



**Entergy  
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QA

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

Subject: Waterford 3 SES  
Docket No. 50-382  
License No. NPF-38  
Supplemental Information for Revision 6, Change 1 to  
Inservice Testing Program - Pumps and Valves

Gentlemen:

Revision 6, Change 1 of the Waterford 3 Inservice Testing (IST) Program - Pumps and Valves (submitted per Louisiana Power & Light letter W3P89-1516, dated August 21, 1989) contained three outstanding relief requests (per our letter W3P90-1148, dated July 17, 1990). Entergy Operations, Inc. discussed these relief requests (numbered 2.1.4, 2.1.5 and 3.1.56) with the NRC on August 16, 1990 and again on November 6, 1990. The attachment revises the above relief requests to address the concerns discussed, and shall replace the originally submitted relief requests.

Please note that relief request 2.1.4 has been withdrawn. In an effort to simplify this submittal, the remaining relief requests have not been renumbered.

If you have any questions concerning this response, please contact B.R. Loetzerich at (504) 739-6636.

Very truly yours,

RFB/BRL/ssf

Attachment: Relief Requests for IST Program, Revision 6 Change 1

cc: Messrs. R.D. Martin, NRC Region IV  
D.L. Wigginton, NRC-NRR  
E.L. Blake  
R.B. McGehee

NRC Resident Inspectors Office

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Relief Request  
2.1.4

This relief request is withdrawn as a result of the  
NRC conference call on August 16, 1990.

Relief Request  
2.1.5

Test Requirements

IWP-3300, IWP-3500(b), and IWP-4310 require  
measurement of bearing temperatures of applicable  
pumps during at least one inservice test each year.

Basis for Relief

Bearing temperature increases rapidly with impending  
bearing failure. Yearly measurement of bearing  
temperature is not expected to detect bearing  
degradation. Vibration and hydraulic parameters  
provide significantly better evidence of pump  
degradation which could result in or from a bearing  
failure.

Alternate Testing

Vibration and hydraulic (pressure, flow)  
measurements taken during each test will identify  
pump degradation causing or resulting from bearing  
failure.

This relief would apply to all pumps in the Inservice  
Test Plan.

Relief Request  
3.1.56

Test Requirement

IWV-3417(a) requires that:

"If, for power operated valves, an increase in stroke time of 25% or more from the previous test for valves with full-stroke times greater than 10 seconds or 50% or more for valves with full-stroke times less than or equal to 10 seconds is observed, test frequency shall be increased to once each month until corrective action is taken, at which time the original test frequency shall be resumed."

Basis for Relief

Comparing stroke times to the previous value fails to identify **slowly** degrading valves for increased testing and observation. Comparing stroke time data to a valve reference value provides a better analysis of stroke times. The valve reference value is an average stroke time when the valve is known to be in good condition and operating properly. Significant deviations from this reference value will require increased testing and surveillance.

Alternate Testing

A reference stroke time value will be established based on the average stroke time when the valve is known to be in good condition and operating properly.

If, for power operated valves, an increase in stroke time of 25% or more from the reference value for valves with full-stroke times greater than 10 seconds or 50% or more for valves with full-stroke times less than or equal to 10 seconds is observed, the test frequency shall be increased to once each month until corrective action is taken, at which time the original test frequency shall be resumed.

Comments

For valves with full-stroke times less than or equal to 10 seconds, approval is granted by NRC Generic Letter 89-04.