



**LOUISIANA**  
POWER & LIGHT

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July 2, 1986

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A4.05  
QA

Mr. George W. Knighton, Director  
PWR Project Directorate No. 7  
Division of PWR Licensing-B  
Office of Nuclear Reactor Regulation  
Washington, D.C. 20555

SUBJECT: Waterford SES Unit 3  
Docket No. 50-382  
Control Systems Single Failure Study

Dear Mr. Knighton:

Louisiana Power and Light hereby submits for your review and approval seven (7) copies of the Control Systems Single Failure Study.

The study was performed in response to an open item identified in Sections 7.7 and 7.7.6 of the Waterford 3 SSERs 1 and 8 respectively. The study documents the analysis of the postulated failure of any single power source, sensor, or impulse line to determine if any such failure could cause multiple control systems malfunctions that may lead to transients not bounded by the FSAR Chapter 15 analyses. The results of the analysis concludes that all single power source, sensor, or impulse line failures result in plant conditions that are clearly bounded by the existing FSAR Chapter 15 analyses. The system analyses and fault trees that support this evaluation are attached.

Please feel free to contact me or Robert J. Murillo should you have any questions.

K.W. Cook  
Nuclear Support and Licensing Manager

KWC/kJM/smb 8607160152 860702  
PDR ADOCK 05000382  
Attachments E PDR

cc: B.W. Churchill, W.M. Stevenson, R.D. Martin, J. Wilson,  
NRC Resident Inspector's Office (Site)

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