
Fe	Q	Q	Q	Q	

Cu	Q	Q	Q	Q	
Ca	Q	Q	Q	Q	
So4	Q	Q	Q	Q	
Si	Q	Q	Q	Q	
N2	Q	Q	Q	Q	
NH4	Q	Q	Q	Q	
NO2	Q	Q	Q	Q	
NO3	M	M	M	M	
PO4	Q	Q	Q	Q	

VI. TERRESTRIAL LIFE PROGRAM

The terrestrial ecology monitoring program of WNP 1 and WNP 4 is part of an integrated monitoring program for the pre-operational, construction and operational phases of all three nuclear power plants presently planned for the Hanford area. The terrestrial monitoring program includes a preliminary pre-operational survey now being conducted and a monitoring program, out-lined below, which is descriptive of both the pre-operational and operational phases.

A. Vegetation Studies

The purpose of vegetation studies will be to identify the impact of cooling tower operation upon plant communities through pre- and post-operational field studies. Parameters to be measured are changes in species composition, changes in primary productivity and changes in mineral content of plant tissues and soil.

1. Aerial Photography

Aerial photographs in natural color and false color infrared of the site and adjacent area will be made to provide a basis for mapping the extent of changes in existing plant communities between plant site and the Columbia River. These photographs will be taken twice in the first year; once in spring when plants are at peak growth and once in fall when plants are dormant. Future photography will depend on the utility of the photographs.

2. Identification of Major Plant Communities

Study plots will then be established in each major plant community to provide a record of the plant species that comprise each community. A measure of the relative abundance of each species will be made using conventional field ecology methods of determining density and/or canopy cover for each species encountered in the study plots at appropriate seasons of the year.

3. Identification of Forage

Plant species that are potentially important as forage for wildlife or domestic livestock will be specified. The expected pattern for secondary plant succession following the destruction of existing vegetation by fire or mechanical means will also be described.

4. Soil Analysis

The chemical and physical properties of a representative soil profile will be analyzed to provide a basis for recommending the kinds of plants that would be useful in re-vegetating soil disturbed by construction activities.

During the pre-operational survey vegetational analyses will be conducted with the aim of making objective assessments of the environmental impacts of operation of the nuclear power stations. The major impact upon vegetation is likely to be the accumulation of salts in the soil and on vegetative surfaces derived from cooling tower drift.

5. Ground Cover Analysis

The amount of ground cover provided by herbaceous species will be estimated each year at peak yield.

B. Animal Studies

The purpose of animal studies is to identify the impact of cooling tower operation upon animal communities through pre- and post-operational field studies. Parameters to be measured are changes in species composition, changes in biomass and seasonal patterns of activity.

1. Pocket Mouse

Detailed studies of the pocket mouse population will be made during all phases of the monitoring program. A free-living population will be studied in the zone of expected heavy drift deposition and compared with a population outside the drift zone.

2. Large Mammals

An aerial census of the large mammals, i.e., deer and coyote, will be made twice each year to obtain an estimate of the use of the local areas made by these kinds of animals. In addition, mule deer fecal pellet transects will be made in a study area adjacent to the site.

3. Birds

Censuses of bird populations will be made by wading along prearranged transect lines and counting birds with the aid of binoculars. Special attention will be paid to the birds that use the local plant communities as nesting habitat and birds that are ordinarily hunted as game or are regarded as being in danger of extinction.

4. Other Vertebrates

Observations will be made as to the abundance of other species of vertebrate animals, especially jackrabbits, lizards, snakes, and the occurrence of important invertebrates, such as ground-dwelling darkling beetles and grasshoppers that are important items in food chains.

ATTACHMENT I

WNP 1/4 SITE RESTORATION PLAN/
FOUR PARYAGREEMENT



P.O. Box 968 ■ Richland, Washington 99352-0968

December 5, 2002
GO1-02-0052

Mr. J.O. Luce, Chairman
Energy Facility Site Evaluation Council
P.O. Box 43172
Olympia, Washington 98504-3172

Subject: **NUCLEAR PROJECTS NOS. 1 AND 4
SITE RESTORATION PLANS**

Reference: Letter GO1-99-034 dated June 30, 1999, AE Mouncer (Energy Northwest) to
AJ Fiksdal (EFSEC), "Nuclear Projects Nos. 1 and 4, Revised Site Restoration
Plan"

Dear Mr. Luce:

As you are aware the Department of Energy-Richland Operations Office (DOE-RL), Bonneville Power Administration (BPA), Energy Northwest (EN), and the Washington State Energy Facility Site Evaluation Council have reached agreement on a site restoration plan and funding for WNP-1 and WNP-4. That agreement (Attachment D) includes a funding guarantee from Bonneville and is contingent upon EFSEC approval of the agreement and site restoration plan as proposed herein.

Energy Northwest proposes a Level 3D restoration plan (which does not require removal of the turbine pedestals) for the WNP-1 and WNP-4 projects to be implemented in two phases (refer to Attachment A for historical information). The first phase will consist of completing, in the next 18-24 months, essential, "Health, Safety, and Environmental Protection," restoration activities to place the sites in a safe state for potential reuse and/or long-term storage. The second phase will commence in twenty-three years and will complete the remaining activities to implement Level 3D restoration. The information relevant for Council review of this restoration proposal is contained in the 1999 plan (Reference) and in Attachments B and C.

Deferral of major site restoration activities allows an investment real rate of return, leverages multiple site restoration efficiencies, and maximizes reuse potential. Upon Council approval of this proposal, funds to cover both phases of restoration activities will be guaranteed pursuant to Attachment D.

Restoration Level 3D

Initially, Restoration Level 3D, without the requirement to remove the turbine pedestals, was recommended (Reference) based on a combination of factors including public health and safety, environmental considerations, stakeholder and tribal perspectives, compatibility with legal agreements and land use plans, and cost. The proposed plan implements the 1999 Level

NUCLEAR PROJECTS NOS. 1 AND 4 SITE RESTORATION PLANS

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3D description, with the exception of pedestal removal, over a period of twenty-six years (simulated images are provided in Attachment E). Benefits of this proposal include near term completion of activities for health, safety, and environmental protection; additional time to allow for funding accumulation and reuse of existing infrastructure and facilities; and the ability to defer cost impacts on Northwest ratepayers. A general description of Level 3D restoration follows.

WNP-1 This restoration level provides for the installation of substantial doors to minimize access, ground area cleanup, elimination of potential hazards at ground level, and sealing of the General Services Building by removing selected walls to elevation 501' and completing selected concrete walls and roof areas. The Containment Building would remain intact, the turbine pedestal would remain in place, and the remaining power block structures would be removed to ground level. Unused support buildings would also be removed.

WNP-4 This restoration level provides for substantial doors to minimize access, ground area cleanup, elimination of potential hazards at ground level, sealing of the General Services Building by removing selected walls to elevation 479' and pouring concrete roofs to seal the building, and seals the Containment Building by removing walls to elevation 479' and pouring a concrete roof at that elevation. The turbine pedestal would remain in place and the remaining power block structures would be removed to ground level. Unused support buildings would also be removed.

Further details are contained in Attachment C.

Proposed Plan Benefits

Health, Safety, and Environmental Protection The proposed plan provides for significant, "health, safety, and environmental protection," activities to be accomplished within the next 18-24 months, unless the Council agrees to a longer time period pursuant to Attachment D. These activities will ensure that a high level of protection is maintained at both sites until the major activities are completed or reuse negates the need for further restoration.

Funding The proposed plan provides funding assurance (Attachment D) to complete activities at both WNP-1 and WNP-4. BPA has acknowledged its restoration funding responsibilities for WNP-1. While no funding source for WNP-4 restoration exists, BPA has been willing to participate in funding some restoration of WNP-4 as a part of a total site restoration solution. This plan provides the long sought after solution for lack of funding for WNP-4 restoration and avoids the potential for costly and time consuming litigation. It also allows for the leveraging of multiple site restoration efficiencies and maximizes the reuse potential of these facilities. By deferring the major restoration activity by 26 years, the investment real rate of return from BPA's Restoration Trust Fund will work to accumulate the funds needed to complete site restoration at both sites.

**NUCLEAR PROJECTS NOS. 1 AND 4
SITE RESTORATION PLANS
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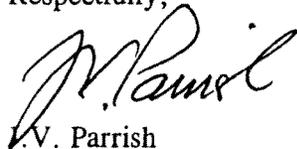
The 1999 Site Restoration Plan estimated the total cost to restore both WNP-1 and WNP-4 to Level 3D at \$48.3 million. Since that time, work estimated at \$6 million to remove the asbestos-containing material from the cooling towers has been completed. It is reasonable to believe that remaining work, in 2003 dollars, is about \$45 million. BPA proposes to establish a restoration trust fund and to guarantee an escalated \$45 million be available to complete restoration within 26 years, unless the Council agrees to a longer period pursuant to Attachment D.

Reuse The utility infrastructure, warehouses, office buildings, and potentially some of the plant buildings still have a significant useful life for reuse. Many of these buildings and other site resources are currently being used to support Columbia Generating Station activities. The White Bluffs Solar Demonstration Facility is also located on the WNP-1 property and is currently being considered for expansion. Energy Northwest is currently determining if there are additional economic development opportunities for these structures and land areas. Any reuse promotes local economic development and may dictate a delay in major demolition efforts or eliminate the need for restoration of certain facilities.

Ratepayer Impact The proposed Level 3D plan stretches out in time a major portion of the costs, thereby, relieving pressure on the BPA power rate structure.

Energy Northwest is currently finalizing preparations to proceed with the near-term activities. However, work on these activities will not begin until Council approval of this proposed plan is obtained. Your earliest consideration of this proposal would be greatly appreciated. Should you have any questions or desire additional information regarding this matter, please contact JD Arbuckle at (509) 377-4601.

Respectfully,



J.V. Parrish
Chief Executive Officer
Mail Drop 1023

Attachments: as stated

**Attachment A
Restoration Plan Historical Summary**

References:

- 1) Letter GO1-95-012 dated March 8, 1995, WG Council (Supply System) to FS Adair (EFSEC), "Nuclear Projects 1, 3, 4, and 5 Site Restoration Plan"
- 2) Letter dated June 15, 1995, JJ Zeller (EFSEC) to WG Council (Supply System), "Nuclear Projects 1, 3, 4, and 5 Site Restoration Plan" (EFSEC Resolution No. 280)
- 3) Letter GO1-99-034 dated June 30, 1999, AE Mouncer (Energy Northwest) to AJ Fiksdal (EFSEC), "Nuclear Projects Nos. 1 and 4, Revised Site Restoration Plan"
- 4) Letter dated December 17, 1999, D Ross (EFSEC) to JV Parrish (Energy Northwest), "WNP-1/4 Site Restoration"

In 1995 Energy Northwest submitted an initial site restoration plan for its terminated nuclear power plant projects (Reference 1). EFSEC approved the plan and noted that there were a number of uncertainties associated with the restoration work proposed in the plan (Reference 2). Accordingly, the Council conditioned its approval on conducting more detailed reviews as additional information became available and Energy Northwest was able to finalize its plans.

In 1999 Energy Northwest transmitted a revised restoration plan that included economic development strategies for WNP-1 and WNP-4 (Reference 3). The plan provided a cost benefit comparison of a range of restoration alternatives for WNP-1 and WNP-4. Benefits were assessed in terms of protection of the public's health and safety and the environment. Both costs and benefits were determined by outside consultants. Based on these assessments, Energy Northwest recommended that a modified Level 3D restoration alternative would represent a balance between the priority objective of protecting the public's health and safety, while being environmentally responsible and cost effective. Approval by the Council was not requested at that time since the plan was contingent upon funding approval from BPA and concurrence by the landowner (USDOE). Correspondence from the Council following the submittal of the 1999 plan encouraged Energy Northwest to complete its short-term restoration activities contained in the plan, determine the economic development potential of the site, and pursue the approvals necessary to finalize the restoration plan (Reference 4).

Since that time, some short-term restoration activities have been completed, several economic development initiatives have been explored, and significant discussions between Energy Northwest, DOE-RL, BPA, and EFSEC management and staff have occurred.

Attachment B Near-Term Activities

This attachment contains a general description of the types of activities to be completed in the next eighteen to twenty-four months. Additional detail is included in Attachment C.

As described in the proposed restoration plan, certain activities will be completed in the near term to maintain a level of public health, safety, and security until the sites are fully restored in approximately twenty-six years. In addition, potential environmental hazards will also be eliminated in the near term. Completion of the Health, Safety, and Environmental Protection (HS&EP) activities will allow the sites to be available for selected reuse during the next twenty-two years. Immediate reuse of certain facilities could result in some HS&EP activities being accomplished as part of a facility renovation.

Substantial structures will be sealed to limit public access. Peripheral buildings will be removed if determined to be unsafe and unsuitable for reuse. Unwanted bird habitat and nesting areas will be reduced. Additional fencing will be installed to establish a safe perimeter.

To permit site reuse in the interim, selected site infrastructure (i.e., power lines, roads, railroad tracks, and other site utilities and structures) will remain to support economic development on, and adjacent to the site.

- 1. Environmental Hazard Cleanup** – Remove hazardous materials identified in the WNP-1 and WNP-4 Environmental Site Assessments and resolve outstanding issues from previous evaluations. This task includes removal of oil in equipment, PCB containing light ballasts, etc.
- 2. Eliminate Fall/Tripping Hazards** – Identify access paths inside buildings and seal or cover accessible floor openings, pipe openings, vaults, pits, trenches, etc.
- 3. Secure Pits/Vaults** – Either by fencing or demolishing and backfilling to grade any minor underground structures.
- 4. Remove Trash/Scaffold/Formwork** – Eliminate any overhead hazards and debris by removing any construction forms, scaffolding, and trash from the interior and exterior areas.
- 5. Secure WNP-4 Circulating Water Pump House** – Debris will be removed, pipe openings sealed, floor drains provided, and the structure will be fenced to prohibit access.
- 6. Seal Building Openings** – Openings to the power block structures will be sealed to prevent human access. Sealing methods may include concrete block walls, metal plate, metal doors, or other substantial material. At WNP-4, access doors will be provided in two locations. The Containment access ramp at WNP-4 will be removed and stairs provided to

NUCLEAR PROJECTS NOS. 1 AND 4
SITE RESTORATION PLANS
Page 6 of 17

access the containment at each major level. At WNP-1, the permanent doors will be installed where feasible.

7. **General Cleanup and Grading** – Scour the area to remove debris, fill in trenches, holes, etc., to provide a gentle slope to the area.
8. **Install Fencing and Signs** – Install a second fence around the WNP-4 GSB and Containment, the WNP-1 and 4 Cooling Towers, the WNP-1 and 4 Spray Ponds, and the WNP-1 GSB, TGB, and Containment. No Trespassing signs and access signage will be provided. Access gates to each fenced area will also be provided.
9. **Install Building Drains** – At WNP-4 the GSB floor and roof drains will be plumbed to gravity drain to the building exterior. At WNP-4 drain holes or pumps will be installed at selected locations to minimize the buildup of water in the basement areas. At WNP-1, the roof drains for all buildings will be plumbed to drain to the building exterior.
10. **Remove Buildings and Structures** – Remove unsafe and unusable buildings and structures to grade.
11. **Seal Underground Piping** – Openings to the large circulating water piping (eight, nine, and twelve foot diameter) will be sealed. The exit weirs on each cooling tower will be sealed.
12. **Secure Air Intake Structures** - These structures, two per site, will be secured by sealing wall openings and providing a permanent door.

Attachment C

Final Restoration Level 3D General Description

Final restoration will be implemented to meet the Level 3D definition in the June 30, 1999 Restoration Plan, except that the turbine pedestals will remain in place. The site infrastructure will be maintained throughout the period to support near-term HS&EP activities and potential site reuse. Specific restoration activity descriptions are presented below. Although the detailed specifications for the near-term Health, Safety and Environmental Protection (HS&EP) work scope outlined in Attachment B are in process and have yet to be completed, the work scope will be finalized and prioritized based upon a thorough cost/benefit analysis of the proposed tasks. Detailed specifications for the final restoration will be prepared closer to the time when the work will be accomplished.

Exterior

Near Term HS&EP

- Points of building entry will be provided with secure access doors or permanently sealed to prevent unauthorized entry.
- Relocate fencing and provide additional fencing to minimize footprint and reduce unauthorized entry potential such that security patrols are not required. Install “No Trespassing” signs.
- Potential environmental hazards will be eliminated.
- Exterior fall hazards will be eliminated. Exterior trash will be removed.
- Outside piping and electrical vaults will be sealed, protected, or demolished and backfilled, and the general outside areas will be graded. Large underground piping will be capped.
- Temporary buildings neither safe nor feasible for reuse will be removed.
- The turbine oil and condensate tanks will be removed.
- The access ramp to the WNP-4 Containment Building will be removed.
- Fence or remove exterior substations and distribution load centers to minimize entry potential.
- Remove unnecessary fire protection loop valves and dead ends.

Level 3D (23-26 Years)

- Slabs and remaining structures would be removed.
- Close and cap landfill at completion of restoration.
- Yard areas would be cleaned, contoured, graded, and seeded.

**NUCLEAR PROJECTS NOS. 1 AND 4
SITE RESTORATION PLANS
Page 8 of 17**

- The large underground circulating water lines would be backfilled.
- Roads and rail lines would be removed and graded clear.

Containment

Near Term HS&EP

- The interior will be cleaned to remove trash, debris, scaffolding, overhead hazards, and formwork.
- At WNP-4 limited safe access paths will be provided for required maintenance activities and/or potential building reuse.
- The WNP-1 containment building will be secured with permanent doors. Openings in the WNP-4 containment building will be sealed.
- The fire protection lines will be drained at WNP-1.
- Provide drain holes or passive system for water drainage at WNP-4.
- Minimize protrusions or install anti-bird roosting devices at WNP-4.

Level 3D (23-26 Years)

- The WNP-4 containment walls would be removed down to elevation 479.
- A concrete floor would be poured at elevation 479 at WNP-4.

General Services Building

Near Term HS&EP

- Permanent doors will be installed at WNP-1. WNP-4 will be secured with permanent doors or sealed to provide highly secure access. Exterior wall openings will be sealed.
- At WNP-4 the interior will be cleaned to remove trash, debris, scaffolding, overhead hazards, and formwork. This also includes construction of concrete walls to prevent access at ground level.
- At WNP-4 limited safe access paths will be provided for required maintenance activities and/or potential building reuse.
- Roof areas at WNP-1 will be reworked to provide a long-term seal.
- Replumb roof drains to grade and install sump pumps or drain holes in structure, as appropriate, to ensure rainwater can be removed from building interior.
- The fire protection lines will be drained at WNP-1.

Level 3D (23-26 Years)

- The walls would be demolished down to elevation 479 at WNP-4 and 501 at WNP-1.
- Concrete roofing would be poured at 479 (WNP-4) and 501 (WNP-1) elevations.
- A concrete floor would be poured at elevation 479 for WNP-4.

Turbine – Generator Building

Near Term HS&EP

- At WNP-1 the building will be secured with permanent doors or sealed to provide highly secure access.
- The WNP-1 interior will be cleaned to remove trash, debris, scaffolding, and formwork. Note: At WNP-4 this only includes protection from fall hazards at ground level.
- Seal transformer drains after transformer removal.
- The fire protection lines will be drained at WNP-1.
- The pedestal will be dressed up to eliminate protrusions or antibird roosting devices will be installed at WNP-4.

Level 3D (23-26 Years)

- The WNP-1 structure would be removed.
- The turbine pedestals will remain.
- The transformer footings and firewalls would be removed.
- The footprint area would be cleaned, contoured, graded, and seeded.

Cooling Towers

Near Term HS&EP

- Permanent doors and walls (to minimize bird access) to cooling tower stairwells will be provided.
- Provide permanent seal to exit weir by sealing pipe providing drain holes in weir floor and backfilling to ground level.

Level 3D (23-26 Years)

- The structures would be demolished to grade and the basin slab removed.

- The footprint areas would be cleaned, contoured, graded, and seeded.

Circulating Water Pump House

Near Term HS&EP

- At WNP-1 the building will be secured with permanent doors or sealed to provide highly secure access.
- The interior will be cleaned to remove trash, debris, scaffolding, and formwork. At WNP-4 this also includes addition of a fence around the pump pit since the building has already been removed.
- The roof drains will be replumbed to grade and drain holes will be provided in the basement structure.

Level 3D (23-26 Years)

- The surface slabs at both units and the building at WNP-1 would be removed and the pit would be backfilled.
- The footprint area would be cleaned, contoured, graded, and seeded.

Spray Pond And Pump House

Near Term HS&EP

- The building will be secured with permanent doors or sealed to provide highly secure access and a separate fence will be installed around the spray pond.
- The interior will be cleaned to remove trash, debris, scaffolding, and formwork.

Level 3D (23-26 Years)

- The building would be removed and the pond backfilled.
- The footprint area would be cleaned, contoured, graded, and seeded.

Remote Air Intakes/Chemical Waste Treatment Building

Near Term HS&EP

- The buildings will be secured with permanent doors or sealed to provide highly secure access.
- The interior will be cleaned to remove trash, debris, and formwork. Note that the WNP-4 Chemical Waste Treatment Building does not exist.

Level 3D (23-26 Years)

- The remote air intakes would be removed to grade and backfilled.
- The WNP-1 Chemical Waste Treatment Building concrete slab and treatment ponds would be removed and backfilled.
- The footprint area would be cleaned, contoured, graded, and seeded.

River Intake Structure

Near Term HS&EP

- Any openings to the building will be sealed.
- The interior would be cleaned to remove trash and debris.

Level 3D (23-26 years)

- No additional actions required, the structures will remain.

Security Access Building

Near Term HS&EP

- The building will be provided with permanent doors or sealed to provide highly secure access.
- The interior will be cleaned to remove trash and debris.

Level 3D (23-26 Years)

- Remove building.
- The footprint area would be cleaned, graded, and seeded.

Pipeline Corridor

Near Term HS&EP

- The openings to the vent stations will be sealed.

Level 3D (23-26 years)

- No additional actions required, the structures will remain.

WNP-1/4 SITE RESTORATION PLAN

ATTACHMENT D

WNP-1/4 SITE RESTORATION
FUNDING AGREEMENT

JANUARY 29, 2003



Department of Energy

TRUE COPY

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

POWER BUSINESS LINE

January 29, 2003

In reply refer to: P-6

Letter of Agreement
Contract No. 03PB-11279

Mr. Keith Klein, Manager
U.S. Department of Energy A7-50
Richland Operations Office
P. O. Box 550
Richland, WA 99352

Mr. J. V. Parrish, Chief Executive Officer
Energy Northwest – MD 1023
P. O. Box 968
Richland, WA 99352

Mr. James O. Luce, Chairman
Washington Energy Facility Site Evaluation Council
P. O. Box 43172
Olympia, WA 98504-3172

Gentlemen:

In September 2002, Energy Northwest, the Department of Energy - Richland Operations Office ("RL") and the Bonneville Power Administration ("Bonneville") reached agreement on a proposed WNP-1/4 site restoration and funding plan. Since that time, Energy Northwest and Bonneville management and staff have held numerous discussions with the State of Washington's Energy Facility Site Evaluation Council ("EFSEC") Chair and staff in order to reach agreement on that proposal. The four entities (hereafter "Parties") have now concluded all discussions and have agreed on a new 9-point WNP-1/4 site restoration and funding proposal ("Proposal"). The purpose of this letter of agreement is to describe the Proposal and document our agreement with it.

Independent, outside consultants assessed the costs and benefits of a range of restoration alternatives for WNP-1 and WNP-4. Benefits were assessed in terms of protection of the public's health and safety and the environment. Based on those assessments, Energy Northwest recommended to EFSEC that a Level 3D (with the exception of leaving in place the turbine pedestals) restoration alternative would represent a proper balance between the priority objective of protecting the public's health and safety while being both environmentally responsible and cost effective. That level of restoration has been adopted in this Proposal.

Additionally, considerable effort has been focused on investigating reuse opportunities for the WNP-1 and WNP-4 facilities and clarifying site emergency preparedness procedures related to operations at the adjacent Columbia Generating Station. Based on interest expressed, there is some potential for economic development and reuse of a portion of the facilities at both sites.

Also, there are immediate health and safety concerns to address, mainly at WNP-4. However, starting major Level 3D restoration tasks beyond addressing these immediate concerns at this time would preclude the future use of these facilities. Thus, the immediate initiation of major site restoration activities at either site is neither appropriate nor necessary. Delaying major site restoration expenditures also provides a solution to the lack of funding for WNP-4 restoration, by allowing WNP-1 restoration funds to grow to the point that they can cover both projects.

Accordingly, the Proposal to assure funding for WNP-1 and WNP-4 restoration is as follows:

1. Within 18-24 months of EFSEC approval of a revised Level 3D site restoration plan (Plan)¹ enclosed herein, "health, safety and environmental protection" activities needed to assure that WNP-1 and WNP-4 remain in a "safe state" compatible with reuse shall be completed by Energy Northwest/Bonneville or their designated contractor. The cost for these near-term restoration activities is expected to be between \$3-4 million, with most activities occurring at WNP-4. These tasks are currently being prioritized and their costs estimated. If these costs exceed \$4 million, Energy Northwest/Bonneville may request a reasonable extension of time to complete these tasks. Approval of such extension shall not be unreasonably withheld by EFSEC.
2. Energy Northwest/Bonneville or their designated contractor shall: 1) commence by no later than 23 years; and 2) complete no later than 26 years from the date of EFSEC's approval of the Plan, all final Level 3D activities; provided, however, that at the request of Energy Northwest/Bonneville or RL if Energy Northwest elects not to maintain site control, EFSEC shall revisit either date without prejudice if facility reuse or sequencing of WNP-1/4 restoration activities with Columbia Generating Station decommissioning activities warrant extending either date. Approval of such extension of time shall not be unreasonably withheld by EFSEC.
3. Bonneville guarantees funding of restoration activities and environmental mitigation pursuant to the approved Plan and paragraph 6 below. The cost/funding requirement is estimated at \$45 million in 2003 dollars. In the event that the \$45 million estimate (appropriately adjusted for costs incurred) escalated to 2025 dollars proves to be inaccurate and results in insufficient funds being available to complete the restoration activities in 26 years, Bonneville shall make up the shortfall. Bonneville may make up the shortfall by requesting a reasonable extension of time to complete Plan tasks. Approval of such extension shall not be unreasonably withheld by EFSEC.
4. Bonneville shall establish an external trust fund, agree to review funding status every five years, and provide EFSEC with annual reports regarding the accumulated funds in the trust. At EFSEC's discretion, it may audit the trust.

¹ The revised Level 3D site restoration plan will not require removal of the turbine pedestals for WNP-1 and WNP- 4.

5. The provisions of paragraphs 1-4 above are included in the Plan that Energy Northwest submitted by letter dated December 5, 2002 for EFSEC approval. Implementation of the near-term "health, safety and environmental protection" activities will be reviewed and monitored by EFSEC.
6. Bonneville shall cause to be paid to EFSEC/the State \$3.5 million for offsite environmental mitigation and other EFSEC activities that improve the environment. This payment is made in recognition of the level of site restoration described in the Plan and the delay allowed for the completion of final site restoration. These funds shall be used in EFSEC's discretion after consultation with the Washington Department of Fish and Wildlife, with the bulk of the funds to be spent for mitigation in Benton County. Payment will be made in a lump sum after EFSEC approval of the Plan and within 30 days of a request for payment by EFSEC. This payment will be deemed to satisfy all requirements for wildlife or wildlife habitat mitigation under EFSEC Resolution No. 296, provided that if additional construction or changes in operation or operational conditions at the Columbia Generating Station result in the loss of additional wildlife or wildlife habitat then EFSEC may require Energy Northwest to undertake appropriate mitigation and Bonneville will guarantee payment pursuant to existing net-billing obligations.
7. EFSEC shall amend the Site Certification Agreement (SCA) upon completion of the near term health, safety and environmental protection activities set out in the Plan. The amended SCA shall include only those requirements as EFSEC in the reasonable exercise of its discretion deems necessary to assure completion of Level 3D restoration actions pursuant to paragraph 2. Those requirements will replace any and all requirements in the existing SCA. Further, Bonneville may request Energy Northwest and/or Energy Northwest may request EFSEC to further amend or terminate the SCA to release those portions of the site and/or facilities that are proposed to be: 1) sold, leased or otherwise transferred and used for long-term economic development; and/or 2) no longer intended for the development of energy facilities larger than 350 MWs. Approval of such SCA amendment or termination shall not be unreasonably withheld by EFSEC.
8. Effective upon execution of this agreement and until final Level 3D restoration activities are completed, Energy Northwest will maintain general liability insurance on the leased property in the minimum amount of \$1,000,000 per incident and \$10,000,000 aggregate limit and will include RL as an additional named insured. Insurance coverage may include a deductible consistent with industry standards. The policy will be funded pursuant to generally accepted accounting principles. Bonneville will guarantee funding for the policy. These obligations shall not apply to any portion of the leased property that RL transfers ownership of, leases or otherwise permits the use of for other than WNP-1/4 purposes.
9. Upon approval of the Plan, the State shall provide to Energy Northwest, Bonneville, and the United States Government (including RL and all other components of the U.S.

Department of Energy) an immediate release from all claims, damages, and causes of action, existing or otherwise, related to the restoration of the WNP-1 and WNP-4 sites beyond the level in the approved Plan.

It is important to note that each particular point in this Proposal is significant and rejection or revision of any particular point negates the Proposal in its entirety, unless the parties mutually agree otherwise. Additionally, until this Proposal has been agreed to and is effective, Bonneville does not and is not acknowledging any liability or responsibility for any WNP-4 costs. However, once the Proposal has been agreed to and is effective, the parties will be bound by its terms. Once effective, Bonneville's guarantee for the payment of WNP-4 restoration costs shall be strictly limited to the obligations in the Proposal and is not intended to extend to any other WNP-4 cost.

Please acknowledge your concurrence to the Proposal by signing all four originals. We will forward you one original after all have signed.

Sincerely,



Paul E. Norman
Senior Vice President
Power Business Line

Enclosure

I concur with the above Proposal and agree to be bound by its terms:



Keith Klein
Manager, Richland Operations Office
U.S. Department of Energy

4/8/03

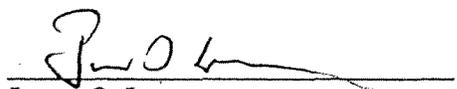
Date



J. V. Parrish
Chief Executive Officer
Energy Northwest

02/03/2003

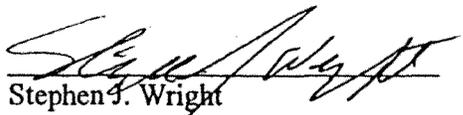
Date



James O. Luce
Chair
Washington Energy Facility Site Evaluation Council

DEC 03 2003

Date



Stephen J. Wright
Administrator and Chief Executive Officer
Bonneville Power Administration

DEC 03 2003

Date



Gary Locke
Governor
State of Washington

DEC 03 2003

Date

Attachment E
Figures

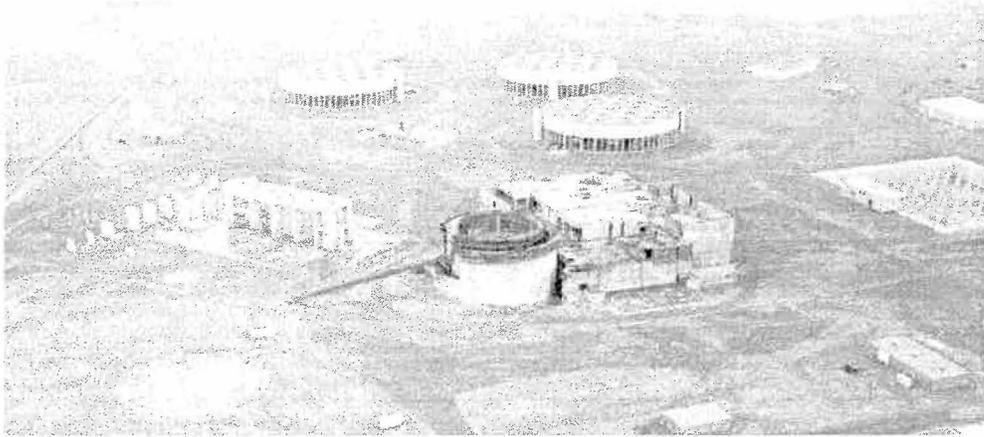


WNP-1 Pre Restoration



WNP-1 Level 3D Restoration Completed

**NUCLEAR PROJECTS NOS. 1 AND 4
SITE RESTORATION PLANS
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ATTACHMENT II

EFSEC RESOLUTION 302

**WASHINGTON STATE
ENERGY FACILITY SITE EVALUATION COUNCIL**

**RESOLUTION NO. 302
ENERGY NORTHWEST NUCLEAR PROJECTS NOS. 1 AND 4
SITE RESTORATION PLAN**

WHEREAS, The Energy Facility Site Evaluation Council (Council or EFSEC) has adopted rules directing applicants and certificate holders to formulate plans for site restoration, effective March 11, 1987; and

WHEREAS, Energy Northwest is the certificate holder for the Site Certification Agreement for Nuclear Projects Nos. 1 and 4 (WNP-1 and WNP-4, or WNP-1/4) and is subject to the Council's rules regarding site restoration; and

WHEREAS, Energy Northwest has terminated its plans to complete WNP-1 and WNP-4; and

WHEREAS, Energy Northwest on June 30, 1999, submitted to the Council for review a report that evaluated the costs and benefits of a range of options for restoration of the WNP-1 and WNP-4 construction sites, including the identification of Level 3D--Demolish and Seal (with the exception of removing the turbine pedestals) as the preferred alternative; and

WHEREAS, Energy Northwest on December 5, 2002, submitted to the Council for approval a final Site Restoration Plan (Plan) for the WNP-1 and WNP-4 construction sites. The Plan, which by this reference is incorporated into and attached to this Resolution, is based on a revised restoration Level 3D to be completed in 26 years, and includes the implementation of near-term health, safety and environmental protection activities to be completed in 18 - 24 months following Council approval of this Resolution; and

WHEREAS, The Council has found that the revised restoration Level 3D, that does not require the removal of the WNP-1 and WNP-4 turbine pedestals, containment structures, and general services buildings, is satisfactory for the final end state of the restoration project and is protective of public health, safety, and the environment; and

WHEREAS, The Council has found that the delay of the final restoration for 26 years is acceptable to resolve the lack of funding for WNP-4 restoration; assure restoration of WNP-4 without costly and time consuming litigation; leverage multiple site restoration activities; accumulate funds necessary to complete final restoration; and maximize facility reuse potential; provided that the immediate near-term health, safety and environmental protection activities proposed by Energy Northwest are completed in the next 18-24 months to assure the site remains in a safe condition for reuse or long-term storage; and

WHEREAS, The Council understands that the cost estimates for the near-term restoration activities are expected to be between \$3-4 million. If these costs exceed \$4 million, Energy Northwest or Bonneville Power Administration (BPA) may request a reasonable extension of time to complete these tasks, and approval of such extension will not be unreasonably withheld by the Council; and

WHEREAS, The Council has determined that it will, without prejudice, revisit the final completion date at Energy Northwest's or BPA's request, if facility reuse or sequencing of WNP-1/4 restoration activities with Columbia Generating Station (CGS) decommissioning activities warrant extending that date, and that Council approval of such extension of time will not be unreasonably withheld; and

WHEREAS, The Council understands that the cost estimates for Plan restoration activities has been estimated at approximately \$45 million in 2003 dollars, and in the event that the \$45 million estimate (appropriately adjusted for costs incurred) escalated to 2025 dollars proves to be inaccurate and results in insufficient funds being available to complete the restoration activities in 26 years, BPA shall make-up the shortfall, provided that Energy Northwest or BPA may request a reasonable extension of time to complete these tasks, and approval of such extension will not be unreasonably withheld by the Council; and

WHEREAS, The Council has found the WNP-1/4 Site Restoration Funding Agreement (Attachment D to the Plan) to be a satisfactory guarantee of funding for the restoration and environmental mitigation activities stated therein and in the Plan, based on the establishment of an external trust fund by BPA; and that agreement provides for review of the funding status every five years; transmittal of annual reports of the accumulated funds in the trust; and the ability to audit the trust fund at the Council's discretion; and

WHEREAS, Pursuant to the WNP-1/4 Site Restoration Funding Agreement, and in consideration of the Council's approval of the agreed to level of restoration and for the delay in time allowed for the completion of final site restoration, BPA, within 30 days of a request for payment to Energy Northwest, will cause to be paid to the Council (State) the lump sum of \$3.5 million for offsite environmental mitigation or other activities that improve the environment to be used at the Council's discretion, after consultation with the Washington Department of Fish and Wildlife, with the bulk of the funds to be spent for mitigation in Benton County; and

WHEREAS, Subject to receipt of the mitigation funds, the Council has determined that such payment will be deemed to satisfy all requirements for wildlife or wildlife habitat mitigation under EFSEC Resolution No. 296, provided that if additional construction or changes in operation or operational conditions at the Columbia Generating Station result in the loss of additional wildlife or wildlife habitat then EFSEC may require Energy Northwest to undertake appropriate mitigation; and

WHEREAS, Upon completion of the near-term health, safety and environmental protection activities set out in the Plan, and submittal of a request from Energy Northwest to amend the WNP-1/4 Site Certification Agreement, pursuant to the WNP-1/4 Site Restoration Funding Agreement, the Council, upon a determination that the requirements of the Plan and this Resolution have been successfully satisfied, shall amend the WNP-1/4 SCA as follows. The amended SCA shall include only the requirements as EFSEC, in the reasonable exercise of its discretion, deems necessary to assure completion of Level 3D restoration actions pursuant to the Plan. Those requirements will replace any and all requirements in the existing SCA. Further, Energy Northwest may request EFSEC to further amend or terminate the SCA to release those portions of the site and/or facilities that are proposed to be: 1) sold, leased or otherwise transferred and used for long-term economic development; and/or 2) no longer intended for the development of energy facilities larger than 350 megawatts. Approval of such SCA amendment or termination shall not be unreasonably withheld by EFSEC.

WHEREAS, The Council has recognized that the actual demolition/restoration methods have not been determined at this time and that specific details of the Plan may require additional review, approval, and monitoring by the Council; and

WHEREAS, The Council agrees that upon the adoption of this Resolution approving the Energy Northwest's WNP-1/4 Site Restoration Plan, the state shall provide to Energy Northwest and BPA an immediate release from all claims, damages and causes of action, existing or otherwise, related to the restoration of the WNP-1 and WNP-4 sites beyond the level in the approved Plan; and

WHEREAS, The Council recognizes that the adoption of this Resolution approving Energy Northwest's current WNP-1/4 Site Restoration Plan will supersede all previous site restoration plans and commitments and will close EFSEC Resolution No. 280; and

WHEREAS, The Council recognizes that Energy Northwest has completed certain initial restoration tasks at the 1 and 4 projects that have benefited the public health, safety, and the environment; and

WHEREAS, The Council finds that the WNP-1/4 Site Restoration Plan (December 2002) is consistent with the public health, safety, and welfare; the applicable laws and regulations; and the intent of the WNP-1/4 SCA.

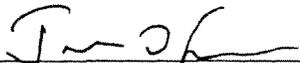
NOW, THEREFORE, BE IT RESOLVED, That the Energy Facility Site Evaluation Council hereby re-approves* Energy Northwest's Site Restoration Plan for Nuclear Projects Nos. 1 and 4 (December 2002), subject to the commitments therein; provisions of this Resolution; and Council laws and rules. *Resolution No. 302 was initially approved by the Council on December 9, 2002.

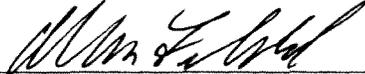
BE IT FURTHER RESOLVED, That the Council hereby closes out Resolution No. 280; and the approved Plan supersedes all previous site restoration plans for the WNP-1/4 projects.

BE IT FURTHER RESOLVED, That implementation of the near-term restoration activities and ongoing requirements will be reviewed and monitored by the Council.

Dated and effective this 15th day of December, 2003.

WASHINGTON STATE ENERGY FACILITY SITE EVALUATION COUNCIL

By: 
Jim Luce, EFSEC Chair

Attest: 
Allen Fiksdal, EFSEC Manager

Attachment:

Energy Northwest Site Restoration Plan for Nuclear Projects Nos. 1 and 4 (December 2002)

ENERGY NORTHWEST WNP 1/ 4
REQUEST FOR SITE CERTIFICATION AGREEMENT AMENDMENT
Enclosure 2

State Environmental Policy Act Checklist

WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Site Certification Agreement Amendment for Energy Northwest Nuclear Projects NO. 1 and NO. 4 (WNP 1/4)

2. Name of applicant:

Energy Northwest

3. Address and phone number of applicant and contact person:

Energy Northwest
P.O Box 968
Richland, Washington 99352-0968
509-377-8639
Shannon Khounnala

4. Date checklist prepared:

June 25, 2009

5. Agency requesting checklist:

Washington State Energy Facility Site Evaluation Council (EFSEC)

6. Proposed timing or schedule (including phasing, if applicable):

On May 4, 1995, EFSEC issued a *Determination of Non-Significance* for Energy Northwest's plan to demolish its nuclear power plants WNP-1/4 in two phases. This plan was further detailed in the documents referenced below.

The first phase of the plan includes health, safety, environmental, and security restoration activities. The first phase of restoration has been completed. The second phase of restoration will include removing slabs, remaining structures and unusable buildings; sealing underground piping; securing air intake structures; cleaning, grading, and re-seeding; and closing and capping the landfill. These activities are expected to be completed by 2029.

This phased approach for completion of the site restoration allows for the time needed to accumulate funds to complete site restoration activities and realize the maximum reuse potential for the existing facilities.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No. Energy Northwest has terminated its plans to complete these units as nuclear power plants. The first phase of site restoration activities have been completed to maintain a level of public health, safety, and security, until the sites are fully restored in 2029.

Minor changes are expected in the scope of the future demolition activities. In the meantime, Energy Northwest will continue to own and operate these sites for the reuse of existing infrastructure and facilities as the Industrial Development Complex.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Energy Facility Site Evaluation Council Resolution 302, "Energy Northwest Nuclear Projects Nos. 1 and 4 Site Restoration Plan," dated December 15 2003.

Letter dated January 29, 2003, from Bonneville Power Administration to Energy Northwest, Energy Facility Site Evaluation Council, and Department of Energy-Richland Operations, "WNP-1/4 Site Restoration Plan and Four Party Funding Agreement."

Additional information is included in the proposed Site Certification Agreement (SCA) amendment prepared in accordance with WAC-463-66-030.

Extensive documentation regarding the general site area was prepared pursuant to NEPA and SEPA to support decisions to construct and restore WNP-1/4.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None

10. List any government approvals or permits that will be needed for your proposal, if known.

The project sites and activities are currently subject to oversight by EFSEC as provided in RCW 80.50 and Title 463 of the Washington Administrative Code. The existing SCA and the powers vested in EFSEC preempt the need for additional permits from other jurisdictions (RCW 80.50.110 and RCW 80.50.120).

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

Energy Northwest seeks to amend the WNP-1/4 SCA with EFSEC in order to update the terms and conditions within the agreement to more accurately reflect the intended activities, facility reuse opportunities, and future final phase of site restoration. The SCA has not been substantially amended since its original inception in 1975 wherein the "project" referenced in the 1975 SCA, and Amendment No 1 in 1982 (amendment to change the operating terms of emergency diesel generators), is described as the construction and operation of two nuclear generating units. Since the construction of these two units has been terminated, an amendment to the SCA is warranted.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The site at which the project, identified as WNP-1/4, is located in Benton County, Washington. The site is located entirely within the federally-owned area known as the Hanford Operations Area, United States Department of Energy located approximately 12 miles north of Richland, Washington in Sections 3 and 4, 33 and 34 of Townships 11 and 12 North, Range 28 East.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one) Flat, rolling, hilly, steep slopes, mountainous, other

The landmass of the subject site consists of fairly flat terrain surrounded by gentle rolling hills.

b. What is the steepest slope on the site (approximate percent slope)?

The developed areas of the site consist of flat terrain and slopes less than 3%. Undeveloped areas support gentle rolling hill formations with occasional slopes up to 20%.

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Generally, the dominant native soil profile of the area is Rupert Sand. Rupert Sand is a brown-to grayish-brown coarse sand grading to dark grayish-brown to a depth of 35 inches. It is one of the most extensive soil types on the Hanford Site. Existing facilities however are constructed on engineered surfaces of compacted sand and gravel.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Future site restoration activities are expected to require fill materials to bury structures, cover demolition debris, fill subsurface structures, and to recontour the land surface. The quantity of fill materials are not currently known but plans call for use of previously excavated material or other local sources already disturbed by the project construction activities.

The proposed SCA amendment will allow Energy Northwest to continue to explore reasonable re-use activities of the existing infrastructure and facilities. Economic development activities that propose new construction or significant modification of facilities likely to require excavation or fill, will be evaluated under the State Environmental Policy Act as separate project actions.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Limited wind erosion and fugitive dust is likely during the future demolition and restoration activities. Erosion is also possible during maintenance activities related to the reuse of existing facilities and structures. Water erosion is expected to be minimal, if any, due to the lack of steep slopes or frequent rainfall events.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Currently, less than 25% of the developed portion of the site is covered with impervious surfaces. Future activities are not expected to increase the impervious surface on the proposed site. Future removal of buildings or structures will reduce the total impervious surface on the site.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Best Management Practices (BMPs) will be utilized during any maintenance of existing facilities or future restoration activities that have the potential to result in erosion. The proposed SCA amendment provides specific construction related requirements, such as cuts and slopes, in order to reduce fugitive dust and wind erosion. BMPs outlined in the proposed SCA amendment also include, but are not limited to, dust suppression (wetting) of construction roads, temporary parking lots, and spoil and disposal areas. Restoration of vegetation will be also provided, as needed, to ensure that bare earth areas are stabilized.

a. **Air**

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

During typical operation days, emissions are limited to the vehicles accessing the site. Lease tenants of the Industrial Development Complex are required to obtain any air permits prior to the start of any operation that may result in regulated emissions.

During any potential construction maintenance activities or future site restoration activities, emissions to the air are expected from the use of construction equipment (e.g backhoe, bulldozer, trucks etc.) and site demolition activities. During these short term events, fugitive dust, windblown debris, hydrocarbon, nitrogen oxide, and particulate matter emissions would be expected.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No off-site sources of emissions or odors that may affect the proposal are anticipated.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Typical site operations do not require measures to control emissions or other impacts to air. Any site maintenance activities or future site restoration activities will be completed with equipment with standard mufflers to meet vehicle air emission standards. Temporary mitigation measures include water application to control fugitive dust, as needed, and reseeded or planting with native vegetation to provide long term stabilization.

3. **Water**

- a. Surface:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Surface water near the subject property is limited to the Columbia River, located approximately two miles east of the developed areas of the site.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

An inlet structure, originally constructed to draw water from the Columbia River, is located at the eastern limit of the project area. This inlet is not in use and work within the shoreline will be limited to maintaining safety signs and removing debris as needed.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No. The option to withdraw water from the Columbia River has been removed from the proposed SCA amendment.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

Not currently. Any discharge to the waters of the US shall be subject to the terms and conditions of a valid NPDES permit for as long as such a system is required.

b. Ground:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

Yes. Ground water will continue to be withdrawn from the two existing on-site wells. Withdrawal will occur at a maximum rate of 2.3 cubic feet per second (CFS). The water will support the reuse of WNP-1/4 as an Industrial Development Complex providing potable water and fire service water. Additionally, this water is used to support Energy Northwest's Columbia Generating Station during maintenance activities.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Domestic sewage at WNP-1/4 is treated at a common sewage treatment facility shared with Energy Northwest's Columbia Generating Station (WNP-2). This proposal does not involve the construction or operation of a septic tank/drainfield system or any other waste disposal system or facility. No waste material will be discharged into the ground as a result of this project.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

There is no stormwater runoff due to arid conditions and high rates of soil infiltration.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No. The generation of potentially harmful leachate in the groundwater will be minimized by limiting the on-site disposal of demolition debris to those wastes conforming to the definition of inert and demolition wastes (WAC 173-3-04-100).

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

No other surfacewater/stormwater controls are necessary at WNP-1/ 4 due to the arid climate and high rate of soil infiltration.

4. Plants

a. Check or circle types of vegetation found on the site:

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

The WNP-1/ 4 site is characterized as a shrub-steppe environment. Riparian communities are present along the shoreline of the Columbia River.

b. What kind and amount of vegetation will be removed or altered?

None, except some vegetation areas incidental to future backfill operations associated with future restoration activities. Most of the natural vegetation was removed from the developed portion of the sites during the original project construction phase.

c. List threatened or endangered species known to be on or near the site.

The Washington State Department of Natural Resources (DNR) has been contacted regarding potential occurrence of significant plant species near the site. Unfortunately, DNR site surveys have not been completed in more than 10 years. However, the occurrence of federal and state listed species on the Hanford Site are tracked and described in reports prepared for USDOE by the Pacific Northwest National Laboratory (PNNL). PNNL reported that no federally listed endangered or threatened plants occur on the Hanford site, although 12 species present on the site are listed by Washington State.

Energy Northwest completed surveys of the Columbia River shoreline near Energy Northwest property in 2008. This survey revealed the presence of the state-listed threatened species *Rotala ramosior* (*Lowland toothcup*) and watch list species *Cyperus bipartitus* (*Shining flatsedge*) at a

location approximately one-half mile downstream of the Energy Northwest property. Also found near the water edge throughout the 2 km survey zone was the state watch list species *Artemisia lindleyana* (*Col. River mugwort*).

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Any removal of buildings, structures, or facilities during the future planned restoration, will be seeded and/or planted with native plant species typical of the shrub/steppe habitat.

5. Animals

- a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other: owls, quail, pheasant, doves, magpies, crows

mammals: deer, bear, elk, beaver, other: rodents, bats, raccoon, porcupine, skunk

fish: bass, salmon, trout, herring, shellfish, other: sturgeon, crappie, catfish, walleye, perch

- b. List any threatened or endangered species known to be on or near the site.

On the Hanford site there are three species of fish and four species of birds listed as threatened or endangered by either the state or federal governments. Of the Federally listed fish species, only steelhead trout (*Oncorhynchus mykiss*) spawns in the Hanford Reach. Spring chinook (*O. tshawytscha*) migrate through the area on their way to spawning grounds upstream. Bull trout (*Salvelinus confluentus*) have been found in the reach but are not considered resident.

The four bird species are listed as threatened or endangered in the State of Washington. Ferruginous hawks (*Buteo regalis*) have successfully nested on the Hanford site, especially on several steel transmission line towers. The white pelican (*Pelecanus erythrorhynchos*) is relatively common along the Hanford Reach but does not appear to nest or reproduce on the Hanford site. The sandhill crane (*Grus canadensis*) migrates over the Hanford site and on rare occasions is observed on the shore or islands of the Hanford Reach. The greater sage grouse (*Centrocercus urophasianus*) was formerly more common on the Hanford Site, especially on the Fitzner-Eberhardt Arid Lands Ecology (ALE) Reserve Unit, located more than 10 miles west of the WNP-1/4 site. It disappeared for a number of years following several large fires in the 1980s. Since the late 1990s, there have been scattered sightings of greater sage grouse on ALE, and during 2003 a dead sage grouse was found 20 miles north of the WNP-1/4 site.

- c. Is the site part of a migration route? If so, explain.

Yes. The Hanford Site and Columbia River drainage is a segment of the Pacific Flyway, a migratory bird route. This area serves as a resting area for various migratory birds, waterfowl, and shorebirds.

- d. Proposed measures to preserve or enhance wildlife, if any:

Ongoing site reuse activities are not expected to require any significant removal of vegetative areas. Additional future restoration activities will remove structures and provide the opportunity to restore much of the developed area to natural conditions, ideal for habitat use.

6. Energy and natural resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

None. Energy use has ceased for those facilities not currently in use. Remaining facilities and buildings operated for re-use as the Industrial Development Complex will continue to use electric power.

- b. Would your project affect the potential use of solar energy by adjacent properties?
If so, generally describe.

No

- c. What kinds of energy conservation features are included in the plans of this proposal?
List other proposed measures to reduce or control energy impacts, if any:

None

7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal?
If so, describe.

During re-use of the site as the Industrial Development Complex, some waste materials will be generated. All waste that cannot be disposed of at Energy Northwest's inert landfill, will be promptly removed from the site and disposed of at an approved location. Hazardous materials will be stored at the site in secured facilities. It is possible small quantities of oil, mechanical fluids, paint, coatings, or solvents could leak from equipment, machinery, or vehicles used at the site.

Future short term health hazards are expected during the final phase of site restoration. Some short term hazards are expected during the conduct of demolition work (toxic fumes from steel cutting, controlled explosions, potentially hazardous residue produced by cleaning, etc.). The completion of the restoration work will eliminate these hazardous.

- 1) Describe special emergency services that might be required.

None anticipated

- 2) Proposed measures to reduce or control environmental health hazards, if any:

Robust procedures are in place to inspect, identify, and mitigate any spill from mechanical equipment or waste storage areas while the site is operated as the Industrial Development Complex.

Long term health hazards will be eliminated with the demolition and removal of the structures during the final phase of the site restoration.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None which will affect the project

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Short term noise impacts are expected to occur during the final site restoration activities. Noise is expected to be generated during the term of the demolition work between the hours of 7 am and 10 pm.

- 3) Proposed measures to reduce or control noise impacts, if any:

None. Short-term construction noise is exempt during the hours of 7am-10pm (WAC 173-60-050).

8. Land and shoreline use

- a. What is the current use of the site and adjacent properties?

Partially completed power plants and their associated facilities currently exist on the subject property. Some of the storage/maintenance facilities are leased to various industrial tenants. Surrounding lands are occupied by the Columbia Generating Station or are undeveloped.

- b. Has the site been used for agriculture? If so, describe.

No

- c. Describe any structures on the site.

Each site has, in varying degrees of completion, a reactor building, reactor auxiliary building, turbine-generator building, electrical switchyard, pumphouses, cooling towers, office and warehouse buildings, storage tanks, and the supporting infrastructure of roads, parking lots, storage yards, and service connections (water, sewer, electricity, firewater).

- d. Will any structures be demolished? If so, what?

Yes. Most of the structures related to the nuclear projects constructed at these sites will be demolished according to a plan approved by EFSEC. This plan will result in restoration of the sites such that they pose minimal hazards to the public. Because Energy Northwest will retain ownership and control of this site for future energy generation projects, and for current re-use of the existing facilities, some structures and systems useful for that purpose will be retained.

- e. What is the current zoning classification of the site?

The site is unclassified by Benton County.

- f. What is the current comprehensive plan designation of the site?

The Department of Energy has designated the area as "Industrial" in the Hanford Comprehensive Land-Use Plan.

- g. If applicable, what is the current shoreline master program designation of the site?

Not Applicable

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

None

i. Approximately how many people would reside or work in the completed project?

None

j. Approximately how many people would the completed project displace?

None

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not Applicable

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Not Applicable

9. **Housing**

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Not Applicable

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Not Applicable

c. Proposed measures to reduce or control housing impacts, if any:

Not Applicable

10. **Aesthetics**

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The tallest structure currently located on the site is the reactor building at 235 feet. No new structures are proposed as part of the proposed SCA amendment.

b. What views in the immediate vicinity would be altered or obstructed?

None

c. Proposed measures to reduce or control aesthetic impacts, if any:

Final restoration activities will improve aesthetics of the site. In addition, Energy Northwest agrees to landscape the project lands within the fenced perimeter in a manner which is compatible with its surroundings. Should any vegetation be disturbed as a direct result of any construction done by Energy Northwest, Energy Northwest agrees to restore vegetation insofar as practicable. This will be done by returning the area, as nearly as possible, to its original topography and topsoil conditions in order to promote revegetation of indigenous plant species.

11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Use of the site as the Industrial Development Complex requires operating various buildings with electricity during normal business hours.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No

- c. What existing off-site sources of light or glare may affect your proposal?

None

- d. Proposed measures to reduce or control light and glare impacts, if any:

None

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

The Columbia River, adjacent to the site, provides recreation opportunities.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

No

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None

13. Historic and cultural preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

Archaeological investigations were conducted for the WNP-1/ 4 prior to construction. The site was surveyed in 1974 and detailed monitoring of the makeup water pumphouse construction was conducted in 1977. Monitoring at the WNP-1/ 4 pumphouse, resulted in the recordation of a multi-component site containing both pre-contact and historic era material. Surface investigations revealed a ceramic Chinese rice bowl fragment. The bowl was assumed to be linked to Chinese placer mining that occurred in the area in the 1860s. Pre-contact materials were discovered during excavation for the makeup water intake pipes. Radiocarbon dating of a piece of sagebrush limb charcoal found in association with a fire hearth, cobble tools, and stone flakes suggested the location was a late pre-contact fishing camp around 1600 AD. Archaeological materials recovered from the WNP-1/4 pumphouse construction are stored in the USDOE Hanford Cultural and Historical Program curation and storage facility.

- c. Proposed measures to reduce or control impacts, if any:

Energy Northwest is implementing procedural controls to assess and consider impacts to potential or existing historical and archaeological sites when planning and performing work activities. Any archaeological findings will be reported to EFSEC during the course of excavation and restoration of the project. Energy Northwest agrees to consult with the Council to arrange for preservation of artifacts and for interpretation of any archaeological site discovered in the course of maintenance and restoration.

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

The site has paved highway access to Hanford Site Route 4.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No

- c. How many parking spaces would the completed project have? How many would the project eliminate?

Not Applicable

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

To facilitate final restoration activities, use of all common transportation modes is anticipated for the removal of equipment or salvage during the demolition period. Following completion of the project, no transportation will be necessary.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

During operation as the Industrial Development Complex, travel to and from the site is estimated at 160 trips per day. Following final site restoration activities, the completed project should generate no vehicular traffic.

- g. Proposed measures to reduce or control transportation impacts, if any:

None

15. Public services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No

