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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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BRANCH

Morton B. Margulies, Esq., Chairman
Administrative Judge
Atomic Safety and Licensing Board
Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Gustave A. Linenberger, Jr.
Administrative Judge
Atomic Safety and Licensing Board
Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Oscar H. Paris
Administrative Judge
Atomic Safety and Licensing Board
Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

In the Matter of
GEORGIA POWER CO.
(Vogtle Electric Generating Plant, Units 1 and 2)
Docket Nos. 50-424 and 50-425 (OL)

Dear Administrative Judges:

Attached are copies of "NRC Staff's Response to 'Applicants' Motion for Partial Reconsideration of Memorandum and Order Ruling on Motion for Summary Disposition of Contention 10.1" and "Affidavit of Armando Masciantonio in Support of NRC Staff's Response to 'Applicants' Motion for Partial Reconsideration of Memorandum and Order Ruling on Motion for Summary Disposition of Contention 10.1".

As to Mr. Masciantonio's Affidavit, he is presently on travel status and was not available to execute the document in question. Upon his return, the Staff will file an executed copy of the Affidavit. I presently expect this will be accomplished at the end of this week or the first part of next week.

Sincerely,

Bernard M. Bordenick
Bernard M. Bordenick
Counsel for NRC Staff

Enclosures: As Stated

cc: Service List

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

OFFICE OF SECRETARY
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In the Matter of)	
)	
GEORGIA POWER COMPANY)	Docket Nos. 50-424
<u>et al.</u>)	50-425
)	(OL)
(Vogtle Electric Generating Plant,)	
Units 1 and 2))	

NRC STAFF'S RESPONSE TO "APPLICANTS' MOTION
FOR PARTIAL RECONSIDERATION OF MEMORANDUM
AND ORDER RULING ON MOTION FOR SUMMARY
DISPOSITION OF CONTENTION 10.1"

In a Memorandum and Order dated January 23, 1986, the Licensing Board denied Applicants' motion for summary disposition of Contention 10.1 and designated six issues for hearing. Applicants on January 27, 1986, have requested reconsideration of the designation of the fourth of these issues for hearing -- that Applicants have not explicitly addressed the polymer applications other than cable jackets and insulation identified by Intervenor.

For the reasons set forth in Applicants' January 27, 1986, motion and in the attached Affidavit of Armando Masciantonio, the NRC Staff (Staff) fully supports the Applicants' Motion for Partial Reconsideration of the Licensing Board's January 23, 1986, Memorandum and Order denying summary disposition of Contention 10.1.

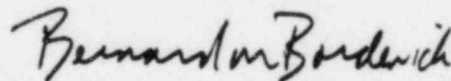
In sum, the Staff is of the view that the fourth issue designated for hearing by the Licensing Board is not material to a disposition of Contention 10.1. Intervenor has not presented any bases for even

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suggesting that there are significant dose-rate effects for any application of Hypalon, EPR, or Neoprene. To the contrary, the only information put forth by Intervenors (the Sandia Study, NUREG/CR-2157) clearly demonstrates that for the total doses expected at Vogtle the dose-rate effects are insignificant regardless of application. Further, the only material experiencing discernible dose-rate effects, according to the Sandia Study, which is within the range of relevant total doses expected at Vogtle is XLPO which the Applicants have stated is only found in cable insulation at Vogtle. Therefore, other applications of the Polymer XLPO have already been addressed by the applicant and were found to be nonexistent at Vogtle. Staff also agrees with Applicant that, as a practical matter, presenting an analysis of each application of Hypalon, EPR, and Neoprene is a considerable and burdensome task which will not contribute to the resolution of Contention 10.1 by the Licensing Board.

Accordingly, the Staff fully supports Applicants' request that the Board reconsider and eliminate the fourth issue, set out above, as an unresolved issue of material fact.

Respectfully submitted,



Bernard M. Bordenick
Counsel for NRC Staff

Dated at Bethesda, Maryland
this 10th day of February, 1986

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
GEORGIA POWER COMPANY)	Docket Nos. 50-424
<u>et al.</u>)	50-425
)	(OL)
(Vogtle Electric Generating Plant,)	
Units 1 and 2))	

AFFIDAVIT OF ARMANDO MASCIANTONIO IN SUPPORT OF NRC
STAFF'S RESPONSE TO "APPLICANTS' MOTION FOR PARTIAL
RECONSIDERATION OF MEMORANDUM AND ORDER RULING ON
MOTION FOR SUMMARY DISPOSITION OF CONTENTION 10.1"

1. My name is Armando Masciantonio. I am presently employed by the U.S. Nuclear Regulatory Commission as a Mechanical Engineer in the Engineering Branch of PWR-A Division of Licensing, Office of Nuclear Reactor Regulation (NRR). Before the recent NRR reorganization I was employed as an Equipment Qualification Engineer in the Equipment Qualification Branch, Division of Engineering, Office of Nuclear Reactor Regulation. I was responsible for the technical reviews, analyses and evaluations of the adequacy of the environmental qualification of electric equipment important to safety and safety-related mechanical equipment whose failure under postulated environmental conditions could adversely affect the performance of safety systems in nuclear power plants.
2. The purpose of this Affidavit is to respond to "Applicants' Motion for Partial Reconsideration of Memorandum and Order Ruling on

Motion for Summary Disposition of Contention 10.1" (Applicants' Motion) which was filed on January 23, 1986.

3. One of the issues set for hearing in the Licensing Board's Memorandum and Order dated January 23, 1986, which denied Applicants' motion for summary disposition of Contention 10.1, is that Applicants have not explicitly addressed the polymer applications other than cable jackets and insulation identified by Intervenors.
4. As noted in Applicants' recent motion, Contention 10.1 relates to the significance of dose rate effects in the artificial aging of four specific polymers during environmental qualification. The contention is based on a Sandia Study (NUREG/CR-2157), and the four polymers addressed in that study are chlorosulfonated polyethylene (Hypalon), ethylene propylene rubber (EPR), chloroprene (Neoprene), and cross-linked polyolefin (XLPO). Applicants in their motion for summary disposition specifically addressed all four polymers in terms of the various polymer applications set forth by Joint Intervenors and the bases for the Intervenors' allegations (the Sandia Study).
5. As further noted in Applicants' motion for reconsideration, for three of these polymers -- Hypalon, EPR, and Neoprene -- Applicants demonstrated in their motion for summary disposition that the dose-rate effects that had been observed in these polymers were insignificant at and below the maximum total dose that equipment important to safety at Vogtle might incur over forty years of normal plant operation. In the case of Hypalon and EPR, Applicants' motion

for summary disposition also demonstrated that the reduction in properties addressed by the Sandia study is virtually the same for all dose rates up to a total integrated dose of 20 megarads. In the case of Neoprene, the reduction is virtually the same up to a total integrated dose of 10 megarads. Applicants have stated that at Vogtle, no equipment important to safety will receive a total integrated dose for forty year normal operation greater than 10 megarads, and most such equipment will receive less than one megarad. Thus, only XLPO exhibited discernible dose-rate effects within the range of relevant total doses. See Affidavit of Joel Kitchens, Victor L. Gonzalez, and Mark L. Mayer (July 30, 1985), ¶¶ 28-29 (Affidavit of Kitchens et. al.); Applicants' Statement of Material Facts As To Which There is No Genuine Issue To Be Heard Regarding Joint Intervenors' Contention 10.1 (Dose Rate Effects) (July 31, 1985), ¶¶ 7-9.

6. Applicants' motion for summary disposition also stated that Applicants cross-checked the four polymers against their uses at Vogtle, including all applications put forth by Joint Intervenors. See Affidavit of Kitchens et. al., ¶ 18. XLPO was found only in cable insulation. Id., ¶ 30.
7. XLPO was not found in the other applications identified by Joint Intervenors -- O-rings, gaskets, and elastic diaphragms. See id., ¶ 30. Since dose rate effects were not discernible in Hypalon, EPR, and Neoprene at and below the maximum total dose that equipment important to safety might incur over forty years of normal plant operation, Applicants' motion states, and I agree, that the

applications of these three polymers were irrelevant. Irrespective of the polymer application, artificial aging of safety-related equipment with these three polymers reasonably simulates normal life degradation, and hence the environmental qualification tests of such equipment are valid.

8. Based on the above considerations, the fourth issue designated for hearing by the Licensing Board is not material. No bases has been presented by Intervenors for suggesting that there are significant dose-rate effects for any application of Hypalon, EPR, or Neoprene. To the contrary, the only information put forth by Joint Intervenors (the Sandia Study) demonstrates that the effects are insignificant regardless of application.
9. I also agree with Applicants that, as a practical matter, presenting an analysis of each application of Hypalon, EPR, and Neoprene is a considerable and burdensome task which will not contribute to the resolution of the contention in question by the Licensing Board.

Armando Masciantonio

Subscribed and sworn to before me
this ____ day of February, 1986

Notary Public

My commission expires: _____