



**LOUISIANA**  
**POWER & LIGHT**

142 DELARONDE STREET  
P. O. BOX 6008 • NEW ORLEANS, LOUISIANA 70174 • (504) 366-2345

March 13, 1984

W3P84-0624  
3-A20.16

Director of Nuclear Reactor Regulation  
Attention: Mr. G.W. Knighton, Chief  
Licensing Branch No. 3  
Division of Licensing  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

SUBJECT: Waterford SES 3  
Docket No. 50-382  
Environmental Qualification

Dear Sir:

10 CFR 50.49 requires that LP&L submit information demonstrating that Waterford 3 can be safely operated pending completion of environmental qualification. The purpose of this letter is to provide justification for interim operation (attached) pending complete qualification of ex-core neutron detectors manufactured by Westinghouse.

In addition, per the request of Mr. H. Garg, we would like to note that, except for the neutron flux detectors discussed in the attached and the Heated Junction Thermocouples (Reactor Vessel Level Monitoring System), all installed Regulatory Guide 1.97 equipment is qualified as required. (As stated in SSER #5 Sec. 22.II.F.2, the HJTCs will not be used until second cycle.) It is appropriate to note here that our compliance with 10 CFR 50.49 requires that all equipment subject to that regulation (including applicable R.G. 1.97 equipment) be qualified or an accepted JIO be in place prior to fuel load.

Yours very truly,

K. W. Cook  
Nuclear Support & Licensing Manager

KWC/RMF/ch  
Attachment

cc: E.L. Blake, W.M. Stevenson, J. Wilson, D.M. Crutchfield, G.L. Constable,  
H. Garg

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JUSTIFICATION FOR INTERIM OPERATION  
EX-CORE NEUTRON FLUX DETECTORS

Safety Function

The required design function of the ex-core neutron flux detectors is to scram the reactor in the event of power transients. There are four channels of ex-core detectors providing input to the Reactor Protection System for this purpose.

Status

All four channels of the detectors are currently qualified for 10 minutes post-LOCA in order to provide adequate margin for scrambling the reactor. However, in order to meet Regulatory Guide 1.97 Rev. 2 post-accident monitoring requirements, neutron flux monitoring channels C and D are being upgraded to withstand the long-term post-LOCA environment. Although this upgraded equipment will be installed prior to fuel load, the long-term qualification test has not yet been completed. The equipment has thus far successfully undergone 125 days of qualification testing and is now in the cool-down portion of the test.

Justification

LP&L feels that adequate justification for interim operation is provided by:

- o The existing detectors (channels A and B) have already been qualified for 10 minutes post-LOCA in order to perform their primary safety function, i.e., scrambling the reactor.
- o The new detectors (channels C and D) have already successfully completed the critical portions of the qualification test (the first 125 days), and have therefore been demonstrated as qualified for at least some years of operation.

Schedule

We are confident that the confirmatory matters of completing the test and compiling and reviewing the test report can be completed prior to commercial operation. We will inform you if there are any changes to this schedule.