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POWER & LIGHT

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November 30, 1984

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Q-3-A20.02.02
A4.05

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 Unit 3
Docket No. 50-382
GENERIC LETTER 83-28, ITEMS 4.2.3 AND 4.2.4
REACTOR TRIP BREAKER LIFE CYCLE TESTING

REFERENCES: (1) W3P84-0609 dated March 8, 1984
(2) W3P84-1737 dated June 22, 1984

Dear Sir:

Generic letter 83-28 (sections 4.2.3 and 4.2.4) covers life cycle testing and periodic replacement requirements for reactor trip breakers (RTBs). By Reference (1) and (2) LP&L indicated its participation in a CE Owners Group (CEOG) program to investigate various options for enhancement of existing breakers, and deferred its response to the subject requirements pending completion of the CEOG program. As you know, that program is now complete.

When Generic Letter 83-28 was issued, the failure mode of RTBs, although unclear, was partially attributed to breaker component wear. During the course of the CEOG program, it became apparent that GE AK-2-25 breakers have failed primarily due to age related hardening of the lubricant in the breaker trip shaft bearings and latch roller assembly. Moreover, as the tripping mechanism in AK-2-25 breakers does not contain components subject to detrimental frictional wear, the potential for breaker failure due to component wear is minimal. For these breakers, life cycle testing would not present an appropriate means for demonstration of trip reliability.

LP&L has taken steps to preclude future uncertainty over RTB age related problems. The Waterford 3 breakers have been refurbished with vendor recommended lubricant (Mobil 28) by the GE Atlanta Service Shop. Laboratory tests have demonstrated that Mobil 28 retains its lubricity in excess of

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Mr. G.W. Knighton

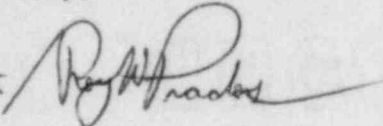
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40 years under the most adverse ambient conditions. Following servicing, maintenance and surveillance tests performed on the Waterford 3 breakers indicated significant performance improvement. Concurrently, LP&L implemented newly revised and extensive maintenance and surveillance procedures for the RTBs. Finally, LP&L is participating in a CE program to monitor AK-2-25 breaker performance. Key parameters (e.g. response time, trip shaft torque) will be collected in a common data bank to be utilized for performance trending and potential prediction of impending failures.

It is expected that the breaker refurbishment, newly implemented procedures and the CE monitoring program will assure reliable RTB performance over the life of Waterford 3. Pending further guidance from the Staff, LP&L is confident that the intent of Generic Letter 83-28, items 4.2.3 and 4.2.4, has been met.

Should you require further information on this matter please contact Mike Meisner at (504) 595-2832.

Yours very truly,

K.W. Cook 

K. W. Cook
Nuclear Support & Licensing Manager

KWC/MJM/ch

cc: W.M. Stevenson, E.L. Blake, J.T. Collins, J. Wilson, T. Alexion,
D.M. Crutchfield, G.L. Constable