JAN 10 1968

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THRU: Charles C. Long, Chief, RPB-3, DRL
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Division of Reactor Licensing

CONTROL AND INSTRUMENTATION MEETING WITH FLORIDA POWER CORPORATION, JANUARY 5, 1968, DOCKET NOS. 50-302 & 50-303

A meeting was held with the Florida Power Corporation on January 5, 1968, for the purpose of discussing the control and instrumentation aspects of the Crystal River nuclear units.

Several points of junction of control and safety were noted. The primary coolant temperature appeared to be one, but was resolved to be diagrammatic only. However, there is an unresolved joining of the primary coolant pressure measuring channels. Four are provided, with two out of four required for trip action. One of the four is selected as input to the pressure control circuit. Since all four pressure signals are joined in some manner so as to select one for control, we asked for further detail as to their physical arrangement.

We asked if the current from each four-foot ion chamber could be measured separately and were informed that it was possible.

In response to a question about splitting the scram bus, FPC reserved comment. The understand the question, from Metropolitan Edison, but do not care to commit themselves at this time.

We asked for details on in-service testing methods, protection and ESF systems, as related to IEEE standards.

The applicant stated that the Borated Water Storage Tank level instrumentation would be redundant.

We discussed Criterion 11. Philosophically the applicant objects, but pragmatically he will comply. Both FPC and B&W are of the opinion that safety is degraded by local control stations.

There was extended discussion on flow measurement, or the lack of it. We pointed out our concern, which is mostly lack of protection to certain flow loss incidents. B&W understands the additional thermal-hydraulic analyses are needed. FPC asked if dP switches across the steam generator, which would trip at a single preset low ΔP, would be satisfactory; we did not approve. The applicant was notified that direct flow measurement and protective action may be required.

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FPC noted that they were updating radiation monitoring section to applicable standards of the Metropolitan Edison case.

We asked about use of in-core instrumentation as related to core hot spots. We also inquired as to the function of out-of-core ion chambers for the same purpose. THe applicant did not believe that the out-of-core instrumentation would be called on to detect hot spots, such as those caused by xenon oscillation. However, results of a forthcoming core flux computation could cause revision of that position.

Stevens of B&W asked if there was any procedure that he (or his company) could do to expedite matters. His concern was replication of effort with different applicants and different reviewers. We suggested and encouraged the topical report format.

Attendees

FPC

W. O. May
W. A. Szelistowski

DRL

T. Ippolito
D. F. Ross
D. Sullivan
A. Schwencer

B&W

E. S. Patterson
H. H. Stevens
R. F. Ryan
W. R. Smith
F. Norman

GAI

W. B. Shields

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