

October 20, 1980

Office of Nuclear Reactor Regulation Emergency Preparedness Program Office U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Attention: Mr. Steve L. Ramos Mail Stop Phillips 242

NUREG-0696
"Functional Criteria for Emergency
Response Facilities"
Rancho Seco Nuclear Generating
Station, Unit 1

Dear Mr. Ramos:

The incident at Three Mile Island Unit #2 has resulted in many lessons learned throughout the nuclear industry. Many of the lessons involved emergency planning. The NRC is now deeply involved with the development of documents (NUREG-0654 and NUREG-0696) to provide guidance in implementing possible solutions.

The systems and facilities described in NUREG-0696 address the following areas of frustration experienced during the TMI Unit #2 incident:

- . The control room operators' misinterpretation of the status of various plant systems.
- . The technical advisors' inability to deal with the limited space in the control room.
- . The public officials' and the general population's inability to obtain timely and accurate information.

The Safety Parameter Display System (SPDS), Technical Support Center (TSC), Emergency Operations Facility (EOF), and the Nuclear Data Link (NDL) attempt to solve each of these frustrations.

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The SPDS, as described, will be similar in function to the displays currently available at the Loss of Fluid Test (LOFT) facility in Idaho. This is a one of a kind system on a very unique reactor. There are indications that this type of system may soon be installed at various reactor simulators. The displays that evolve will probably be much different than the LOFT system. The displays between NSSS vendors and between different designs of a given NSSS vendor will also evolve to meet the needs of the various design configurations.

May I suggest that the R&D, debugging, and operator testing be done on the reactor simulators first. Then, after the wrinkles have been ironed out, implement the SPDS on the operating reactors.

## Our concerns are:

- 1. An unproven system should not be installed in an operating reactor. This may in reality compromise the overall safety of the plant if installed without proper development and testing.
- 2. Research and development, debugging, and operator training should be done on reactor simulators first. Great expenditures of time and energy could be wasted if each operating reactor were to develop its own system.
- 3. A superior SPDS may be in operation faster if done through proper R&D. An inferior system plagued with problems could result, if each operating reactor were forced to do the development on its own.

The NDL to the NRC Headquarters in Bethesda appears to be of limited value and usefulness. The TSC will have at its fingertips all necessary plant information and expertise to provide guidance to the control room. The time spent for the NRC in setting up a command center in Bethesda may best be spent in transit to the site and to be involved at the TSC. The desire for the NRC to hold press conferences in Bethesda would also diminish the effectiveness of the EOF. The EOF will have all the necessary information and be familiar with site specific conditions to provide the public with timely and credible information. Provisions will be made for the NRC at both the TSC and the EOF. I suggest that the overall emergency response best be served if the NRC exercised those provisions.

The concept that the media be accommodated for at the EOF is also questionable. The media will swarm wherever information is released. The facilities and capabilities of the EOF may become severely strained if information is released at the EOF. The volume of people and equipment would compromise the overall emergency response function of the EOF. We do not deny the need to keep the people informed via the media. We feel that the overall emergency response best be accomplished if the media center be kept separate from the EOF. And all media releases should be done at one location, in concurrence with the public officials involved, and each major group should be represented to answer questions.

The following comments apply to specific sections of NUREG-0696.

Page 3. Paragraph 1

"While the TSC function is centered on management of the plant in the mitigation of accidents, the EOF is designed to provide assistance in the decision making process to protect the public health and safety and to control radiological monitoring teams and facilities onsite and offsite."

The TSC has the onsite responsibilities while the EOF has all the offsite. Why then should the EOF control the onsite radiological monitoring team? Suggested rewording: "... and to control radiological monitoring teams and facilities offsite."

Page 3, Paragraph 1

"The EOF must have radiological and meteorological data and adequate plant systems information to perform these functions.'

Please specify what is meant by "adequate plant systems information". Would a direct telephone line to the TSC satisfy this criteria? The EOF is not responsible for technical advice to the control room. The EOF need not overlap the function of the TSC.

Page 19, Paragraph 2

"Data providing information on the general condition of the plant is also required in the EOF for utility resource management and recovery management. At minimum, the EOF data set will include data for all Type A, B, C, D, and E variables specified by R.G. 1.97. Signals from sensors providing data for variables specified by R.G. 1.97 shall be input directly into the data acquisition processor serving the EOF with no previous signal processing by a plant process computer. The EOF shall receive and have the capability to display the same plant data and radiological information that is transmitted to the NRC."

The EOF is concerned only with the offsite emergency response. The TSC is the technical advisor to the control room and an interface between the onsite and offsite groups. Those people who will be providing technical advice concerning plant systems and operation will be in the TSC, not the EOF. The proper function of the EOF does not require the variables specified by R.G. 1.97 to function as NUREG-0696 describes.

The dedicated communication links between the EOF and TSC should provide any additional specific data that could be desired by the EOF staff.

Suggested rewording: deletion.

"Data trending and time history data display capability shall be provided in the EOF for evaluating radiological and environmental data and plant data."

The need for data trending and time history data display of plant data at the EOF is questionable. This function should be with the TSC.

Suggested rewording: delete "and plant data."

Page 19, Paragraph 4

"All data transmitted to the NRC or other offsite locations shall also be available for display in the EOF."

The NDL transmission to the NRC is not necessary for the proper function of the EOF. The TSC is the location where technical advice and guidance concerning plant systems and operations will be provided. The EOF should have no need for this volume of information.

Suggested rewording: deletion.

Page 20, Paragraph 2

"The EOF shall have ready access to up-to-date plant records, procedures, and emergency plans needed to exercise overall utility resources management and for recovery management."

The EOF does not need plant records to satisfy its function. If a prolonged recovery is necessary and if it is managed from the EOF, then these records can be obtained on an ad hoc basis.

Suggested rewording: delete "up-to-date plant records" and "and for recovery management".

## Page 20 V. Nuclear Data Link (NDL)

I seriously doubt the usefulness of the NDL system for the following reasons:

- 1. Technical advice and guidance will be provided from the TSC.
- Plant management and plant operators will place a much higher credibility on the advice from those intimately involved with the design, construction, and operation of the plant. Less credibility will be given to advice from a group in Bethesda with limited experience on our particular plant design and characteristics.

- 3. NRC advice and guidance should be provided at the TSC.
- Existing dedicated telephone links should provide Bethesda with adequate information.

Sincerely,

John S. Mattimoe

Assistant General Manager and Chief Engineer