

July 15, 1970

Dr. Peter A. Morris, Director
Division of Reactor Licensing
United States Atomic Energy Commission
Washington, D. C. 20545



Dear Dr. Morris:

Subject: Violation of Technical Specification,
Sec. 3.1.1.1a - July 6, 1970
Ginna Station Unit No. 1
Docket 50-244

On Sunday, July 5, 1970, at approximately 2000 hours, a steam leak was located in a high pressure turbine gage line. It was necessary to shut down the turbine to make the repair. The Electric Load Dispatching office was notified and arrangements made to remove the turbine-generator unit from service.

The Operations Engineer then proceeded to plan further maintenance during this shutdown, namely, to add packing to pressurizer spray valve PCV-431A, to check the stroke on pressurizer spray valve PCV-431B, and to adjust the turbine trip pilot valve. The Operations Engineer remained at the plant throughout the shutdown and the return to the normal level of power generation.

The load was gradually reduced on the turbine. Boron concentration was increased in the primary loop, maintaining the "D" control rod bank at 140-180 steps out during the turbine unloading period. Prior to boration, the boron concentration in the reactor coolant was 1093 ppm B.

The Shift Foreman outlined to the assembled maintenance force the work that was to be accomplished and the coordination that was required.

The turbine generator was removed from service at 2321 hours, at which time approximately 211 gallons of boric acid from the boric acid tank had been added to the reactor coolant system. Steam from the steam generators continued to be supplied to the turbine plant for turbine gland sealing and the steam air ejector.

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The control room operators were then instructed to maintain a reactor power level corresponding to a current of 10^{-7} amperes on the intermediate range channel and that it would be necessary to remove both reactor coolant pumps from service at the time of adding packing to the pressurizer spray valve.

The Shift Foreman told the Head Control Operator that work on the pressurizer spray valves would not start immediately, that one of the pumps should be left running and that dilution should be started. 1144 gallons of dilution water were added prior to the shutdown of the second reactor coolant pump.

One reactor coolant pump was shut down at 2355 hours. Subsequently, the control room received a call from the containment requesting permission to start work. This would require the shutdown of the one remaining reactor coolant pump. The Head Control Operator shut down the second reactor coolant pump at 0015 hours on July 6, 1970.

The Shift Foreman ordered the two licensed control room operators to monitor the in-core thermocouples, as well as the reactor power level, while the pumps were out. He then proceeded into the plant to inspect its status and became occupied in operational duties and in extricating two auxiliary operators from a stalled elevator.

In the interval, the latching and tripping of the turbine stop valves during adjustment of the turbine trip pilot valve utilized steam from the steam generators and resulted in lowering of the coolant temperature. The build-in of Xenon and the lowering of the coolant temperature required dilution to maintain the "D" bank of control rods between 140 and 180 steps out and to maintain constant power. Dilution was initiated at 0030 hours and 1365 gallons of dilution water were added while the reactor coolant pumps were shut down. In this same period, 25 gallons of boric acid were added to the volume control tank by the automatic make-up system. The control room operators were monitoring the in-core thermocouples and the reactor power level during this entire period.

The Shift Foreman returned to the control room sometime after 0200 hours and realized that a violation of Technical Specification 3.1.1.1a had occurred. The observed primary coolant temperature differential and the decreasing, but uniformly distributed, in-core thermocouple readings indicated that natural circulation was occurring. During this assessment, the control room was notified by a senior operator who had been assigned to monitor the containment work that the work was completed and the containment was secured and locked. The Shift Foreman directed that a reactor coolant pump be put in service at 0222 hours. The intermediate range channels were watched closely and no power change was observed. An

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additional 2000 gallons of dilution water was added after the reactor coolant pump was started. The boron concentration of the primary coolant following this addition was 1039 ppm B.

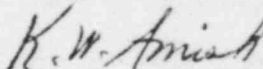
The unit was returned to service at 0330 hours.

The Plant Operations Review Committee and the Nuclear Safety Audit and Review Board have not finalized their recommendations of appropriate action to be initiated to prevent recurrence of this violation (Ref. Tech. Specs. Sec. 6.1.4.1d6 and Sec. 6.1.1.2d5). Pending such determination the following measures have been taken:

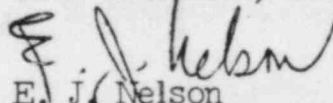
1. Orders have been issued that maintenance work is to be performed only when duly authorized written procedures are available which coordinate the proposed maintenance work with plant operation during the maintenance activity.
2. Selected personnel representing the NSA&R Board, other than plant personnel, are being assigned to confirm that plant procedures are in compliance with Technical Specifications, and to audit non-routine plant operations for compliance. This will be the primary responsibility of such personnel during the period of this assignment. (The Chairman of the Board and Chief Executive Officer and the President of Rochester Gas and Electric Corporation are Chairman and Vice Chairman respectively of the Nuclear Safety Audit and Review Board.)
3. A program has been instituted to have an outside organization re-evaluate operator proficiency.
4. A program has been instituted to have an outside organization assist a subcommittee of the NSA&R Board in a review of station operation, organization and procedures.

Finalizing the recommendations for appropriate action to be initiated to prevent recurrence of Technical Specifications violations, and approval and implementation of such recommendations are being expedited. We will promptly notify you of the action taken.

Very truly yours,



K. W. Amish
Vice President, Electric and Steam



E. J. Nelson
President

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