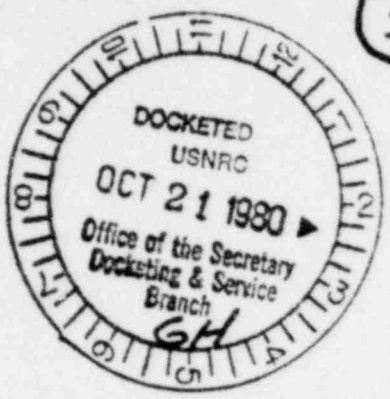
(33)

DOCKET NUMBER
PROPOSED RULE PR 50
45 FR 54708



PUBLIC SERVICE INDIANA

S. W. Shields
Senior Vice President -
Nuclear Division

October 6, 1980

Mr. Samuel J. Chilk
Secretary of the Commission
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Docketing and Service Branch

Dear Sir:

In the Federal Register of August 15, 1980 (45 F.R. 54708) the Nuclear Regulatory Commission (NRC) staff solicited comments on the document NUREG-0696, "Functional Criteria for Emergency Response Facilities." Public Service Company of Indiana, Inc. (PSI) concurs that NRC guidance needs to be developed regarding the design and operation of the Safety Parameter Display System (SPDS), Technical Support Center (TSC), Emergency Operations Facility (EOF), and Nuclear Data Link (NDL). PSI feels that NUREG-0696, after adequate incorporation of industry comments, represents the appropriate mechanism for doing this.

Since the final revision to this NUREG will significantly impact both operating plants and those plants still under construction, PSI hopes that all industry comments will be appropriately addressed and incorporated accordingly.

PSI appreciates the opportunity to offer the attached comments on NUREG-0696.

Sincerely,

S. W. Shields

nowledged by card. 10/21/80

PAB:gb

Attachment

L-4-1, Pt.50

P.O. Box 190, New Washington, Indiana 47162 812 . 293 . 4441

GENERAL COMMENTS

1. NRC Role in an Emergency

PSI feels some very positive steps are being taken to improve the response capabilities of the licensee, local and state agencies, and federal agencies in the event of a radiological emergency at a nuclear power plant. We believe that the ongoing NRC-FEMA efforts, emergency and evacuation planning, and the identification of emergency response facilities (TSC, EOF, SPDS, and NDL) are examples of the increased awareness of emergency planning. In addition, we note that per Items I.B.1.1 and I.B.1.2 of the TMI Action Plan (Organization and Management of Long-Term Improvements and Evaluation of Organization Management Improvements of Near-Term Operating License Applicants), the licensees and applicants are required to upgrade, where needed, their on-site and off-site staffs in order to improve emergency response capability. In particular, the draft NRC document, Criteria for Utility Management and Technical Competence, contains guidance relative to personal qualifications, training requirements, organizational structure, and other areas which are germane to routine and emergency operations.

However, we are concerned that the NRC role in the event of an emergency, particularly involving its functional interfaces and authorities, has not yet been adequately defined; the role is difficult to define in quantitative terms and therefore is difficult to assess. We hope that the following observations will serve in some positive manner:

a) The TMI-2 incident demonstrated the problems inherent in attempting to manage a nuclear power plant accident from a considerable distance off-site. PSI agrees that the institution of the NDL and dedicated telephones will considerably change the nature of the communications efforts and problems. However, we are concerned that the NDL, although probably contributing in a positive manner with regard to independent assessment, may serve to be a source of confusion in management level discussions between the on-site emergency coordinators and the NRC Emergency Management Team (EMT).

b) We note that NUREG-0696 would station the EMT in the NRC Operations Center (Bethesda, Maryland), with the applicable Regional Director and Region support staff traveling to the plant site upon activation of the EMT. The NUREG additionally states that, "In all emergency situations, the NRC role will not extend to any manipulation of nuclear facility controls. However, in extreme cases, the NRC may direct that certain operations be performed at the nuclear facility. Any such direction would come from the NRC Regional Director after his

arrival onsite and from NRC headquarters prior to that time."

PSI has two concerns. The first deals with qualifications of the regional personnel that would arrive onsite. The licensee plant personnel will be specifically trained in the operation of the plant and will be much more knowledgeable of its operating characteristics and system status than the NRC regional personnel that are to provide oversight and support. Secondly, we take exception to the philosophy whereby these same regional support personnel might "direct that certain operations be performed." Presumably, these directions would take place only with regard to actions in which the licensee and NRC were in disagreement, and only where the EMT was in accord with the Regional Director's ruling. It is PSI's position that, in no event should the NRC dictate specific plant operational maneuvers without first demonstrating qualifications on that plant. In addition, PSI is doubtful that the NRC has legal authority for specific operational direction. Also, we are again concerned about the ability of the EMT to manage an emergency from off-site.

PSI suggests that the NRC re-examine its emergency response planning. For example, extensive training might be needed for each region's support staff; and it might not be appropriate, despite the political considerations, to have the entire EMT located in the NRC Operations Center.* NRC should adapt its planning to put the specific State plans rather than attempt to dictate methods in which the states operate.

We also suggest that the final version of NUREG-0696 be edited to remove the contention that the NRC might direct operations at the plant. There has been considerable controversy over this, and we understand that that is not the NRC's actual intent in light of Mr. Harold Denton's statements regarding the Nuclear Data Link before the Nuclear Safety Oversight Committee, on September 16, 1980. Instead, PSI believes there would be some value to a positive statement in the final document, which would affirm that the ultimate responsibility and authority for the safe operation of the plant must rest with the licensee.

2. Human Engineering Factors as Applied to Control Room Designs

Regarding the SPDS, we note that the intent is to provide continuous indication of plant parameters or derived variables representative of the safety status of the plant, all essentially in one location in the control room, TSC, and EOF.

---

* In addition, it is the position of the State of Indiana that recommendations to the Indiana Governor should be made through the Indiana Department of Civil Defense and Emergency Management (IDCD), not from the NRC Operations Center (Reference: State of Indiana Radiological Emergency Response Plan for Fixed Nuclear Facilities).

PSI understands that the need for the SPDS originally surfaced through the recognition that the TMI-2 control room design was inadequate in some respects (human engineering).

In accordance with Task I.D.1 of the Action Plan, (Control Room Design Reviews), licensees and applicants will be required to perform comprehensive human engineering control room design reviews, and make modifications as appropriate. Presumably, the next generation of nuclear plants will contain considerably improved control rooms, and this may be the case for some plants in construction as well.

PSI feels that the need for a SPDS console in the control rooms of existing plants may be justified. We suggest, however, that the final version of NUREG-0696 be revised to include reference to the possibility that new plants with improved control rooms (with respect to human engineering factors) may be able to meet the intent of the control room SPDS without necessarily meeting all of the individual requirements of the final document. (This would not delete the requirements for SPDS display consoles in the EOF and TSC, however).

3. Limiting Conditions for Operation (LCO)

Both LCO's and/or unavailability requirements are specified for some equipment and use of the SPDS, EOF, TSC, and NDL. It is PSI's position that neither of these types of requirements are necessary for the safe operation of the plant; sufficient backup systems exist. However, PSI does feel that it would be appropriate to include general requirements indicating that highly reliable, state-of-the-art systems are required.

SPECIFIC COMMENTS

1) Page 2, Section I.B

PSI concurs with the statement that during normal operation and events in the Notification of Unusual Event class, the plant is managed and operated from the control room and that activation of the TSC and EOF are not necessary. PSI also concurs that during more serious accidents, all off-site coordination and interaction will occur via the TSC and/or the EOF as appropriate.

2) Page 2, Section I.B.1

It is PSI's understanding that the SPDS will be displayed during normal operation and all emergencies only in the control room and that the SPDS will be activated in the TSC and EOF as these facilities are activated.

3) Page 2, Section I.B.2

PSI suggests that "possible" be changed to "practicable." The primary function of the TSC is to assist control room personnel during an emergency. To fulfill this function, the TSC is being required to be radiologically habitable. Therefore, for some installations a balance between "habitability" and "proximity to the control room" may be necessary.

4) Page 2, Section I.B.2

PSI agrees that the staffing of the TSC will vary according to the emergency class.

5) Page 2, Section I.B.2

This NUREG states that:

"Plant operations management will shift from the control room to the TSC when the TSC is activated..." PSI suggests that this be changed to read: "Plant operations management may shift from the control room to the TSC when the TSC is activated." Operational contingencies may require the plant management to be present elsewhere during an emergency.

6) Page 3, Section I.B.3

PSI concurs with the NRC's positions that activation of the EOF is only required for the Site Emergency and General Emergency levels, and that staffing of the EOF will vary according to the emergency class.

7) Page 3, Section I.B.4

This NUREG states that:

"When a significant incident occurs at a nuclear power plant, the NRC may activate the Emergency Management Team (EMT) to oversee the agency response." At what emergency level (i.e. Notification of Unusual Event, Alert, Site Emergency or General Emergency) will the EMT be activated?

This NUREG also states that:

"When the Regional Director arrives at the site, it is contemplated that responsibility for managing the NRC operations in and around the plant will be transferred to the Regional Director." In both cases, the NRC role during an emergency is not clearly defined. (See General Comment #1).

8) Page 3, Section I.B.4

PSI disagrees that key decisions, especially those relating to recommendations for actions affecting the general public, be made at the NRC Operations Center. All major decisions should be made at the TSC and/or EOF where the licensee, State organizations, NRC and other Federal organizations will be located. (See General Comment #1).

9) Page 4, Section I.B.4

Again, PSI disagrees with the concept that the NRC will be making major decisions or recommendations at the NRC Operations Center based upon information from the NDL.

10) Page 4, Section I.B.4

PSI suggests that the following two sentences be deleted:

"However, in extreme cases, the NRC may direct that certain operations be performed at the nuclear facility. Any such direction would come from the NRC headquarters prior to that time." The primary responsibility for operation of a plant at all times rests with the licensee. The NRC should make recommendations to the licensee, but not attempt to direct the operations of the plant. (See General Comment #1).

11) Page 4, Section I.B.4

As an example of the still-undefined NRC role, this NUREG states that:

"Details of NRC response procedures and organization may evolve somewhat,

but the roles and functions for which technical data will be required are not expected to change." (See General Comments #1).

12) Page 5, Section I.C

Lack of resolution of those items that should be in Regulatory Guide 1.97 will significantly effect the schedule by which the emergency response facilities can be designed and constructed.

13) Page 5, Section I.C

What is the technical justification for not utilizing the plant process computer? This, presumably, is not a functional requirement. PSI recommends that plant process computers be allowed as long as the desired availability and isolation can be demonstrated.

14) Page 5, Section I.D

PSI understands "independent verification by qualified personnel other than the original designers and developers" to mean different personnel as opposed to different organizations or companies. PSI suggests that this be clarified.

15) Page 6, Section I.D

This NUREG implies that detailed performance specifications may be derived by the NRC at a later date. PSI suggests that this could alternately be accomplished by the licensees (or their architect-engineers). If the NRC is to be depended upon for performance specifications, schedules for design and installation may be impacted. Clarification of the NRC's role in deriving these performance specifications is needed.

16) Page 7, Section II.C

The requirements of this section may be mutually exclusive. PSI suggests deleting the second sentence.

17) Page 8, Item F

See General Comment #3.

18) Page 8, Item F

PSI recommends deletion of the requirement that the SPDS be capable of withstanding an OBE. The likelihood of an OBE occurring in conjunction

with an accident of any significance is extremely remote. Even if this unlikely situation arises, the SPDS only duplicates information already on the control boards. Also, control rooms are being reviewed regarding human factors engineering; this review will enhance the utilization of instrumentation already on the control boards. Therefore, PSI feels there is no logic for requiring the SPDS to withstand an OBE. In addition, lack of modern seismically qualified computers in the market place would preclude the use of state-of-the-art graphics, which would be the logical choice from a human engineering viewpoint.

(Additionally, at the NRC meeting of August 20, 1980 in Chicago to discuss NUREG-0696, the NRC indicated that the SPDS displays in the TSC and EOF are not required to meet an OBE. This NUREG needs to explicitly state that to avoid future confusion).

19) Page 8, Section II.F

See Specific Comment #15.

20) Page 8, Section III.A

See Specific Comment #3.

21) Page 9, Section III.A

PSI understands the fourth paragraph to mean that interactivity is desirable on the data display system(s). Is this what is meant, or does it mean that the capability to send messages from terminal to terminal (through the computer) is desired?

22) Page 9, Section III.A

See General Comment #3.

23) Page 10, Section III.B

PSI recommends that communication via closed circuit TV be considered in place of "face-to-face" interaction between control room and TSC personnel. This provides additional flexibility in locating the TSC without reducing its effectiveness.

24) Page 10, Section III.B

PSI recommends deletion of the third paragraph. The TSC should simply be required to be habitable and within that constraint, as close as practicable to the control room. A primary and a secondary habitable

TSC should not be a requirement because a habitable TSC cannot be constructed within a 2 minute walking time of the control room. (See Specific Comment #3).

25) Page 11, Section III.D

PSI does not believe that a separate space should be provided for private NRC consulatations within the TSC due to potential space limitations. The more appropriate place for this function would be in the EOF.

26) Page 11, Section III.E

PSI concurs that the TSC and its equipment need not meet Seismic Category I criteria nor be qualified as an Engineered Safety Feature.

27) Page 12, Section III.F

PSI suggests that the second paragraph be changed to read: "To ensure adequate radiological protection of TSC personnel, radiation monitoring systems shall be available for use in the TSC." Whether the radiation monitoring systems are permanertly installed or portable should be left up to the individual licensees.

28) Page 12, Section III.G

PSI suggests adding "Operations Center" at the end of the first sentence.

29) Pages 12-13, Section III.H

Numeric values given for unavailability levels should be deleted. (See General Comment #3). Also, PSI suggests deletion of "and reliability" from the first sentence of this section. (Some of the control room data is redundant, hard-wired, and safety-related. The same reliability is not necessary nor should it be required for the TSC system).

30) Page 13, Section III.I

PSI suggests that this NUREG should not rule out the use of plant process computers (PPCs). If a given PPC can meet the final availability requirements of NUREG-0696, then it should be allowed to be utilized.

31) Page 14, Section III.I

Numeric values given for unavailability levels should be deleted. (See General Comment #3). Also, it appears 0.001 is a typographical error as it is inconsistent with page 13.

32) Page 15, Section IV.A

It is PSI's understanding that the NRC staff currently feels that the news media could be accommodated at a location other than the EOF. Please clarify.

33) Page 15, Section IV.A

See General Comment #3.

34) Page 16, Section IV.B

There appears to be no technical basis for a "maximum ground travel time of 20 minutes" from the EOF to the reactor. PSI suggests deletion of the time requirement and strictly requiring that the EOF be within approximately 10 miles of the site. Site specific considerations need to be included; therefore flexibility is desired, especially as other outside agencies will be involved.

35) Page 16, Section IV.B and Page 18, Section IV.G

This NUREG states that:

"Arrangements shall be provided for on-site personnel to have face-to-face communications with EOF management personnel on short notice under all emergency operating conditions."

PSI recommends that closed circuit TV be considered equivalent to "face-to-face" communications.

36) Page 16, Section IV.C

PSI suggests that the last two sentences of the first paragraph be deleted. The management of the EOF and the interface between the EOF and the plant will be detailed in the licensee's emergency plan.

37) Page 17, Section IV.E

PSI feels this section should be deleted. The requirements of this section are adequately and more appropriately covered by the last two sentences of the first paragraph in Section IV.F.

38) Page 17, Section IV.F

The requirement for the EOF to be habitable is sufficient criteria to allow the EOF to be designed. PSI suggests that the specific requirement