

March 26, 1991

Docket No. 50-397

Mr. G. C. Sorensen, Manager
Regulatory Programs
Washington Public Power Supply System
3000 George Washington Way
P. O. Box 968
Richland, Washington 99352

Dear Mr. Sorensen:

SUBJECT: SCHEDULAR EXEMPTION TO 10 CFR 55.45(b)(2)(iii) FOR SIMULATION FACILITY CERTIFICATION (TAC NO. 76488)

The Commission has issued the enclosed exemption from the requirements of 10 CFR 55.45(b)(2)(iii). The exemption allows for the submittal of Form NRC-474 "Simulation Facility Certification" after the March 26, 1991 deadline provided in the rule, but no later than June 30, 1992. The exemption is in response to your application dated April 4, 1990.

Based on the considerations discussed in the exemption, we have concluded that the information provided and the actions described in the application form an acceptable basis for the granting of an exemption. The Commission has determined, pursuant to 10 CFR 55.11, that this exemption is authorized by law and will not endanger life or property and is otherwise in the public interest. Furthermore, the Commission has determined, pursuant to 10 CFR 50.12(a), that the special circumstances of 10 CFR 50.12(a)(2)(v) are applicable in that the exemption would provide only temporary relief from the regulation and you have made good faith efforts to comply with the regulation.

A copy of the exemption is being forwarded to the Office of the Federal Register for publication.

Sincerely,
original signed by Patricia Eng
Patricia L. Eng, Project Manager
Project Directorate V
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosure:
Exemption

cc/enclosure
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Mr. G. C. Sorensen
Washington Public Power Supply System

WPPSS Nuclear Project No. 2
(WNP-2)

cc:

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	}	
WASHINGTON PUBLIC POWER SUPPLY SYSTEM		Docket No. 50-397
(Nuclear Project No. 2)		

EXEMPTION

I.

Washington Public Power Supply System (Supply System, the licensee) is the holder of Facility Operating License No. NPF-21 which authorizes operation of the Nuclear Project No. 2 (WNP-2). The license provides, among other things, that the licensee is subject to all rules, regulations, and Orders of the Commission now or hereafter in effect. The facility is a boiling water reactor located on the licensee's site in Benton County, Washington.

The revision to 10 CFR Part 55, "Operators' Licenses," which became effective on May 26, 1987, established requirements for the administration of operating tests on nuclear power plant simulators. These regulations, in conjunction with 10 CFR 50.54(i-1), require facility licensees to use simulation facilities when administering operating tests for initial licensing and requalification. These regulations further require that a certified or NRC-approved simulation facility must be used to administer operating tests after May 26, 1991.

II.

The licensee intends to comply with 10 CFR 55.45(b) by certifying a plant-referenced simulator. Section 55.45(b)(2)(iii) of 10 CFR Part 55 requires that facility licensees proposing to use a simulation facility consisting solely of a plant-referenced simulator, submit Form NRC-474 "Simulation Facility Certification" no later than 46 months after the effective date of this rule, that is by March 26, 1991. On April 4, 1990, the Supply System requested an exemption from this filing requirement to allow for the submittal of Form NRC-474 after March 26, 1991, but no later than December 31, 1991. Additionally, the Supply System requested an exemption from the requirements of 10 CFR 55.45(b)(2)(iv) to allow the simulation facility portion of the operating tests to be administered on the existing, upgraded WNP-2 simulator prior to certification of their new simulator. By letter dated September 27, 1990, the Supply System amended their April 4, 1990 letter and requested an additional extension to submit Form NRC-474 no later than September 30, 1992 following completion of acceptance testing.

In the Fall of 1988, after assessing the capabilities of the existing WNP-2 simulator pursuant to the requirements for its certification, the Supply System elected to replace its current simulator. Although the existing simulator could have been extensively upgraded to meet minimum requirements, the licensee decided to purchase a new simulator to improve operations personnel training and provide for future expansion. The exemption was requested because the replacement simulator will not be ready for certification by March 26, 1991.

The licensee initially expected completion of the new simulator in July of 1991 and requested an exemption until December 31, 1991. However, the vendor has had technical difficulties modeling the facility's nuclear steam supply system. The licensee now anticipates delivery of the new simulator no sooner than December 31, 1991. The additional nine month period proposed (until Form NRC-474 submittal) is based on the Supply System's estimate of a realistic schedule to complete certification and included time for training the operators on the new simulator before using it for examinations.

During the proposed exemption period, from May 26, 1991 until certification of the new simulator, only two sets of operating tests are scheduled. In August of 1991, any operators who fail the March 1991 requalification examinations or the April 1991 initial examinations are scheduled to be reexamined. In March of 1992 the Supply System is scheduled to conduct their own requalification program annual operating tests.

The next examinations, currently scheduled for August of 1992 for initial operator licensing, are to be conducted on the new simulator. In order to allow adequate preparation time for these operating tests, this Exemption grants only a fifteen month relief period, to June 30, 1992, rather than the eighteen months requested.

The Supply System has performed upgrades to its existing simulator to support its continued use until certification of its new simulator. The licensee has replaced the existing simulator's boiler and recirculation

models to allow training on an increased number of transient and off-normal operating conditions. Significant changes were also made to key main energy loop models to support the simulator's improved malfunction response.

In March of 1990, the existing simulator was used during the conduct of a requalification program evaluation. Simulator deficiencies were identified by the combined licensee and NRC review team during the examination validation period. The affected scenarios were then modified to mitigate the deficiencies sufficiently to maintain adequate examination coverage and objectivity before administering the operating tests. The simulator operated satisfactorily during the examinations and, with similar pre-examination validation effort, is capable of supporting the limited number of operating tests scheduled during the proposed exemption period.

III.

The Commission has determined, pursuant to 10 CFR 55.11, that this exemption is authorized by law and will not endanger life or property and is otherwise in the public interest. Furthermore, the Commission has determined, pursuant to 10 CFR 50.12(a), that special circumstances of 10 CFR 50.12(a)(2)(v) are applicable in that the exemption would provide only temporary relief from the applicable regulation and the licensee has made good faith efforts to comply with the regulation. This Exemption grants a temporary relief period of fifteen months from the March 1991 date for submittal of the WNP-2 simulation facility certification. Additionally, this Exemption allows the licensee to continue to use the existing WNP-2 simulator for the administration of the simulation facility

portion of operating tests for scheduled operator examinations up to, but not including, the initial operator licensing examinations currently scheduled for August of 1992. Good faith efforts to comply with the regulation were made as follows:

- (1) The existing WNP-2 simulator became ready for training in 1983 and the licensee initially planned to certify it as a plant-referenced simulator.
- (2) In August 1988, the Supply System performed an evaluation of upgrade and new procurement options.
- (3) On December 8, 1988, in a meeting at the NRC's Region V offices, the licensee presented plans to replace the existing WNP-2 simulator while also upgrading it during the interim.
- (4) On January 16, 1989, the Supply System entered a contract for construction of a certifiable plant-referenced simulator.
- (5) On April 19, 1990, in a meeting at NRC headquarters, the licensee presented the status of the new simulator project and existing simulator upgrade program.
- (6) The Supply System has upgraded the existing WNP-2 simulator and continues to provide support for its continued use until receipt of the new simulator.

IV.

The Commission hereby grants an exemption from the schedular requirements of 10 CFR 55.45(b)(2)(iii) for submittal of Form NRC-474 "Simulation Facility Certification." This Exemption is effective until June 30, 1992. Furthermore, the Commission hereby grants an exemption from

the requirement of 10 CFR 55.45(b)(2)(iv) for administration of the simulation facility portion of operating tests only on certified or approved simulation facilities after May 26, 1991. This Exemption is effective until receipt of Form NRC-474, but does not include any operating tests after June 30, 1992.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this Exemption will have no significant impact on the quality of the human environment (56 FR 887).

This Exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

original signed by Bruce A. Boger
Bruce A. Boger, Director
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 26th day of March 1991

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DATE : 3/25/91	3/26/91			