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NL-10-109

October 12, 2010  
U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Station O-P1-17  
Washington, DC 20555-0001

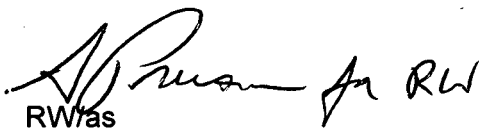
Subject: **10 CFR 50.59(d) Report for Indian Point Unit Nos. 1 and 2**  
Indian Point, Unit Nos. 1 & 2  
Docket Nos. 50-003 & 50-247  
License Nos. DPR-5 & DPR-26

Dear Sir or Madam:

Entergy Nuclear Operations, Inc. (Entergy), pursuant to 10 CFR 50.59 (d)(2), hereby transmits a 50.59 report listing and summary report of the changes, tests and experiments implemented at Indian Point Units 1 and 2 between April 20, 2008, and April 12, 2010 or utilized in support of the UFSAR update. Attachment 1 provides a report listing and Attachment 2 provides a summary of the 50.59 evaluations changes in the facilities, changes in procedures, and tests and experiments implemented pursuant to 10 CFR 50.59.

There are no new commitments made by Entergy contained in this letter. If you have any questions, please contact me at (914) 734-6710.

Very truly yours,

  
RW/as

Attachment 1 – 50.59 Report Listing  
Attachment 2 - 50.59 Summary of Changes, Tests and Experiments

cc: see next page

IE47  
NRR

Indian Point Units 1 & 2  
Docket Nos. 50-003 & 50-247  
License Nos. DPR-5 & DPR-26  
NL-10-109  
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cc: NRC Resident Inspector's Office  
Mr. John Boska, Senior Project Manager, NRC NRR DORL  
Mr. William M. Dean, Regional Administrator, Region 1  
Mr. Paul Eddy, NYS Dept. of Public Service Commission  
Mr. Francis J. Murray Jr., President & CEO NYSERDA

ATTACHMENT 1 TO NL-10-109

**50.59 REPORT LISTING**

ENTERGY NUCLEAR OPERATIONS, INC  
INDIAN POINT UNITS 1 & 2  
DOCKET NOS. 50-003 & 50-247  
LICENSE NOS. DPR-5 & DPR-26

**50.59 REPORT LISTING**

<b>50.59 EVALUATION NUMBER</b>	<b>Unit No.</b>	<b>Rev. No.</b>	<b>Unit 1 &amp; 2 – 2010 Report 50.59 EVALUATION TITLE</b>
09-2001-00-EVAL	2	0	2-TOP-014 "Contingency Actions for Degraded Recirculation Line to CST"
08-2001-00-EVAL	2	0	Partial UFSAR Revision in Support of Resolution of GSI-191 for 30 Day Mission Time

ATTACHMENT 2 TO NL-10-109

**50.59 SUMMARY OF CHANGES, TESTS AND EXPERIMENTS**

ENERGY NUCLEAR OPERATIONS, INC  
INDIAN POINT UNITS 1 & 2  
DOCKET NOS. 50-003 & 50-247  
LICENSE NOS. DPR-5 & DPR-26

**50.59 Summary of Changes, Tests and Experiments**

<b>50.59 Evaluation No.</b>	<b>Rev. No.</b>	<b>TITLE</b>
09-2001-00-EVAL	0	2-TOP-014 "Contingency Actions for Degraded Recirculation Line to CST"

**Brief Description of the Change, Test or Experiment:**

Temporary Operating Procedure 2-TOP-014 provides actions for motor driven Auxiliary Boiler Feed Pump (ABFP) operation while recirculation return line to the Condensate Storage Tank (CST) is isolated for repairs. During the repair, the pump minimum flow recirculation line from the turbine driven ABFP #22 to the CST return will be isolated by closing the manual valve. Also, the bearing cooling lines for ABFP #22 will be isolated by closing a manual valve. The ABFP #22 will be declared inoperable and tagged out. ABFP #22 will enter a 72 hour Allowed Outage Time (AOT) per IP2 Technical Specification 3.7.5B.

**Summary of the associated 10 CFR 50.59 Evaluation**

During the CST return line repair, the minimum flow recirculation lines from the motor driven ABFP's will be isolated as part of the tagout. Currently the CST is inoperable, per Technical Specification 3.7.6A, due to the CST return line leak. However, the CST has adequate inventory and is available for normal decay heat removal function. The backup City Water Supply is operable per Technical Specification 3.7.6. The TOP provides procedural instructions for operation of the motor driven ABFP's with the recirculation lines isolated. The TOP also provides required instructions to ensure that the pump discharge flow is more than the current design basis recir flow for each pump. Consistent with NRC guidance for use of manual action in place of automatic action a dedicated Operator stationed in the Central Control Room will be assigned for the TOP. The TOP requires maintaining a minimum flow to the Steam Generator's by increasing the Steam Generator Blow Down flow, cooldown rate, or restoration of the automatic recirculation flow path as required. Based on this, the motor driven pumps will continue to provide their design basis function for the duration of the TOP.

50.59 Evaluation No.	Rev. No.	TITLE
08-2001-00-EVAL	0	Partial UFSAR Revision in Support of Resolution of 191 for 30 Day Mission Time

Brief Description of the Change, Test or Experiment:

Revise the UFSAR to incorporate the 30 day mission time input assumption to be used in assessments of the functional performance of the recirculation equipment following a Loss of Coolant Accident (LOCA) with respect to the new methodology for evaluating PWR sump performance under NRC Generic Letter GL-2204-02 and Generic Safety Issue GSI-191.

Summary of the associated 10 CFR 50.59 Evaluation

NRC Generic Letter GL-2204-02 and Generic Safety Issue GSI-191 initiated a new generic methodology for calculating and evaluating post LOCA debris generation, transport and effects in PWRs. This results in a new mechanistically based evaluation of sump and recirculation phase performance by all PWR licensees. Many input assumptions, calculational methodologies, and effects analyses are being changed from original plant licensing bases.

For IP2 vintage plants, equipment necessary for response to a design basis large break LOCA was conservatively presumed to be required for one year as no specific "mission Time" was contained in regulatory guidance at that time. The primary focus was on the capability of equipment to withstand the post accident ambient environmental conditions such as post-LOCA temperature, pressure, humidity, radiation, submergence. Current environmental qualification requirements for electrical equipment inside containment are still based on one (1) year of integrated environmental effects. However, the UFSAR Chapter 14 radiological release consequence calculations for loss of coolant accidents have always been performed assuming a 30-day release period following the event.

The original IP2 licensing basis for sump performance was deterministically based. Post-LOCA recirculation equipment was required to perform post-LOCA borated and buffered solution. With respect to evaluating the impacts of the new GL-2004-02 assumptions on post-LOCA recirculation equipment, the NRC addressed the issue of mission time in the generic Safety Evaluation Report (SER) on NEI-04-07. Consistent with this, WCAP-16406 provided a generic assessment of the effects of the new GSI-191 debris assumptions on systems downstream of the sumps. It also established a generic mission time of 720 hours (i.e. 30 days) specifying that any mission times less than this needed to be supported by plant specific calculations.

Bases on the above, since the NRC SER generically approved the use of the new methodology, IP2 will be using a 30 day "mission time" for the specific evaluations and analyses necessary to respond to the GSI-191 and GL-2004-09 requirements.