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July 25, 1984  
5211-84-2191

Office of Nuclear Reactor Regulation  
Attn: John F. Stolz, Chief  
Operating Reactors Branch No. 4  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Stolz:

Three Mile Island Nuclear Station, Unit I (TMI-1)  
Operating License No. DPR-50  
Docket No. 50-289  
Resolution of Emergency Planning Deficiencies

The ASLB Partial Initial Decision (PID) on the restart of TMI-1 identified several emergency planning conditions to be satisfied prior to restart. Item 2010g of the PID required a communications drill to be held as a result of problems identified by FEMA in the June 2, 1981 TMI Annual Exercise. This drill was conducted on October 14, 1981 and judged sufficient by the NRC Staff and NRC restart certification item #144 was certified as complete (see NRC Letter dated July 25, 1983).

The November 16, 1983 TMI Annual Exercise, however, identified communications deficiencies similar to those discussed in the PID. On June 25, 1984 Mr. William Dircks wrote a memorandum to the NRC Commissioners providing the staff's recommendations toward the resolution of emergency preparedness related TMI-1 restart issues. GPU Nuclear met with representatives of FEMA Region III and NRC Region I to discuss resolution of the communications deficiencies. Subsequently, a communications exercise with all 5 risk counties was conducted July 17, 1984. Attached is a letter of July 16, 1984 from GPUN to FEMA Region III describing the objectives of the exercise and the scenario used. GPUN provided observers, through the use of Emergency Management Services, Inc. (EMS) at all County EOC's. A detailed analysis by EMS of the communications exercise is included (Attachment 2). The report indicates that the exercise successfully demonstrated the communications capability of the five counties surrounding TMI. As is to be expected, areas needing further attention were identified and GPUN, through the efforts of EMS, will address these matters as part of its continuing program of assistance to the counties.

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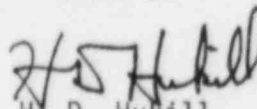
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Prior to the July 17, 1984 communications exercise, a special communications drill was conducted to address communications deficiencies in Dauphin and Lancaster Counties identified by FEMA in the 1983 TMI Annual Exercise. This drill, held June 18, 1984, involved TMI, TMI risk counties and the Bureau of Radiation Protection (BRP). The drill scenario simulated a breakdown in the notification scheme between TMI and the Pennsylvania Emergency Management Agency (PEMA) thereby requiring Dauphin County to assume the lead role in the notification process. In addition, the scenario included the protective action recommendation of sheltering to be passed. Representatives from FEMA Region III and PEMA were observers. The drill identified the need for the development of a Standard Operating Procedure and for conducting specialized training dealing with notifications and communications. Emergency Management Services, Inc. provided specialized training dealing with notifications for Dauphin County. EMS also developed a Standard Operating Procedure which was adopted for use by all five TMI risk counties. These actions were performed prior to the July 17, 1984 Communication Exercise.

GPUN believes that the July 17, 1984 communications exercise resolves the communications aspects of the deficiencies identified in the 1983 TMI Annual Exercise and forms the basis for the NRC Staff to re-certify completion of PID item 2010g.

The Category A deficiencies identified in the 1983 TMI Annual Exercise will be further addressed in exercises scheduled for the third quarter of 1984. These exercises should resolve any remaining concerns about the adequacy of offsite Emergency Planning for TMI.

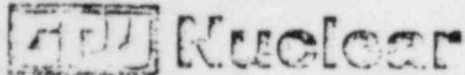
Sincerely,

  
H. D. Hurill  
Director, TMI-1

HDH/GJG/SMO/djb

Attachment (2)

cc: D. Matthews, NRC Headquarters  
R. Conte, Senior Resident Inspector  
T. Martin, NRC Region I  
R. Wilkerson, FEMA Headquarters  
J. Asher, FEMA Region III  
J. Patten, PEMA



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6400-84-65

July 16, 1984

Mr. J. Asher, RAC Chairman  
FEMA Region III  
Curtis Building  
Seventh Floor  
Sixth and Walnut Streets  
Philadelphia, PA 19106

Dear Mr. Asher:

Pursuant to our meeting of July 3, 1984 and in accordance with Mr. William J. Dircks' June 25, 1984 memo to the NRC Commissioners, a communications exercise is scheduled for July 17, 1984. This exercise will involve the Pennsylvania Emergency Management Agency (PEMA), Bureau of Radiation Protection (BRP), Dauphin, Lancaster, York, Cumberland and Lebanon Counties and TMI risk municipalities. Attached for your information is the scenario for this exercise.

The objectives for the exercise include:

- Satisfactorily perform the TMI-1 restart condition item 2010g (NRC certification item #144) imposed by the Atomic Safety and Licensing Board.

There must be held prior to restart of TMI-1 at least one communications drill similar to that suggested by the Commonwealth (PF 1118). The drill should include ideally, communications between: Licensee and PEMA, PEMA and each risk county and its key officials and each municipality and its key officials. Such a drill should be structured to test telephone service and the various radio systems. If possible, stress should be placed on the communications systems to test the possible effect on an emergency overload situation.

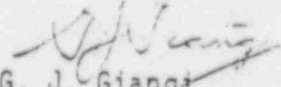
July 16, 1984

- Dauphin County will demonstrate its ability to promptly implement the notification and alerting responsibility upon a breakdown in communications between PEMA and TMI. Notifications shall include other TMI risk counties, PEMA and Dauphin County risk municipalities.
- Lancaster County will demonstrate its ability to promptly notify the Lancaster County risk municipalities of TMI emergency declarations and protective action recommendations.

Please inform me at your earliest convenience as to whether the objectives have been satisfactorily accomplished.

Again, I would like to thank you for the support and cooperation you have provided towards the prompt resolution of exercise deficiencies.

Sincerely,

  
G. J. Giang  
GPUN Manager,  
Emergency Preparedness

1sg

Attachment

cc: R. Wilkerson, FEMA Headquarters  
P. Giordano, Director, FEMA Region III  
D. Mathews, NRC Headquarters  
B. Crocker, NRC Region I  
J. Patten, PEMA  
D. Taylor, PEMA

## SCENARIO

### Clocktime/Scenario time

1000	T = 0	TMI-1 Control Room notifies Dauphin County and PEMA that a Site Emergency was declared at TMI-1 at 0950 due to a large leak within the Reactor Building. Minor amounts of radioactivity is being released to the environment but is expected to terminate within 30 minutes.
	Expected Actions:	PEMA should contact BRP and the TMI risk counties. Dauphin County should contact the risk municipalities. BRP should contact TMI-1.
1030	T = 30	TMI-1 recommends sheltering for a 2 mile radius around TMI to BRP. At this point it will be assumed that neither BRP nor TMI can contact PEMA requiring Dauphin County to assume the lead role.
	Expected Actions:	Dauphin County should contact the risk counties, Dauphin County risk municipalities and attempt to contact PEMA.



Emergency Management Services, Inc.

Suite 105  
355 North 21st Street  
Camp Hill, PA 17011  
(717) 737-5677

July 18, 1984

JUL 19 1984

Mr. George Giangli  
Manager, Emergency Preparedness  
GPU Nuclear  
P.O. Box 480  
Middletown, PA 17057

Dear George:

In accord with your instructions, EMS assigned personnel to each of the five TMI risk counties to independently observe player participation in the communications exercise. The observers were orally briefed on the general scheme of the drill and instructed to observe the effectiveness of message handling (authentication and accuracy), dissemination of messages (both internally and to risk municipalities), the amount of realism (actual play vs. simulation), and finally to assess the overall demonstrated capability of the observed county to conduct operations under emergency conditions. Due to some early concerns expressed by county EMCs, the introduction of these observers into the framework of the exercise were not as official critics. Consequently, the observations listed below should be treated as a basis for GPU/EMS continuing effort to assist the counties in the development of more effective organizations and improved operational procedures. The comments are not listed in any priority manner.

Favorable comment:

- a. The counties participated to the degree to which they had planned to participate, and notified all risk municipalities in an acceptable time frame, which in itself is a major undertaking that severely tests the saturation point of the in-place telephone communications system.
- b. All counties demonstrated that their respective listing of municipal EMCs and institutional points of contact were up to date.
- c. The existing notification systems were adequate.
- d. Telephone communications, although slow, were sufficient to meet the initial message dissemination requirements.
- e. On duty shifts (full time employees) were adequate to handle the initial message dissemination surge.



f. Initial response personnel demonstrated their general knowledge of the RERP as it applied to dissemination of the triggering message.

g. In two instances, Lebanon and York Counties, second echelons of leadership demonstrated their respective capacities to fill the EMC roles due to the absence of the EMC. The Dauphin County EMC handled the responsibilities of the assistant EMC during the initial notification requirement and demonstrated that the county has the capability to accommodate the loss of key personnel and operate effectively.

h. Dauphin County demonstrated that it has the capacity to assume net control from PEMA in the event of a communications failure by use of existing radio and/or telephone channels.

i. Of special interest were the actions of Lancaster County. This county extended the drill beyond the communications objectives to include setting up of the EOC; activating RACES, PEMARS and local government radio nets; and, the planning and preparation for triggering of the public alert system. Two volunteer\* staff members physically reported to the EOC and set-up for continued operations.

j. Dauphin County is to be commended for its full call-out effort which included municipalities, school districts, nursing homes, etc. Especially noteworthy was the effort to locate primary points of contact and the cooperation and coordination among those disseminating the initial message in sharing the notification burden.

k. Positive attitudes toward the drill and its importance for preparedness were observed in all counties.

Areas needing attention:

a. The recording of emergency notification messages needs additional practice to insure completeness, accuracy and timeliness.

b. All messages, incoming and outgoing, should be in writing. This would ensure that when several individuals are disseminating information that the identical information is being delivered.

c. Lebanon County did not receive the initial message from PEMA.

d. During drills and tests (communications) some administrative arrangements need to be developed which does not require the personal response of the municipal EMC. The present system of calling the business or work place of the EMC and having the individual called or paged only to discover that it is a communications drill is not received enthusiastically by either the employee (EMC) or the employer.

\* Per July 25, 1984 telephone conversation between G. J. Giangli (GPUN Mgr Emergency Preparedness) and Oran K. Henderson (EMS), the word "volunteer" is incorrect and should be deleted.

e. Four of the five county RERPs include an Incident Notification Form, designed to be used for the transmission of information from the State to the County. The Lancaster County RERP does not include the form. The forms being used by the four counties are not identical. (York County uses a form shown as Change #1, July 1983 and the remaining counties use the form distributed with their initial RERP). The York County form includes redundant information in paragraph II. and III.8.

f. The initial notification message from some counties to municipalities and institutions was too lengthy.

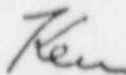
g. The role of the log/journal needs to be emphasized during subsequent training sessions and a "log/journal clerk" needs to be identified and instructed in its maintenance, in some instances.

EMS provided observers to the Counties as follows:

Cumberland County.....	M. Starry
Dauphin County.....	K. Henderson
Lancaster County.....	R. Carroll
Lebanon County.....	W. Vinnette
York County.....	D. Thomas

The FEMA provided J. Asher as an observer to the Dauphin County and K. Lawson to the Lancaster County. The PEMA similarly assigned P. Robbins to Dauphin County and R. Foor to Lancaster County. FEMA and PEMA did not have representatives at the other EOCs.

Sincerely,



ORAN K. HENDERSON

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