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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

July 29, 1999 GO2-99-142

Docket No. 50-397

U.S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, D.C. 20555

Gentlemen:

Subject: WNP-2, OPERATING LICENSE NPF-21 REQUEST FOR AMENDMENT, POST-ACCIDENT NEUTRON FLUX MONITORING, LICENSE CONDITION 2.C.(16), ATTACHMENT 2, ITEM 3(b)

- References: 1) Letter dated June 15, 1989, GC Sorenson (SS) to NRC, "Satisfaction of License Condition 2.C.(16), Attachment 2, Item 3(b), Wide Range Neutron Monitor"
 - Document, GE Nuclear Energy, "Position on NRC Regulatory Guide 1.97, Revision 3, Requirements for Post-Accident Neutron Flux Monitoring System," NEDO-31558-A, Class 1, March 1993

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In accordance with the Code of Federal Regulations Title 10, Parts 50.90 and 2.101, the Supply System hereby requests that License Condition 2.C.(16), Attachment 2, Item 3(b) be removed from the WNP-2 Operating License. This License Condition required the installation of a Category 1 upgrade to the standard Boiling Water Reactor (BWR) Neutron Monitoring Systems (NMS) in the form of Ex-core Wide Range Monitors (WRM) in conformance with the requirements of Regulatory Guide 1.97. WNP-2 installed the WRM system in the spring of 1989 as delineated in Reference 1.

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REQUEST FOR AMENDMENT, POST-ACCIDENT NEUTRON FLUX MONITORING, LICENSE CONDITION 2.C.(16), ATTACHMENT 2, ITEM 3(b) Page 2

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Reference 2 documents the NRC Safety Evaluation of NEDO-31558-A, "Position on NRC Regulatory Guide (RG) 1.97, Revision 3, Requirements for Post-Accident Neutron Flux Monitoring System," finding that the standard NMS originally installed in existing BWRs should meet the NEDO-31558-A criteria in lieu of having a RG 1.97 compliant WRM system. The NRC SER states: "The neutron flux monitoring instrumentation installed at Susquehanna Steam Electric Station Units 1 and 2 and WNP-2 exceed the criteria of NEDO-31558, and therefore, these plants may take advantage of any relaxation that the new criteria might provide." In adjusting to NEDO-31558-A criteria, the NRC instructs licensees to review their NMS and confirm that the guidelines of the NEDO document are met.

The Supply System review is presented in Attachment 1 and confirms that the WNP-2 NMS meets or exceeds the functional design criteria established by Section 5.0 of NEDO-31558-A and, with the exception of two differences, the WNP-2 Emergency Operating Procedures (EOPs) conform to the event analysis given in Section 4.0 of NEDO-31558-A.

The two differences in the EOPs are related to the operation of High Pressure Core Spray (HPCS) to maintain reactor level (a plant specific design difference) and the initiation of boron injection based on core oscillations. The latter difference is due to a more recent revision to the EOP generic guidelines than that evaluated in NEDO-31558-A. Based on the discussion in Section 3.0 of Attachment 1 (which evaluates these differences), the Supply System concludes that the WNP-2 NMS fully complies with the NEDO-31558-A guidelines.

Removal of License Condition 2.C.(16), Attachment 2, Item 3(b) will allow the Supply System to reduce maintenance and surveillance costs associated with the WRM system. Upon approval of this request, the WRM system will be deactivated (spared in place) and the WNP-2 FSAR will be revised per 10 CFR 50.71 to delete neutron monitoring as a RG 1.97 variable. The current WNP-2 Technical Specifications do not contain Limiting Conditions for Operation regarding the WRM system.

The Supply System requests this change prior to the refueling outage scheduled for Spring 2001.

Attachment 2 describes an evaluation of the proposed changes in accordance with 10 CFR 50.92(c) and concludes they do not result in a significant hazards consideration. Attachment 3 provides the Environmental Assessment Applicability Review and notes that the proposed change meets the eligibility criteria for a categorical exclusion as set forth in 10 CFR 51.22(c)(9). Therefore, in accordance with 10 CFR 51.22(b), an environmental assessment of the change is not required. Attachment 4 provides a marked up page of the Operating License. Attachment 5 submits the typed Operating License page as revised by this amendment.

REQUEST FOR AMENDMENT, POST-ACCIDENT NEUTRON FLUX MONITORING, LICENSE CONDITION 2.C.(16), ATTACHMENT 2, ITEM 3(b) Page 3

This amendment request has been approved by the Plant Operations Committee and reviewed by the Supply System Corporate Nuclear Safety Review Board. In accordance with 10 CFR 50.91, the State of Washington has been provided a copy of this letter.

Should you have any questions or desire additional information, please call Mr. P.J. Inserra at (509) 377-4147.

Respectfully,

,

RL'Webring Vice President, Operations Support/PIO Mail Drop PE08

Attachments:

- 1. Evaluation of WNP-2 Neutron Monitoring System (NMS) to the Criteria of NEDO-31558-A
- 2. Evaluation of Significant Hazards Considerations
- 3. Environmental Assessment Applicability Review
- 4. Operating License Markup
- 5. Revised Operating License Page
- cc: EW Merschoff NRC RIV JS Cushing - NRR NRC Sr. Resident Inspector - 927N DL Williams - BPA/1399 DJ Ross - EFSEC PD Robinson - Winston & Strawn

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STATE OF WASHINGTON)	Subject:	Operating License NPF-21
)	_	Request for Amendment
· · · · · · · · · · · · · · · · · · ·		Post-Accident Neutron Flux
ý		Monitoring, License Condition
ý		2.C.(16), Attachment 2, Item 3(b)
COUNTY OF BENTON		••••

I, RL Webring, being duly sworn, subscribe to and say that I am the Vice President, Operations Support/PIO, for the WASHINGTON PUBLIC POWER SUPPLY SYSTEM, the applicant herein; that I have the full authority to execute this oath; that I have reviewed the foregoing; and that to the best of my knowledge, information, and belief that the statements made in it are true.

DATE 1999

RL Webring , Vice President, Operations Support/PIO

On this date personally appeared before me RL Webring, to me known to be the individual who executed the foregoing instrument, and acknowledged that he signed the same as his free act and deed for the uses and purposes herein mentioned.

GIVEN under my hand and seal this $\underline{Z9}$ day of 1999 Notary Public in and for the STATE OF WASHINGTON Residing at My Commission expires



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REQUEST FOR AMENDMENT, POST-ACCIDENT NEUTRON FLUX MONITORING LICENSE CONDITION 2.C(16), ATTACHMENT 2, ITEM 3(b) Attachment 1 Page 1 of 8

Evaluation of WNP-2 Neutron Monitoring System (NMS) to the Criteria of NEDO-31558-A

1.0 INTRODUCTION

The NRC Safety Evaluation (Reference 2) states that licensees should review their NMS instrumentation to confirm they meet the functional design criteria in NEDO-31558-A. In addition, the licensee is required to assure that there is no plant specific role in the Emergency Operating Procedure: (EOPs) for neutron monitoring that differs from the evaluation in that report. Section 2 of this attachment provides information relative to the capabilities of the NMS at-WNP-2 as .'t applies to the criteria outlined in NEDO-31558-A. Section 3 of this attachment provides a discussion of the applicable EOPs relative to the position taken by NEDO-31558-A.

2.0 <u>NEDO-31558-A CRITERIA COMPARISON</u>

The topics of discussion in this section correspond to subsections 5.2.1 through 5.2.16 of NEDO-31558-A. The individual NEDO and RG 1.97 recommendations are restated and the existing capabilities of the WNP-2 NMS are evaluated against these recommendations. Where necessary, clarifying information is provided. The bases for the requirement are not restated as this information is provided in NEDO-31558-A. This evaluation shows that the WNP-2 NMS meets or exceeds the guidelines established by NEDO-31558-A.

2.1 <u>Neutron Flux Range: NEDO-31558-A Section 5.2.1</u>

NEDO Guideline: 1% to 100%

RG 1.97 Recommendation: $10^{-6}\%$ to 100%

Evaluation: The NMS consists of three (3) individual monitoring subsystems:

- Average Power Range Monitors (APRM)/Local Power Range Monitors (LPRM)
- Intermediate Range Monitors (IRM)
- Source Range Monitors (SRM)

The APRM/LPRM subsystem alone exceeds the flux monitoring range specified by the NEDO guideline. The operating range of the APRM/LPRM subsystem is 1% to 125% of rated power. In addition to the APRM/LPRM subsystem, the operating range of the IRM subsystem is from $10^{5}\%$ to 40% of rated power with the detectors fully inserted in the core. However, at full power, the IRM detectors are completely withdrawn. When WNP-2 is at 100% power, fully withdrawn IRMs are on scale in Range 1 and are able to indicate gross reactor power at levels

REQUEST FOR AMENDMENT, POST-ACCIDENT NEUTRON FLUX MONITORING LICENSE CONDITION 2.C(16), ATTACHMENT 2, ITEM 3(b)

Attachment 1 Page 2 of 8

above 40%. If the detectors can be driven into the core during ATWS conditions they can provide their full range of power indication. The SRM subsystem, with the detectors fully inserted have a range of 10^{-10} % to 10^{-3} % power. When the detectors are withdrawn during full power operation at WNP-2 they are on scale in the last decade of indication (1 x 10^5 to 1 x 10^6 counts per second) and have over 2 decades of indication available below full power. Even fully withdrawn, the SRM subsystem can provide a gross indication of reactor power from low power (a few percent) to full power. Thus the WNP-2 NMS exceeds the criterion stated in NEDO-31558-A.

2.2 Accuracy: NEDO Section 5.2.2

NEDO Guideline: +/-2% of Rated Power

RG 1.97 Recommendation: None stated

Evaluation: WNP-2 calibration procedures are performed to ensure that the APRMs are accurate to within +/-2% of rated thermal power as required by the Technical Specifications; however, the combination of inaccuracies in the detectors, amplifiers, and recorders would slightly exceed the requirement of +\- 2% of rated power. Clarification of the NEDO accuracy requirement is provided in GE Nuclear Energy Department Letter #OG93-1057-13, "Report on Committee Workshop Regarding Implementation of NEDO-31558 Functional Criteria," dated November 24, 1993, which contains a position statement in Attachment 4 that "The accuracy of displays, indicators and signal processing reads: devices used to obtain a main control panel display was not included in the 2% accuracy specified by the NEDO. The plant specific display inaccuracies (including recorders) need not be added to the APRM inaccuracy to show compliance to the 2% criterion." Thus the WNP-2 NMS meets the criterion stated in NEDO-31558-A as clarified by Attachment 4 to the "Report on Committee Workshop Regarding Implementation of NEDO-31558 Functional Criteria."

2.3 <u>Response Characteristic: NEDO Section 5.2.3</u>

NEDO Guideline: 5 Sec/10% change

RG 1.97 Recommendation: None specified

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Evaluation: The WNP-2 Technical Specification values for APRM time response for Reactor Protection System (RPS) input exceed the NEDO guideline. For example, the WNP-2 APRM fixed neutron upscale (118%) trip surveillance confirms the response time is \leq .09 Sec/23% change.

2.4 Equipment Qualification: NEDO Section 5.2.4

NEDO Guideline: Operate in ATWS environment

RG 1.97 Recommendation: RG 1.89 and 1.100

- **Evaluation:** A plant specific equipment qualification evaluation was performed for WNP-2 to ensure that the NMS was designed to function in the abnormal environment of ATWS events. The IRM and APRM/LPRM components required for ATWS mitigation have been evaluated to assure the equipment would be functional during an ATWS event; and, therefore the WNP-2 NMS meets the NEDO guidelines.
- 2.5 <u>Function Time: NEDO Section 5.2.5</u>

NEDO Guideline: 1 Hour (minimum)

- RG 1.97 Recommendation: None specified
- Evaluation: The function time is tied to the duration of the event during which the equipment must survive. At WNP-2 the NMS was shown to meet a function time of 1.5 hours which exceeds the NEDO guideline and bounds all WNP-2 analyzed ATWS events. Of the ATWS events documented and analyzed in the WNP-2 FSAR, an ATWS with an inadvertent open relief valve has the longest duration from beginning to Hot Shutdown (< 1% power) and lasts approximately 25 minutes.
- 2.6 <u>Seismic Qualification: NEDO Section 5.2.6</u>

NEDO Guideline: Seismic qualification not required

RG 1.97 Recommendation: Seismically qualified, Category 1 equipment important to safety per RG 1.100 IEEE-344

Evaluation: The LPRMs and APRMs are seismically qualified; therefore, the WNP-2 NMS exceeds the NEDO criterion.



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REQUEST FOR AMENDMENT, POST-ACCIDENT NEUTRON FLUX MONITORING LICENSE CONDITION 2.C(16), ATTACHMENT 2, ITEM 3(b) Attachment 1 Page 4 of 8

2.7 <u>Redundancy and Separation: NEDO Section 5.2.7</u>

NEDO Guideline: Redundancy to assure reliability

RG 1.97 Recommendation: Redundant divisions (RG 1.75)

- Evaluation: The WNP-2 APRM/LPRM subsystem consists of six (6) independent channels, each channel consists of inputs from up to 22 LPRM detectors. The six (6) APRM channels are divided into two (2) separate divisions each powered from an independent RPS Bus. Because of the redundancy in detector inputs per channel (only 14 required for APRM operability per WNP-2 Technical Specifications), the separate divisions of RPS power supply, and the total number of channels, the APRM/LPRM subsystem alone satisfies the NEDO guideline.
- 2.8 <u>Power Sources: NEDO Section 5.2.8</u>

NEDO Guideline: Uninterruptible and reliable power sources

RG 1.97 Recommendation: Standby power source (RG 1.32)

Evaluation: The SRM subsystem is powered by separate divisions of 24 volt DC uninterruptible power except for the detector drives which are powered from a Division 2 bus. The IRM subsystem is powered by uninterruptible battery backed DC power except for the recorders and The IRM detector drives are powered from a the detector drives. Division 2 bus. The APRM/LPRM subsystem (except for the recorders) is supplied power from the RPS motor generator (MG) sets A and B. The MG sets are extremely reliable and are normally supplied power from the offsite power sources. During loss-of-offsite power (LOOP) conditions, the power output from the MG sets is lost until the MG sets driving power source is restored by the onsite Division 1 and 2 Diesel Generators and the MG set breakers are manually reset. The reset is procedurally controlled on LOOP conditions.

> The SRM recorders are powered by divisional uninterruptible power. The IRM and APRM recorders are powered by a single power supply from a Division 2 bus. In addition, some of the information portrayed by these recorders is also available to the control room operators on the Transient Data Acquisition System (TDAS) computer which is on uninterruptible power. TDAS monitors signals from six (6) APRM channels, two (2) IRM channels (A and B), and two (2) SRM channels (A and D). Thus the WNP-2 NMS and related equipment power supplies are acceptable and in compliance with the NEDO criterion.



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2.9 Channel Availability: NEDO Section 5.2.9

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NEDO Guideline: Available prior to accident

RG 1.97 Recommendation: Available prior to accident

Evaluation: WNP-2 Technical Specification requirements for the APRM subsystems are contained in section 3.3.1.1, RPS instrumentation. This instrumentation is required during power operation; therefore, the existing requirements satisfy this criterion.

2.10 Quality Assurance: NEDO Section 5.2.10

NEDO Guide.ine: Limited QA requirements based on Generic Letter 85-06

RG 1.97 Recommendation: Application of specific regulatory guides

Evaluation: The NMS detectors and signal processing equipment that are part of the RPS instrumentation are safety related with 10 CFR 50, Appendix B, quality requirements. The recorders and computer systems used to collect data from the NMS are procured to Supply System Quality Class 2 requirements. Since this equipment is located in the control room the installation must meet stringent quality requirements for that location. A review of the quality requirements for the recorders indicate they are equivalent to those required by Generic Letter 85-06. The TDAS computer, which collects the NMS signals, is designed and maintained to provide a high degree of reliability as described in FSAR subsection 7.7.1.15. Therefore, the WNP-2 NMS and related equipment satisfy the stated NEDO guideline.

2.11 Display and Recording: NEDO Section 5.2.11

NEDO Guideline: Continuous recording

RG 1.97 Recommendation: Continuous recording

Evaluation: The NMS channels have continuous recording capability provided by recorders located on the central portion of the operators' control console along with the other plant parameters which are of primary significance to the operator. In addition, all APRM channels and selected IRM and SRM channels are monitored by the plant TDAS computer. Therefore, this requirement is satisfied.

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2.12 Equipment Identification: NEDO Section 5.2.12

NEDO Guideline: Identified in accordance with control room design review

RG 1.97 Recommendation: Identified as post-accident monitors

- Evaluation: The NMS recorders are all clearly marked and labeled. These recorders are located on the central portion of the operators' control console along with the other plant parameters which are of primary significance to the operator. The NMS data that is collected by computer goes to the TDAS. TDAS is clearly identified as described in FSAR subsection 7.7.1.15. Consequently, the identification of the equipment satisfies the criterion of NEDO-31558-A.
- 2.13 Interfaces: NEDO Section 5.2.13

NEDO Guideline: No interference with RPS trip functions

RG 1.97 Recommendation: Isolators to be used for alternate functions

- **Evaluation:** Consistent with the ATWS rule (10 CFR 50.62), the non-Class 1E parts of the NMS do not interfere with the RPS trip functions. At WNP-2, the non-Class 1E portions are isolated and separated from the Class 1E portions of the system as required by WNP-2 electrical separation design criteria. The WNP-2 NMS satisfies the NEDO criterion.
- 2.14 Service, Test, and Calibration: NEDO Section 5.2.14

NEDO Guideline: Establish in-plant procedures

- RG 1.97 Recommendation: Establish in-plant procedures
- Evaluation: The NMS equipment is tested and calibrated on the frequencies specified in the WNP-2 Technical Specifications and the Licensee Controlled Specifications. These requirements are implemented in plant procedures; therefore, the criterion specified in the NEDO is satisfied.

2.15 Human Factors: NEDO Section 5.2.15

NEDO Guideline: Incorporate human factors engineering principles

RG 1.97 Recommendation: Incorporate human factors engineering principles

REQUEST FOR AMENDMENT, POST-ACCIDENT NEUTRON FLUX MONITORING LICENSE CONDITION 2.C(16), ATTACHMENT 2, ITEM 3(b) Attachment 1

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Evaluation: The control room human factors design review was performed for the instrumentation and controls located on the operator control console as part of the TMI action plan. Human factors engineering principles were incorporated into this review process. The WNP-2 NMS satisfies this NEDO criterion.

2.16 Direct Measurement: NEDO Section 5.2.16

NEDO Guideline: Direct measurement of neutron flux

RG 1.97 Recommendation: Direct measurement of neutron flux.

Evaluation: The NMS utilizes input from fission detectors which are located in the reactor core and provide direct measurement of neutron flux; therefore, this NEDO criterion is satisfied.

3.0 WNP-2 EMERGENCY OPERATING PROCEDURE (EOP) REVIEW

NEDO-31558-A states that licensees, "...should review their Emergency Operating Procedures (EOPs) to assure that there is no plant specific role for neutron flux monitoring that differs from the evaluation in NEDO-31558-A." Section 4.0 of the NEDO report evaluates a range of postulated events where the operator may be required to use the NMS for post-accident monitoring and determines the effect of NMS failure on the outcome. The Supply System review has identified two differences from NEDO-31558-A under ATWS conditions:

In Plant Procedure PPM 5.1.2 "RPV Control - ATWS" guidance is given for the 3.1 reduction of RPV level to reduce power. The generic Emergency Procedure Guidelines (EPGs) require maintaining the RPV level above the minimum steam cooling water injection level by using the outside shroud injection systems. At WNP-2 the High Pressure Core Spray (HPCS) system injects water inside the shroud. Under ATWS conditions it is desirable to use this system even though it injects inside the shroud since it is the only safety related system capable of providing high volume injection at high pressure if the feedwater system is not available. Since this is a deviation from the generic emergency procedure guidelines, the WNP-2 EOPs place restrictions on the operation of HPCS. It can be used only if reactor power is above two percent and power is not increasing with both Standby Liquid Control (SLC) pumps operating. This requirement prevents HPCS from diluting the boron concentration and injecting subcooled water if power has already been reduced. If the power level is unknown, the operator is required to stop HPCS injection and emergency depressurization is required if water level drops to the minimum required for steam cooling. Although depressurization may be required as a result of the inability to determine power level concurrent with the inability to maintain reactor water level, plant safety is not threatened.

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REQUEST FOR AMENDMENT, POST-ACCIDENT NEUTRON FLUX MONITORING LICENSE CONDITION 2.C(16), ATTACHMENT 2, ITEM 3(b) Attachment 1 Page 8 of 8

3.2 In Plant Procedure PPM 5.1.2 "RPV Control - ATWS" two conditions are specified to initiate boron injection. The first condition states that boron injection is to commence and continue when periodic neutron flux oscillations are greater than 25 percent. This condition was not evaluated in NEDO-31558-A. However, boron injection would still occur as required by the second condition (i.e., before the wetwell temperature reaches 110 degrees F).

None of the activities prescribed by Plant Procedure PPM 5.1.2, "RPV Control - ATWS" depend solely on having the NMS available. The Rod Position Information System (RPIS) is powered from an uninterruptible source and remains available, even during SBO conditions, to provide full core control rod position information as a backup reactor power indicator. The EOP provides direction to proceed to the next step in the procedure (i.e., boron injection) if the power level is not known. Evaluation of the differences noted above result in the same conclusions for transients without scram as NEDO-31558-A and do not change the applicability of the NEDO to WNP-2. Additionally, the WNP-2 EOPs do not reference the WRM system.

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Evaluation of Significant Hazards Considerations

In accordance with the criteria for defining a significant hazards consideration established in 10 CFR 50.92(c), the Supply System has evaluated the removal of License Condition 2.C(16), Attachment 2, Item 3(b) from the WNP-2 Operating License and deactivation of the Ex-core Wide Range Monitors (WRM). This evaluation has determined that operation of the facility in accordance with the proposed amendment does not represent a significant hazards consideration. The following discussion is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The probability of an evaluated accident is derived from the probabilities of the individual precursors to that accident. The consequences of an evaluated accident are determined by the operability of plant systems designed to mitigate those consequences. As stated in the NRC safety evaluation approving NEDO-31558-A (Reference 2), Category 1 neutron flux monitoring instrumentation is not needed for existing BWRs to cope with Loss-of-Coolant Accident (LOCA), Anticipated Transient Without SCRAM. (ATWS), or other accidents that do not result in severe core damage conditions. Instrumentaticn to monitor the progression of core melt accidents would best be addressed by the current severe accident management program. Also, WRM is not included in the WNP-2 IPE/PSA models and WRM is not relied upon for operator actions in the Emergency Operating Procedures (EOPs) or actions accounted for in Severe Accident Management. Therefore, no individual precursors of an accident are affected and the elimination of the WRM does not impact or change the probabilities of accidents previously evaluated. In addition, since the operability of plant systems designed to mitigate accident consequence has not changed, the consequences of an accident previously evaluated are not expected to increase.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

Creation of the possibility of a new or different kind of accident would require the creation of one or more new precursors of that accident. New accident precursors may be created by modifications of the plant configuration, including changes in procedures that may create the potential for new or different personnel errors. The elimination of the WRM system does not create the possibility of a new or different kind of accident because plant crews are trained to use the Neutron Monitoring System (NMS) in normal evolutions and under emergency conditions according to EOP guidance. In addition, NEDO-31558-A concludes that the failure of all neutron flux monitoring instrumentation does not prevent the operator from determining the shutdown condition of the reactor. Sufficient information is available on which to base operational decisions and to conclude that reactivity control has been accomplished. For example,

REQUEST FOR AMENDMENT, POST-ACCIDENT NEUTRON FLUX MONITORING LICENSE CONDITION 2.C(16), ATTACHMENT 2, ITEM 3(b) Attachment 2 Page 2 of 2

Rod Position Information System (RPIS) is powered from an uninterruptible source and remains available even during Station Blackout (SBO) conditions to provide full core control rod position information as a backup reactor power indicator based on calculations of rod worth and shutdown margin. The proposed change does not introduce any new modes of operation or alter system setpoints which could create a new or different kind of accident. Therefore, no new precursors of an accident and no new or different kinds of accidents are created.

3. Does the change involve a significant reduction in a margin of safety?

The elimination of the WRM system does not result in a reduction of the margin of safety. The neutron power indications necessary for operator response to ATWS are provided by the NMS not WRM. Based on a WNP-2 specific evaluation against the alternate criteria specified in NEDO-31558-A, there is sufficient confidence that the instrumentation would still be available to confirm that the reactor is shutdown. In addition, failure of the existing neutron flux monitoring instrumentation does not prevent plant operators from determining the shutdown condition of the reactor. Sufficient information is available to the operator to make operational decisions and to conclude that reactivity control has been accomplished. The proposed changes will not impact the basis for any Technical Specification related to the establishment or maintenance of nuclear safety margins. Therefore, operation of the facility in accordance with the proposed amendment does not involve a reduction in a margin of safety.

REQUEST FOR AMENDMENT, POST-ACCIDENT NEUTRON FLUX MONITORING LICENSE CONDITION 2.C(16), ATTACHMENT 2, ITEM 3(b) Attachment 3 Page 1 of 1

Environmental Assessment Applicability Review

As discussed in the significant hazards consideration, the Supply System has concluded that the proposed change to the license condition does not involve a significant hazards consideration. In addition, the proposed change does not create the potential for a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite, nor do the changes involve a significant increase in individual or cumulative occupational radiation exposure. The elimination of WRM does not impact analyzed total Core Damage Frequency, does not impact containment integrity and cannot impact radioactive releases; therefore, elimination of WRM does not change the Large Early Release Frequency (LERF). Accordingly, the proposed change meets the eligibility criteria for a categorical exclusion as set forth in 10 CFR 51.22(c)(9). Therefore, in accordance with 10 CFR 51.22(b), an environmental assessment of the change is not required.

REQUEST FOR AMENDMENT, POST-ACCIDENT NEUTRON FLUX MONITORING LICENSE CONDITION 2.C(16), ATTACHMENT 2, ITEM 3(b) Attachment 4

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Operating License Markup

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3. <u>Regulatory Guide 1.97, Revision 2 Compliance</u>

(a) The licensee shall implement (installation or upgrade) requirements of R.G. 1.97 Rev. 2 with the exception of flux monitoring prior to startup following the first refueling outage.

(b) The licensee shall implement (installation or upgrade) requirements of Regulatory Guide 1.97. Revision 2, for flux monitoring prior to startup following the fourth refueling outage.

4. <u>Upgrade Emergency Operating Procedures (EOPs)</u>

The licensee shall provide within two(2) months after the issuance of this operating license, an addendum to the Procedures Generation Package describing the function and task analysis as identified in Supplement 1 to NUREG-0737.

5. <u>Emergency Response Facilities</u>

The licensee shall have fully functional emergency response facilities (Technical Support Center, Operational Support Center, and Emergency Operations Facility) prior to exceeding five (5) percent of rated power. •

REQUEST FOR AMENDMENT, POST-ACCIDENT NEUTRON FLUX MONITORING LICENSE CONDITION 2.C(16), ATTACHMENT 2, ITEM 3(b) Attachment 5

Revised Operating License Page

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3. Regulatory <u>Guide 1.97</u>, <u>Revision 2 Compliance</u>

- (a) The licensee shall implement (installation or upgrade) requirements of R.G. 1.97 Rev. 2 with the exception of flux monitoring prior to startup following the first refueling outage.
- 4. <u>Upgrade Emergency Operating Procedures (EOPs)</u>

The licensee shall provide within two(2) months after the issuance of this operating license, an addendum to the Procedures Generation Package describing the function and task analysis as identified in Supplement 1 to NUREG-0737.

5. <u>Emergency Response Facilities</u>

The licensee shall have fully functional emergency response facilities (Technical Support Center, Operational Support Center, and Emergency Operations Facility) prior to exceeding five (5) percent of rated power. · · · · · .

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