

Consumers
Power
Company

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October 24, 1975

Director of Nuclear Reactor Regulation
Att: Mr Robert A. Purple, Chief
Operating Reactor Branch No 1
US Nuclear Regulatory Commission
Washington, DC 20555

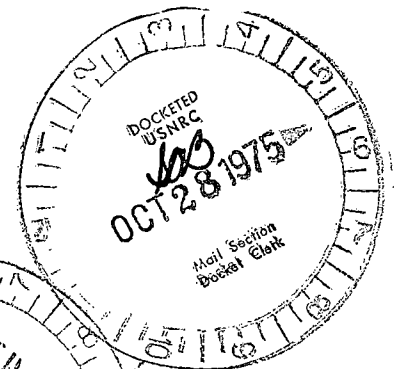
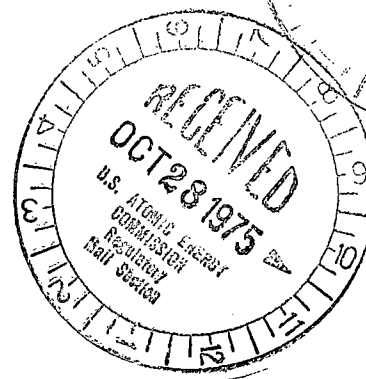
DOCKET 50-255, LICENSE DPR-20
PALISADES PLANT, AO-75-24

Attached is Abnormal Occurrence Report AO-75-24 which covers the release of heated water at a temperature which exceeded the Technical Specifications limit for a period of about 90 minutes. There were no safety implications associated with this occurrence and the Michigan Water Resources Commission limits were not exceeded.

David A. Bixel

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Assistant Nuclear Licensing Administrator

CC: JGKeppler, USNRC
File



12381

ABNORMAL OCCURRENCE REPORT
Palisades Nuclear Plant

1. Report No: AO-75-24, Docket 50-255
- 2a. Report Date: October 24, 1975
- 2b. Occurrence Date: October 15, 1975
3. Facility: Palisades Nuclear Plant, Covert, Michigan
4. Identification of Occurrence: Thermal discharge of the blowdown from the closed-cycle cooling system above permissible temperature limit.
5. Condition Prior to Occurrence: Plant was at a nominal 80% of full power.
- 6 & 7. Description of Occurrence and Apparent Cause: During installation of new thermal discharge monitoring equipment, the dilution pumps were shut off. This action was taken to reduce turbulence in the discharge mixing basin and allow divers to install the temperature sensing probes. Heated water flowed into the mixing basin from the makeup basin due to the service water discharge into the makeup basin (which is exempt from the temperature limits). In addition, blowdown from the closed-cycle cooling system flowed into the mixing basin. This was permitted because blowdown discharge will result in a lower thermal discharge than that from the makeup basin (due to the impact of the service water and to displacement of closed-cycle cooling system water by the service water). By minimizing flow, we did not expect the temperature of the mixing basin to rise as rapidly as it did or to exceed the temperature limits. The difference in temperature peaked at 14°F for a period of about 90 minutes.
8. Analysis of Occurrence: There were no safety implications associated with this occurrence.

A review of this occurrence determined that the total discharge to the lake was about 27×10^6 Btu/h which is below the Technical Specifications limit of 500×10^6 Btu/h. The service water thermal discharge, which is exempt from the limit, was 80×10^6 Btu/h. Approximately 80% of the service water was being used as makeup to the closed-cycle cooling system, reducing the total discharge to the lake (service water plus blowdown) to the 27×10^6 Btu/h discussed above. It appears that the thermal discharge and temperature, due to the closed-cycle cooling system, would have been below the acceptable limits had the service water been discharged directly to the lake. However, since some of the discharge originated with the closed-cycle cooling system, it technically violated the limits.

9. Corrective Action: As an interim measure a note has been added to the operating procedure to caution operator to closely monitor the discharge temperature when a dilution pump is removed from service during power operation. In addition, we are discussing appropriate modifications to our October 1, 1975 Technical Specifications change request which would

provide sufficient operating latitude to permit us to minimize total heat discharged from the plant rather than minimize only that from the closed-cycle cooling system.

10. Failure Data: None applicable.