

65

THIS DOCUMENT CONTAINS  
POOR QUALITY PAGES

ROUTING AND TRANSMITTAL SLIP

Date

4/2/80

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1.		
2. George D. Sauter H-1156		
3.		
4.		
5.		

Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS

Per Chairman Ahearne's request, we have developed the enclosed. Please call if you have any questions prior to the 1:30 meeting.

*Gus Lainas*  
Gus Lainas  
X-28069

cc: D. Eisenhut  
R. Ferguson  
T. Wambach

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
	Phone No.

5041-102

☆ U. S. GPO: 1978-0-261-647 3354

OPTIONAL FORM 41 (Rev. 7-76)  
Prescribed by GSA  
FPMR (41 CFR) 101-11.206

800711.0 586

## FIRE PROTECTION REVIEW PROGRAM STATUS

As background, the fire protection reviews consist of two major areas. First, the adequacy of fire protection features needed to prevent and extinguish potential fires. This part of the review includes the adequacy of fire brigade manning and training, control of combustibles, adequacy of sprinkler systems, hose stations, etc. Staff reviews of this area will be completed by July 1980 and implementation is feasible by November 1, 1980. Most licensees are committed to this implementation schedule with some exceptions. The exceptions are related to those items requiring plant shutdowns to implement (e.g., the installation of oil collection systems for reactor coolant pumps which requires access to the containment). Licensees have committed to making these shutdown related modifications during the first scheduled refueling outage after October 1980. A firm required date for these modifications by end of 1980 would therefore necessitate a number of plant shutdowns, since it is unlikely that all of the large numbers of affected nuclear units have scheduled shutdowns prior to the end of 1980. However, we believe it appropriate, as the current proposed rule requires that implementation be required by November 1, 1980 although it may result in plant shutdowns.

The second review area is related to the need for alternate shutdown capabilities. Licensees must demonstrate that they have adequate capability for plant shutdown assuming a postulated fire in a critical plant location. This review area has required substantial modifications and review effort. The schedule for the completion of staff reviews of this area for all plants, with the exception of the 11 SEP plants, which will be discussed in following paragraphs, is July 1980. The conclusion that will be reached at that time will be either (a) that the plant has adequate capability including any proposed modifications, or (b) that additional modifications are required. Staff reviews have been completed for 28 plants; fourteen plants have completed installation, and five are scheduled for installation by December 1980.

The amount of time required to design, procure and install equipment for alternate shutdown system modifications varies considerably from plant to plant. It is estimated that implementation of required modifications will take 6 to 12 months from the time that the staff determines that alternate shutdown modifications are required. All staff reviews to determine the need for alternate shutdown modifications are currently scheduled to be finished by July 1980. The staff currently estimates that an additional 12 plants could implement these modifications by December 1980. However, the remaining 23 plants require more extensive modifications which could delay implementation to June 1981.

In accordance with our current plans, the 11 SEP plants would require an even longer implementation schedule. The reason for this is that the systems necessary to shutdown these plants are undergoing review for several issues that could require safe shutdown system modifications, e.g., tornado missiles, floods, pipe breaks inside and outside containment, and earthquakes. The SEP could, for example, conclude that certain existing systems do not have adequate seismic capability or adequate flood protection and therefore, additional dedicated systems would be needed. Until now, the staff's review was being conducted in parallel for these issues with the objective of not requiring installation of significant alternate shutdown modifications for fire protection and then a few months later require additional or redesigned dedicated systems for other SEP review considerations.

To accelerate the fire protection evaluations, the SEP facilities will be reviewed for safe shutdown capability by August 1980 regardless of whether or not the licensee has submitted a fire protection safe shutdown analysis. For those SEP plants requiring alternate shutdown systems, we expect modifications to require about 18 months for system design, procurement of equipment, and installation. For those plants requiring dedicated systems, we expect completion of the installation to require about 30 months.

Based on the foregoing, we would require alternate shutdown related modifications to be implemented by June 1981 for non-SEP plants. For the SEP plants, following the August 1980 review, we would require all modifications to be installed as soon as possible but no later than December 1981 for alternate shutdown systems and no later than December 1982 for dedicated systems.

ALTERNATE/DEDICATED SHUTDOWN SYSTEMS

STATUS AS OF MARCH 31, 1980

Total Operating Plants -		68
1. Alternate Shutdown System Modifications Complete - (staff reviews complete)	<i>(in place)</i>	14
Browns Ferry 1,2,3	Ft. St. Vrain	
Brunswick 1,2	Hatch 1,2	
Kewaunee	Davis-Besse 1	
Rancho Seco		
Cooper		
D.C. Cook 1,2		
2. Alternate Shutdown System Modifications Scheduled to be Completed by December 1980 - (staff reviews complete)	<i>Installation complete by 12/80</i>	5
Indian Point 2,3	Farley 1	
Beaver Valley		
Crystal River 3		
3. Alternate Shutdown System Modifications Not Now Scheduled for December 1980, but could, <u>by staff estimation</u> be completed by December 1980 - (*staff reviews complete)		12
North Anna 1*	Monticello	
Arkansas 1,2	Fitzpatrick	
Trojan	Ft. Calhoun	
Quad Cities 1,2	Three Mile Island 1	
H.B. Robinson		
Dresden 3		
4. Alternate Shutdown System Modifications Could Extend to <u>June 1981</u> by Present Estimates - (*staff reviews complete)	<i>July</i>	23
Salem 1*	Surry 1,2*	
Duane Arnold	Zion 1,2	
Millstone 2	Maine Yankee	
Turkey Point 3,4	Peach Bottom 2,3	
Vermont Yankee	Point Beach 1,2	
Calvert Cliffs 1,2	St. Lucie	
Prairie Island 1,2	Three Mile Island 2	
Nine Mile Point*	Pilgrim	
5. <u>Dedicated Shutdown System</u> Required - scheduled for January 1982 -	<i>system to service 3 plants</i>	3
Oconee 1,2,3		

*Must meet  
Dec 80*

*April*

*Dec 81*

*Dec 81*

*Staff estimates followed up by calls to licensees*

*Staff estimates were made in each category*

Sched out  
alt in Dec 81  
ded in Dec 82

- 2 -

Staff review SFP plant Alternate Shutdown Systems to be completed by August 1980 - 11.

Palisades

San Onofre 1+

Dresden 2 *probably alternate shutdown system*

Dresden 1+

Oyster Creek+

LaCrosse+

Millstone 1+

Big Rock Point+

Ginna\*\*

Yankee Rowe\*\*

Haddam Neck+

\*\*Dedicated system anticipated (Installation expected to be completed by 12/82). 10

+Alternate shutdown system anticipated (Installation expected to be completed by 12/81).

OTHER OUTSTANDING ISSUES

The following list shows the issues, other than shutdown capability, which were not completely resolved by the issuance of the SER for the plant. The letters after the plant name refer to topics included in the proposed Appendix R and are defined in the Key below. Some of these issues have been resolved subsequent to issuance of the initial SER.

Arkansas 1, 2: D,F,K,M,Q,Y	Maine Yankee: C,D,E,F,G,K,M
Big Rock Point: G,Y	Monticello: B,D,E,F,J,K,S,T,V
Indian Point 2, 3: C,F,Y	Peach Bottom 2,3: D,E,F,G,I,K,L,P,R
Oconee 1, 2, 3: K	S,T,V,Y,Z
Oyster Creek: A,G,J,K,R	Point Beach 1,2: D,E,F,G,H,J,K,
Palisades: E,F,G,K,M,U,Y	M,S,T,V,W,BB
Trojan: F,J,K,M,S,Y	St. Lucie: B,C,D,E,F,G,H,I,J,M,
Haddam Neck: A,E,K,M,S,T	S,Y,Z
Dresden 1,2,3: B,D,E,F,S,T,AA	Fitzpatrick: A,B,C,E,F,K,L,S,
Duane Arnold: A,F,J,K,R,S,T,W	X,Y,Z,AA
Millstone 1,2: F,K,M,T,W,Y	Fort Calhoun: C,T,X,BB
Quad Cities 1,2: E,F,T	Ginna: C,F,G,K,M,S,T,V,X,Y,Z,AA} 4/81
San Onofre: C,E,F,M,T,AA } <i>some deferred until * completion of SEP</i>	H.B. Robinson: D,J,K,L,M,T,V,X, } <i>in issue</i>
Turkey Point 3,4: B,C,E,F,T,V } <i>12/80 in issue</i>	Y,BB
Vermont Yankee: C,F,G,J,K,Q,R,T	LaCrosse: B,C,D,E,F,G,Q,R,T,V,Y,AA
Zion 1,2: F,J,K,T,X	Pilgrim: F,G,K,R,S,T,V,X,AA
Yankee Rowe: C,D,E,T,V	Three Mile Island: D,E,F,I,K,L,
Prairie Island 1,2: B,D,F,J,K,M,S,	M,T,V,X,Y,BB
T,V,Z,AA	Calvert Cliffs 1,2: A,C,D,E,F,G,
Surry 1,2: B,D,E,F,G,K,M,S,T,	I,J,K,L,M,R,T
U,V,BB	

DSS or IE Reviews - No Data

D.C. Cook 1,2 - DSS  
Fort St. Vrain - DSS  
Hatch 1,2 - DSS  
Davis Besse - DSS  
North Anna 1 - DSS  
Salem 1 - DSS

Farley 1 - DSS  
Beaver Valley - IE  
Cooper - IE  
Crystal River - IE  
Nine Mile Point - IE } 4/81 (*referring to outage*)

\* anticipate some structural modifications after SEP

KEY:

- A - Fire Hazard Analysis
- B - Fire Water Distribution System
- C - Water Supply
- D - Manual Fire Suppression
- E - Automatic Fire Detection
- F - Automatic Fire Suppression
- G - Fire Brigade
- H - Fire Brigade Training
- I - Emergency Lighting
- J - Administrative Controls
- K - Fire Barrier Penetration Seal Qualification
- L - Supervision of Fire Doors
- M - RCP Oil Collection System
- N - Hydrant Block Valves
- O - Sectional Control Valves
- P - Hydrostatic Hose Tests
- Q - Associated Circuits
- R - Radiological Consequences
- S - Ventilation Systems
- T - In-Situ Test
- U - Technical Specifications
- V - Combustible Control
- W - Diesel Generator Intake
- X - Fire Retardants
- Y - Fire Barriers
- Z - Penetration Seals
- AA - Exposed Steel Protection
- BB - Water Damage