



May 8, 2015

TMI-15-062

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

Three Mile Island Nuclear Station, Unit 1  
Renewed Facility Operating License No. DPR-50  
NRC Docket No. 50-289

Subject: Special Report – Radioactive Gaseous Process and Effluent Monitoring Instrumentation

This Special Report is being submitted pursuant to the requirements of Three Mile Island Nuclear Generating Station, Unit 1, Off-site Dose Calculation Manual (ODCM) Table 2.1-2 Action 30. Action 30 states the following:

- ACTION 30**
1. With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, a grab sample shall be collected and analyzed for the inoperable gas channel(s) at least once per 24 hours. With both channels inoperable, a grab sample shall be collected and analyzed for the inoperable gas channel(s):
    - (a) at least once per 4 hours during degassing operations.
    - (b) at least once per 24 hours during other operations (e.g. Feed and Bleed).
  2. If the inoperable gas channel(s) is not restored to service within 14 days, a special report shall be submitted to the Regional Administrator of the NRC Region I Office and a copy to the Director, Office of Inspection and Enforcement within 30 days of declaring the channel(s) inoperable. The report shall describe (a) the cause of the monitor inoperability, (b) action being taken to restore the instrument to service, and (c) action to be taken to prevent recurrence.

On April 8, 2015 at 16:15 the B channel Waste Gas Hydrogen and Oxygen Monitor (CA-G-1B) was declared inoperable due to a failed high oxygen monitor reading. The cause for the monitor inoperability was due to a failed cooling fan that resulted in overheating multiple circuit boards. The troubleshooting methodology was not rigorous enough to resolve the failure within the 14-day time clock. The impact of the fan failure on the multiple parts of the instrument was not assessed and addressed in time to prevent exceeding the 14-day time clock.

The failed cooling fan was replaced and the monitor was successfully calibrated returning CA-G-1B to service on April 24, 2015 at 14:00.

The surveillance procedure to repair and calibrate the explosive gas monitor will be revised to include checking for proper cooling fan operation.

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TM1-15-062  
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and Effluent Monitoring Instrumentation  
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There are no regulatory commitments contained in this letter.

If you have any questions, please contact Gus Smith at (717) 948-8777.

Respectfully,

A handwritten signature in black ink, appearing to be 'THA', enclosed within a large, hand-drawn oval.

Thomas P. Haaf  
Plant Manager, Three Mile Island Unit 1  
Exelon Generation Co., LLC

cc: USNRC, Regional Administrator, Region I  
USNRC, Senior Resident Inspector, TMI Unit 1  
USNRC, Director, Office of Inspection & Enforcement