

December 29, 1998

Mr. J. V. Parrish  
Chief Executive Officer  
Washington Public Power Supply System  
P.O. Box 968 (Mail Drop 1023)  
Richland, Washington 99352-0968

SUBJECT: ISSUANCE OF AMENDMENT FOR THE WASHINGTON PUBLIC POWER  
SUPPLY SYSTEM NUCLEAR PROJECT NO. 2 (TAC NO. M96929)

Dear Mr. Parrish:

The Commission has issued the enclosed Amendment No. 155 to Facility Operating License No. NPF-21 for WPPSS Nuclear Project No. 2. The amendment consists of changes to the Technical Specifications (TS) in response to your application dated October 10, 1996, as supplemented by letter dated November 9, 1998.

The amendment changes Facility Operating License No. NPF-21 to authorize the storage of byproduct, source, and special nuclear materials at the WNP-2 site. These materials had been originally stored at the WNP-1 site and are not intended for use at WNP-2. A 10 CFR Part 46 license currently authorizes the storage of the subject material at the WNP-1 site.

A copy of the related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,  
Original Signed By  
Chester Poslusny, Senior Project Manager  
Project Directorate IV-2  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Docket No. 50-397

Enclosures: 1. Amendment No. 155 to NPF-21  
2. Safety Evaluation

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

DOCKET NO. 50-397

NUCLEAR PROJECT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 155  
License No. NPF-21

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Washington Public Power Supply System (licensee) dated October 10, 1996, as supplemented by letter dated November 9, 1998, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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2. Accordingly, Facility Operating License No. NPF-21 is amended by the addition of paragraph 2.B(6):
  - (6) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to store byproduct, source, and special nuclear materials not intended for use at WPPSS Nuclear Project No. 2. The materials shall be no more than 9 sealed neutron radiation sources designed for insertion into pressurized water reactors and no more than 40 sealed beta radiation sources designed for use in area radiation monitors. The total inventory shall not exceed 24 microcuries of strontium-90, 20 microcuries of uranium-235, 30 curies of plutonium-238, and 3 curies of americium-241.
3. This amendment is effective immediately and is to be implemented within 45 days of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Chester Poslusny, Senior Project Manager  
Project Directorate IV-2  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Attachment: Page 3 of License

Date of Issuance: December 29, 1998

- (3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source of special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility; and
- (6) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to store byproduct, source, and special nuclear materials not intended for use at WPPSS Nuclear Project No. 2. The materials shall be no more than 9 sealed neutron radiation sources designed for insertion into pressurized water reactors and no more than 40 sealed beta radiation sources designed for use in area radiation monitors. The total inventory shall not exceed 24 microcuries of strontium-90, 20 microcuries of uranium-235, 30 curies of plutonium-238, and 3 curies of americium-241.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at reactor core power levels not in excess of full power (3486 megawatts thermal). Items in Attachment 1 shall be completed as specified. Attachment 1 is hereby incorporated into this license.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

- a. For Surveillance Requirements (SRs) not previously performed by existing SRs or other plant tests, the requirement will be considered met on the implementation date and the next required test will be at the interval specified in the Technical Specifications as revised in Amendment 149.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 155 TO FACILITY OPERATING LICENSE NO. NPF-21  
WASHINGTON PUBLIC POWER SUPPLY SYSTEM

NUCLEAR PROJECT NO. 2

DOCKET NO. 50-397

1.0 INTRODUCTION

By letter dated October 10, 1996, as supplemented by letter dated November 9, 1998, Washington Public Power Supply System (Supply System or the licensee) requested that a change be made to Facility Operating License No. NPF-21 to authorize the permanent storage of certain byproduct, source, and special nuclear materials at the WNP-2 site. These materials had been originally stored at the WNP-1 site and are not intended for use at WNP-2. A 10 CFR Part 46 license currently authorizes the storage of the subject material at the WNP-1 site. The WNP-2 license currently provides for use as required of these types of materials, as discussed below.

The November 9, 1998, supplemental letter provided additional clarifying information and did not change the staff's original no significant hazards consideration determination published in the Federal Register on September 23, 1998 (63 FR 50942).

2.0 EVALUATION

Section B.3 of Facility Operating License NPF-21 for WNP-2 currently authorizes the licensee to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required. Section B.4 permits the receipt, possession, and use in amounts as required, any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analyses or instrument calibration or associated with radioactive apparatus or components. Section B.5 permits the possession, but not separation of byproduct and special nuclear material as may be produced by the operation of the facility.

The licensee proposed the addition of the following section to the license:

- (6) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to store byproduct, source, and special nuclear materials not intended for use at WPPSS Nuclear Project No. 2. The materials shall be no more than 9 sealed neutron radiation sources designed for insertion into pressurized water reactors and no more than 40 sealed

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beta radiation sources designed for use in area radiation monitors. The total inventory shall not exceed 24 microcuries of strontium-90, 20 microcuries of uranium-235, 30 curies of plutonium-238, and 3 curies of americium-241.

In its November 9, 1998, submittal, the licensee provided information on where these particular materials are being stored on the WNP-2 site. Specifically, the sources are being stored in approved containers at WNP-2. The beta radiation sources are located in an area between WEA-FU-1A and WEA-FU-1B HEPA filter units on the 487' elevation of the radwaste building. The fission detector material is enclosed in sealed units suitable for insertion into a Combustion Engineering pressurized water reactor, and is stored in a controlled inventory warehouse adjacent to the WNP-2 protected area. The source and detector storage areas are marked as radioactive materials area and are barricaded with warning signs as required by the WNP-2 Radiation Protection Program.

The licensee also stated in its November 9, 1998, submittal that the actual storage locations for the subject material may change in the future, but the source and detector storage areas will continue to be designated as radioactive material areas and barricaded with warning signs in accordance with the WNP-2 Radiation Protection Program.

The specific storage areas are located in low traffic areas. Further, all personnel working in the radwaste building and in the controlled inventory warehouse are required to be qualified radiation workers or under the direct control of a qualified radiation worker. Health physics technicians are the only staff authorized to handle these specific sources at the WNP-2 site.

The staff acknowledges that the current radiation safety program at WNP-2 provides training and monitoring of personnel in work practices and uses thermoluminescent dosimeters (TLDs) as the monitoring method of legal record. TLDs, electronic dosimeters, and self reading pocket dosimeters are used to provide personal monitoring during all plant activities, including those which would apply to these sources.

Table 12.2-12 included in the Final Safety Analysis Report lists the special sources that are stored at the site for use at WNP-2 that have strength greater than 100 millicuries. It is expected that this table will be updated to reflect the additional sources that have been relocated from the WNP-1 site.

On the basis of the existing radiation safety program at the WNP-2 site, the method of storage and control for the sources described above being stored at the site, and the relatively small amounts of material involved, the staff finds that the proposed modification to Operating License NPF-21 authorizing the storage of byproduct, source, and special nuclear materials at the WNP-2 site to be acceptable. There is no potential impact to the health and safety of the public based on the storage of the materials.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Washington State official was notified of the proposed issuance of the amendment. The State official had no comments.

#### 4.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32, and 51.35, an environmental assessment and finding of no significant impact was published in the Federal Register on December 24, 1998 (63 FR 71317).

Accordingly, based upon the environmental assessment, the Commission has determined that issuance of this amendment will not have a significant effect on the quality of the human environment.

#### 5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Chet Poslusny

Date: December 29, 1998