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Anthony Vitale
Site Vice President

February 27, 2017

NL-17-025

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11545 Rockville Pike
Rockville, MD 20852

SUBJECT: Post Accident Monitoring (PAM) Report for an Inoperable Gross Failed Fuel Detector
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 for two channels of Gross Failed Fuel Detector (GFFD) inoperable for greater than the TS allowed completion time. TS 3.3.3 [Post Accident Monitoring (PAM) Instrumentation], Table 3.3.3-1, for Function 23, GFFD require two operable channels. The GFFD is provided to allow determination of reactor coolant system (RCS) radioactivity concentration and is satisfied by instrument loops R63A and R63B. The primary sample system provides sampling via RCS hot legs of RCS loop 1 and 3. The RCS sample is combined into a single sample line to feed Radiation Monitor R63A and R63B (GFFD) located outside containment. The combined sample line #59 for loops 1 and 3 penetrates containment with two air operated automatic containment isolation valves (CIV) (SP-AOV-956E and SP-AOV-956F) outside containment that are designed to fail closed on loss of power or air. The sample line is then routed to the GFFD through a globe valve SP-517 to a sample heat exchanger then to self-regulating flow control valve FCV-505. The GFFD provides a means for determining RCS radioactivity concentration post accident. To allow adequate time for the N-16 gamma decay, the flow rate to R-63A&B is required to be between 0.3 and 0.5 gpm.

During operator rounds on February 4, 2017, operators observed GFFD flow stable at 0.29 gpm. The observed flow is outside the required band and no further adjustment of valve SP-FCV-505 is possible. On February 5, 2017, at 01:02 hours, entered Technical Specification 3.3.3, Condition C (One or more functions with two required channels inoperable) for Function 23 (GFFD) due to GFFD being inoperable due to the low process flow condition. The condition was recorded in the Indian Point Energy Center (IPEC) Corrective Action Program (CAP) as CR-IP3-2017-00400.

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The GFFD is a TS Table 3.3.3-1 Function (#23). This condition exceeded the TS 3.3.3 Condition C allowed completion time of 7 days on February 11, 2017. CR-IP3-2017-00497 recorded the condition. TS 3.3.3 Condition D, required action and associated completion time of Condition C not met requires entry into TS 3.3.3, Table 3.3.3-1 for the channel. TS Table 3.3.3-1 Function 23 (GFFD) reference condition is Condition F. TS 3.3.3, Condition F requires a report be submitted to NRC within the next 14 days pursuant to TS 5.6.7. 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

As specified in OAP-035 (TS and TRM License Adherence and Use) and 3-CY-2325 (Radioactive Sampling Schedule), the depressurized, routine RCS samples meet and exceed the alternate monitoring requirements of PAM TS 5.6.7. Additionally, alternate indications remain available for Emergency Planning purposes per IP-EP-AD40 (Equipment Important to Emergency Response). The closure of valve SP-AOV-956E and SP-AOV-956F allows the remainder of the downstream portions of the sampling system (RHR and Internal Recirculation Pumps) to continue to be available. During isolation of the hot leg RCS sample line, normal reactor coolant sampling to meet the reactor coolant chemistry and radiochemistry sampling requirements will be from the demineralizer inlet sample pathway. This will allow obtaining all required analysis; Dose Equivalent Iodine (DEI) and Dose equivalent Xenon (DEX) analysis, cc/Kg dissolved hydrogen and anions (Cl, F, SO₄). During accident conditions, sampling reactor coolant will be from the recirculation sump when the plant reaches the conditions to go on internal recirculation.

- Cause

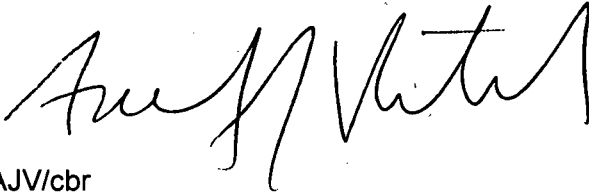
The cause of the failure of valve FCV-505 to operate properly is unknown. The condition was recorded in the Indian Point Corrective Action Program (CAP) as condition report CR-IP3-2017-00400.

- Plans and schedule for restoring

Valve FCV-505 is obsolete and there is no repair kit currently available to implement a repair. Work Order 463793 was prepared to replace valve FCV-505. Action will be in accordance with the plant work control process.

Should you have any questions regarding this matter, please contact Mr. Robert Walpole, Manager, Regulatory Assurance, Indian Point Energy Center at (914) 254-6710.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew J. Viteri". The signature is fluid and cursive, with a large initial "A" and "V".

AJV/cbr

cc: Mr. Douglas Pickett, Senior Project Manager, NRC NRR
Mr. Daniel H. Dorman, Regional Administrator, NRC Region I
NRC Senior Resident Inspectors Office
Mr. John B. Rhodes, President and CEO, NYSERDA
Mrs. Bridget Frymire, New York State Dept. of Public Service