

MEETING SUMMARY

SUBJECT: DRAFT FUNCTIONAL REQUIREMENTS FOR EMERGENCY FACILITIES
DATE: June 19, 1980
PLACE: NRC, Bethesda, Maryland
PARTICIPANTS: NRC - Safety Data Integration Group
AIR - Subcommittee on Safety Parameter Integration

A. General

1. Base Set of Variables

The AIF requested clarification of what is to be the base set of variables. The NRC considers R. G. 1.97 to be the base set and these variables would be the minimum set required to be displayed in the TSC and EOF. The NDL would be a subset of the variables in R. G. 1.97 except in an unusual situation where a variable unique to one or a few plants might be desired. In addition, the NDL may include some system (i.e., equipment) status information (e.g., ESF actuation signal, reactor trip). Other variables unique to a plant or necessary to accomplish the function of the TSC and EOF (including R.G. 1.97 Type A variables) as determined by the licensee, would be displayed in addition to the R.G. 1.97 variables. The SPD would include variables selected by the licensee. The SPD would be displayed in the TSC and EOF and the variables (but not in the SPD format) would be included in the NDL. The variables for each element (the SPD, TSC, EOF and NDL) are to be compatible among themselves and with Regulatory Guide 1.97.

2. Availability, Reporting, and LCO Requirements

The AIF commented that the availability requirements were unnecessarily restrictive and that providing some means of compensation, backup or corrective action if the SDP, TSC or EOF were inoperable was sufficient rather than requiring shutdown of the plant. The NRC will consider modifying these requirements to recognize possible backup measure and to provide a consistent set of availability and LCO requirements.

3. NRC Accident Response Role

The AIF noted that the requirements for the NDL would be based on the NRC accident response role which they feel is ill defined. The NRC believes that we have been given adequate Commission guidance on our role, understand it and have incorporated this understanding into the NDL functional requirements. The NRC noted that a report on the NRC emergency response plan is to be issued within three months.

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ENCLOSURE 1

4. Schedule

The NRC is considering requiring full implementation of these emergency facilities by early 1982. The present requirement to upgrade the TSC and EOF by January 1981 will be an interim step to full implementation and could be a requirement for structure and furnishing sufficient to accommodate the division of personnel between the control room, TSC and EOF but without all of the data displays. AIF could provide a schedule, sequence of approach and the next level of design and qualification detail within about two months. NRC recognizes need to provide additional detail at least by issuing R. G. 1.97 providing an NDL interface specification and clarification of the NRC emergency response role.

5. Case-By-Case Reviews

NRC noted that this document is intended to provide generic guidance, but is not the lowest common denominator. As with the SRP and Regulatory Guides, compliance with this document will be acceptable. Exceptions and other approaches will be considered, but licensees and applicants will have to provide justification for any differences. The NRC also wish to avoid multiple individual reviews and recognizes the need to achieve a balance in the amount of detail so that flexibility is allowed while still providing adequate detail so that NRC review of implementation is not required.

B. Safety Parameter Display

1. Purpose

The AIF agreed that the purpose of the SPD is to aid detection in all situations; normal operation, transients and accidents. The NRC will clarify which accidents, possibly including those beyond the current design bases, are intended to be included.

2. Qualifications

The AIF suggested that the qualifications associated with any instrument (presumably this includes the TSC and EOF as well as the SPD) be the same as for the "original design base" of the instrument. The requirement for OBE seismic design was noted in particular as inappropriate.

3. Interfaces

The AIF suggested that inclusion of isolation requirements in the functional requirements is unnecessary since the present requirements for safety systems specify the isolation requirements.

4. Alarming

AIF suggested that the requirement for an SPD alarm would be counterproductive since there are too many alarms already. The NRC will consider substituting a requirement that an alarm be provided only if it is shown to serve a useful purpose.

5. Clarifications

The AIF suggested that it be made clear that the SPD performs no control or protective function and that existing equipment (and not necessarily new) can be used in the SPD.

C. Technical Support Center

1. Single Data System

The AIF requested clarification that the TSC is not one system but several systems of subsystems. AIF suggested that the separate and diverse systems be permitted. The NRC noted that the intent was to have a common data base for at least the R. G. 1.97 variables.

2. Proximity

AIF commented that having the TSC in close proximity to the control room was unnecessary to accomplish the purpose. Location anywhere inside the security boundary would be sufficient and a limit of no more than 50 yards was too restrictive. The NRC believes that capability for face-to-face discussion between control room and TSC personnel is sufficient and will consider whether some reasonable walking time would suffice.

3. Backup TSC

AIF requested a clearer definition of what the backup TSC must be and suggested the backup could be to relocate TSC management personnel in the control room and TSC technical personnel in the EOF as a backup.

4. Structural Design

AIF suggested that the specification of the Uniform Building Code would assure an adequate structure and there was no need to design for tornadoes and the maximum flood.

D. Emergency Operations Facility

1. Activation Level

AIF suggested that activation of the EOF for every Alert would unnecessarily involve the state and local officials. The NRC noted that the intent was not to provide frequent exercising of the plan and some less frequent activation level would be considered.

2. Separation of Functions

AIF suggested that some functions not be required to be performed at the EOF. Evaluation of radiation releases at far offsite locations would allow comprehensive, sophisticated computer analysis support. The NRC noted that sufficient evaluation capability must be provided in the EOF to accomplish its purpose and while far-site support would be helpful and permitted, such far-site support could not be relied upon unless there were reliable communication. Since only space for 20 was required, AIF suggested that press briefings probably could not be held at the EOF. The NRC noted that press facilities away from the EOF could be necessary, but that some capability to brief groups, not necessarily the press, would be required in the EOF.

3. Location

AIF suggested that the EOF location not be specified explicitly, but based on justification by the licensee that the function could be accomplished. The NRC noted that the intent was to assure a capability for face-to-face discussion between EOF and TSC personnel away from their normal corporate environment. The NRC will consider revising the requirement in terms of time rather than distance.

4. Habitability

The AIF suggested that distance be considered in assessing the dose at the EOF. The NRC noted that since the airborne concentration varied little over the specified distance (3 to 4 miles) that a single shielding factor was appropriate. If greater distances are permitted, distance may be allowed as a factor in determining the required shielding.

5. Size

AIF suggested that size not be explicitly specified, but justified based on accomplishing the function.

6. Backup

AIF requested that the requirements for a back-up EOF be better defined and noted that the farther away the EOF was located from the plant, the less was the necessity for a back-up.

7. Communications

AIF suggested that there would normally be no communication between the EOF and the control room. Although communication would be primarily between the EOF and the TSC, a capability to communicate with the control room is required.

8. Availability

AIF suggested that there was no need for an independent power supply to the EOF.

9. Data

AIF suggested that only the capability to transmit hard copy to the EOF from the TSC was required.

10. Records

AIF suggested that the types of records not be explicitly specified, but only the function.

E. Nuclear Data Link

1. Purpose

AIF suggested that the purpose of the NDL (and the role of the NRC) be better defined. The role of the NRC has not been consistently defined in various documents and briefings. The NRC stated that these functional requirements should now be controlling.

2. Data

AIF suggested the quantity of data for the NDL was inconsistent with the purpose, that is, too much for an overview and too little to permit direction. Only those parameters needed to assess safety status should be transmitted by the NDL.

3. Implementation

AIF suggested that the NDL implementation be staged and that it first be installed as a prototype on one or a few plants. AIF suggested that the assumption that the NRC Operations Center can be properly staffed and use the data be verified before fully implementing the NDL.

ATTENDANCE
AIF MEETING
June 19, 1980

Roger Mattson	NRC
Warren Minners	NRR/DST
E. C. Wenzinger	NRC/OSD
E. Morris Howard	NRC/IE
Bernard Weiss	NRC/IE
K. G. Cooper	Westinghouse
Warren Owen	Duke Power
Steve Howell	Consumers Power
Art Bivens	AIF Staff
R. A. Szalay	AIF
Steve Ramos	NRC/EPPO
Daniel Garner	NRC/NRR
Jack Roe	NRC/EPPO
Frank Pagano	NRC/EPPO
Dean Kunihiro	NRC/RV-EPPO
Dan Cain	NSAC/EPKI
Dan Wilkinson	NSAC
Roger Weitzel	NRC/EPPO
Margaret Frederick	NRC/EPPO
Ellery L. Hammond	Iowa Electric Light & Power
Bob Lawler	GE
W. Brad Hardin	LLNL
Jan Preston-Smith	LLNL
L. Rolf Peterson	LLNL
R. B. Hamilton	GE
Roger Newton	Wisconsin Electric Power Co.
George Lanik	NRC/ICSB
W. L. Stewart	VEPCO
George L. Pannell	VEPCO
Gerard Goering	Northern States Power
Jack Pucark	Combustion Engineering
Roy Prados	Louisiana Power & Light
Jane Gibson	NRC/EPPO
Richard F. Locke	Pacific Gas & Electric
Fred Anderson	PG & E Consultant
Peter A. Moeller	Public Service Electric & Gas Company
Michael J. Gaitaries	NRC
Robert A. Purple	NRC/DL
Lawrence M. Potash	INPO
Greg C. Ficke	Cincinnati Gas & Electric
Michael F. Rulli	Cincinnati Gas & Electric
S. H. Weiss	NRC/DHFS
K. E. Perkins	NRC/EDO
Frank Lomax	NRC/Standards

Ray Priebe
Cliff Fisk
Bernard Stiefeld
Tom McKenna
Arthur Desrosiers
T. F. Plunkett
R. A. Haladyna
P. J. Holden
L. C. Geary
M. J. Scarpa
Paul Blanch
Ted Myers
David Panlratz
Sam Bassett
Ron Feit
William G. Gordon
E. R. Kane
W. A. Coley
Brian Grimes

NRC/EPPO
Sandia Labs-ALBQ
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Battelle PNL
Illinois Power Co.
LILCO
Stone & Webster
Westinghouse
Dames & Moore
Northeast Utilities
Toledo Edison Co.
General Electric
NRC/RES
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Bechtel Power
B&W
Duke Power
NRC/NRR