



**LOUISIANA**  
POWER & LIGHT

WATERFORD 3 SES • P.O. BOX 8 • KILLONA, LA 70066-0751

Ref: 10CFR50.36(c)(2)

July 15, 1988

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QA

U.S. Nuclear Regulatory Commission  
ATTENTION: Document Control Desk  
Washington, D.C. 20555

SUBJECT: Waterford 3 SES  
Docket No. 50-382  
License No. NPF-38  
Reporting of Special Report

Attached is Special Report Number SR-88-007-00 for Waterford Steam Electric Station Unit 3. This Special Report is submitted per 10CFR50.36(c)(2) and Technical Specifications 3.3.3.4 and 6.9.2.

Very truly yours,

N.S. Carns  
Plant Manager - Nuclear

NSC/WEM:rk

Attachment

cc: R.D. Martin, NRC Resident Inspectors Office, INPO Records Center  
(J.T. Wheelock), E.L. Blake, W.M. Stevenson, D.L. Wigginton

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SPECIAL REPORT

SR-88-007-00

Primary Meteorological Tower  
Instruments Out-of-Service Greater Than Seven  
Days Due to Lightning Strike.

INTRODUCTION

At 1405 hours on June 28, 1988, Waterford Steam Electric Station Unit 3 was operating at 100% power when all Primary Meteorological Tower (PMT) instrumentation was declared out-of-service during corrective maintenance on a Delta Temperature Instrument (DTI) and a Wind Speed Instrument (WSI). Both instruments were found to be out of calibration and were individually placed out-of-service earlier. Maintenance was complete on the DTI at 1730 hours on July 2, 1988, and the remaining maintenance on the WSI did not affect the other PMT instrumentation. However, a failure in communications between Operations and Maintenance personnel resulted in Operations personnel conservatively maintaining the PMT out of service. Before this could be resolved, the PMT was struck by lightning during the evening hours of July 4, 1988, causing damage to the instrumentation. Sufficient repairs were completed by 1620 hours on July 7, 1988, enabling the PMT to be declared operable by 1627 hours on July 7, 1988.

The PMT was never functionally inoperable except during corrective maintenance on July 2, 1988, when the PMT Boom was lowered to replace temperature elements. At other times, sufficient local and recorded indications were continuously available and periodically monitored to meet Technical Specification (TS) requirements. Since the PMT Instrumentation was not administratively returned to service within seven days, this report is submitted pursuant to TS 3.3.3.4.a and 6.9.2.

## NARRATIVE

At 1405 hours on June 28, 1988, Waterford Steam Electric Station was operating at 100% power when the Primary Meteorological Tower (PMT) was declared out-of-service during corrective maintenance on PMT Instrumentation. One PMT Delta Temperature Instrument (DTI), EM-ITE-0102, had been declared out-of-service at 1430 hours on June 20, 1988, since the DTI readings were found to be out of tolerance on the Technical Specification (TS) Logs on June 20, 1988, and an entry in the Equipment Out-of-Service (EOS) Log was made for the PMT DTI. Only one of the three PMT DTIs are required to be operable per TS 3.3.3.4; therefore, this Limiting Condition for Operation (LCO) was still satisfied. Corrective maintenance replaced and calibrated four Temperature Elements and a Transmuter Card which is used to convert process inputs to signals used by the Plant Monitoring Computer (PMC). Since it was necessary to lower the boom on which the 199 foot level PMT sensors are installed to replace the four Temperature Elements, the PMT was declared out-of-service on June 28, 1988, and the seven-day action statement of TS 3.3.3.4 was entered. The Temperature Elements were replaced on July 2, 1988, corrective maintenance on the DTI was completed, and the DTI entry was cleared from the EOS log at 1845 hours on July 2, 1988.

At 0944 hours on June 27, 1988, the PMT 33 Foot Wind Speed Instrument (WSI) was declared out-of-service since its computer point identification output read consistently higher than actual values. Only one of the two 33 foot WSIs are required to be operable per TS 3.3.3.4; therefore, this LCO was still satisfied. Maintenance personnel decided to complete WSI maintenance, which did not affect the operability of other PMI instrumentation, after the July 4 weekend in order to complete DTI maintenance to place the PMT back in service. Corrective maintenance on the WSI recalibrated a transmuter card on July 5, 1988, and replaced and calibrated a power supply circuit card on July 6, 1988. After retests were completed, the WSI was cleared from the EOS log at 0800 hours on July 8, 1988.

The PMT was declared out-of-service due to maintenance on the DTI; however, a failure in communications between Operations and Maintenance personnel resulted in Operations personnel conservatively maintaining the PMT out-of-service until the scope of other PMT maintenance could be clarified. It was not clear to Operations personnel how troubleshooting of the PMT WSI affected the operability of other PMT instrumentation. Prior to this clarification, however, the PMT was struck by lightning during the evening hours of July 4, 1988. This caused damage to PMT Wind and Temperature Indication. Due to continuing inclement weather, repairs could not be effected for several days. Sufficient repairs on the PMT instrumentation were completed, and the PMT was declared operable at 1627 hours on July 7, 1988.

The PMT was not functionally inoperable in this event before July 4, 1988, except during corrective maintenance on July 2, 1988, when the PMT Boom was lowered to replace the four Temperature Elements. At other times, sufficient local and recorded indications were continuously available and periodically monitored to meet TS requirements. Since the PMT had not been administratively returned to service within seven days, this report is submitted pursuant to TS 3.3.3.4.a and 6.9.2. Had the PMT not been struck by lightning, the PMT would have been returned to service prior to expiration of the seven-day limit. Between June 28 and July 2, if circumstances had occurred requiring meteorological information, the required information was available and the instrumentation could have been promptly declared operable by consultation with the appropriate maintenance personnel. Since the Secondary Meteorological Tower provides all required instrumentation except 199 foot wind direction and was available during this period, there was available data for estimating potential radiation doses to the public as a result of a routine or accidental release of radiological material to the atmosphere. No unplanned releases occurred during this period. Thus, there was no safety significance to this event.

#### PLANT CONTACT

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