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August 24, 2011

NL-11-103

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Report on Inoperable Main Steam Line Radiation Monitor
Indian Point Unit Number 3
Docket No. 50-286
License No. DPR-64

Dear Sir or Madam:

The purpose of this letter is to submit a report pursuant to Technical Specification (TS) 5.6.7. One radiation monitor channel per main steam line is required by TS 3.3.3, Table 3.3.3-1, item 22. Radiation Monitor R-62C (Main Steam Line Radiation Monitor) was declared inoperable on July 19, 2011 at about 2144 hours. TS 3.3.3, Condition A requires the radiation monitor to be fixed within 30 days and if this completion time is not met, Condition B requires a report be submitted to NRC within the next 14 days pursuant to TS 5.6.7. The 30 days expired at 2144 hours on August 18, 2011. The report is to outline the alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrument to operable status.

- Alternate method of monitoring

The primary alternate method of monitoring for an out of service Steam Line Radiation Monitor channel is the Condenser Off-Gas Monitor R-15 and the Steam Generator Blowdown Monitor R-19. Additionally, grab samples can be obtained both routine and post accident.

- Cause

R-62C became inoperable due to a failed high voltage power supply caused by damaged connector insulation.

- Plans and schedule for restoring

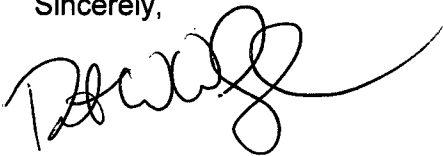
After R-62C failed, troubleshooting commenced the week of July 20, 2011. Initial troubleshooting was on the Bantam 11 Radiation Monitoring computer which monitors the RM-80 microprocessor. The RM-80 microprocessor provides a link between the radiation detector and the Bantam 11 computer and supplies the detector high voltages.

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MRK

Initial troubleshooting determined the R-62C high voltage power supply (HVPS) located in an RM-80 in the electrical tunnel had failed. A HVPS for RM R-62C was not in stock and a search for one was initiated. A HVPS vendor was found and the applicable parts ordered. The process of obtaining a HVPS resulted in significant delay in returning R-62C to service. Next the detector and connector were tested by means of a megger. Due to its elevation and because the connector could not be removed only the high voltage conductor could be tested. The megger testing showed no negative results. Upon receipt the HVPS was replaced, but on power-up the replacement power supply failed. As a result of the HVPS failure, the wiring, connector and detector required inspection and testing. To obtain access to applicable components for additional troubleshooting, scaffolding had to be erected. Insulation in the area was encapsulated and sampling performed for unknown material for potential hazardous material which delayed work further until results were obtained. An evaluation of the sample results were negative. The first replacement HVPS was removed and a second replacement HVPS was installed. During power-up monitoring an unexpected condition was identified and the power-up stopped. Further investigation and testing of the detector and wiring circuit determined that wiring insulation at the connector was damaged. The connector contained a fault that did not show up in the initial megger testing which caused the original and first replacement HVPS to fail. Appropriate repairs will be made to include replacement of the connector. The replacement HVPS will be tested and if successful RM R-62C, will be returned to service. Estimated date of completion of repairs and testing for return to service of R-62C is August 31, 2011. The condition was recorded in the Indian Point Corrective Action Program (CAP) as condition report CR-IP3-2011-03658.

If you have any questions or require additional information, please contact me.

Sincerely,



RW/cbr

cc: Mr. John P. Boska, Senior Project Manager, NRC NRR
Mr. William M. Dean, Regional Administrator, NRC Region I
NRC Senior Resident Inspectors Office
Mr. Francis J. Murray, Jr., President and CEO, NYSERDA
Mr. Paul Eddy, New York State Dept. of Public Service