Entergy

Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
Entergy Nuclear Indian Point 2, LLC
P. O. Box 249
Buchanan, NY 10511

September 20, 2001

Re: Indian Point Unit No. 2
Docket No. 50-247
NL 01-111

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Stop 0-P1-17
Washington, DC 20555-0001

SUBJECT: License Amendment Request (LAR 01-009) for One Time Extension of Technical Specification Surveillance Intervals

Pursuant to 10CFR50.90, Entergy Nuclear Operations, Inc. (ENO) requests an amendment to the Indian Point Unit No. 2 (IP2) Technical Specifications (TS). The purpose of this License Amendment Request is to allow a one-time extension to the intervals for the surveillance requirements in the following TS: Table 4.1-1 Item 17 and Sections 4.4.H, 4.6.A, and 4.12.B. If this request is approved, the surveillance requirements would be deferred until the next scheduled refueling outage (RFO), which will commence no later than November 19, 2002.

Attachment 1 to this letter provides the description and evaluation of the proposed change. The revised TS pages are provided in Attachment 2 (strikeout and shadow format). Attachment 1 also identifies the deferral period required for each surveillance requirement. Attachment 3 contains an evaluation of the acceptability of each requested surveillance test interval extension. Past tests have been evaluated and the results of these evaluations support the one-time extension. ENO is planning a Fall 2001 outage. Selected refueling frequency surveillance tests will be performed during this outage to minimize the scope of this License Amendment Request. The tests for which deferrals are requested cannot reasonably be performed prior to the RFO. Therefore, without this one-time extension, ENO would be required to significantly extend the Fall 2001 outage or shutdown at a later date to perform an otherwise unnecessary and lengthy plant outage.

In addition, this submittal requests other changes to TS Table 4.10-2, TS Table 4.10-4, and TS Section 4.12.

To facilitate planning for the Fall 2002 RFO, ENO requests approval of the proposed change by March 31, 2002 with an implementation date within 60 days of approval.

A001

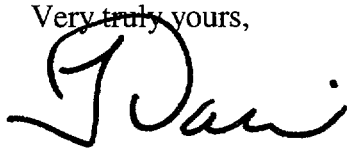
The Station Nuclear Safety Committee (SNSC) and the Nuclear Facilities Safety Committee (NFSC) have reviewed the proposed change. Both committees concur that the proposed change does not involve a significant hazards consideration as defined by 10 CFR 50.92(c).

In accordance with 10 CFR 50.91, a copy of this submittal and the associated attachments are being submitted to the designated New York State official.

There are no new commitments in this letter.

Should you or your staff have any questions regarding this submittal, please contact Mr. John F. McCann, Manager, Nuclear Safety and Licensing at (914) 734-5074.

Very truly yours,



Fred Dacimo
Vice President – Operations
Indian Point 2

cc:

Mr. Hubert J. Miller
Regional Administrator-Region I
US Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Patrick D. Milano, Project Manager
Project Directorate I-1
Division of Reactor Projects I/II
US Nuclear Regulatory Commission
Mail Stop O-8-2C
Washington, DC 20555

NRC Senior Resident Inspector
US Nuclear Regulatory Commission
PO Box 38
Buchanan, NY 10511

Mayor, Village of Buchanan
236 Tate Avenue
Buchanan, NY 10511

Mr. Paul Eddy
NYS Department of Public Service
3 Empire Plaza
Albany, NY 12223

Mr. William F. Valentino, President
NYS ERDA
Corporate Plaza West
286 Washington Ave. Extension
Albany, NY 12223-6399

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
ENTERGY NUCLEAR OPERATIONS, INC.	)	Docket No. 50-247
Indian Point Nuclear Generating Unit No. 2)	)	

APPLICATION FOR AMENDMENT
TO OPERATING LICENSE

Pursuant to Section 50.90 of the Regulations of the Nuclear Regulatory Commission (NRC), Entergy Nuclear Operations, Inc., as holder of Facility Operating License No. DPR-26, hereby applies for amendment of the Technical Specifications contained in Appendix A of this license.

The specific proposed Technical Specification revision is set forth in Attachment 2. The associated assessment demonstrates that the proposed change does not involve a significant hazards consideration as defined in 10CFR50.92(c).

As required by 10CFR50.91(b)(1), a copy of this Application and our evaluation concluding that the proposed change does not involve a significant hazards consideration has been provided to the appropriate New York State official designated to receive such amendments.

BY: _____

Fred Dacimo
Vice President – Operations
Indian Point 2

Subscribed and sworn to
before me this 20 day
September, 2001

_____
Notary Public

ERSILIA A. AMANNA
Notary Public, State of New York
No. 01AM6036699
Qualified in Westchester County
Commission Expires March 20, 2002

ATTACHMENT 1 TO NL 01-111

LICENSE AMENDMENT REQUEST

ONE-TIME EXTENSION OF TECHNICAL SPECIFICATION SURVEILLANCE INTERVALS

ENTERGY NUCLEAR OPERATIONS, INC
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247

LICENSE AMENDMENT REQUEST

DESCRIPTION OF THE PROPOSED CHANGE

Entergy Nuclear Operations, Inc. (ENO) is requesting a change to the Indian Point Unit No. 2 (IP2) Technical Specifications (TS) to extend the intervals for the surveillance requirements in the Table below until the next refueling outage (RFO) that will start no later than November 19, 2002.

The proposed change revises TS Table 1-1, Frequency Notation, to change the "Refueling Interval (R##)" Test Frequency/Requirement to allow tests so annotated a one-time extension of the test interval. The proposed change would then remove the R## notation from tests previously identified and add the R## notation or otherwise annotate the test frequency for the surveillance requirements to allow a test interval extension until the start of the Fall 2002 RFO but no later than November 19, 2002.

Surveillance Requirement	**Test Number and Title**	**TS Frequency**	**Due Date[a]**	**Extension Interval Requested[b]**
Table 4.1-1, Item 17, Volume Control Tank Level	PC-R13, VCT Level	Once per 24 months	11/10/02	< 1 month
Table 4.1-1, Item 17, Volume Control Tank Level	PC-R13-1, VCT Level Transmitter	Once per 24 months	11/12/02	< 1 month
4.4.H.1.a, Containment - Residual Heat Removal System	PT-R27A, 885A, 885B, & 741A Leak Rate Determination	Once per 24 months	10/23/02	< 1 month
4.4.H.1.b, Containment – Residual Heat Removal System	PI-R-4, Press Inspect SI Piping and Components	Once per 24 months	11/11/02	< 1 month
4.6.A.2, Diesel Generators	PT-R84A, 21 EDG Alternate 24 Hr Load Test	Once per 24 months	10/10/02	< 2 months
4.6.A.2, Diesel Generators	PT-R84B, 22 EDG Alternate 24 Hr Load Test	Once per 24 months	11/07/02	< 1 month
4.6.A.2, Diesel Generators	PT-R84C, 23 EDG Alternate 24 Hr Load Test	Once per 24 months	11/15/02	< 1 month
4.12.B, Shock Suppressors, (Snubbers)	PT-R34, Shock Suppressor Initial Functional Test	Once per 24 months	10/20/02	< 1 month

Surveillance Requirement	Test Number and Title	TS Frequency	Due Date[a]	Extension Interval Requested[b]
4.12.B, Shock Suppressors, (Snubbers)	PT-R34A, Steam Generator Shock Suppressor Initial Functional Test	Once per 24 months	10/26/02	< 1 month

[a.] The date on which the TS allowable extension expires.
[b.] The maximum time for which an extension past the TS allowable extension due date is requested.

ENO also requests that the IP2 Facility Operating License DPR-26 Condition 2.L requirement for integrated leak tests for applicable systems at a frequency not to exceed refueling cycle intervals be amended to allow a one-time extension of the test interval so that the test is performed during the RFO starting no later than November 19, 2002. Test PI-R-4, Press Inspect SI Piping and Components, that implements TS 4.4.H also implements this License Condition requirement.

ENO also requests that the surveillance interval requirements that were inadvertently removed from the TS be restored. This request affects the Channel Calibration interval for:

- TS Table 4.10-2, Radioactive Liquid Effluent Monitoring Instrumentation Surveillance Requirements, Items:
  - 3.a Flow Measurement Devices – Liquid Radwaste Effluent Line
  - 3.b Flow Measurement Devices – Steam Generator Blowdown Effluent Line
  - 4.a Tank Level Indicating Devices – 13 Waste Distillate Storage Tank
  - 4.b Tank Level Indicating Devices – 14 Waste Distillate Storage Tank
  - 4.c Tank Level Indicating Devices – Primary Water Storage Tank
- TS Table 4.10-4, Radioactive Gaseous Effluent Monitoring Instrumentation Surveillance Requirements, Items:
  - 4.d Vent Monitor – Flow Rate Monitor
  - 5.a Stack Vent – Noble Gas Activity Monitor
  - 5.d Stack Vent – Flow Rate Monitor

ENO also requests a change to Section 4.12.A, "Shock Suppressors (Snubbers)," to remove the reference to the alternate inspection requirements that are no longer applicable for snubbers installed at the steam generators.

REASONS FOR THE CHANGE

These surveillance tests were to have been performed during the next RFO that had been previously scheduled for the Spring of 2002. This would have been within the allowable extension for performing the tests so that an additional extension would not have been required. During the unscheduled steam generator replacement outage in the year 2000, the test schedules were reviewed since the 2002 RFO schedule was changed to September 2002. This revised schedule would still have permitted the tests to be performed without the need for an additional extension. However due

to delays in startup from the steam generator replacement outage, the next RFO is now scheduled for later in the Fall of 2002. Since this has resulted in a requirement that the tests be performed before the scheduled RFO, IP2 is requesting a one-time extension to allow the testing to be deferred until the start of the RFO but no later than November 19, 2002. ENO is planning a Fall 2001 outage. Selected refueling frequency surveillance tests will be performed during this outage to minimize the scope of this License Amendment Request. The tests for which deferrals are requested cannot reasonably be performed prior to the RFO. Therefore, without this one-time extension, ENO would be required to significantly extend the Fall 2001 outage or shutdown at a later date to perform an otherwise unnecessary and lengthy plant outage.

Radioactive Liquid and Gaseous Effluent Monitoring Instrument surveillance interval requirements that were approved by License Amendment No. 187 (Ref. 1) were inadvertently removed by subsequent License Amendment No. 198 (Ref. 2). The surveillance interval requirements incorporated into the TS by License Amendment No. 187 will be restored.

The steam generator snubbers were modified to an equivalent snubber that no longer requires external hydraulic reservoirs with its associated tubing. This TS clarification is therefore no longer required or justified.

EVALUATION OF THE PROPOSED CHANGE

Evaluation of the One-Time Extensions to Surveillance Intervals

Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

TS 4.0.1 states that each surveillance requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the specified interval.

For each of the tests for which a deferral is requested, ENO has prepared an evaluation that describes the test, evaluates past performance, and concludes that deferring each individual test would have an insignificant affect on the reliability of the affected system, structure, or component. These evaluations are found in Attachment 3, "Evaluations for Specific Deferred Surveillance Requirements." ENO has evaluated the combined impact of deferring the tests and has determined that there will not be a significant adverse affect on the ability of the affected systems to perform their safety functions. That is, for the functions of the affected structures, systems and components, the proposed changes do not:

- Significantly change the probability of any initiating event, the probability of successful mitigative action, the functional recovery time, or the operator action requirement;
- Significantly change functional requirements or redundancy;
- Significantly change operations that affect the likelihood of undiscovered failures;

- Significantly affect the basis for successful safety function; or
- Create "special circumstances" under which compliance with existing regulations using the proposed deferrals may not produce the intended or expected level of safety and plant operation may pose an undue risk to public health and safety.

There would be a significant economic penalty and radiation dose accrual if IP2 were required to perform or extend a mid-cycle outage (MCO) solely for the purpose of performing surveillance tests. The scheduled MCO would be extended by approximately 3-4 days while an outage performed solely to perform the testing has been estimated as a 9-11 day outage. There would not be any cost or radiation dose savings during the RFO if the tests were performed early since IP2 would be required to re-perform the tests during the RFO to ensure the ability to operate at power for the entire next cycle. Nonetheless, a MCO is currently planned for the fall of 2001. When practical during this outage, surveillance testing will be performed that will have to be repeated during the Fall 2002 RFO. For each of the tests for which deferral is requested, an evaluation has been performed that has determined that prerequisite plant conditions will not be established during the MCO or that the economic penalty or the dose accrual of performing the test during the MCO would be excessive.

On balance the economic and dose benefits coupled outweigh the potential but insignificant reliability effects of delaying required surveillance testing.

Evaluation of the Reinsertion of Inadvertently Removed Surveillance Requirements

In License Amendment 187 (Ref. 1), the NRC approved the revision of surveillance intervals for various systems, components, and instruments from "R" (eighteen months) to R# (24 months) to accommodate a 24 month refueling cycle. These revisions were made in accordance with the guidance provided by Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle." The revisions included changes to the Channel Calibration intervals for the instruments on Tables 4.10-2 and 4.10-4 that are the subject of this submittal. The Staff's Safety Evaluation evaluated the acceptability of the changes for Channel Calibration for the subject instruments from 18 months to 24 months.

In License Amendment 198 (Ref. 2), the NRC approved changes to Tables 4.10-2 and 4-10-4 that, with one exception, are described in the Staff's Safety Evaluation as clarifications and administrative items. The one exception was to change the Table 4.10-4 Item 5.a source check interval from "P" to "M." Despite the fact that there was no Staff Safety Evaluation, the surveillance interval for the subject instrumentation was changed from 24 months back to 18 months. ENO has concluded that this change was inadvertent and caused by the fact that the submittals for License Amendment 198 overlapped the submittals and issuance of License Amendment 187.

Since the Staff's Safety Evaluation in Ref. 1 evaluated and found acceptable the changes for Channel Calibration for the subject instruments from 18 months to 24 months, this change has been previously reviewed by IP2 with a conclusion that there was no significant hazards consideration and by the NRC with a conclusion that the proposed TS changes do not have a significant affect on safety.

Evaluation of the Administrative Change to Delete the Alternate Inspection Requirements for the Steam Generator Snubbers

Surveillance Requirement 4.12.A requires visual inspections of snubbers. The visual inspection interval for the snubbers is based on the number of unacceptable snubbers found during the previous inspection in proportion to the sizes of the various populations or categories and may be as long as two refueling cycles with good overall visual inspection results. When a snubber design has a feature that makes it generically susceptible to an unacceptable condition, snubbers of that design may be grouped into a separate population for the purpose of determining the required inspection interval. IP2 previously had steam generator snubbers that had a common external reservoir and tubing. Leakage of hydraulic fluid from this external tubing was an unacceptable condition that was only applicable to these snubbers. Therefore, they were separately grouped as permitted by the NRC in the issuance of License Amendment 62 (Ref. 3).

The steam generator snubbers were modified to an equivalent snubber that no longer has a common external hydraulic reservoir with its associated tubing. Since the snubber design has been changed, the need for creating a separate population for the steam generator snubbers is not required. In addition, the conditional paragraph allowing the separate grouping of the steam generator snubbers will never be entered. So the proposed change would eliminate the conditional paragraph that allowed the separate grouping of the steam generator snubbers.

TS 4.12.A assures that the necessary quality of snubbers is maintained so that there is confidence that they are operable. The ability of TS 4.12.A to provide this assurance is not changed by the proposed change.

Overall Conclusions

Based on the considerations discussed above, (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.

NO SIGNIFICANT HAZARDS CONSIDERATION EVALUATION

ENO has determined that this proposed Technical Specification change does not involve a significant hazards consideration as defined by 10CFR50.92(c).

1. **Operation of the facility in accordance with the proposed amendment would not involve a significant increase in the probability of occurrence or consequences of an accident previously evaluated.**

   There is no change to the design, function, or capability of any plant structure, system, or component as a result of the proposed surveillance interval extensions. Hence there is no change in the probability of occurrence of an accident previously evaluated.

   The proposed surveillance interval extensions do not affect the ability of any plant structure, system, or component to mitigate the consequences of any accident previously evaluated. The surveillance interval extensions do not alter or prevent the ability of the affected structures, systems, and components to perform their intended functions.

   The operability of snubbers is not affected by the deletion of the allowance to separately group steam generator snubbers for the purposes of determining inspection intervals.

   Therefore, operation of the facility in accordance with the proposed amendment would not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. **Operation of the facility in accordance with the proposed amendment would not create the possibility of a new or different kind of accident from any accident previously evaluated.**

   The proposed changes do not involve any physical design change or operational change to any plant system, structure or component. Thus a new failure mode is not introduced. Therefore, the proposed changes do not create a new accident initiator or precursor, or create the possibility of a new or different kind of accident from any accident previously evaluated.

3. **Operation of the facility in accordance with the proposed amendment would not involve a significant reduction in the margin of safety.**

   As a result of these proposed surveillance interval extensions, there are no changes to IP2's design or to the IP2 TS safety limits, limiting safety system settings, or limiting conditions for operation. The only change is a change to the surveillance testing frequency for affected structures, systems, and components.

   The proposed surveillance interval extensions have been evaluated to not significantly degrade the reliability of any existing system, structure, or component. Therefore, testing in accordance

with the proposed test intervals continues to ensure that the necessary quality of affected structures, systems, and components is maintained, that IP2 operation will be within safety limits, and that the IP2 limiting conditions for operation will be met.

The proposed surveillance interval extensions do not adversely affect the ability of any IP2 structures, systems, or components to function when required to mitigate any accident or licensing basis event.

The proposed deletion of the allowance to separately group steam generator snubbers for the purpose of determining inspection intervals does not affect the effectiveness of the surveillance requirements. The steam generator snubbers will still be inspected at the interval required by the TS.

Therefore, operation of the facility in accordance with the proposed amendment would not involve a significant reduction in the margin of safety.

CONCLUSIONS

Based on the above evaluation and the Staff's Safety Evaluation (Ref. 1), ENO has concluded that the proposed changes will not result in a significant increase in the probability or consequences of any accident previously analyzed, will not result in a new or different kind of accident from any accident previously analyzed, and does not result in a reduction in any margin of safety. Therefore, operation of IP2 in accordance with the proposed amendment does not involve a significant hazards consideration. In addition, the proposed change to the TS has been reviewed by both the Station Nuclear Safety Committee (SNSC) and the Nuclear Facilities Safety Committee (NFSC). Both committees concur that the proposed change does not involve a significant hazards consideration.

ENVIRONMENTAL ASSESSMENT

An environmental assessment is not required for the above proposed change because the requested change to the Indian Point Unit No. 2 Technical Specifications conforms to the criteria for "actions eligible for categorical exclusion," as specified in 10CFR51.22(c)(9). The requested change will have no impact on the environment. The proposed change does not involve a significant hazards consideration as discussed in the preceding section. The proposed change does not involve a significant change in the types or significant increase in the amounts of any effluents that may be released offsite. In addition, the proposed change does not involve a significant increase in individual or cumulative occupational radiation exposure.

REFERENCES

1. NRC letter to Con Edison, titled "Issuance of Amendment for Indian Point Nuclear Generating Unit No. 2 (TAC No. M90164)," dated October 30, 1996

2. NRC letter to Con Edison, titled "Issuance of Amendment for Indian Point Nuclear Generating Unit No. 2 (TAC No. M90896)," dated August 12, 1998
3. NRC letter to Con Edison, re issuance of Amendment No. 62 for Indian Point Nuclear Generating Unit No. 2, dated August 28, 1980

ATTACHMENT 2 TO NL 01-111

TECHNICAL SPECIFICATION PAGES IN

STRIKEOUT/SHADOW FORMAT

Deleted text is shown as ~~strikeout~~.

Added text is shown as shaded.

ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247

TABLE 1-1

Frequency Notation

Notation	Test Frequency/Requirements	Surveillance Interval
Shift (S)	At least twice per calendar day	N.A.
Daily (D)	At least once per calendar day	N.A.
Weekly (W)	At least once per week	7 days
Monthly (M)	At least once per month	31 days
Quarterly (Q)	At least once per three months	92 days
Semi-Annually(SA)	At least once per six months	6 months
Annually (A)	At least once per 12 months	12 months
Refueling Interval (R#)	At least once every 24 months	24 months
Refueling Interval (R)	At least once every 18 months	18 months
S/U	Prior to each reactor startup	--
P	Completed prior to each release	--
N.A.	Not Applicable	
Refueling Interval (R##)	At least once every 24 months except a one time extension of the test interval to allow the test to be performed during the refueling outage starting no later than ~~June 3, 2000~~ November 19, 2002	--

Table 4.1-1
Minimum Frequencies for Checks, Calibrations and
Tests of Instrument Channels

Channel Description	Check	Calibrate	Test	Remarks
1. Nuclear Power Range	S	D (1) M (3)*1	Q (2)	1) Heat balance calibration 2) Signal to delta T; bistable action (permissive, rod stop, trips) 3) Upper and lower chambers for axial offset.
2. Nuclear Intermediate Range	S (1)	N.A.	S/U (2)*2	1) Once/shift when in service 2) Bistable action (permissive, rod stop, trip)
3. Nuclear Source Range	S (1)	N.A.	S/U (2)*2	1) Once/shift when in service 2) Bistable action (alarm, trip)
4. Reactor Coolant Temperature	S	R#	Q (1)	~~Calibration of setpoint generators extended on a one time basis to 37 months~~ 1) Overtemperature - delta T Overpower - delta T
5. Reactor Coolant Flow	S	R#	Q	~~Calibration of transmitters extended on a one time basis to 37 months.~~
6. Pressurizer Water Level	S	R#	Q	~~Calibration of transmitters extended on a one time basis to 37 months~~.
7. Pressurizer Pressure (High & Low)	S	R#	Q	~~Calibration of transmitters extended on a one time basis to 37 months~~.

Minimum Frequencies for Checks, Calibrations and Tests of Instrument Channels

	Channel Description	Check	Calibrate	Test	Remarks
8.a	6.9 kV Voltage	N.A.	~~R##~~ R#	Q	
8.b	6.9 kV Frequency	N.A.	~~R##~~ R#	Q (1) R# (2)	1) Underfrequency relay actuation only. 2) The full test including RCP breaker trip upon underfrequency relay actuation and reactor trip logic relay actuation upon tripping of the RCP breaker.
9.	Analog Rod Position	S	R#	M	
10.	Rod Position Bank Counters	S	N.A.	N.A.	With analog rod position
11.	Steam Generator Level	S	R#	Q	~~Calibration of transmitters extended on a one time basis to 37 months~~.
12.	Charging Flow	N.A.	R#	N.A.	
13.	Residual Heat Removal Pump Flow	N.A.	~~R##~~ R#	N.A.	~~Calibration of transmitters extended on a one time basis to 37 months~~.
14.	Boric Acid Tank Level	W	R#	N.A.	
15.	Refueling Water Storage Tank Level	W	Q	N.A.	
16.	DELETED				
17.	Volume Control Tank Level	N.A.	R##	N.A.	
18a.	Containment Pressure	D	R#	Q	Wide Range
18b.	Containment Pressure	S	R#	Q	Narrow Range

Table 4.1-1

Minimum Frequencies for Checks, Calibrations and Tests of Instrument Channels

	Channel Description	Check	Calibrate	Test	Remarks
18c.	Containment Pressure (PT-3300,PT-3301)	M	R#	N.A.	High Range
19.	Process Radiation Monitoring System	D	R#	M	
19a.	Area Radiation Monitoring System	D	R#	M	
19b.	Area Radiation Monitoring System (VC)	D	R#	M	
20.	Boric Acid Make-up Flow Channel	N.A.	R#	N.A.	
21a.	Containment Sump and Recirculation Sump Level (Discrete)	S	~~R##~~ R#	~~R##~~ R#	Discrete Level Indication Systems.
21b.	Containment Sump, Recirculation Sump and Reactor Cavity Level (Continuous)	S	R#	R#	Continuous Level Indication Systems. ~~Calibration of transmitters extended on a one time basis to 37 months.~~ ~~Testing of transmitters extended on a one time basis to 37 months.~~
21c.	Reactor Cavity Level Alarm	N.A.	R#	R#	Level Alarm System
21d.	Containment Sump Discharge Flow	S	R#	M	Flow Monitor

Table 4.1-1
Minimum Frequencies for Checks, Calibrations and
Tests of Instrument Channels

	Channel Description	Check	Calibrate	Test	Remarks
21e.	Containment Fan Cooler Condensate Flow	S	R#	M*3	~~Calibration of transmitters extended on a one time basis to 37 months.~~
22a.	Accumulator Level	S	R#	N.A.	~~Calibration of transmitters extended on a one time basis to 37 months.~~
22b.	Accumulator Pressure	S	R#	N.A.	~~Calibration of transmitters extended on a one time basis to 37 months.~~
23.	Steam Line Pressure	S	R#	Q	~~Calibration of transmitters extended on a one time basis to 37 months.~~
24.	Turbine First Stage Pressure	S	R#	Q	
25.	Reactor Trip Logic Channel Testing	N.A.	N.A.	M*9	
26.	Engineered Safety Features (SI) Logic Channel Testing	N.A.	N.A.	M*9	
27.	Turbine Trip a. Low Auto Stop Oil Pressure	N.A.	~~R##~~ R#	N.A.	
28.	Control Rod Protection (for use with LOPAR fuel)	N.A.	R#	*4	

Table 4.1-1

Minimum Frequencies for Checks, Calibrations and Tests of Instrument Channels

Channel Description	Check	Calibrate	Test	Remarks
29. Loss of Power				
a. 480v Emergency Bus Undervoltage (Loss of Voltage)	N.A.	~~R##~~ R#	~~R##~~ R#	
b. 480v Emergency Bus Undervoltage (Degraded Voltage)	S	~~R##~~ R#	M	
c. 480v Emergency Bus Undervoltage (Alarm)	N.A.	~~R##~~ R#	M	
30. Auxiliary Feedwater				
a. Steam Generator Water Level (Low-Low)	S	R#	R#	~~Calibration and testing of transmitters extended on a one time basis to 37 months.~~
b. Low-Low Level AFWS Automatic Actuation Logic	N.A.	N.A.	M	Test one logic channel per month on an alternating basis.
c. Station Blackout (Undervoltage)	N.A.	~~R##~~ R#	~~R##~~ R#	
d. Trip of Main Feedwater Pumps	N.A.	N.A.	R#	
31. Reactor Coolant System Subcooling Margin Monitor	M	R#	N.A.	
32. PORV Position Indicator (Limit Switch)	M	R#	R#	

Table 4.1-1

Minimum Frequencies for Checks, Calibrations and Tests of Instrument Channels

	Channel Description	Check	Calibrate	Test	Remarks
33.	PORV Block Valve Position Indicator (Limit Switch)	M[*5]	R#	R#	
34.	Safety Valve Position Indicator (Acoustic Monitor)	M	R#	~~R##~~ R#	
35.	Auxiliary Feedwater Flow Rate	M	R#	R#	
36.	PORV Actuation/ Reclosure Setpoints	N.A.	~~R##~~ R#	N.A.	
37.	Overpressure Protection System (OPS)	N.A.	R#	*6	~~Calibration of transmitters extended on a one time basis to 37 months.~~
38.	Wide Range Plant Vent Noble Gas Effluent Monitor (R-27)	S	R#	N.A.	
39.	Main Steam Line Radiation Monitor (R-28, R-29, R-30, R-31)	S	R#	N.A.	
40.	High Range Containment Radiation Monitor (R-25, R-26)	S	~~R#~~[7]	N.A.	
41.	Containment Hydrogen Monitor	Q	Q[*8]	N.A.	

Table 4.1-3

Frequencies for Equipment Tests

		Check	Frequency	Maximum Time Between Tests
1.	Control Rods	Rod drop times of all control rods	Refueling # Interval	*
2.	Control Rods	Movement of at least 10 steps in any one direction of all control rods	Every 31 days during reactor critical operations	*
3.	Pressurizer Safety Valves	Setpoint	Refueling Interval ~~(R##)~~ (R#)	*
4.	Main Steam Safety Valves	Setpoint	Refueling Interval ~~(R##)~~ R#	*
5.	Containment Isolation System	Automatic Actuation	Refueling Interval ~~(R##)~~ R#	*
6.	Refueling System Interlocks	Functioning	Each refueling shutdown prior to refueling Operation	Not Applicable
7.	Diesel Fuel Supply	Fuel Inventory	Weekly	10 days
8.	Turbine Steam Stop Control Valves	Closure	**	**
9.	Cable Tunnel Ventilation Fans	Functioning	Monthly	45 days

* See Specification 1.9.

** The turbine steam stop and control valves shall be tested at a frequency determined by the methodology presented in WCAP-11525 "Probabilistic Evaluation of Reduction in Turbine Valve Test Frequency", and in accordance with established NRC acceptance criteria for the probability of a missile ejection incident at IP-2. In no case shall the test interval for these valves exceed one year.

e. Closure of the containment isolation valves for the purpose of the test shall be accomplished by the means provided for normal operation of the valves.

2. Acceptance Criteria

The As Found measured leakage rate shall be less than 1.0 L_a where L_a is equal to 0.1 w/o per day of containment steam air atmosphere at 47 psig and 271°F, which are the peak accident pressure and temperature conditions. Prior to entering a mode where containment integrity is required, the As Left leakage rate shall not exceed 0.75 L_a.

3. Frequency

The integrated leakage rate test frequency shall be performed in accordance with 10 CFR 50 Appendix J, Option B as modified by approved exemptions and in accordance with guidelines contained in Regulatory Guide 1.163, dated September 1995.

B. SENSITIVE LEAKAGE RATE

1. Test

A sensitive leakage rate test shall be conducted with the containment penetrations, weld channels, and certain double-gasketed seals and isolation valve interspaces at a minimum pressure of 52 psig and with the containment building at atmospheric pressure.

2. Acceptance Criteria

The test shall be considered satisfactory if the leak rate for the containment penetrations, weld channel and other pressurized zones is equal to or less than 0.2% of the containment free volume per day.

3. Frequency

A sensitive leakage rate test shall be performed at every Refueling Interval ~~(R##)~~. (R#)

C. AIR LOCK TESTS

1. The containment air locks shall be tested at a minimum pressure of 47 psig. The test shall be performed in accordance with 10 CFR 50 Appendix J, Option B, as modified by approved exemptions and in accordance with guidelines contained in Regulatory Guide 1.163, dated September 1995. The acceptance criteria is included in Specification 4.4.D.2.a.

2. Whenever containment integrity is required, verification shall be made of proper repressurization to at least 47 psig of the double-gasket air lock door seal upon closing an air lock door.

D. CONTAINMENT ISOLATION VALVES

1. Tests and Frequency

a. All isolation valves in Table 4.4-1 shall be tested for operability in accordance with 10 CFR 50 Appendix J, Option B, as modified by approved exemptions and in accordance with guidelines contained in Regulatory Guide 1.163, dated September 1995.

b. Isolation valves in Table 4.4-1 which are pressurized by the Weld Channel and Containment Penetration Pressurization System are leakage tested as part of the Sensitive Leakage Rate Test included in Specification 4.4.B.

c. Isolation valves in Table 4.4-1 which are pressurized by the Isolation Valve Seal Water System shall be tested at every refueling but in no case at intervals greater than a Refueling Interval ~~(R##)~~ (R#) , as part of an overall Isolation Valve Seal Water System Test.

d. Isolation valves in Table 4.4-1 shall be tested with the medium and at the pressure specified therein.

2. Acceptance Criteria

a. The combined leakage rate for the following shall be less than 0.6 L_a: isolation valves listed in Table 4.4-1 subject to gas or nitrogen pressurization testing, air lock testing as specified in Specification 4.4.C.1, portions of the sensitive leakage rate test described in

Specification 4.4.B.1 which pertain to containment penetrations and double-gasketed seals.

b. The leakage rate into containment for the isolation valves sealed with the service water system shall not exceed 0.36 gpm per fan cooler.

c. The leakage rate for the Isolation Valve Seal Water System shall not exceed 14,700 cc/hr.

3. Containment isolation valves may be added to plant systems without prior license amendment to Table 4.4-1 provided that a revision to this table is included in a subsequent license amendment application.

E. CONTAINMENT MODIFICATIONS

Any major modification or replacement of components of the containment performed after the initial pre-operational leakage rate test shall be followed by either an integrated leakage rate test or a local leak detection test and shall meet the appropriate acceptance criteria of Specifications 4.4.A.2, 4.4.B.2, or 4.4.D.2. Modifications or replacements performed directly prior to the conduct of an integrated leakage rate test shall not require a separate test.

F. REPORT OF TEST RESULTS

A post-outage report shall be prepared presenting results of the previous cycle's Type B and Type C tests, and Type A, Type B, and Type C tests, if performed during that outage. The technical contents of the report are generally described in ANSI/ANS 56.8-1994, and will be available on-site for NRC review. The report shall also show that the applicable performance criteria are met and serves as a record that continuing performance is acceptable.

G. VISUAL INSPECTION

A detailed visual examination of the accessible interior and exterior surfaces of the containment structure and its components shall be performed at each Refueling Interval ~~(R##)~~ (R#) and prior to any integrated leak test to uncover any evidence of deterioration which may affect either the containment structural integrity or leak-tightness. The discovery of any significant deterioration shall be accompanied by corrective actions in accordance with acceptable procedures, non-destructive tests and inspections, and local testing where practical, prior to the conduct of any integrated leak test. Such repairs shall be

4.5 ENGINEERED SAFETY FEATURES

Applicability

Applies to testing of the Safety Injection System, the Containment Spray System, the Hydrogen Recombiner System, and the Air Filtration System.

Objective

To verify that the subject systems will respond promptly and perform their design functions, if required.

Specifications

A. SYSTEM TESTS

1. Safety Injection System

a. System tests shall be performed at each reactor Refueling Interval ~~(##).~~ (R#) With the Reactor Coolant System pressure less than or equal to 350 psig and temperature less than or equal to 350°F, a test safety injection signal will be applied to initiate operation of the system. The safety injection pumps are made inoperable for this test.

b. The test will be considered satisfactory if control board indication and visual observations indicate that all components have received the safety injection signal in the proper sequence and timing; that is, the appropriate pump breakers shall have opened and closed, and the appropriate valves shall have completed their travel.

c. Conduct a flow test of the high head safety injection system after any modification is made to either its piping and/or valve arrangement.

d. Verify that the mechanical stops on Valves 856 A, C, D and E are set at the position measured and recorded during the most recent ECCS operational flow test or flow tests performed in accordance with (c) above. This surveillance procedure shall be performed

following any maintenance on these valves or their associated motor operators and at a convenient outage if the position of the mechanical stops has not been verified in the preceding three months.

B. CONTAINMENT SPRAY SYSTEM

1. System tests shall be performed at each reactor Refueling Interval ~~(##)~~. (R#) The tests shall be performed with the isolation valves in the spray supply lines at the containment blocked closed. Operation of the system is initiated by tripping the normal actuation instrumentation.

2. The spray nozzles shall be tested for proper functioning at least every five years.

3. The test will be considered satisfactory if visual observations indicate all components have operated satisfactorily.

C. HYDROGEN RECOMBINER SYSTEM

1. Visual Inspection of both PARs at each refueling outage(#) shall be done to verify that there is no significant fouling by foreign materials.

2. A sample plate from each PAR shall be removed at each refueling outage and tested to verify response to a hydrogen mixture test gas.

D. CONTAINMENT FAN COOLER SYSTEM

Each fan cooler unit specified in Specification 3.3.B shall be demonstrated to be operable:

1. At least once monthly by initiating, from the control room, flow through the unit and verifying that the unit operates for at least 15 minutes.

2. At least once every Refueling Interval (#) by verifying a system flow rate at ambient conditions greater than or equal to 64,500 cfm.

4. At least once every Refueling Interval(#) by:

   a. verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches water gauge while operating the system at ambient conditions and at a flow rate of 2000 cfm ±10%.

   b. verifying that, on a Safety Injection Test Signal or a high radiation signal in the control room, the system automatically switches into a filtered intake mode of operation with flow through the HEPA filters and charcoal adsorber banks. ‡

   c. verifying that the system maintains the control room at positive pressure relative to the adjacent areas during system operation.

5. After each complete or partial replacement of an HEPA filter bank, by verifying that the HEPA filter banks remove greater than or equal to 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at ambient conditions and at a flow rate of 2000 cfm ±10%.

6. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the charcoal adsorbers remove greater than or equal to 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at ambient conditions and at a flow rate of 2000 cfm ±10%.

F. FUEL STORAGE BUILDING AIR FILTRATION SYSTEM

The fuel storage building air filtration system specified in Specification 3.8 shall be demonstrated operable:

1. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 15 minutes.

Thus, the allowable methyl iodide penetration, by system, is as follows:

TS Sec.	System Name	Filter Efficiency	UFSAR Reference	Allowable Methyl Iodide Penetration
4.5.E	Control Room Air Filtration System	90%	Sec. 14.3.6.5	5.0%
4.5.F	Fuel Storage Building Air Filtration System	85%	Table 14.2-2	7.5%
4.5.G	Post-Accident Containment Venting System	70%	Sec. 14.3.6.1.3	15.0%

While UFSAR Sections 14.3.6.1.3 and 14.3.6.5 provide filter efficiencies for methyl iodide, UFSAR Table 14.2-2 just provides a combined iodide (methyl iodide and elemental iodide) efficiency. Since the methyl iodide efficiency is lower than the combined iodide efficiency, the use of the combined iodide efficiency provides a more conservative limit for testing purposes.

References

(1) UFSAR Section 6.2
(2) UFSAR Section 6.4
(3) NRC Generic Letter 99-02, dated June 3, 1999
(4) UFSAR Table 14.2-2
(5) UFSAR Section 14.3.6.1.3
(6) UFSAR Section 14.3.6.5

~~1. In this instance Refueling Interval is defined by R##.~~

4.6 EMERGENCY POWER SYSTEM PERIODIC TESTS

Applicability

Applies to periodic testing and surveillance requirements of the emergency power systems.

Objective

To verify that emergency power systems will respond promptly and properly when required.

Specifications

The following tests and surveillances shall be performed as stated:

A. DIESEL GENERATORS

1. Each month, each diesel generator shall be manually started and synchronized to its bus or buses and shall be allowed to assume the normal bus load.

2. At each Refueling Interval (R##), each diesel generator shall be manually started, synchronized and loaded up to its continuous (nameplate) and short term ratings.

3. At each Refueling Interval ~~(R##)~~ (R#), to assure that each diesel generator will automatically start and assume the required load within 60 seconds after the initial start signal, the following shall be accomplished: by simulating a loss of all normal AC station service power supplies and simultaneously simulating a Safety Injection signal, observations shall verify automatic start of each diesel generator, required bus load shedding and restoration to operation of particular vital equipment. To prevent Safety Injection flow to the core, certain safeguards valves will be closed and made inoperable.

   The above tests will be considered satisfactory if the required minimum safeguards equipment operated as designed.

B. DIESEL FUEL TANKS

A minimum oil storage of 48,000 gallons will be maintained for the station at all times.

C. STATION BATTERIES (NOS. 21, 22, 23, & 24)

1. Every month, the voltage of each cell, the specific gravity and temperature of a pilot cell in each battery and each battery voltage shall be measured and recorded.

2. Every 3 months, each battery shall be subjected to a 24-hour equalizing charge, and the specific gravity of each cell, the temperature reading of every fifth cell, the height of electrolyte, and the amount of water added shall be measured and recorded.

3. Each time data is recorded, new data shall be compared with old to detect signs of abuse or deterioration.

4. At least once every Refueling Interval ~~(R##)~~ (R#) each battery shall be subjected to a load test and a visual inspection of the plates.

D. GAS TURBINE GENERATORS

1. At monthly intervals, at least one gas turbine generator shall be started and synchronized to the power distribution system for a minimum of thirty (30) minutes with a minimum electrical output of 750 kW.

Table 4.10-2

Radioactive Liquid Effluent Monitoring Instrumentation Surveillance Requirements

Instrument	Channel Check	Source Check	Channel Calibration	Channel Functional Test
1. GROSS RADIOACTIVITY MONITORS PROVIDING ALARM AND AUTOMATIC TERMINATION OF RELEASE				
a. Liquid Radwaste Effluent Line	D*	P	R(3)#	Q(1)(5)
b. Steam Generator Blowdown Effluent Line	D*	M	R(3)#	Q(1)(5)
2. GROSS BETA OR GAMMA RADIOACTIVITY MONITORS PROVIDING ALARM BUT NOT PROVIDING AUTOMATIC TERMINATION OF RELEASE				
a. Service Water System Effluent Line	D*	M	R(3)#	Q(2)(5)
b. Unit 1 Secondary Boiler Blowdown Effluent Line	D*	M	R(3)#	Q(2) (5)
3. FLOW RATE MEASUREMENTS DEVICES				
a. Liquid Radwaste Effluent Line	D(4)	N.A.	~~R~~ R#	Q
b. Steam Generator Blowdown Effluent Line	D(4)	N.A.	~~R~~ R#	Q
4. TANK LEVEL INDICATING DEVICES***				
a. 13 Waste Distillate Storage Tank	D**	N.A.	~~R~~ R#	Q
b. 14 Waste Distillate Storage Tank	D**	N.A.	~~R~~ R#	Q
c. Primary Water Storage Tank	D**	N.A.	~~R~~ R#	Q
d. Refueling Water Storage Tank	D**	N.A.	Q	Q

Table 4.10-4

Radioactive Gaseous Effluent Monitoring Instrumentation Surveillance Requirements

	Instrument	Channel Check	Source Check	Channel Calibration	Channel Functional Test	Modes In Which Surveillance Required
1.	WASTE GAS HOLDUP SYSTEM					
a.	Noble Gas Activity Providing Alarm	D	M	R[(3)]#	Q[(2)(6)]	*
2.	WASTE GAS HOLDUP SYSTEM EXPLOSIVE GAS MONITORING SYSTEM					
a.	Hydrogen Monitor	D	N.A.	Q[(4)]	M	**
b.	Hydrogen or Oxygen Monitor	D	N.A.	Q[(5)]	M	**
3.	CONDENSER EVACUATION SYSTEM					
a.	Noble Gas Activity	D	M	R[(3)]#	Q[(2) (6)]	*
4.	PLANT VENT					
a.	Noble Gas Activity Monitor	D	M	R[(3)#]	Q[(1) (6)]	*
b.	Iodine Sampler	W	N.A.	N.A.	N.A.	*
c.	Particulate Sampler	W	N.A.	N.A.	N.A.	*
d.	Flow Rate Monitor	D	N.A.	~~R~~ R#	N.A.	*
e.	Sampler Flow Rate Monitor	D	N.A.	R#	N.A.	*
5.	STACK VENT					
a.	Noble Gas Activity Monitor	D	P	~~R[(3~~ R[(3]#	Q[(2) (6)]	*
b.	Iodine Sampler	W	N.A.	N.A.	N.A.	*
c.	Particulate Sampler	W	N.A.	N.A.	N.A.	*
d.	Flow Rate Monitor	D	N.A.	~~R~~ R#	N.A.	*
e.	Sampler Flow Rate Monitor	D	N.A.	R#	N.A.	*

Note 3: If the number of unacceptable snubbers is equal to or less than the number in Column A, the next inspection interval may be twice the previous interval but not greater than 48 months ~~except for the Refueling Interval (R##) defined in Technical Specification Table 1-1~~.

Note 4: If the number of unacceptable snubbers is equal to or less than the number of Column B, but greater than the number in Column A, the next inspection interval shall be the same as the previous interval.

Note 5: If the number of unacceptable snubbers is equal to or greater than the number in Column C, the next inspection interval shall be two-thirds of the previous interval. However, if the number of unacceptable snubbers is less than the number in Column C, but greater than the number in Column B, the next interval shall be reduced proportionally by interpolation, that is, the previous interval shall be reduced by a factor that is one-third of the ratio of the difference between the number of unacceptable snubbers found during the previous interval and the number in Column B to the difference in the numbers in Column B and C.

Note 6: The provisions of Specification 4.0.1 are applicable for all inspection intervals.

Snubbers are categorized as accessible or inaccessible during reactor operation. These two groups may be inspected independently according to the above schedule except as noted below.

~~If snubber inoperability is identified due to excessive fluid leakage from the external tubing associated with the twenty-four snubbers installed at the steam generators, this group of snubbers may be inspected independently according to the above schedule.~~

Visual inspection shall verify that (1) there is no visual indication of damage or impaired operability, (2) attachments to the foundation or supporting structure are secure, and (3) in those locations where snubber movement can be manually induced without disconnecting the snubber, the snubber has freedom of movement and is not frozen. Snubbers which appear

C. FUNCTIONAL TEST ACCEPTANCE CRITERIA

The snubber functional test shall verify that:

1. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.

2. Snubber bleed, or release rate, where required, is within the specified range in compression or tension. For snubbers specifically required to not displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.

D. RECORD OF SNUBBER SERVICE LIFE

A record of the service life of each snubber, the date at which the designated service life commences and the installation and maintenance records on which the designated service life is based shall be maintained as required by Specification 6.10.2.n. Concurrently with the first visual inspection and at least once during every Refueling Interval (~~R##~~ R#), the installation and maintenance records for each snubber shall be reviewed to verify that the indicated service life has not been exceeded or will not be exceeded prior to the next scheduled snubber service life review. If the indicated service life will be exceeded prior to the next scheduled snubber service life review, the snubber service life shall be re-evaluated or the snubber shall be replaced or reconditioned so as to extend its service life beyond the date of the next scheduled service life review. This re-evaluation, replacement, or reconditioning shall be indicated in the records.

ATTACHMENT 3 TO NL 01-111

EVALUATIONS FOR SPECIFIC DEFERRED SURVEILLANCE REQUIREMENTS

ENTERGY NUCLEAR OPERATIONS, INC
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247

TABLE OF CONTENTS

TS SECTION	TEST NO. & TITLE	PAGE NO.
Table 4.1-1, Item 17	PC-R13-1 – VCT Level Transmitters PC-R13 – VCT Level	2
Table 4.1-1	Description of the Instrument History Performance Analysis (IHPA) Methodology	5
4.4.H	PT-R27A, 885A,885B& 741A Leak Rate Determination	6
4.4.H and Operating License Condition 2.L	PI-R4, Operating Pressure Inspection of SI Piping and Components	6
4.6.A.2	PT-R84A, 21 EDG 24 Hour Load Test PT-R84B, 22 EDG 24 Hour Load Test PT-R84C, 23 EDG 24 Hour Load Test	9
4.12	PT-R34, Shock Suppressor Initial Functional Test PT-R34A, Steam Generator Shock Suppressor Initial Functional Test	12

Surveillance Test:	PC-R13-1 – Volume Control Tank Level Transmitters PC-R13 – Volume Control Tank Level
TS Section:	Table 4.1-1, Item 17, Volume Control Tank Level
Date Past Due – Maximum TS Allowable Extension	PC-R13-1, 11/10/02 PC-R13, 11/12/02

Requested Additional Extension: < 1 month

DESCRIPTION OF CHANGE

This application for amendment to the IP2 TS proposes to revise TS Table 4.1-1 Item 17 to allow a one-time extension of the surveillance interval for the calibration/test of the volume control tank level channels due in early November 2002. If approved, this surveillance will be completed during an outage to begin no later than November 19, 2002, several days later than the TS maximum allowable surveillance period extension. Based on the above dates, the maximum length of the extension would be nine days.

TS Table 4.1-1 Item 17 requires a calibration at each refueling.

EVALUATION OF CHANGE

The Chemical and Volume Control system (CVCS) Volume Control Tank (VCT) collects the reactor coolant surge volume resulting from a change from zero power to full power that is not accommodated by the pressurizer. It also receives the excess coolant release caused by the deadband in the reactor coolant temperature instrumentation. The VCT also acts as a head tank for the charging pumps and a reservoir for the leakage from the Reactor Coolant Pump (RCP) controlled leakage seal. At a preset low-level in the VCT, the automatic makeup control action compensates for minor leakage of reactor coolant without causing significant changes in the coolant boron concentration. At a preset high-level in the VCT, the automatic makeup control action is ceased. If the level in the VCT continues to decrease to a preset low-low level, the VCT outlet is isolated and the refueling water storage tank is aligned for RCS makeup.

In 1994 (Ref 1), the surveillance interval of the VCT level channel was extended in accordance with Generic Letter 91-04 to 24 months (plus 25%). In 1999, the surveillance interval was extended on a one-time basis to 37 months. In each case, as part of the process to extend the surveillance frequency, all completed calibration procedures were reviewed. This included mid-cycle outage calibrations that may have resulted due to channel failures or modifications. The "as found/as left" data from the completed calibration procedures was statistically evaluated to determine a projected drift with a 95/75 probability/confidence level. This drift value was used as input to determine the Channel Statistical Allowance (CSA). Included in the evaluation along with instrument drift was the determination of all other channel uncertainties including sensor,

rack, measurement and test equipment (M&TE), and process affects for normal and applicable adverse environmental conditions.

The CSA for the VCT Level channels was determined in 1992 using Westinghouse methodology for evaluating channel uncertainties. Each uncertainty term was determined according to the instrument characteristics/specifications with specific calculations for process effects. An identical process was used for a one-time extension in 1999. For this current one-time extension to 31 months, a separate computer program, the Instrument History Performance Analysis (IHPA - See the description of this methodology on Attachment 3 page 8.) by CRS Engineering, was used to statistically evaluate data from the 2000 RFO and to project a drift for the extended cycle on a 95/95 basis. The projected drift from the most current (IHPA) evaluation (including 2000 RFO data) was compared with the drift projected in 1992 for 24 months (plus 25%). This comparison indicated that the 1992 drift value remained bounding.

To support an extended surveillance interval without interim calibration, it must be demonstrated that the projected drift is accommodated by the channel uncertainty calculations for the VCT level transmitters. This is demonstrated by performing an as-left/as-found evaluation of the surveillance data taken from the executed test procedures for the affected equipment. This data evaluation included the surveillance intervals through the 2000 RFO as well as those prior to 1991 (18-month fuel cycles). The combined data set was evaluated using the IHPA drift methodology to determine a projected 31-month drift. In all cases the projected IHPA 31 month drift was bounded by the pre-existing (Westinghouse methodology) 30 month drift (24 months + 25%). Therefore, it can be concluded that the CSA previously determined remains valid for a 31 month cycle.

This test cannot be performed on-line due to the potential for transients from Reactor Coolant System volume perturbations. In addition, this test requires the charging pumps to be shutdown. Therefore, there is increased risk to the RCP seals as well as the loss of the normal boric acid addition path. During the planned mid-cycle outage (MCO), there are no plans to shutdown the charging pumps. This simplifies shutdown operations, maximizes the number of boric acid addition paths available, and reduces the risk to the RCP seals. This test was therefore not included in the scope of the planned MCO.

NO SIGNIFICANT HAZARDS EVALUATION

ENO has determined that this proposed Technical Specification change does not involve a significant hazards consideration as defined by 10 CFR 50.92(c).

(1) **Does the proposed license amendment involve a significant increase in the probability or consequences of an accident previously evaluated?**

A statistical analysis of channel uncertainty for a proposed 31 month operating cycle has been performed. It confirms that the channel drift for the proposed 31 month interval is bounded by the existing drift allowance used in the current uncertainty calculations.

Therefore, there is no expected decrease in reliability for the VCT level channel for the proposed 31 month operating cycle. Since there is no expected decrease in the reliability of the VCT level channels, the design safety functions of the VCT are not affected.

Therefore, the proposed license amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

(2) **Does the proposed license amendment create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change does not involve the addition of any new or different type of equipment, nor does it involve operating equipment required for safe operation of the facility in a manner that is different from that addressed in the Updated Final Safety Analysis Report (UFSAR). The proposed change in the surveillance interval has been evaluated to have a negligible effect on the reliability of the existing instruments.

Therefore, the proposed license amendment does not create the possibility of a new or different kind of accident from any previously evaluated.

(3) **Does the proposed amendment involve a significant reduction in a margin of safety?**

The proposed change in surveillance interval resulting from an increased operating cycle will not result in a channel statistical allowance that impacts any TS limit or any UFSAR requirement. Protective functions will continue to occur so that safety analysis limits are not exceeded.

Based on past rest results, the one-time extension of nine days does not involve a significant reduction in a margin of safety.

REFERENCES

1. NRC letter to Con Edison, titled "Issuance of Amendment for Indian Point Nuclear Generating Unit No. 2 (TAC NOS. M88861)," dated November 16, 1994

DESCRIPTION OF THE INSTRUMENT HISTORY PERFORMANCE ANALYSIS (IHPA) METHODOLOGY

The Instrument History Performance Analysis (IHPA) Program is a software application developed by CRS Engineering, Inc. for use in conjunction with Microsoft Excel to provide a means to perform instrument drift analysis accurately and efficiently. "As left" and "As found" data from a typical instrument surveillance calibration is loaded into the computer. The computer program evaluates the data and rejects those data points (outliers) that are outside of the expected statistical range as questionable data points. Separately, a search of Work Orders is done to ascertain if an outside influence (maintenance) could have perturbed the data. A linear regression analysis is performed for each data point. Included in these analyses are intercepts and slope values of a trend line for time dependent data, estimates of the confidence intervals about the trend line, and estimates of the prediction intervals (NUREG-1475) about the trend line. The data set is modified by subtracting any trend line biasing. Values of the correlation factor are generated and normality tests are performed on the remaining data. Prediction intervals about the trend line are performed.

A normality test is applied to verify a normal distribution. If the data set is equal to or less than 50, a "W" test (ANSI N 15.15-1974) is applied. If the data set is equal to or larger than 50 data points, a "D-Prime (D')" test (ANSI N 15.15-1974) is performed. One sided or two sided K values are produced as appropriate.

Finally, histograms of the data for each of the test data points and scatter plots for each test data point are produced.

Prior to use of the IHPA program, IP2 utilized the services of Westinghouse in analyzing drift data for the purpose of extending the operating cycle to 24 months in the 1992-1994 time frame and for the one-time extension of the operating cycle to 37 months in 1999. The data used in the Westinghouse evaluations has been loaded into the IHPA program, unless excluded because of instrument failures after 1993.

In License Amendment 91 (Accession No. ML003686855) for Nine Mile Point Unit 2 (Docket No. 50-410), the NRC approved the relaxation of the fuel cycle from 18 to 24 months based on a licensee analysis using the IHPA program.

Surveillance Test:	PT-R27A, 885A, 885B& 741A Leak Rate Determination PI-R4, Operating Pressure Inspection of SI Piping and Components
TS Sections:	4.4.H, Residual Heat Removal System Facility Operating License Condition 2.L
Date Past Due - Maximum Allowable TS Extension:	PI-R4 - November 11, 2002 PT-R27A - October 23, 2002
Requested Additional Extension:	PI-R4 - < 1 month PT-R27A - < 1 month

DESCRIPTION OF CHANGE

This application for amendment to the IP2 TS proposes to revise Section 4.4.H to allow a one-time extension of the surveillance interval for the functional tests for the leak rate determination for the specified piping and components due in October and November 2002. If approved, these surveillance tests will be completed during the next RFO that will commence no later than November 19, 2002. In addition, Facility Operating License Condition 2.L will also require an extension because test PI-R4 is credited for Section 2.L in addition to the TS 4.4.H. Based on the above dates, the maximum length of the extension would be less than one month. Without this one-time extension, an outage will be necessary to perform the required surveillance tests.

TS 4.4.H.1.a.(2) specifies the requirements for performance of a hydrostatic test of a selected portion of the Residual Heat Removal (RHR) piping system. The RHR piping from the pump suctions to the containment isolation valves on the line from the containment sump is hydrostatically tested at no less than 100 psig. PT-R27A performs the hydrostatic test between valves 885A and 885B, checks for external leakage from the piping and valves 885A and 885B, and tests seat leakage on valves 885A, 885B and 741A. The seat leakage testing requirements will continue to meet test frequency requirements and do not require a surveillance interval extension analysis. A portion of 4.4.H.1.a (2) is met by performance of test PT-R12 that has been completed and does not require extension. The only portion of PT-R27A requiring the extension is the external leakage determination between containment isolation valves 885A and 885B.

PI-R4 is another surveillance test that is performed to check for external leakage in support of TS 4.4.H. The quantities of leakage from PT-R27A (external), PI-R4, and several other procedures are summed to ensure that leakage outside containment remains less than 2 gallons per hour as specified in 4.4.H.2 at the frequency specified in 4.4.H.4.

In addition to the cited TS, performance of PI-R4 is part of the required battery of tests associated with the Facility Operating License Condition 2.L. This License Condition specifies that a

program be implemented to track and limit external leakage from systems outside the vapor containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practicable levels. Several of the Engineered Safety Features and auxiliary systems located outside containment will or may be required to function during a serious transient or accident. The overall program consists of several separate but complementary elements that collectively assure compliance with the license requirement. Currently, these surveillances are performed at a frequency of 24 months. The proposed change is a one-time extension of less than one month.

Therefore, both the frequency specifications at TS 4.4.H.4 and at Facility Operating License Condition 2.L require the less than one-month extension.

EVALUATION OF CHANGE

These tests ensure the integrity of systems outside the containment that may be pressurized during accidents and transients. The tests limit the potential leakage from these systems so that the offsite exposure impact from potential leakage will be insignificant relative to the offsite dose calculated for leakage directly from the containment in a design basis accident.

The test data for PT-R27A from 1986 through 2000 (8 tests) were reviewed. For each of the eight refueling interval tests reviewed the measured external leakage from the piping system was 0.00 gph.

The test data for PI-R4 was evaluated for the last two cycles. The contribution of leakage from this test was 0.00 cc/min for the last cycle and 9.0 cc/min for the previous cycle. Thus, the integrity of the piping has been adequately demonstrated.

The systems are designed, constructed, and maintained to standards that minimize the possibility of developing leaks. The integrity of the sections of piping discussed herein has been adequately demonstrated and is of a nature where a less than one month schedular extension will have no expected affect on the test results.

These tests are only performed during an RFO due to the adverse impact that performance of the test has on the operability of the tested system. The capability to transition from a test lineup to a post-accident operating lineup is more difficult and time consuming than the transition from a standby to a post-accident operating lineup. In addition while there is an almost imperceptible chance of test failure, the test has a risk of unexpected leakage past valves into the containment. This risk of leakage is low but any leakage would be into high radiation areas of the containment into a sump that is required to be maintained empty during plant operation. Therefore, the consequences of test failure due to valve leakby would be high due to the difficulty in mitigating the effects of any leakage into the containment.

These tests cannot reasonably be performed during a short outage. Performing these tests requires the Residual Heat Removal system to be out of service. During a short outage the

residual heat load will be high requiring the availability of RHR to ensure the maintenance of desired plant conditions. In addition, use of the RHR system is desirable early in an outage to aid in the cleanup of the expected shutdown crud burst. This test was therefore not included in the scope of the planned MCO.

NO SIGNIFICANT HAZARDS EVALUATION

ENO has determined that this proposed Technical Specification change does not involve a significant hazards consideration as defined by 10CFR50.92(c).

(1) Does the proposed license amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Since the past test data supports the integrity of the system and an extended standby period is not expected to affect any potential leak path, there is a reasonable expectation that the RHR and Safety Injection systems will continue to perform their intended safety functions without excessive leakage. It is concluded that a one-time extension of less than one month for the leakage test surveillance intervals will have minimal impact on the system reliability.

Therefore, the proposed license amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

(2) Does the proposed license amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve the addition of any new or different type of equipment. Nor does it involve operating equipment required for safe operation of the facility in a manner that is different from that addressed in the UFSAR.

Therefore, the proposed license amendment does not create the possibility of a new or different kind of accident from any previously evaluated.

(3) Does the proposed amendment involve a significant reduction in a margin of safety?

There is minimal risk that a surveillance interval extension of less than one month will increase leakage in the piping systems under review beyond the TS limits or that the system performance will be influenced. Past test data indicate that there was no impact on the margin imposed by the TS.

Therefore, the proposed license amendment does not involve a significant reduction in the margin of safety.

Surveillance Test:	PT-R84A, 21 EDG 24 Hour Load Test PT-R84A-1, 21 EDG Alternate 24 Hour Load Test PT-R84B, 22 EDG 24 Hour Load Test PT-R84B-1, 22 EDG Alternate 24 Hour Load Test PT-R84C, 23 EDG 24 Hour Load Test PT-R84C-1, 23 EDG Alternate 24 Hour Load Test
TS section:	4.6.A.2, Diesel Generators
Dates Past Due - Maximum Allowable TS Extension:	PT-R84A (or PT-R84A-1) - October 10, 2002 PT-R84B (or PT-R84B-1) - November 7, 2002 PT-R84C (or PT-R84C-1) - November 15, 2002
Requested Additional Extension:	PT-R84A (or PT-R84A-1) – < 2 months PT-R84B (or PT-R84B-1) – < 1 month PT-R84C (or PT-R84C-1) – < 1 month

DESCRIPTION OF CHANGE

This application for amendment to the IP2 TS proposes to revise Section 4.6.A.2 to allow a one-time extension of the surveillance interval for the functional test of the Emergency Diesel Generators (EDG) due in October and November, 2002. If approved, this surveillance will be completed during the next RFO that will commence no later than November 19, 2002. Based on the above dates, the maximum length of the extension would be less than two months. Without this one-time extension, an outage will be necessary to perform the required surveillance.

TS 4.6.A.2 requires that, at each Refueling Interval, each diesel generator shall be manually started, synchronized, and loaded to its continuous (nameplate) and short term ratings.

EVALUATION OF CHANGE

The three EDGs are sources of emergency power. Each EDG is capable of 1750 kW (continuous), 2100 kW for 2 hours in any 24 hour period, and 2300 kW for ½ hour. The EDGs are capable of starting and obtaining normal speed in less than 10 seconds.

An evaluation of the results of all the EDG load test surveillances for the last eight years was performed. The data from the tests was reviewed to determine if each EDG was capable of meeting the continuous (nameplate) and short-term ratings. With the two exceptions discussed below, all other tests proved satisfactory.

1. Evaluation of 1997 Test Failure

   On June 24, 1997, EDG 23 failed to meet the load requirements for the specified period of time. EDG 23 was being supplied from the non-essential service water header and a

concurrent plant valve line up was being conducted on the service water system. The EDG had been running satisfactorily for 22.5 hours. A valve in the line supplying EDG cooling water was inadvertently closed which necessitated premature load reduction to prevent damage to the EDG. The inadvertent error was corrected and the EDG was scheduled for retest.

On June 26, 1997, EDG 23 tripped prior to meeting the load requirements for the specified period of time. The EDG had been running satisfactorily for 16 hours. The operator was swapping lube oil filters. Air entrained in the oncoming filter caused lube oil pressure to momentarily dip below the low lube oil pressure trip set point and the EDG tripped off line. A procedure change to SOP 27.3.1 was initiated to prevent recurrence. This change requires venting the oncoming strainer until it is free of air prior to placing it into active service. This problem was not a problem related to EDG performance.

Full load testing of EDG 23 was completed successfully on June 28, 1997.

2. Evaluation of 2000 Test Failure

   EDG 22 was tested on May 9, 2000 and was not able to obtain the 2300 kW output required for the test. A maximum value of 2275 kW output was obtainable and all other required outputs were obtained. The EDG was shutdown and analysis was performed. It was determined that recently performed maintenance activities resulted in a limitation for the range of movement of the fuel control lever arm. The condition was corrected and EDG 22 was subsequently tested with satisfactory results.

IP2 is currently evaluating whether the tests can be performed on line. However, these EDG tests have historically not been performed online because the tests require an abnormal electrical system lineup. The complex lineup, the length of the tests, and other operating restrictions also make it impractical to perform all the tests during the planned MCO.

The monthly EDG test, PT-M21, which is normally performed with the plant at power, tests the EDGs' ability to reach required speed and voltage in a specified time and loads the EDGs in accordance with TS requirements.

NO SIGNIFICANT HAZARDS EVALUATION

ENO has determined that this proposed Technical Specification change does not involve a significant hazards consideration as defined by 10CFR50.92(c).

(1) Does the proposed license amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

The identified anomalies with valve and filter operation for EDG 23 were evaluated and corrected and are not indicative of any inability of the machine to meet performance

requirements. The anomalous adjustment affecting movement of the fuel control lever arm for EDG 22 was properly evaluated and eliminated as evidenced by subsequent successful testing. Therefore, the historical data together with the positive verification of the adequacy of corrective actions for previous test failures demonstrate that the EDGs have met the required performance criteria. Therefore the ability of the EDGs to mitigate accidents is not affected by this proposed change.

Failure of an EDG cannot, of itself, initiate an accident.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

(2) **Does the proposed license amendment create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed change does not involve the addition of any new or different type of equipment, nor does it involve operating equipment required for safe operation of the facility in a manner that is different from that addressed in the UFSAR. Also, the increased surveillance interval (one-time only) will not adversely affect the reliability of the EDGs.

Therefore, the proposed license amendment does not create the possibility of a new or different kind of accident from any previously evaluated.

(3) **Does the proposed amendment involve a significant reduction in a margin of safety?**

The functional test history indicates the functional test failures were the result of actions independent of actual EDG load performance. Apart from these anomalous actions, the record does not indicate a potential for failure to meet performance criteria. In all cases, the functional test failures were thoroughly analyzed and appropriate actions were taken to prevent recurrence. Subsequent testing resulted in the EDG meeting its design requirements.

There is no reduction of margin indicated by the surveillance testing. The proposed change for a one-time extension of the test interval does not adversely affect the performance of any safety related system, component or structure and does not result in increased severity of any of the accidents considered in the UFSAR. Surveillance test results indicate no trend toward margin reduction.

Therefore, the proposed license amendment does not involve a significant reduction in a margin of safety.

Surveillance Tests:	PT-R34, Shock Suppressor Initial Functional Test PT-R34A, Steam Generator Shock Suppressor Initial Functional Test
TS section:	4.12, Shock Suppressors (Snubbers)
Dates Past due - Maximum Allowable TS Extension:	PT-R34 - October 20, 2002 PT-R34A - October 26, 2002
Requested Additional Extension:	PT-R34 - < 1 month PT-R34A - < 1 month

DESCRIPTION OF CHANGE

This application for amendment to the IP2 TS proposes to revise Section 4.12 to allow a one-time extension of the surveillance interval for the functional test of the Shock Suppressors (Snubbers) past due in October 2002. If approved this surveillance will be completed during the next RFO that will commence no later than November 19, 2002. Based on the above dates, the maximum length of the extension would be less than one month. Without this one-time extension, an outage will be necessary to perform the required surveillance.

TS 4.12, Shock Suppressors (Snubbers), specifies the testing requirements for the hydraulic snubbers identified in TS 3.12, Shock Suppressors (Snubbers). A functional test of a representative sample of 10% of the safety related hydraulic snubbers is performed on a refueling interval basis.

EVALUATION OF CHANGE

Snubbers are required to prevent unrestrained pipe motion under dynamic loads as might occur during an earthquake or severe transient while allowing normal thermal motion during startup, normal operating conditions, and shutdown. The accident analysis does not specifically take credit for the operation of the snubbers in the event an accident or transient. Systems responding to various events have their piping or components protected by snubbers and therefore the snubbers are required to operate to prevent damage to the equipment. The protection afforded by snubbers to the piping and components is required during low probability events. As a result, TS 3.12 allows for of one or more snubbers to be inoperable for a period of 72 hours.

Testing Requirements

Many snubber functional tests were typically performed during cold shutdown conditions. While some snubbers can be tested during plant operation, the possibility of performing all the required snubber inspections and tests online is precluded by concerns for accessibility, personal safety, potential interaction with safety related equipment, lack of hot settings, and the potential for

significant personnel dose. During a short outage, the requirements for temporary lighting, temporary power, temporary shielding, and scaffolding make the mobilization of a large workforce necessary at a time when radiation levels are high due to the shutdown crud burst. Snubber testing was therefore not included in the scope of the planned MCO.

Functional testing is performed on a representative sample (10%) of the snubbers. If any one of the snubbers removed for testing fails the acceptance criteria, the TS requires that an additional 10% sample must be removed and tested. This additional testing will continue until no failures are found or until all snubbers of the same type have been functionally tested.

Snubbers scheduled for testing (initial 10% sample population) during the next functional test cycle include 16 snubbers from the vapor containment, six from the auxiliary feedwater building, and one from the primary auxiliary building. As discussed below, one additional steam generator snubber will be removed for testing in the 2002 RFO due to functional test failures that occurred during the 2000 RFO. Removal of snubbers from systems located in the vapor containment creates risk to personnel and equipment and in several cases requires the erection of scaffolding over safety related equipment in high radiation areas. Similarly, removal of snubbers from the auxiliary feedwater and primary auxiliary building requires the use of ladders or the construction of scaffolding over safety related equipment. Removal of all the required snubbers during operation to perform functional testing thus presents an unacceptable level of risk to personnel and the plant.

Test History

Functional Testing

A review of the results of functional testing over an eleven-year period (1989 through 2000) was performed. Over this period there were six snubbers that failed their functional test. One snubber in 1989, two in 1993, and three steam generator snubbers in 2000 did not meet the acceptance criteria established in the test procedure.

1. Evaluation of the 1989 Failure

   The 1989 failure was due to a failure of the snubber to perform in the "lock up" mode. Engineering review of the results of the test concluded no adverse stress condition was imposed on the system during the operating cycles. An analysis was performed to determine the consequences of a seismic event with the snubber failing to lock up and it was determined that the potential failure did not adversely affect the supported piping system. As a result of the test failure in accordance with the TS requirements, an additional sample of 10% was selected for functional testing. There were no functional test failures in the second sample group.

2. Evaluation of the 1993 Failures

The two failures occurring in 1993 had different analyzed causes. One snubber indicated a high locking velocity in the tension direction. The snubber bleed rate was too high and the fluid level indicator moved erratically. No cause was determined for the leakage of the fitting. The fluid reservoir was filled with oil and the snubber met the functional test criteria.

The second snubber failed the testing due to an inconsistent but measurable locking velocity. Drag force exceeded the allowable and the compression bleed rate exceeded the capability of the test machine. There was no apparent reason for the snubber's degraded condition as observed during the evaluation. The installed location for the snubber was inspected to determine if any installation problem had affected the snubber performance. It was observed that, when the snubber was removed for testing, the original rod eye was unthreaded from the piston and left in place. It was concluded that physical interferences would have resulted in a moment at the rod end. This would have increased the bearing force of the piston against the cylinder wall, thereby increasing the potential for galling and wear.

An engineering analysis of both functional test failures was performed. The analysis concluded that there was no impact on the supported system and the system had no loss of operability due to the inoperable snubbers.

The TS requires that a snubber that fails the previous test be retested during the next test period. Both snubbers were retested during the 1995 RFO and successfully passed the functional test.

3. Evaluation of the 2000 Failures

During the 2000 RFO, three steam generator support structure snubbers failed the functional test in compression bleed. The failure condition was analyzed and it was determined that the compression bleed rate was not an operability concern and the snubber could perform its safety function. It was also concluded that the condition had no impact on the steam generator support structure.

The two additional snubbers made by the manufacturer of the failed snubbers were tested and one of the two also failed the functional test on compression bleed rate. The snubbers were replaced with recently rebuilt and tested snubbers. The replacement snubbers were not from the same manufacturer as the failed snubbers. The remaining steam generator snubbers are not from the same manufacturer as the failed snubbers.

The TS requires that snubbers that fail the previous test be retested during the next test period. The steam generator snubbers installed in the position of the failed snubbers, in addition to the required 10% test sample, will be tested during the 2002 RFO.

During the 1997 RFO while inspecting a steam generator snubber that was selected to be removed for functional testing, an observation of an adjacent steam generator snubber indicated an anomalous condition that warranted investigation. As a result of the observation and subsequent inspections of other steam generator snubbers, a comprehensive engineering review and analysis, including testing of snubber parts, was conducted on three of the steam generator snubbers that exhibited anomalous conditions was conducted. The analysis concluded that, although it was not possible to determine the root cause of the damage to the three snubbers, it was possible to draw an overall conclusion and a conclusion regarding specific as-found snubber issues. The results of the engineering analysis concluded that the bending of the pins was most likely caused by thermal growth loading applied to a locked up snubber during RCS heatup but that the reason for the snubber lock up was not known. It was concluded that the steam generators and the structural members of the support frame were not impacted and the snubbers were capable of meeting their safety function in the as-found condition. There was no engineering data or visual indication that suggested that the degraded condition was time dependent. During plant startup, the steam generator snubbers were instrumented at strategic locations to evaluate the loads during RCS heat up period. All the snubbers operated in an acceptable manner during the heat up. None of the snubbers or structural frames experienced loads that were indicative of the as-found snubber conditions.

NO SIGNIFICANT HAZARDS EVALUATION

ENO has determined that this proposed Technical Specification change does not involve a significant hazards consideration as defined by 10CFR50.92(c).

(1) **Does the proposed license amendment involve a significant increase in the probability or consequences of an accident previously evaluated?**

The TS functional testing program requires a sampling program that provides a 95% confidence level that 90-100% of the snubbers operate within acceptance limits. For each snubber failing the functional test an additional sample lot must be selected and tested to assure that the required confidence level is maintained. The past functional test history with very few functional test failures provides assurance that an extension in the surveillance will not result in increased snubber failures. In all cases, the functional test failures were thoroughly analyzed and appropriate action was taken to prevent recurrence. Subsequent testing resulted in all snubbers meeting their design requirements.

Therefore, the proposed license amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

(2) Does the proposed license amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed license amendment does not create the possibility of a new or different kind of accident from any previously evaluated. The proposed change does not involve the addition of any new or different type of equipment, nor does it involve operating equipment required for safe operation of the facility in a manner that is different from that addressed in the UFSAR. Also, the increased surveillance interval (one-time only) will not adversely affect the snubbers.

(3) Does the proposed amendment involve a significant reduction in a margin of safety?

The objective of the functional test is to provide a 95% confidence level that 90-100% of the snubbers operate within the specified acceptance limits. The review of past test history indicates that this objective was met at the time of the testing. There are no identified trends that would suggest that the same success rate would not be maintained over the requested extension period. The proposed license amendment does not involve a significant reduction in a margin of safety. The proposed change for a one-time extension of the test interval does not adversely affect the performance of any safety related system, component or structure and does not result in increased severity of any of the accidents considered in the UFSAR.

Therefore, the one-time extension of less than one month for the functional tests does not involve a significant reduction in a margin of safety.