R. Tedesco, Chief
Reactor Projects Branch #2, DRL

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THRU: V. A. Moore, Chief, LAPTB, DRL
D. F. Sullivan /s/ D. F. Sullivan
Instrumentation & Power Technology Branch, DRL

JERSEY CENTRAL; OYSTER CREEK UNIT #1; REVIEW OF INSTRUMENTATION SCHEMATICS; DOCKET #50-219

LAPTB:DRL:DFS - RT-59

On June 20 and 21, I met with Messrs. J. Healy (Jersey Central), M. Lamb (General Electric), and E. Mobile and G. Lary (Burns and Roe) to discuss instrumentation schematics relating to:

a) Protection System
b) Refueling Interlock System
c) Rod Block System
d) Emergency Power System
e) Core Spray System
f) Containment Spray System.

a) Protection System
The review encompassed schematic dwgs #237E366, 1-6. Two design deficiencies were uncovered:

1) Several circuits which allow the manual bypassing of certain scram functions are designed such that a single failure (short to line) would place the bypass in force.

2) Several circuits which control redundant containment isolation valves can be disabled by a single short-to-line.

We understand that these deficiencies will be corrected.

b) Refueling Interlock System
A single failure within the present design would allow more than one rod to be withdrawn while a loaded hoist was positioned above the core. M. Lamb proposed a design modification which provides redundancy by adding a separate circuit which de-energizes the rod selector circuits. The existing rod block circuit de-energizes the drive circuits.

We believe this is satisfactory, and understand that the modification will be accomplished.

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c) Rod Block System
As stated above, the Refueling Interlock system will initiate a rod block via redundant circuits. The decision to incorporate, or not to incorporate, redundancy within all other rod block inducing circuits will await the outcome of the "startup accident" analysis requested by our recent list of questions.

d) Emergency Power System
No schematics were available. However, we discussed this matter at length, and I believe that the applicant and his representatives fully understand our position: that no single failure within the on-site emergency power system shall prevent the automatic initiation of sufficient power.

The final design will be judged against this criterion.

e) Core Spray System
The final design of this system depends upon the design of the Emergency Power system. Existing schematics were reviewed for information and familiarization purposes.

The final design will be reviewed at a later date.

f) Containment Spray System
The final design of this system also depends on the design of the Emergency Power system and will be reviewed at a later date.

I understand, from these discussions, that the final, modified schematics will be available for review on or about August 15. Assuming full cooperation by the applicant, we should be able to complete our review of the schematics during a two day meeting.

I anticipate that the entire review, including a visit to the site, can be completed by September 15.

cc: S. Levine
V. Moore
V. Stello
D. Sullivan

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DATE ▶	6/22/67					

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