



Nebraska Public Power District

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U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

Gentlemen:

Subject: Special Report on Augmented Off Gas Outage
Cooper Nuclear Station, NRC Docket 50-298, DPR-46

The subject Special Report is forwarded as an enclosure to this letter. This Special Report is required to fulfill the requirements of the Cooper Nuclear Station (CNS) Technical Specifications whenever the Augmented Off Gas (AOG) system is isolated for an extended period of time.

Sincerely,

M. F. Peckham
Plant Manager

/dm

Enclosure

cc: Regional Administrator
USNRC - Region IV

Senior Project Manager
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector
USNRC

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SPECIAL REPORT FOR AUGMENTED OFF GAS OUTAGE

1.0 INTRODUCTION

In conformance with the requirements of the CNS Technical Specifications this report describes the effects of an extended outage of the Augmented Off Gas (AOG) system. Technical Specifications Section 3.21.C.4.c states:

"In the event radioactive gas from the main condenser air ejector is discharged in effluent air for more than 7 days without treatment by charcoal adsorbers or in the event that air is discharged via an exhaust ventilation treatment system for more than 31 days without treatment and the limit of Specification 3.21.C.4.b is exceeded, prepare and submit a Special Report to the NRC, pursuant to Specification 6.5.3 and in lieu of any other report, which identifies the inoperable equipment and describes the corrective action taken."

2.0 DISCUSSION

On July 13, following an unplanned half RPS trip, the AOG system isolated in accordance with the design of the system. It was noted that following the AOG isolation there was a high influx of water into the Z sump. As detailed in Licensee Event Report (LER) 97-010 this resulted in the Standby Gas Treatment (SGT) system being declared inoperable. In order to maintain SGT operable, the AOG system was secured. On July 21, 1997, the AOG system was returned to service based on verification that the drain line from the 48 inch holdup line to the Z sump was not blocked. Subsequent performance of a surveillance procedure indicated that this corrective action was inadequate and the AOG system was again secured on July 21, 1997, and the SGT system declared operable. With the AOG system secured, the effluent releases from the plant are increased but, based on a dose projection, the dose to a Member of the Public will remain within the limits established by the CNS Radiological Effluent Technical Specifications.

Since the AOG was out of service for longer than 7 days a Special Report is required to fulfill the Technical Specification requirements. A summary of this evaluation and its conclusions is as follows:

- 1) The time period during which the AOG system was isolated was July 13 to August 28, 1997. As noted above, the AOG system was returned to service for a short period, about 11 hours, on July 21, 1997, until it was determined that the corrective action to assure SGT operability was inadequate.

- 2) An evaluation of the dose effects to the public has been performed, considering the effects of operation with the AOG isolated. This evaluation projected that the dose consequences to a Member of the Public will remain within the limits established by the CNS Radiological Effluent Technical Specifications.
- 3) A plant modification is being installed whose objective is to prevent a large water influx into the Z sump when the AOG system is secured.
- 4) The plant modification was sufficiently implemented so that the AOG system was placed into operation on August 28, 1997 and is presently operating normally.

3.0 COPRECTIVE ACTION

The District developed and is implementing a Design Change to prevent excessive water holdup in the AOG system piping during system operation. Installation of this modification is sufficiently complete to allow the AOG system to be placed in operation without affecting the operability of the SGT system.

4.0 CONCLUSION

The projected offsite dose increase, due to the AOG outage and based on an assessment of compliance to the Technical Specification limits, indicates that the dose consequences to a Member of the Public will remain within the limits established by the CNS Radiological Effluent Technical Specifications.

