



6

POLICY ISSUE (Information)

August 16, 1991

SECY-91-261

For: The Commissioners

From: James M. Taylor
Executive Director for Operations

Subject: MARK I CONTAINMENT PERFORMANCE IMPROVEMENT PROGRAM -
SEMIANNUAL REPORT

Purpose: To provide the Commission with the status of implementing the Mark I containment performance improvements (CPI) as directed in the staff requirements memorandum (SRM) of July 11, 1989.

Background: In the July 11, 1989 SRM, the Commission directed the staff to address five specific requirements which were proposed by the staff in SECY-89-017. The first three requirements dealt with a need to ensure that all Mark I containments have effective hardened wetwell venting capability. The fourth requirement was that the licensees expeditiously implement the station blackout (SBO) rule for Mark I containment plants. The fifth requirement was that the licensees incorporate into each plant's individual plant examination (IPE) program improvements of the CPI program identified in SECY-89-017 that are not related to the hardened wetwell vent modifications.

In the previous semiannual report (SECY-91-036), the staff summarized the implementation status of the first three CPI requirements for hardened wetwell vent path at Mark I containment plants. The staff indicated that the licensees

Contact:
Mohan C. Thadani, NRR
492-1476

NOTE: TO BE MADE PUBLICLY AVAILABLE
IN 10 WORKING DAYS FROM THE
DATE OF THIS PAPER

B152

for 22 out of the 24 Mark I containment plants had volunteered to install hardened wetwell vent modifications during convenient refueling outages of their plants as directed in the July 11, 1989 SRM. The Boston Edison Company has already installed a hardened wetwell vent modification at its Pilgrim plant. The Power Authority of the State of New York (PASNY), the licensee for the FitzPatrick plant, requested and received the approval of the staff for a delay in adopting wetwell vent path modification at FitzPatrick while it completes its IPE program and addresses the NRC-approved criteria for hardened wetwell vents. In approving this request, the staff considered the fact that the vent path at FitzPatrick is already hardened up to the outer wall of the containment building and that the incremental risks to the public health and safety caused by a failure of vent path outside the reactor building were small. The staff also indicated that it has approved the hardened vent modification schedules for all Mark I plants except Peach Bottom, Unit 3, and was exploring with the Philadelphia Electric Company (PECO) a possibility that the modifications could be completed earlier than the proposed date in fall 1993.

In previous semiannual reports, the staff found no significant results on which to report regarding the status of the implementation of the SBO rule and the status of reviews of other Mark I CPI improvements which were incorporated in the IPE programs. Since issuing SECY-91-036, the staff has noted some progress as is reported herein.

Discussion:

During this reporting period, the staff negotiated with PECO to improve the hardened vent implementation schedule of Peach Bottom Unit 3. The staff discussed these issues directly with the President and Chief Operating Officer of PECO. These negotiations prompted PECO to evaluate its backlog of safety-significant modification work at Peach Bottom, Units 2 and 3, to determine if it could implement early the hardened wetwell vent capability. The PECO President stated that PECO concluded that earlier implementation would disrupt other safety-significant modification work already planned and would not promote overall safety. The staff evaluated this explanation provided by PECO's President and considered the facts that PECO has recently adopted a 24-month fuel cycle at Peach Bottom, Unit 3, and a suitable refueling outage for implementing the hardened wetwell vent capability is scheduled in the fall of 1993. The staff concluded that the schedule proposed by PECO is reasonable. By a letter

of June 3, 1991, the staff approved the Peach Bottom, Unit 3 schedule.

In granting this approval, the staff completed its licensing actions to obtain a commitment and a schedule from the licensees for Mark I containment plants to install a hardened wetwell vent capability. Enclosure 1 summarizes the current status of implementing the hardened vent capability at the 24 Mark I containment plants. The staff will prepare a temporary instruction (TI) for the regional staff to inspect and verify the licensees' implementation. The staff will report the progress on regional inspections in future semiannual reports.

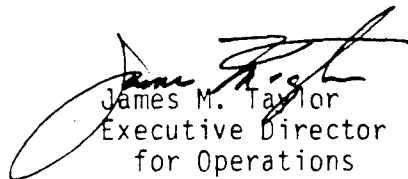
In SECY-91-036 the staff indicated that PASNY will complete its IPE program by June 30, 1991. By a letter of July 12, 1991, PASNY informed the staff that it is revising the date to August 30, 1991, for submitting the IPE report for FitzPatrick and will provide its final position regarding hardened wetwell vent modifications by October 31, 1991 or 60 days after submitting the IPE report. The staff does not find this delay to be significant.

The staff has expeditiously reviewed the licensees' proposals to implement the SBO rule, and has completed preliminary reviews of 22 of the 24 Mark I units. The staff deferred the reviews of Browns Ferry Units 1 and 3 because they are not expected to operate in the near future. The Browns Ferry Unit 1 and 3 reviews will be completed before restart.

The staff initially found that several of the Mark I units did not meet the requirements of the SBO rule. The staff found that the licensees for most plants had used non-conservative assumptions in calculating the adequacy of the battery capacity and the heat-up rate of the control room and other areas containing SBO equipment. These licensees are resolving these concerns.

Additionally, a more significant non-conformance issue was identified during the initial review for Peach Bottom Units 2 and 3. In this case the licensee proposed to change the design basis for emergency diesel generators (EDGs) from three-out-of-four to two-out-of-three in order to make one EDG available as an alternate ac source on the basis that the fourth EDG represents an excess redundancy. A supplemental SBO response from the licensee has been received and is presently under review.

In August 1989, the staff forwarded to the licensees information concerning the other Mark I containment performance improvements recommended in SECY-89-017. The information was transmitted as Supplement 1 to Generic Letter 88-20, "Individual Plant Examination for Severe Accident Vulnerabilities 10 CFR 50.54(f)." In NUREG-1335, "Individual Plant Examination: Submittal Guidance," the staff requested that licensees discuss these improvements. In the review plan for the IPEs, the staff included guidance for the review of licensees' responses. The staff has not yet received any IPE submittals from Mark I licensees. Enclosure 2 lists the dates when licensees of Mark I plants plan to submit their IPE reports. The staff will report its schedule for reviewing other CPI requirements of SECY-89-017 in future semiannual reports.


James M. Taylor
Executive Director
for Operations

Enclosures:

1. Status of Hardened Vent Modifications
at 24 Mark I Plants
2. Expected Dates for Submittal of IPE
for Mark I Plants

DISTRIBUTION:

Commissioners

OGC

OCAA

OIG

GPA

REGIONAL OFFICES

EDO

ACRS

ACNW

SECY

ENCLOSURE 1

STATUS OF HARDENED VENT MODIFICATIONS

AT 24 MARK I CONTAINMENT PLANTS

<u>PLANT NAME</u>	<u>MODIFICATION SCHEDULE</u>
Browns Ferry 1	Upon Restart (June 1995)
Browns Ferry 2	18 Months From Restart (January 1993)
Browns Ferry 3	Upon Restart (June 1993)
Brunswick 1	January 30, 1993
Brunswick 2	January 30, 1993
Cooper	Spring 1993
Dresden 2	January 1, 1993
Dresden 3	January 1, 1993
Duane Arnold 1	December 31, 1992
Fermi 2	December 31, 1992
FitzPatrick	Existing vent is hardened. Additional modifications will be determined after IPE is completed.
Hatch 1	Spring 1993
Hatch 2	December 1, 1992
Hope Creek	January 1, 1993
Millstone 1	March 1993
Monticello	March 31, 1993
Nine Mile Point 1	Before January 1993
Oyster Creek	November 1992
Peach Bottom 2	Fall 1992
Peach Bottom 3	Fall 1993
Pilgrim 1	Implemented
Quad Cities 1	January 1993
Quad Cities 2	January 1993
Vermont Yankee	December 1992

ENCLOSURE 2

EXPECTED DATES FOR SUBMITTAL OF IPE FOR MARK I PLANTS

<u>PLANT NAME</u>	<u>SCHEDULED IPE SUBMITTAL DATE</u>
Browns Ferry 1, 2, & 3	December 1, 1991
Brunswick 1 & 2	August 31, 1992
Cooper	October 30, 1991
Dresden 2 & 3	April 30, 1992
Duane Arnold	August 31, 1992
Fermi 2	April 30, 1992
FitzPatrick	August 30, 1991
Hatch 1 & 2	September 30, 1992
Hope Creek	July 31, 1993
Millstone 1	November 1, 1991
Monticello	November 26, 1991
Nine Mile Point 1	July 31, 1992
Oyster Creek	September 30, 1992
Peach Bottom 2 & 3	September 1, 1992
Pilgrim	April 30, 1992
Quad Cities 1 & 2	June 30, 1993
Vermont Yankee	December 31, 1993