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SUBJECT: Application for amend to license NPF-21, revising TSS to relocate safety/relief valve position indication instrumentation requirements.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • 3000 George Washington Way • Richland, Washington 99352-0968 • (509) 372-5000

October 31, 1994  
GO2-94-247

Docket No. 50-397

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

Gentlemen:

Subject: **WNP-2, OPERATING LICENSE NPF-21  
REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATIONS:  
RELOCATE SAFETY/RELIEF VALVE POSITION INDICATION  
INSTRUMENTATION REQUIREMENTS**

- References:
- (1) NUREG-0892, Supplement 4, dated December 1983, "Safety Evaluation Report [SER] Related to the Operation of WPPSS Nuclear Project No. 2," Section 7.5.2.5
  - (2) Letter, dated January 7, 1994, BA Boger (NRC) to AL Oxsen (SS), "Repeated Failures of Safety Relief Valve Acoustic Monitors (TAC NO. M82168)"
  - (3) Letter, GO2-92-032, dated February 4, 1992, GC Sorensen (SS) to NRC, "Acoustic Monitors for Safety Relief Valve Position Indication"
  - (4) Letter, GO2-92-046, dated February 21, 1992, GC Sorensen (SS) to NRC, "Request for Amendment to Technical Specifications 3/4.4.2, Safety/Relief Valves and 3/4.3.7.5, Accident Monitoring Instrumentation"
  - (5) Letter, dated May 15, 1992, WM Dean (NRC) to GC Sorensen (SS), "Issuance of Amendment for the Washington Public Power Supply System Nuclear Project NO. 2 (TAC M82918)"
  - (6) Letter, dated May 9, 1988, TE Murley (NRC) to RF Janecek (BWROG), "NRC Staff Review of Nuclear Steam Supply Vendor Owners Groups' Application of the Commission Interim Policy Statement Criteria to Standard Technical Specifications"

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**REQUEST FOR AMENDMENT TO TECH SPECS: RELOCATE SAFETY/RELIEF VALVE POSITION INDICATION INSTRUMENTATION REQUIREMENTS**

In accordance with the Code of Federal Regulations, Title 10, Parts 50.90 and 2.101, the Supply System hereby requests an amendment to the WNP-2 Technical Specifications. This request proposes to relocate Safety/Relief Valve (SRV) position indication instrumentation Specification 3/4.3.7.5, "Accident Monitoring Instrumentation," and 3/4.4.2, "Safety/Relief Valves," requirements to plant controlled documents. This request is consistent with the NRC "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Plants," as published on July 22, 1993 (58 FR 39132) and the Improved Technical Specifications (ITS). SRV position indication instrumentation does not meet the criteria established in the policy statement for inclusion in Technical Specifications. The relocation of the SRV position indication instrumentation requirements is also consistent with the supplementary information provided with the policy statement, which allows licensees to only adopt portions of the ITS. In addition, "Safety/Relief Valve Position Indicators" have been excluded from Revision 0 of the BWR-4 and BWR-6 ITS, NUREG-1433 and 1434, respectively.

This Technical Specification amendment is being requested at this time to allow removal of the acoustic monitor channel portion of the SRV position indication system during the April 1995 maintenance and refueling outage. The modification to remove the acoustic monitors will reduce maintenance and operation costs and reduce personnel radiation exposure during refueling outages. To support the planned implementation schedule, it is requested that review and approval of this amendment be completed by March 15, 1995. Subsequent changes to the requirements, such as the removal of the acoustic monitors, will be in accordance with WNP-2 Technical Specification Administrative Controls, Section 6.8, "Procedures and Programs," and the requirements of 10 CFR 50.59, "Changes, tests and experiments." Technical Specification Bases 3/4.4.2, "Safety/Relief Valves," will be modified by the Supply System as indicated on the marked up Bases page included in Attachment 3.

This Technical Specification amendment request is subdivided as follows:

- Attachment 1 provides a discussion and the justification for the proposed changes.
- Attachment 2 describes the Supply System's evaluation of the proposed changes performed in accordance with 10 CFR 50.92(c).
- Attachment 3 includes the affected pages of the Technical Specifications with the proposed changes indicated.



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Page 3

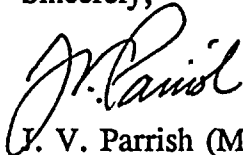
**REQUEST FOR AMENDMENT TO TECH SPECS: RELOCATE SAFETY/RELIEF  
VALVE POSITION INDICATION INSTRUMENTATION REQUIREMENTS**

As discussed in Attachment 2, the Supply System has concluded that the proposed change to the WNP-2 Technical Specifications does not involve a significant hazards consideration. In addition, as discussed herein, the proposed change does not create a potential for a significant change in the types or a significant increase in the amount of any effluents that may be released offsite, nor does the change involve a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the 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.

This Technical Specification amendment request has been reviewed and approved by the WNP-2 Plant Operations Committee and 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 regarding this matter, please call me or Mr. D.A. Swank, Licensing Manager, at (509) 377-4563.

Sincerely,



J. V. Parrish (Mail Drop 1023)  
Assistant Managing Director, Operations

CDM/ml  
Attachments

cc: LJ Callan - NRC RIV  
KE Perkins, Jr. - NRC RIV, Walnut Creek Field Office  
NS Reynolds - Winston & Strawn  
JW Clifford - NRC  
FS Adair - EFSEC  
DL Williams - BPA/399  
NRC Sr. Resident Inspector - 927N

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STATE OF WASHINGTON )  
COUNTY OF BENTON )

Subject: Request for Amend to TS to Relocate  
Safety/Relief Valve Position Indication  
Instrumentation Requirements

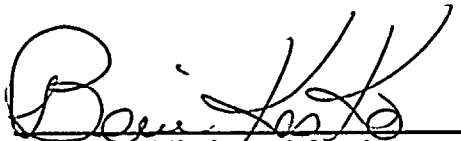
I, J. V. PARRISH, being duly sworn, subscribe to and say that I am the Assistant Managing Director, Operations for the WASHINGTON PUBLIC POWER SUPPLY SYSTEM, the applicant herein; that I have the full authority to execute this oath; that I have reviewed the foregoing; and that to the best of my knowledge, information, and belief the statements made in it are true.

DATE Oct 31, 1994

  
J. V. Parrish, Assistant Managing Director  
Operations

On this date personally appeared before me J. V. PARRISH, 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.

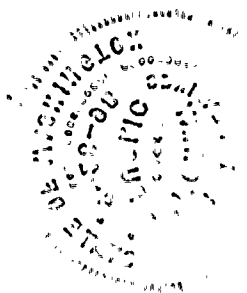
GIVEN under my hand and seal this 31 day of October 1994.

  
Notary Public in and for the  
STATE OF WASHINGTON

Residing at Kennewick, WA

My Commission Expires 4/28/98





# REQUEST FOR AMENDMENT TO TECH SPEC: RELOCATE SAFETY/RELIEF VALVE POSITION INDICATION INSTRUMENTATION REQUIREMENTS

Attachment 1  
Page 1 of 6

## DISCUSSION AND JUSTIFICATION FOR THE PROPOSED CHANGES

The operability of the accident monitoring instrumentation is based on providing assurance that sufficient information is available on selected plant parameters, including SRV position indication, to monitor and assess important variables following an accident. Three Mile Island (TMI) Action Plan Item II.D.3, "Direct Indication of Relief- and Safety-Valve Position," requires that "[r]eactor coolant system relief and safety valves shall be provided with a positive indication in the control room derived from the reliable valve-position detection system or a reliable indication of flow in the discharge pipe." Presently, this requirement is satisfied utilizing three separate indication channels that are monitored and annunciated in the main control room. These channels are discussed in WNP-2 Final Safety Analysis Report (FSAR), Section 7.5.1.9, "Primary System Relief Valve Position Indication." Direct SRV position indication is provided using linear variable differential transducers (LVDTs) mounted on the valve stems. The transducers generate a voltage signal proportional to valve lift, which is processed to provide closed/not closed indication and valve open annunciation. Indirect SRV position indication is provided using acoustic monitors and thermocouples that detect flow in the valve discharge piping. The acoustic monitors use piezoelectric accelerometers mounted on the SRV piping to monitor vibrations caused by the release of reactor coolant (steam) through open or leaking SRVs. The sensor output signals are processed to provide digital (closed/not closed) indication and valve open annunciation. The thermocouples are attached to the SRV tailpipes and monitor for open or leaking SRVs by sensing the temperature rise in the piping that results from the presence of reactor coolant. The purpose of the individual SRV tailpipes is to direct associated SRV discharge into the primary containment suppression pool at sufficient depth to condense the steam. The SRV tailpipe temperatures are recorded and high temperatures are annunciated. The direct (stem mounted) and acoustic monitor position indication channels are safety grade with seismic and environmental qualifications, each channel is powered from a Class 1E electrical source. As such, each of these channels meets the design requirements of TMI Action Plan Item II.D.3. The tailpipe thermocouple channel, although not safety grade, is seismically mounted and is powered from a reliable source. The thermocouple channel has been reviewed and approved by the NRC staff as a diverse backup method of indication (see Reference 1).

As discussed in Reference 2, repeated failures of the charge amplifiers for the SRV acoustic monitors have led to a plant shutdown on November 20, 1986, and five requests for emergency Technical Specification changes during the period from October 13, 1987, through November 25, 1991. Since the charge amplifiers are located in the primary containment drywell, they cannot be repaired during plant operation. In Reference 3, the Supply System committed to installing a SRV stem position indication channel in addition to the acoustic monitors to



## **REQUEST FOR AMENDMENT TO TECH SPEC: RELOCATE SAFETY/RELIEF VALVE POSITION INDICATION INSTRUMENTATION REQUIREMENTS**

Attachment 1  
Page 2 of 6

compensate for their unreliability. A request was submitted on February 21, 1992, for an amendment to WNP-2 Technical Specifications 3.3.7.5 and 3.4.2 (see Reference 4), which allowed for either acoustic monitor or valve stem position indication to provide the SRV position indication previously required of the acoustic monitor alone. It was also requested that the tailpipe thermocouple channel be changed from a design requirement, since it is not safety grade, to an action statement operability verification requirement. The amendment request was approved by the NRC staff on May 15, 1992, and the SRV stem position indication modification was completed in July 1992.

During the approximately 2 1/2 years following the implementation of the SRV stem position indication channel, the new position indication system has proven to be reliable. On the one occasion that a position indicator became inoperable, the repairs were made within the 7 day Limiting Condition for Operation (LCO) of Specifications 3.3.7.5 and 3.4.2. In contrast, the acoustic monitors have continued to be unreliable, resulting in costly repairs and unnecessary radiation exposure to maintenance personnel. The majority of the acoustic monitor failures are related to the charge amplifiers, and as discussed in Reference 3, it is unlikely that they can be successfully moved outside of the primary containment drywell to allow repair during plant operation. As a result, the Supply System has elected to remove the acoustic monitor channel during the next (R-10) Maintenance and Refueling Outage scheduled to commence in April 1995. Implementation of the modification requires the removal of references to the acoustic monitors from the WNP-2 Technical Specifications.

As part of the modification to remove the acoustic monitors, the Supply System will be installing the capability for SRV stroke timing using permanent computer points. Currently, there is no effective means of accurately measuring valve stroke time. Timing using stopwatches has proven not to be feasible due to the short SRV stroke times (open 0.02 to 0.15 seconds; close less than 1.5 seconds). The analog computer points will provide the means to accurately measure valve stroke time. In addition, the removal of the acoustic monitors will allow the SRV stem position indicating lights to be relocated next to the SRV control switches on the control room panel. The lights, although located in the control room, are not currently in view of the SRV control switches.

Although the SRV stem position indication channel has proven to be reliable, the removal of the acoustic monitor channel will result in reliance upon only one indication channel per valve. With only one channel, there is still a possibility of future emergency Technical Specification changes related to the SRV position indication instrumentation. Because of this possibility, this amendment request proposes to remove the SRV position indication instrumentation requirements from the Technical Specifications, instead of only removing the requirements for the acoustic monitors. This is consistent with Revision 0 of the BWR-4 and BWR-6 ITS. The SRV stem position indication and tailpipe thermocouple instrumentation will be retained and the requirements will be relocated to appropriate plant controlled documents in accordance with Technical Specification, Section 6.8, and the requirements of 10 CFR 50.59.



# **REQUEST FOR AMENDMENT TO TECH SPEC: RELOCATE SAFETY/RELIEF VALVE POSITION INDICATION INSTRUMENTATION REQUIREMENTS**

Attachment 1  
Page 3 of 6

WNP-2 Technical Specifications currently address SRV position indication as follows:

Accident Monitoring Instrumentation LCO 3.3.7.5, Table 3.3.7.5-1 includes Note \* for Instrument No. 10, "Safety/Relief Valve Position Indicators," which allows either the acoustic monitor or valve stem position indicator to satisfy the one channel per valve design and operability requirements. Action 82 of Table 3.3.7.5-1 states:

"With the number of OPERABLE Safety/Relief Valve Position Indicator instrumentation channels less than the Minimum Channels OPERABLE requirement of Table 3.3.7.5-1,

- a. Restore an inoperable channel to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours, and
- b. Verify operability and perform daily surveillance of the Tailpipe Temperature Monitoring instrument for the affected SRV until the Minimum Channels OPERABLE requirement is satisfied. Absent an OPERABLE Tailpipe Temperature monitor for the affected SRV restore the inoperable Tailpipe Temperature Monitor to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours."

Accident Monitoring Instrumentation Surveillance Requirement (SR) 4.3.7.5 states:

"Each of the above required accident monitoring instrumentation channels [shown in Table 3.3.7.5-1] shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.7.5-1."

Table 4.3.7.5-1 includes Notes \* and # for Instrument No. 10, "Safety/Relief Valve Position Indicators." Note \* stipulates that the surveillance frequencies are applicable to the acoustic monitor, valve stem position, and tailpipe temperature instrument channels. Note # gives an exemption to the provisions of Specification 4.0.4 provided that the surveillance is performed within 12 hours after reactor steam pressure and flow are adequate to perform the test.

Safety/Relief Valves LCO 3.4.2, Action c, states:

- "c. With both the acoustic monitor and valve stem position indicator for one or more safety/relief valve(s) inoperable, restore either the acoustic monitor or valve stem position indicator to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours."



## **REQUEST FOR AMENDMENT TO TECH SPEC: RELOCATE SAFETY/RELIEF VALVE POSITION INDICATION INSTRUMENTATION REQUIREMENTS**

Attachment 1  
Page 4 of 6

Safety/Relief Valves SR 4.4.2 states:

"The position indicators for each safety/relief valve shall be demonstrated OPERABLE by performance of a:

- a. CHANNEL CHECK at least once per 31 days, and a
- b. CHANNEL CALIBRATION at least once per 18 months."

"The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure and flow are adequate to perform the test."

The Supply System proposes to relocate the above SRV position indication requirements and associated Notes to appropriate plant controlled documents. Changes to the requirements and plant documentation will be subject to Technical Specification, Section 6.8, and the requirements of 10 CFR 50.59.

Regulatory Guide 1.97, Revision 2 (the basis for TMI Action Plan Item II.D.3), "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident," identified SRV position indication as a Category 2, Type D variable. Based on the NRC staff's position in Reference 6, the staff concluded that only instruments for Category 1, Type A variables are required to remain in Technical Specifications. As a result, the "Safety/Relief Valve Position Indicators" have been excluded from Revision 0 of the BWR-4 and BWR-6 ITS. The instrumentation provides only indication and alarm functions; there are no control or accident mitigating design features. Furthermore, other safety-related plant parameters are available to provide reliable indication of open SRVs. For example, since the SRVs relieve to the suppression pool, an increase in suppression pool temperature and level would indicate an open SRV. Perturbations in main turbine governor valve position, generator output, main turbine steam flow, steam/feedwater flow mismatch, and reactor pressure can also be used to indicate or confirm an open SRV. The relocation of the requirements to plant controlled documents will not affect plant safety because the process is administrative in nature and future changes will be controlled pursuant to Technical Specification, Section 6.8, and 10 CFR 50.59.

The NRC's final policy statement on Technical Specification improvements contains four criteria against which requirements are to be evaluated for inclusion in the Technical Specifications. If the requirements meet any of the four criteria, they must be included in the Technical Specifications. The criteria are as follows:





## **REQUEST FOR AMENDMENT TO TECH SPEC: RELOCATE SAFETY/RELIEF VALVE POSITION INDICATION INSTRUMENTATION REQUIREMENTS**

Attachment 1  
Page 5 of 6

1. Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
2. A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure of, or prevents a challenge to the integrity of a fission product barrier.
3. A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or Transient analysis that either assumes the failure of or prevents a challenge to the integrity of a fission product barrier.
4. A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.

The SRV position indication instrumentation does not meet any of the four criteria listed above for inclusion in the Technical Specifications. The following discussion of the criteria with respect to the functions of the instrumentation is provided in support of this conclusion.

1. The purpose of the SRV position indication instrumentation is to detect open or leaking SRVs. Therefore, the instrumentation can be used to detect a breach of the reactor coolant pressure boundary (RCPB) through an open or stuck open SRV. However, based on the FSAR, Section 15.1.4, "Inadvertent Safety/Relief Valve Opening," transient analysis for a stuck open SRV, the event does not involve a significant degradation of the RCPB. The transient resulting from a stuck open SRV does not represent the same magnitude of challenge to a Boiling Water Reactor (BWR) as does a stuck open pressurizer relief or safety valve on a Pressurized Water Reactor (PWR). The event causes only a slight decrease in thermal margins and does not result in fuel damage. The depressurization transient is termed as "mild," with no significant effect on the RCPB or containment design pressure limits. In addition, there are other instruments that can be used to detect open SRVs such as suppression pool temperature and level, main turbine governor valve position, generator output, main turbine steam flow, steam/feedwater flow mismatch, and reactor pressure.
2. No credit is taken for operation of the SRV acoustic monitors or stem position indicators in the FSAR, Section 15.1.4, transient analysis initial conditions for a stuck open SRV. Although the SRV tailpipe thermocouples are assumed operational, the accident analysis does not take credit for their indication or alarm functions. Operator response for the event is assumed to be initiated based on a suppression pool high temperature alarm, not



## REQUEST FOR AMENDMENT TO TECH SPEC: RELOCATE SAFETY/RELIEF VALVE POSITION INDICATION INSTRUMENTATION REQUIREMENTS

Attachment 1  
Page 6 of 6

an open SRV alarm from the SRV position indication instrumentation. Based on the transient analysis, the event causes only a slight decrease in thermal margins and does not result in fuel damage. The Minimum Critical Power Ratio (MCPR) is essentially unchanged, and therefore, fuel integrity is not challenged. Furthermore, the "mild" depressurization transient does not significantly affect the RCPB or containment design pressure limits, or challenge boundary integrity.

3. The SRV position indication instrumentation is a non-intrusive design that does not affect operation of the SRV. The instrumentation provides only indication and alarm functions; there are no control or accident mitigating design features associated with the SRV position indication. The FSAR, Section 15.1.4, transient analysis assumes that the operator response for a stuck open SRV is to attempt to close the valve and establish suppression pool cooling within 20 minutes. These actions are initiated based on a suppression pool high temperature alarm, not an open SRV alarm from the SRV position indication instrumentation. Moreover, no credit is taken in the transient analysis for the SRV position indication and alarm functions. Other parameters, such as suppression pool temperature and level, main turbine governor valve position, generator output, main turbine steam flow, steam/feedwater flow mismatch, and reactor pressure can be used to indicate and/or confirm an open SRV. Therefore, the SRV position indication instrumentation does not perform a function that affects the operator's ability to respond to a stuck open SRV event, nor does its function affect the severity of the transient or the capability of the SRVs to perform their safety function.
4. The SRV position indication instrumentation is designed to indicate an open or leaking SRV and can be used to indicate a stuck open SRV event. The FSAR, Section 15.1.4, transient analysis of the event concluded that the transient would not lead to fuel damage or challenge RCPB or containment integrity. However, the event does result in a release of normal reactor coolant activity through the open SRV to the suppression pool. Based on the transient analysis, the release is contained within the primary containment, and there would be no exposures to plant personnel or the public. Any discharge to the environment would be under controlled conditions in accordance with Technical Specifications. Since the event associated with the SRV position indication instrumentation does not lead to an uncontrolled activity release to the environment, this instrumentation is not significant to the public health and safety.

Based on the above discussion, the SRV position indication instrumentation is not required to be included in the Technical Specifications.



# **REQUEST FOR AMENDMENT TO TECH SPEC: RELOCATE SAFETY/RELIEF VALVE POSITION INDICATION INSTRUMENTATION REQUIREMENTS**

Attachment 2  
Page 1 of 3

## **EVALUATION OF SIGNIFICANT HAZARDS CONSIDERATION**

In accordance with the criteria for defining a significant hazards consideration established in 10 CFR 50.92, the Supply System has evaluated the proposed amendment to WNP-2 Technical Specifications 3/4.3.7.5 and 3/4.4.2 and determined that it 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 Safety/Relief Valve (SRV) position indication instrumentation is a non-intrusive design that does not affect operation of the SRV. The instrumentation provides only indication and alarm functions; there are no control or accident mitigating design features. The purpose of the instrumentation is to detect open or leaking SRVs. Therefore, the instrumentation can be used to detect a breach of the reactor coolant pressure boundary (RCPB) through an open or stuck open SRV. WNP-2 Final Safety Analysis Report (FSAR), Section 15.1.4, "Inadvertent Safety/Relief Valve Opening," transient analysis assumes that the operator response for a stuck open SRV is to attempt to close the valve and establish suppression pool cooling within 20 minutes. However, these actions are initiated based on a suppression pool high temperature alarm, not an open SRV alarm from the SRV position indication instrumentation. No credit is taken for SRV position indication and alarm functions in the transient analysis. Hence, the SRV position indication instrumentation does not affect the severity of the analyzed event or the capability of the SRVs to perform their safety function. Furthermore, other parameters, such as suppression pool temperature and level, main turbine governor valve position, generator output, main turbine steam flow, steam/feedwater flow mismatch, and reactor pressure can be used to indicate or confirm an open SRV. Thus, a postulated failure of the SRV position indication instrumentation does not affect the operator's ability to respond to a stuck open SRV event as evaluated in the FSAR analysis. Based on the transient analysis, the event does not result in an uncontrolled release to the environment or exposure to plant personnel or the public.

Based on the information presented above, the SRV position indication instrumentation does not impact the conditions, assumptions, or conclusions of the previous transient analysis for a stuck open SRV event. Accordingly, the proposed relocation of the SRV position indication instrumentation requirements would have no effect on the transient analysis. Furthermore, the SRV stem position indication and tailpipe thermocouple instrumentation will be retained and future changes to the requirements will be in

## REQUEST FOR AMENDMENT TO TECH SPEC: RELOCATE SAFETY/RELIEF VALVE POSITION INDICATION INSTRUMENTATION REQUIREMENTS

Attachment 2  
Page 2 of 3

accordance with WNP-2 Technical Specification Administrative Controls, Section 6.8, "Procedures and Programs," and the requirements of 10 CFR 50.59, "Changes, tests and experiments." Therefore, it is concluded that the change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

The SRV position indication instrumentation is a non-intrusive design that does not affect operation of the SRV. The instrumentation provides only indication and alarm functions; there are no control or accident mitigating design features. Other parameters, such as suppression pool temperature and level, main turbine governor valve position, generator output, main turbine steam flow, steam/feedwater flow mismatch, and reactor pressure provide reliable indication or confirmation of an open SRV. Hence, a postulated failure of the SRV position indication instrumentation does not increase the severity of a stuck open SRV event transient or prevent accurate determination of SRV position, nor does it reduce the capability of the SRVs to perform their safety function. Furthermore, a failure would not adversely affect the operator's ability to recognize a stuck open SRV and assess the need for suppression pool cooling to mitigate the effects. The SRV stem position indication and tailpipe thermocouple instrumentation will be retained, making the proposed relocation of the SRV position indication instrumentation requirements to plant controlled documents administrative in nature. Future changes to the instrumentation's operational, maintenance, or testing requirements will be controlled in accordance with Technical Specification, Section 6.8, and the requirements of 10 CFR 50.59. Therefore, it is concluded that the change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

As discussed in (1) above, the SRV position indication instrumentation can be used to detect an open or stuck open SRV. In the FSAR, Section 15.1.4, transient analysis for a stuck open SRV, no credit is taken for operation of the SRV acoustic monitors or stem position indicators. Although the SRV tailpipe thermocouples are assumed operational, the transient analysis does not take credit for their indication or alarm functions. There would still be adequate means controlled by Technical Specifications for determining SRV position using other plant parameters. The transient resulting from a stuck open SRV does not represent the same magnitude of challenge to a Boiling Water Reactor (BWR), such as WNP-2, as does a stuck open pressurizer relief or safety valve on a Pressurized Water Reactor (PWR). As discussed in the FSAR transient analysis, the event causes only a slight decrease in thermal margins and does not result in fuel

## **REQUEST FOR AMENDMENT TO TECH SPEC: RELOCATE SAFETY/RELIEF VALVE POSITION INDICATION INSTRUMENTATION REQUIREMENTS**

Attachment 2

Page 3 of 3

damage. The Minimum Critical Power Ratio (MCPR) is essentially unchanged, and as a result, the safety limit margin is unaffected. The depressurization transient is termed as "mild," with no significant effect on the RCPB or containment design pressure limits. A failure of the SRV position indication does not increase the severity of the event or adversely affect the operator's ability to recognize a stuck open SRV and assess the need for suppression pool cooling to mitigate the effects. The proposed relocation of the SRV position indication instrumentation requirements to plant controlled documents does not affect previous commitments to Regulatory Guide 1.97, Revision 2, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident," and Three Mile Island (TMI) Action Plan Item II.D.3, "Direct Indication of Relief- and Safety-Valve Position," and is consistent with Revision 0 of the BWR-4 and BWR-6 Improved Technical Specifications (ITS) NUREG-1433 and 1434, respectively. The SRV stem position indication and tailpipe thermocouple instrumentation will be retained, with future changes to the instrumentation's operational, maintenance, or testing requirements to be controlled in accordance with Technical Specification, Section 6.8, and the requirements of 10 CFR 50.59. Therefore, it is concluded that the change does not involve a significant reduction in the margin of safety.