

SAFETY EVALUATION BY THE
OFFICE OF NUCLEAR REACTOR REGULATION
FOR THE BOSTON EDISON COMPANY ON
PILGRIM NUCLEAR POWER STATION UNIT I

DIESEL GENERATOR LOCKOUT

On March 29, 1977, a generic letter was sent to all licensees requesting that they provide information regarding the status annunciator system for the diesel generators at their facilities. This request for information was prompted by reports from licensees, i.e., LERs, on incidents where diesel generators failed to respond to automatic start signals because control switches or lockout and shutdown relays were left in the shutdown condition by operators unaware of their status. The principle reasons for this lack of awareness were: (1) the sharing of annunciator stations for both disabling and non-disabling alarm conditions; (2) wording on annunciator windows for disabling conditions which did not specifically say a diesel generator emergency start was blocked; and (3) disabling conditions which were not annunciated in the control room.

The licensee responded by letter dated June 1, 1977, describing the diesel generator annunciator system at the Pilgrim Nuclear Power Station. A review of the licensee's response by our consultant, LLNL, has identified two areas of concern:

1. The position of the air supply SHUT-OFF valve is not annunciated to the Control Room.
2. If the diesel generator is in the TEST mode and the shutdown relay is energized, it appears that the alarm can be cleared in the Control Room after the local alarm is cleared. This raises the following question - can the local alarm be cleared without clearing the shutdown relay? If so, an automatic start could be blocked if the local alarm were cleared without first reverting the shutdown relay and the operators were not aware of it.

By letter dated October 20, 1978 and telecon with the licensee on February 4, 1981, the areas of concern have been resolved as follows:

1. Functionally testing the D/G after maintenance and daily checking the position of the shut-off valves provide adequate assurance that the D/G will not be left in an inoperable mode due to the incorrect positioning of the air start shutoff valve. No modification is necessary.
2. The local alarm cannot be cleared without clearing the condition which caused the alarm. The alarm can be silenced, but not cleared (i.e., the local alarm cannot be cleared without clearing the shutdown relay). No modification is necessary.

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