Nuclear

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May 17, 1990

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Additional Information on SPDS

References:
1. NRC Letter to GPUN, 1/30/90 "NRC Findings on SPDS Audit"
2. NRC Letter to GPUN 3/5/86 "SPDS SER"

The purpose of this letter is to provide you with additional information concerning our Safety Parameter Display System (SPDS) and to respond to NRC concerns raised as a result of the SPDS audit as documented in Reference 1. Attachment I provides the information requested by the staff during a conference call on Monday, April 16, 1990. The information describes the steps an operator would take to verify that containment isolation has been achieved.

Attachment II provides responses to each of the NRC concerns raised during the January 17, 18, 1990 SPDS audit. Based on discussions with the staff, we understand that providing this information should resolve all outstanding issues concerning the Oyster Creek SPDS.

If further information is required, please contact Brenda DeMerchant, OC Licensing Engineer at (609) 971-4642.

Very truly yours,

E.E. Fitzpatrick
Vice President and Director
Oyster Creek

EEF/BDeM/jc
Enclosure

(cc's on page 2)

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cc: Mr. Thomas Martin, Administrator
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NRC Resident Inspector
Oyster Creek Nuclear Generating Station

Mr. Alexander Dromerick
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Attachment 1

Upon receipt of containment isolation demand, a Control Room Operator will be directed by the GSS to perform the following verifications (by physically reporting to the indicated panel) using Procedure 312 "Reactor Containment Integrity and Atmosphere Control".

System	Valve No.	Panel No.
DW Vent/Purge	V-27-1	11F
	V-27-2	11F
	V-27-3	11F
	V-27-4	11F
Torus Vent	V-28-17	11F
	V-28-18	11F
Torus 2" Vent Bypass	V-28-47	11F
DWEDT	V-22-1	11F
	V-22-2	11F
DW Floor Sump	V-22-28	11F
	V-22-29	11F
Cleanup	V-16-1	11F
	V-16-2	11F
	V-16-14	11F
	V-16-61	11F
Shutdown Cooling	V-17-19	11F
	V-17-54	11F
Torus/Rx Bldg. Vacuum Breakers	V-26-16	11F
	V-26-18	11F
RBCCW	V-5-147	1F/2F
	V-5-167	1F/2F
	V-5-166	1F/2F
**TIP Air/N_2 Purge Valve	V-23-70	
(Four (4) Individual Tip Drives)		4R
N_2 Purge	V-23-13	12XR
	V-23-14	12XR
	V-23-15	12XR
	V-23-16	12XR
N_2 Makeup	V-23-17	12XR
	V-23-18	12XR
	V-23-19	12XR
	V-23-20	12XR

**The actual valve position cannot be verified anywhere. There is no physical way to verify the actual position of this valve.

System	Valve No.	Panel No.
DW 2" Vent Bypass	V-23-21 V-23-22	12XR 12XR
Torus O_2 Sample Valves	V-38-22 V-38-23	12XR
DW O_2 Sample Valves	V-38-9 V-38-10 V-38-16 V-38-17	These valves must be monitored at the containment particulate monitor cabinet on the 23' elevation using a volt meter

ATTACHMENT II

GPUN believes that the Oyster Creek SPDS meets the regulations outlined in NUREG-0737 as stated in our certification submittal. However, we are planning SPDS enhancements to improve the conciseness and continuousness of the SPDS. Responses to each of the NRC inspection concerns are given below.

CONCERN
A separate alarm status monitor is located 90 degrees away from and to the right of the "SPDS" monitor.

RESPONSE
GPUN will provide a method of continuous display of critical safety function (CSF) status on the SPDS CRT so that the SPDS user does not have to rely upon the alarm CRT to know that any CSF has changed status. The SPDS display will be enhanced so that CSF status boxes will appear on the message line of all displays on every CRT of the Plant Computer System. This arrangement will provide a continuous display of the current CSF alarm status except for a brief period when an error message may interrupt. Five boxes will be displayed on the bottom line of each CRT, one for each CSF. The presentation of the boxes will be Human Factored with respect to their legends, colors, spacing between boxes, error message interruption, etc. We believe that this enhancement will satisfy the conciseness and continuous display issues. This modification is expected to be completed by the end of the third quarter.

CONCERN
A separate containment isolation status panel, No. 11F, is located 180 degrees away from and to the left of the alarm status monitor.

RESPONSE
GPUN maintains that panel 11F is not part of the SPDS but rather is part of the existing control room instrumentation used to confirm SPDS indications. NUREG-0737 states that SPDS is used in addition to the control room instrumentation and serves to aid and augment these instruments.

Further, NUREG-1342 states the operator should not take actions based on SPDS alone. GPUN's use of the SPDS is consistent with this philosophy. The SPDS users are trained to confirm all SPDS indications with control room indications. Having all of the containment isolation valves displayed on the SPDS or on panel 11F would not change the user's actions. Therefore, the proximity of panel 11F to the SPDS or alarm monitor is not a factor, since this panel is not part of the SPDS.

CONCERN
Separate containment isolation status indicators for the traversing incore probe drain lines, reactor building component cooling water lines and containment purge and vent lines are located on the front and back of other panels.

RESPONSE
As described in the previous response, the SPDS users are instructed to confirm all SPDS indications with control room indications. Panel 11F displays a majority of the active containment isolation valves. However, other valves as identified in this concern are located on other panels in the control room. The SPDS user's actions are unchanged by the location of containment isolation valve status indicators in the control room.

CONCERN
The "SPDS" monitor and the separate alarm status monitor are not totally dedicated because non-SPDS displays can be displayed on the monitors.

RESPONSE
The alarm status monitor will be dedicated to displaying plant computer system including SPDS alarms. This monitor dedication will serve to provide initial notification of a SPDS alarm. Once the user is viewing the SPDS monitor, there will be continuous safety function status displayed on that monitor.

CONCERN
On displays below the main menu, the "SPDS" monitor does not indicate a change in status for the five plant-specific safety functions.

RESPONSE
As previously discussed, GPUN has proposed a method for providing continuous status of the five critical safety functions on the SPDS monitor. This will enable the SPDS user to be alerted to changes in safety function status when he is viewing a SPDS display other than the main menu.

CONCERN
The "SPDS" monitor provides only demand rather than containment isolation valve status.

RESPONSE
GPUN maintains that the SPDS is not required to monitor the status of all of the primary containment isolation valves. This position is supported by the NRC SER on the Oyster Creek SPDS (Ref. 2) which agrees that containment isolation demand is acceptable for the SPDS.

When a containment isolation demand is indicated on SPDS, the user would direct an operator to confirm the demand signal and subsequently the completion of containment isolation from conventional control room indications. Even if all of the containment isolation valves were put into SPDS so that containment isolation status indication could be displayed, the SPDS user's actions would be no different. The user would still have to direct an operator to confirm the demand and completion of containment isolation from the control room panel indications. Therefore, we believe that the existing SPDS indication for containment isolation demand is acceptable for achieving the overview function for which the SPDS was intended.

CONCERN
From the "SPDS" monitor, panel 11F in the control room does not provide control room personnel with a complete status of all reactor containment isolation valves.

RESPONSE
As stated in the above response, GPUN maintains that containment isolation demand is sufficient in achieving the overview function for which the SPDS was intended. Also, panel 11F is not part of the SPDS and as such would not require a complete status of all containment isolation valves. The SPDS user is trained to confirm all SPDS indications with conventional control room instrumentation.

Finally, the user's actions would not be altered if the status of all of the containment isolation valves was given on panel 11F or even an SPDS display.