

April 15, 1981

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)
)
LOUISIANA POWER & LIGHT COMPANY) Docket No. 50-382
)
(Waterford Steam Electric)
Station, Unit 3))

APPLICANT'S RESPONSES TO
JOINT INTERVENORS' INTERROGATORIES
19-1 THROUGH 19-7

Interrogatory No. 19-1. At what point in the licensing procedure must the fuel element assembly guide wear problem be resolved?

Answer. Determination of the point in the licensing procedure at which the guide tube wear problem must be resolved is the responsibility of the licensing authority (NRC). In its Question No. 231.1, the NRC Staff took the position that the problem would "ultimately require resolution before the issuance of the operating license." Combustion Engineering, Inc. considers the technical guide tube wear problem to be resolved.

Interrogatory No. 19-2. List all research being done on this problem.

Answer. Research and testing is described in Applicant's amended answer to NRC Question No. 231.1 (Amendment No. 16, March 1981). As described therein, in order to reduce control rod vibration, flow channel extensions are to be installed in the five-element CEA cavities and flow bypass inserts are to be installed in the four-element CEA shrouds. Testing to confirm the final design consisted of two separate 250-hour flow tests using full size 16x16 fuel assemblies. Hardware tolerances and flow conditions were purposely chosen to reflect adverse conditions. The results of these tests showed that a dramatic reduction in control rod vibration characteristics had been achieved, compared to the original hardware configuration, and that very little guide tube wear would be predicted over the course of the fuel lifetime.

The use of the above out-of-pile tests to predict the in-reactor rate of guide tube wear is justified by a demonstration program recently completed in the Calvert Cliffs 2 reactor. The results showed that the wear rate predicted by out-of-pile testing is consistent with that occurring in long-term reactor operation. Because this demonstration program was performed for geometries other than those in Waterford 3, stainless steel guide tube sleeves will be used in the fuel under the CEA's, as an interim measure, until a similar demonstration program planned for Cycle 1 of San Onofre 2 has been completed.

Interrogatory No. 19-3. Give timetable for the resolution of this problem.

Answer. See answer to Interrogatory No. 19-1.

Interrogatory No. 19-4. Give precise technical definition of what is meant by the "resolution of a problem." Give references.

Answer. Applicant is unaware of any "technical definition" of the phrase "resolution of a problem." Applicant takes this phrase, in its ordinary sense, to mean that a problem has been eliminated, cured or dealt with in such a way that it is no longer a "problem." In the case of guide tube wear, the problem has been resolved in the manner described in Applicant's amended answer to NRC Question No. 231.1 (Amendment No. 16, March 1981). Any further answer to this interrogatory would be an exercise in abstract semantics unrelated to the actual issues in this proceeding.

Interrogatory No. 19-5. Is it possible that a problem is only "partially resolved"?

Answer. Applicant assumes that it might be accurate to characterize a problem as having been "partially resolved" if, for example, work on the problem had been started but not completed or if only some aspects of a multifaceted problem had been resolved. See answer to Interrogatory No. 19-4.

Interrogatory No. 19-6. What is meant by "partially resolving" a problem?

Answer. See answer to Interrogatory 19-5.

Interrogatory No. 19-7. Give a history of problems that have been presented to Congress as "resolved" and additional research work has, in fact, been done on them.

Answer. Applicant does not know what problems Joint Intervenors are referring to in this question. Under 42 U.S.C. § 5850, the NRC is required to submit to Congress certain information about "unresolved safety issues." However, guide tube wear is not an "unresolved safety issue." Most information submitted to Congress is in the public domain, and Applicant has no better access to congressional information than do Joint Intervenors. In any event, Applicant is unaware that the issue of guide tube wear has been addressed in correspondence to Congress, and, as stated in the answer to Interrogatory 19-4, the issue has been resolved for the Waterford 3 facility.

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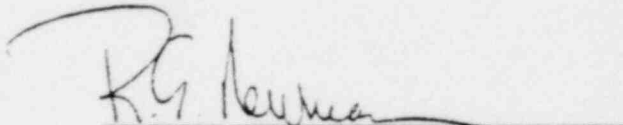
Before the Atomic Safety and Licensing Board

In the Matter of)
LOUISIANA POWER & LIGHT COMPANY) Docket No. 50-382
(Waterford Steam Electric Station,)
Unit 3))


AFFIDAVIT OF R. E. NEWMAN

State of Connecticut)
County of Hartford) SS

R. E. Newman, being duly sworn according to law, deposes and says that he is the Waterford 3 Project Manager with Combustion Engineering, Inc., Power Systems Group; that the information contained in Applicants' Responses to Joint Intervenors' Interrogatory Nos. 19-1, 19-2, and 19-3 is true and correct to the best of his information, knowledge and belief.


R. E. Newman
Waterford 3 Project Manager

Sworn to the subscribed before
me this 13th day of April,
1981.


Notary Public

My Commission Expires March 31, 1985

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

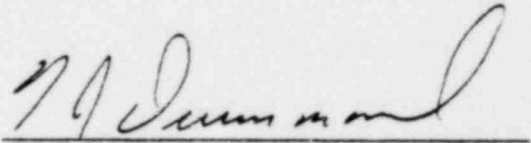
Before the Atomic Safety and Licensing Board

In the Matter of)
)
LOUISIANA POWER & LIGHT COMPANY) DOCKET NO. 50-382
)
(Waterford Steam Electric Station,)
Unit 3))

AFFIDAVIT OF F. J. DRUMMOND


State of Louisiana)
) SS
Parish of Orleans)

F. J. Drummond, being duly sworn according to law, deposes and says that he is the Waterford 3 SES Project Manager with Louisiana Power & Light Company; that the information contained in Applicants' Responses to Joint Intervenors Interrogatory Nos. 19-4 through 19-7 is true and correct to the best of his knowledge and belief.



F. J. Drummond
Waterford 3 SES Project Manager

Sworn to the subscribed before
me this 13TH day of APRIL.



Notary Public

My Commission expires

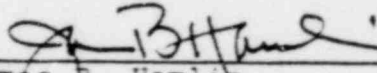
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Station, Unit 3))

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing APPLICANT'S RESPONSES TO JOINT INTERVENORS' INTERROGATORIES 19-1 THROUGH 19-7, and transmittal letter, dated April 15, 1981, were served upon those persons listed on the attached Service List by United States Mail, postage prepaid, this 15th day of April, 1981.



James B. Hamlin
Counsel for Applicant

Dated: April 15, 1981.

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NUCLEAR REGULATORY COMMISSION

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(Waterford Steam Electric)
Station, Unit 3))

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