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10CFR50.36

Docket No. 50-451

Document Control Desk Nuclear Pegulatory Commission Washington, D.C. 20555

Subject: Special Report: Inoperability of the 10-Meter and 60-Meter Wind Direction Instrumentation at Clinton Power Station

Dear Madam or Sir:

Clinton Power Station (CPS) Operational Requirements Manual (ORM) Action 3.2.8 requires inoperabilities of meteorological monitoring instrumentation channels for more than 7 days be reported to the NRC within the next 10 days pursuant to ORM Section 6.9.2, SPECIAL REPORTS. The 10-meter and 60-meter wind speed instrumentation was declared inoperable at 0714 hours on January 13, 1998, and remained inoperable until 1720 hours on January 24, 1998. This report is being submitted in accordance with the CPS ORM to provide information regarding the extended inoperability of the meteorological monitoring instrumentation.

The CPS Environmental Monitoring system utilizes a 199-foot high tower equipped with two levels of instrumentation to monitor the meteorological conditions at the plant. The tower is instrumented with wind direction, wind speed, temperature, and dew point sensors at the 10-meter and 60-meter levels (except that dew point is monitored at the 10-meter elevation only). As described above, at 0714 hours on January 13, 1998, Operations personnel declared the meteorological tower wind direction instrumentation inoperable since the recorded wind direction was a constant value (i.e., the minor variations in wind direction that normally occur were not evident) for both elevations. Freezing rain was suspected to have caused icing of the instruments such that it prevented free motion of the detectors. A visual inspection of the meteorological tower from ground level performed by the system engineer on January 15, 1998, showed that there was, in fact, an ice buildup on the both of the wind direction vanes as evidenced by the lack of a perceptible response to minor fluctuations in wind direction that were occurring at the time.





A review of the wind direction data showed that after this problem was identified, there was a period of several hours where the 10-meter and 60-meter wind direction instruments began tracking again. However, following the initial apparent ice-bound condition, the data from the 10-meter and 60-meter wind direction instruments consistently differed by approximately 30 degrees. This consistent difference was suspected to have been caused by rotation of either or both of the wind sensor housings occurring during the preceding periods of high winds and freezing rain.

When weather conditions permitted, C&I personnel worked expeditiously to return the meteorological tower wind direction instrumentation to service. On January 21, 1998, technicians climbed the meteorological tower and verified that there were no problems with the 10-meter wind direction instrument and that it was reading correctly. On January 22, 1998, technicians climbed the tower to the 60-meter wind direction instrument. The problem with the 60-meter and direction instrument was determined to be that the securing bolt was loose enough to allow slight movement of the housing. The housing wer correctly aligned and the securing bolt was tightened. Testing subsequently demonstrated that the 60-meter wind direction instrumentation was working correctly and there was no longer a disparity between the 10-meter and 60-meter wind direction instrumentation. The 10-meter and 60-meter and direction instruments were subsequently declared OPERABLE at 1720 hours on January 24, 1998.

Submittal of this letter satisfies the requirements of CPS ORM 3.2.8 and ORM 6.9.2 for submitting a SPECIAL REPORT for meteorological tower inoperabilities.

Sincerely yours,

Joseph V. Stock

Director-Licensing

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cc: Regional Administrator, Region III, USNRC NRC Clinton Licensing Project Manager NRC Resident Office, V-690 Illinois Department of Nuclear Safety