



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

OFFICE OF THE
CHAIRMAN

August 23, 1982

The Honorable Morris K. Udall, Chairman
Committee on Interior and Insular Affairs
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

This is to update our letter to you dated July 24, 1981 which addressed the allegations made by Mr. Fred Slaughterback to Congressman Panetta that the Raychem-Flamtrol (Flamtrol) cable installed at the Brunswick nuclear power facility does not comply with NRC requirements. Our previous letter stated that we had contracted with Franklin Research Center (FRC) to make a confirmatory technical assessment of the use of Flamtrol cable and that you would be provided a copy of FRC's report when it was complete.

FRC has completed its assessment of the use of Flamtrol cable at nuclear power facilities and has issued both an interim report (Enclosure 1) and a final report (Enclosure 2) on this matter. FRC's interim report reached no conclusion about the adequacy of the cable used at Brunswick. FRC's final report identified plants using Flamtrol cable in safety applications from the 1981 licensee submittals regarding electrical equipment required to be environmentally qualified; described the space charge phenomenon as applicable to Flamtrol cable; and evaluated the loss-of-coolant accident (LOCA) capability of Flamtrol cable based on jacket integrity.

FRC's final report indicates that the suspect cable (Flamtrol cable having a combined insulation thickness of 0.12 inch or greater) can be expected to perform acceptably under normal service conditions. However, due to the uncertainties associated with space charge effects, FRC could not make a determination of the acceptability of the suspect cable under the harsh environmental conditions that could exist as a result of a design-basis accident (e.g., the temperature, humidity and radiation levels to which the cable could be exposed during a postulated LOCA).

The July 24, 1981 letter to you provided the basis for the technical determinations that at that time the Flamtrol cable being used at Brunswick and other nuclear power facilities complied with the applicable NRC requirements. That letter also indicated that we were continuing our review of the matter with the aid of the above-mentioned contract with FRC. Based on the results of the FRC assessment, we do not believe that the tests previously conducted on Flamtrol cable fully accounted for the space charge effects induced in the suspect cable during the fabrication process. Therefore, we now believe that the results of the qualification tests previously conducted do not apply to

DESIGNATED ORIGINAL

8206270063

Certified By A. Brown

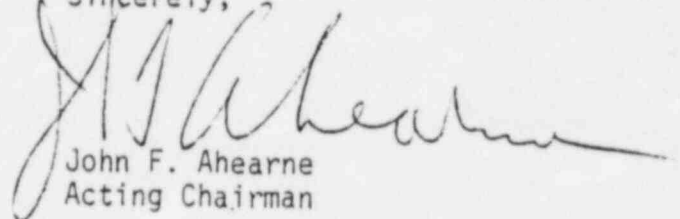
Honorable Morris K. Udall

-2-

Flamtrol cable having a combined insulation thickness of 0.12 inch or greater and which could be exposed to the harsh environment of a postulated design basis accident. As a result, we can no longer conclude that it has been demonstrated that the suspect cable meets all of our requirements. However, since Flamtrol cable having a combined insulation thickness of less than 0.12 inch was within the valid test envelope for the space charge effects, we continue to believe that such cable meets all our requirements.

This matter will be resolved under the auspices of our ongoing equipment qualification program. Toward this end, we are in the process of notifying the affected utilities of our new position regarding Flamtrol cable. Licensees and applicants using or planning to use the suspect cable in systems important to safety will be required to demonstrate its qualification for its intended function. In the event that we find the cable to be unacceptable, we will require that it be replaced.

Sincerely,



John F. Ahearne
Acting Chairman

Enclosures:
As stated