

September 30, 2002  
5928-02-20188

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

Three Mile Island Unit 1 (TMI Unit 1)  
Operating License No. DPR-50  
Docket No. 50-289

**Subject:** Request for Additional Information RE: Relocation of TMI Unit 1 Technical Support Center (TSC) and Emergency Operations Facility (EOF)

- References:**
- 1) USNRC Letter Dated September 20, 2002, "Three Mile Island Nuclear Station, Unit 1 (TMI Unit 1), Request for Additional Information RE: Relocation of TMI Unit 1 Technical Support Center (TSC) and Emergency Operations Facility (EOF)" (TAC No. MB5210 and MB5550)
  - 2) AmerGen Letter Dated May 28, 2002, "Request for NRC Approval of Proposed Technical Support Center (TSC)"
  - 3) AmerGen Letter Dated July 01, 2002, "Request for NRC approval of the Proposed Consolidation of Three Mile Island, Unit 1 (TMI Unit 1) Emergency Operations Facility into the common EOF used by Peach Bottom Atomic Power Station (PBAPS) and Limerick Generating Station (LGS)"
  - 4) AmerGen Letter Dated July 25, 2002, "Supplemental Letter to the Request for NRC Approval of the Proposed Consolidation of Three Mile Island, Unit 1 (TMI Unit 1) Emergency Operations Facility into the Common EOF used by Peach Bottom Atomic Power Station (PBAPS) and Limerick Generating Station (LGS)"

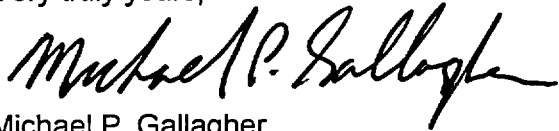
In response to Reference 1, AmerGen Energy Company, LLC (AmerGen) submits the attached additional information for the relocation of the TMI Unit 1 Technical Support Center (TSC) and the Emergency Operations Facility (EOF).

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If you have any questions or require further information, please contact us.

Very truly yours,

A handwritten signature in black ink, appearing to read "Michael P. Gallagher". The signature is fluid and cursive, with the first name being the most prominent.

Michael P. Gallagher  
Director, Licensing & Regulatory Affairs  
Mid-Atlantic Regional Operating Group

Attachment: Request for Additional Information Response

cc: H. J. Miller, USNRC, Administrator Region I  
J. D. Orr, USNRC, Senior Resident Inspector  
T. G. Colburn, USNRC, Senior Project Manager  
File No. 02075

**ATTACHMENT**  
**REQUEST FOR ADDITIONAL INFORMATION RESPONSE**  
**THREE MILE ISLAND NUCLEAR STATION, UNIT 1 (TMI Unit 1)**  
**TECHNICAL SUPPORT CENTER AND**  
**EMERGENCY OPERATIONS FACILITY RELOCATION**  
**DOCKET NO. 50-289**

Proposal for Moving the Technical Support Center (TSC)

Question 1

Discuss the design and features of the building which will house the proposed TSC to protect and shield the staff from direct radiation and sky shine.

Response

The proposed TSC was designed for future occupancy as part of the construction of the Operations Support Facility (OSF). This building was built in accordance with the Division II System Design Description (SDD) for TMI Unit 1 Operations Support Facility, dated September 1984. Under SDD Section 6.3.1, the structural design requirements stated that, "The walls and roof surrounding the TSC shall be 9" thick reinforced concrete. These members shall be designed to resist all applied lateral and gravity loads. The 9" thickness is required for shielding purposes."

As stated in Reference 2, the Technical Support Center (TSC) submittal letter dated May 28, 2002 on page 5 of Attachment A, "A dose calculation was performed and verified that the proposed TSC meets the criteria outlined in NUREG-0696 including ensuring the dose to the TSC occupants is limited to less than 5 Rem TEDE for the thirty (30) days accident mitigation period." The dose calculation credited the shielding specified in the SSD as described above.

Question 2

Since the proposed TSC is outside the protected area, please identify the compensatory measures, planning, etc. to protect the emergency workers in the TSC, and provide safe access to the facility in the event of a security event.

Response

Locating the TSC outside, but in close proximity to the Protected Area, will allow prompt access to facility during an off-hours response.

In response to the February 28, 2002 NRC Security Order, site access security was enhanced. Security is in place at the north gate entrance (the only entrance) to the owner-controlled area (OCA). Two potential configurations exist in the event a security threat developed, one that would allow access to the OCA and another that would require a lock down of the OCA. If the event does not dictate a lock down of the OCA (e.g., early notification of an imminent attack) access to the OCA would be permitted and individuals would staff the TSC. In the event of a site attack, the TSC is a hardened facility and can be locked and secured, providing protection to personnel contained in the TSC. In the event that an individual requires access to the facility, this would be coordinated between the security coordinator located in TSC and security forces at the station to determine if an individual can gain safe ingress to the protected area.

During a security event requiring the lock down of the OCA, the TSC would become inaccessible, requiring compensatory measures. In this situation, required personnel would be directed to report to the simulator area of the training facility, located outside of the OCA. This building will also house the security incident response center. The simulator contains all the necessary communication lines (replicating the TMI control room) and necessary access to the plant process computer, allowing the initial response organization the required assets to assume command and control and implement the TMI emergency plan.

### Question 3

In the event of a situation that makes the proposed TSC inoperable, will the existing TSC continue to be available to serve as a backup TSC?

### Response

No. The current Emergency Response Facility, which will be relocated to the proposed TSC, consists of two areas. The first is the Control Room (CR) and shift manager's office, which provides the workstation for the Emergency Director and key staff. The second is a small room in the area behind the shift manager's office that houses the engineering staff. The main benefit of the proposed TSC is relocating the TSC Emergency Response Organization (ERO) into one facility that will enhance communications and command and control, while removing a large number of people from the CR. This will minimize distractions to the operating staff to allow them to more effectively focus on providing accident mitigation.

In the event that the TSC becomes inoperable or uninhabitable, as a contingency, the training center simulator may be used to provide a local command center for the TSC personnel to assist the CR and Emergency Operations Facility (EOF) staffs. The ERO members in the TSC, as a compensatory measure, would relocate to the training center simulator and re-assume command and control.

Proposal to Integrate and Consolidate the TMI EOF with the Peach Bottom and Limerick EOF in Coatesville.

Question 1

Describe the potential for any adverse effect on overall emergency response capability in the event that any local officials in the surrounding communities near TMI, (within the 10-mile emergency planning zone), who may have emergency response duties, and who also may not approve or support the relocation and consolidation of the TMI EOF with the Coatesville EOF (currently being used for the Peach Bottom and Limerick plants), refuse to cooperate?

Response

The state and counties have provided concurrence letters to AmerGen on the relocation and consolidation of the TMI EOF with the Peach Bottom and Limerick EOF in Coatesville. These were provided to the NRC in a letter dated July 25, 2002, Reference 4. When activated, the EOF participates in accident assessment, and transmits appropriate data and recommended protective actions to Federal, State and local agencies. The facility is equipped with data transmission links with the plant, status boards and dedicated communication links with the ECC, TSC, OSC, JPIC, NRC, State and County emergency agencies, and the State Bureau of Radiation Protection. State and Local emergency plans are approved and implemented in accordance with PEMA and FEMA requirements, independent of the EOF location and the AmerGen Emergency Plan.

The local municipality officials respond to the state and county emergency direction and not to AmerGen TMI protective action recommendations (PAR). Local officials do not report to the current EOF, nor do they contact EOF staff under the current AmerGen Emergency Plan or Standard Radiological Emergency Plan. Communications and direction are provided by the county emergency response organizations, which would continue under the new plan following relocation to the EOF.

Therefore, we do not believe that there will be any adverse effect on the overall emergency response capability in the event that any local officials do not support the proposed relocation activity.

Question 2

The Coatesville EOF was licensed and designed to serve as the EOF for two sites; Limerick and Peach Bottom. With the addition of TMI, this facility will have to handle three sites. With three sites, the potential for having two events at the same time increases significantly. What steps have you taken or plan to take to in terms of the physical structure, staffing, operating protocols, training, etc. to ensure or demonstrate that this consolidated EOF can perform its function?

### Response

A review of the Coatesville EOF for size (physical structure) has been performed and concluded that the building will accommodate an augmented support staff for concurrent events at two sites. Each site TSC would be coordinating with the Coatesville EOF and the EOF staffing would be augmented by the Corporate Emergency Director as required. Designated emergency equipment and supplies are listed in the Emergency Plan Implementing Documents. The equipment and supplies are maintained, inventoried, inspected and calibrated in accordance with approved site procedures. The Coatesville EOF will have the capability to display critical information and radiation monitoring information for protective action recommendation (PAR) to the state and counties for up to three sites simultaneously. The Coatesville Emergency News Center (ENC) will be communicating with the Harrisburg Joint Public Information Center (JPIC) or the Coatesville news media or both. Multiple emergency communications systems and multiple tie-lines between all three sites exits within the Coatesville EOF, including the NRC Emergency Notification System (ENS) and the PEMA Health Physics Network.

Under the direction of the Coatesville EOF Radiation Protection Manager, the Dose Assessment Coordinator and the Dose Assessor maintain communications with the field monitoring teams. Multiple site communications to field monitoring teams can be accomplished through the EOF via phone/radio communications. Additionally, the TSC Dose Assessment Coordinator can also coordinate the field monitoring teams and report back to the EOF. The Dose Assessment functions can be performed at the TSC or the EOF to levelize workload as necessary.

The roll-out of the Exelon Nuclear Standard Radiological Emergency Plan for TMI will provide training to the Corporate Kennett Square ERO EOF and JPIC personnel for all three sites. The same Emergency Plan implementing procedures as used in the Midwest and at Peach Bottom and Limerick will be used at TMI. The Midwest EOF and JPICs have successfully demonstrated a two-site event drill. As part of continuing training, a two-site event drill will be conducted to demonstrate that personnel and equipment can perform the required functions in order to ensure readiness of the emergency preparedness program.

### Question 3

Since the Joint Public Information Center (JPIC) will remain in the Harrisburg area, please provide your plan to provide timely press releases and other information to the JPIC from the EOF and what are your plans for providing a company spokesman with technical Plant knowledge at the JPIC?

### Response

The Exelon Nuclear Standard Radiological Emergency procedures have been thoroughly reviewed and implemented at eight (8) Exelon Nuclear stations including Peach and Limerick. Although Peach Bottom and Limerick do not have split EOF and JPIC facilities, the purpose of the procedures do not change. The ERO teams of the

Exelon Nuclear facilities in Illinois have already exercised the split facility structure in a timely and effective manner. With slight modifications to the procedures, TMI will join the other eight (8) stations currently using the standard process for issuance of press releases. The News Writer, who is stationed in the Coatesville ENC, will draft the press releases. The Public Information Director, the Technical Advisor and the Event Recorder, also stationed in the Coatesville ENC, support the News Writer in the ENC and provide information for the press releases. Because the press releases are drafted in the same building as the Coatesville EOF, the information flow is seamless. After the press release is drafted, the Public Information Director and the Corporate Emergency Director, also stationed at the Coatesville EOF/ENC, perform a review for content. After review by the Corporate Emergency Director, the document is sent either via fax or email to the Harrisburg JPIC. At the Harrisburg JPIC, the Corporate Spokesperson approves the press release. Upon approval, the Administrative Coordinator directs the Clerical Staff to distribute the press release to the appropriate locations in the EOF and JPIC. In addition, the Administrative Coordinator will contact the Public Information Liaison in the JPIC to initiate a fax distribution to the appropriate outside agencies.

The Corporate Spokesperson is an on-call position and is expected to arrive at the JPIC in Harrisburg within 80 minutes of the alert or higher event declaration. In support of the Corporate Spokesperson at the JPIC, the ERO outlined under the Exelon Nuclear Standardize Radiological Emergency Plan provides a Technical Spokesperson and Radiation Protection Spokesperson. The Technical Spokesperson will be staffed from the TMI Station and will be knowledgeable in PWR operations and systems. The ENC and JPIC staff is called in by the automatic ERO callout system and will typically arrive at the ENC and JPIC within 80 minutes of an Alert or higher event declaration.

#### Question 4

The Coatesville EOF is located about 60 miles from TMI Unit 1 with an estimated driving time of over an hour from the site. This distance is considerably further than the current EOF. Discuss how you will staff the proposed EOF, within an hour, with an emergency staff that is knowledgeable of TMI-1's systems and capabilities.

#### Response

As stated in Reference 3, the Emergency Operations Facility (EOF) submittal letter dated July 01, 2002 on page 2, "The proposed EOF in Coatesville will be staffed with personnel primarily from the Exelon Corporate Office in Kennett Square, PA. Personnel with TMI operational knowledge will report to the EOF to support the EOF Operations Advisor position as an augmented support responder." This augmented support responder position is not a 60-minute ERO staff augmentation position. The EOF minimum staff positions are filled within 60 minutes or less of the event declaration. Corporate Kennett Square ERO EOF personnel for the TMI Unit 1 site will be required to complete TMI specific systems training. Also, during an event, the Corporate Emergency Director at the Coatesville EOF will be in direct communication with the TMI TSC Emergency Director. Technical Support and Operations personnel can be included

in technical and operational discussions as needed. Prior to implementation of the Exelon Nuclear Standard Radiological Emergency Plan at TMI, the ERO will perform practice drills including an ERO augmentation drill for the Coatesville EOF and ENC in order to demonstrate and ensure capability of the ERO to staff the EOF and ENC in a timely manner. These drills will also demonstrate that the Coatesville EOF can function for the duration until the TMI augmented position is filled.

The TMI TSC provides the primary technical support to the Station in the event of a declared emergency. While the EOF also provides support, the primary role of EOF personnel is to provide communication and protective action recommendations to offsite agencies.

### Question 5

Discuss the testing and training programs being performed or planned to be performed to verify that the communications links, the information capability are in place, reliable, and operable.

### Response

The plant modification process is being utilized to implement changes to the communication systems. This will ensure the communications links and the information capability at TMI are in place prior to implementation of the Exelon Nuclear Standard Radiological Emergency Plan at TMI. Modification acceptance testing will be completed as part of the installation of the communications equipment as part of the modification process.

The equipment will be tested in accordance with approved procedures that require documentation to reflect accomplishment of such activities, i.e., surveillance, audit, inventory, calibration and corrective actions, as appropriate, to ensure a high state of emergency readiness.

Periodic drills and exercises will be conducted in order to test the state of emergency preparedness. The prime objective of this form of training is to verify the emergency preparedness of all participating personnel, organizations, and agencies. Each drill or exercise will be conducted to: (1) ensure that the participants are familiar with their respective duties and responsibilities, (2) verify the adequacy of the Emergency Plan and the methods used in the Emergency Plan Implementing Documents, (3) test communications networks and systems, (4) check the availability of emergency supplies and equipment, and (5) verify the operability of emergency equipment.