

RS-12-104  
RA-12-068  
TMI-12-099

June 11, 2012

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

Braidwood Station, Units 1 and 2  
Facility Operating License Nos. NPF-72 and NPF-77  
NRC Docket Nos. STN 50-456 and STN 50-457

Byron Station, Units 1 and 2  
Facility Operating License Nos. NPF-37 and NPF-66  
NRC Docket Nos. STN 50-454 and STN 50-455

Clinton Power Station, Unit 1  
Facility Operating License No. NPF-62  
NRC Docket No. 50-461

Dresden Nuclear Power Station, Units 2 and 3  
Renewed Facility Operating License Nos. DPR-19 and DPR-25  
NRC Docket Nos. 50-237 and 50-249

LaSalle County Station, Units 1 and 2  
Facility Operating License Nos. NPF-11 and NPF-18  
NRC Docket Nos. 50-373 and 50-374

Limerick Generating Station, Units 1 and 2  
Facility Operating License Nos. NPF-39 and NPF-85  
NRC Docket Nos. 50-352 and 50-353

Oyster Creek Nuclear Generating Station  
Renewed Facility Operating License No. DPR-16  
NRC Docket No. 50-219

Peach Bottom Atomic Power Station, Units 2 and 3  
Renewed Facility Operating License Nos. DPR-44 and DPR-56  
NRC Docket Nos. 50-277 and 50-278

Quad Cities Nuclear Power Station, Units 1 and 2  
Renewed Facility Operating License Nos. DPR-29 and DPR-30  
NRC Docket Nos. 50-254 and 50-265

Three Mile Island Nuclear Station, Unit 1  
Renewed Facility Operating License No. DPR-50  
NRC Docket No. 50-289

Subject: Exelon Generation Company, LLC's (EGC) 90-Day Response to March 12, 2012 Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendation 9.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident; dated March 12, 2012 (Emergency Preparedness)

References:

1. Letter from Eric J. Leeds and Michael R. Johnson, U.S. Nuclear Regulatory Commission, to All Power Reactor Licensees and Holders of Construction Permits in Active or Deferred Status – "Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated March 12, 2012.
2. Exelon Generation Company, LLC's 60-Day Response to March 12, 2012 Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident, dated May 11, 2012 and May 14, 2012 (corrected).
3. Letter from Anthony R. Pietrangelo, NEI Senior Vice President and Chief Nuclear Officer, to The Honorable Gregory B. Jaczko, Chairman US Nuclear Regulatory Commission – "Industry Initiative on Procurement of Equipment for the Diverse and Flexible Coping Strategy (FLEX)" dated February 24, 2012.

On March 12, 2012, the NRC staff issued a letter entitled Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3 and 9.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident. Enclosure 5 of Reference 1 contains specific Requested Actions, Requested Information, and Required Responses associated with Recommendation 9.3 for Emergency Preparedness (EP) programs. In accordance with 10 CFR 50.54, "Conditions of licenses," paragraph (f), addressees were requested to submit a written response to the information requests within 90 days.

In accordance with Reference 1, Enclosure 5, on May 14, 2012, EGC submitted an alternative course of action for performing the requested actions and providing the requested information (Reference 2). As described in our alternative course of action, Attachment 1 to this letter includes the responses to the following information requests.

- Reference 2, Enclosure 1, Communications, Request #2

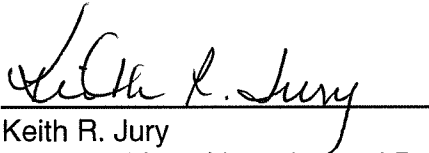
- Reference 2, Enclosure 1, Staffing, Request #3
- Reference 2, Enclosure 1, Staffing, Request #4
- Reference 2, Enclosure 1, Staffing, Request #5

A list of commitments is contained in Attachment 2.

Should you have any questions concerning the contents of this letter, please contact Ron Gaston at (630) 657-3359.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 11th day of June 2012.

Respectfully,



Keith R. Jury  
Vice President, Licensing and Regulatory Affairs  
Exelon Generation Company, LLC

Attachments: (1) Responses to Communications and Staffing Requests for Information  
(2) Summary of Regulatory Commitments

cc: Director, Office of Nuclear Reactor Regulation  
Regional Administrator - NRC Region I  
Regional Administrator - NRC Region III  
NRC Senior Resident Inspector - Braidwood Station  
NRC Senior Resident Inspector - Byron Station  
NRC Senior Resident Inspector - Clinton Power Station  
NRC Senior Resident Inspector - Dresden Nuclear Power Station  
NRC Senior Resident Inspector - LaSalle County Station  
NRC Senior Resident Inspector - Limerick Generating Station  
NRC Senior Resident Inspector - Oyster Creek Nuclear Generating Station  
NRC Senior Resident Inspector - Peach Bottom Atomic Power Station  
NRC Senior Resident Inspector - Quad Cities Nuclear Power Station  
NRC Senior Resident Inspector - Three Mile Island Nuclear Station, Unit 1  
NRC Project Manager, NRR - Braidwood Station  
NRC Project Manager, NRR - Byron Station  
NRC Project Manager, NRR - Clinton Power Station  
NRC Project Manager, NRR - Dresden Nuclear Power Station  
NRC Project Manager, NRR - LaSalle County Station  
NRC Project Manager, NRR - Limerick Generating Station  
NRC Project Manager, NRR - Oyster Creek Nuclear Generating Station  
NRC Project Manager, NRR - Peach Bottom Atomic Power Station  
NRC Project Manager, NRR - Quad Cities Nuclear Power Station

NRC Project Manager, NRR - Three Mile Island Nuclear Station, Unit 1  
Illinois Emergency Management Agency - Division of Nuclear Safety  
Director, Bureau of Radiation Protection - Pennsylvania Department of Environmental  
Resources  
Director, Bureau of Nuclear Engineering - New Jersey Department of Environmental  
Protection  
Chairman, Board of County Commissioners of Dauphin County, PA  
Chairman, Board of Supervisors of Londonderry Township, PA  
Mayor of Lacey Township, Forked River, NJ  
S. T. Gray, State of Maryland  
R. R. Janati, Commonwealth of Pennsylvania

## **Attachment 1**

### **Communications**

Request #2 - Describe any interim actions that have been taken or are planned to be taken to enhance existing communications systems power supplies until the communications assessment and the resulting actions are complete.

Response:

Purchase orders have been submitted for three (3) portable battery operated satellite telephones for each of the ten (10) EGC stations and the Emergency Operations Facilities (EOF) in Pennsylvania (Peach Bottom, Limerick and TMI) and New Jersey (Oyster Creek). The EOF in Illinois (used for Braidwood, Byron, Clinton, Dresden, LaSalle and Quad Cities) is greater than 25 miles from any EGC station and therefore will not receive interim communications systems outlined above. These satellite phones will be used as an interim measure until the completion of the communications assessment and implementation of EGC's long term solution for onsite and offsite communications. Additional batteries have been purchased for these satellite phones for the purpose of maintaining communications capabilities for an extended period of time. Delivery of the satellite phones will occur by August 31, 2012.

For onsite communications, Braidwood, Byron, Clinton, Dresden, LaSalle, Oyster Creek and Quad Cities currently have a "Talk Around" radio frequency programmed on all site radios. The talk around radio frequency transmits push-to-talk transmissions from radio to radio, bypassing the radio repeater systems. A contract has been established with a radio vendor to program the "Talk Around" radio frequency to Limerick, Peach Bottom and TMI site radios. The talk around radio frequency will be used as an interim measure until the completion of the communications assessment and implementation of EGC's long term solution for onsite communications. Sufficient radio batteries are available at each site for maintaining communications capabilities for an extended period of time. Programming of the radio frequency for Limerick, Peach Bottom and TMI will be completed by December 7, 2012.

Portable generators (3 for single unit sites, 6 for dual unit sites) have been ordered and will be available for charging satellite phone and radio batteries at each of the EGC stations. Delivery of the portable generators will occur by August 31, 2012.

## **Attachment 1**

### **Staffing**

Request #3 - Identify how the augmented staff would be notified given degraded communications capabilities.

Response:

Current communications methods will not support direct Emergency Response Organization (ERO) notification in the event of a large-scale natural disaster that affects normal communications within 25 miles of a site.

To promote timely staff augmentation by the ERO, ERO members are trained to respond to their assigned emergency response facilities when they become aware of an area wide loss of grid. This training is an annual requirement and is performed in accordance with Emergency Preparedness procedures.

The guidance to ERO members will be revised by October 31, 2012, to include site-specific details regarding muster points that will be used in association with logistical support in the event of a large scale natural disaster that inhibits site access. This logistical support is addressed under the response to Request #4 below.

Request #4 - Identify the methods of access (e.g., roadways, navigable bodies of water and dockage, airlift, etc.) to the site that are expected to be available after a widespread large scale natural event.

Response:

Various methods of access would apply to each site, depending upon the nature of the natural disaster affecting the site, including walking, personal vehicle, helicopter, ATV and water craft. For sites located in Illinois, support from the State of Illinois for the response to such an event is governed by the Illinois Emergency Management Act and the Division of Nuclear Safety - Powers Enabling Statute. These statutes describe the State's authority to provide the necessary support in the event of an emergency, including a nuclear event, to coordinate assistance necessary to protect the safety of the public. The stated purpose of the Emergency Management Act and the policy of the State is, "that all emergency management programs of this State be coordinated to the maximum extent with the comparable programs of the federal government, including its various departments and agencies, of other states and localities and private agencies of every type, to the end that the most effective preparation and use may be made of the nation's resources and facilities for dealing with any disaster that may occur."

## **Attachment 1**

### **Staffing**

In addition, EGC is reviewing agreements with the states of Illinois, Iowa, Maryland, New Jersey, and Pennsylvania to verify the ability to obtain logistical support under existing statutes and agreements, including the Mutual Aid framework, and to update agreements, as necessary. Support services would include assistance such as transportation of emergency responders to designated emergency response facilities in the event of a large-scale natural disaster that inhibits site access and clearing of access roads, as conditions warrant. Any applicable agreements will be verified or updated by October 31, 2012.

In addition, EGC is developing agreements with the electrical distribution companies serving each of the site areas to obtain heavy equipment/trucks that may be available to facilitate site access under these conditions. Any applicable agreements will be established by October 31, 2012.

In support of these agreements, EGC is establishing staging areas to be used by the emergency responders as common locations for transport to the affected site. Areas under consideration include the current alternate assembly areas and Emergency Operations Facilities, as well as strategically located schools and shopping centers. The selected areas will be identified by October 31, 2012.

In addition to these agreements, each EGC site has specific letters of agreement for services and support from local counties, fire departments, law enforcement, and health care facilities. These agreements are documented in the applicable Emergency Plan.

EGC anticipates that site access will be unavailable for the first six hours following the postulated natural disaster. Following the initial six-hour period, emergency responders for the affected site will be expected to assemble at the pre-designated muster points. Communications protocols established in conjunction with the planned memoranda/agreements with the associated State(s) will be invoked to coordinate the dispatch of transportation appropriate for the specific event (e.g., helicopter, ATV, boat, etc.).

## **Attachment 1**

### **Staffing**

Request #5 - Identify any interim actions that have been taken or are planned prior to the completion of the staffing assessment.

Response:

Regarding actions taken prior to the completion of the phase 1 staffing assessment, EGC is currently assessing initial on-shift staffing for station blackout (SBO) conditions in response to the requirements of changes to 10 CFR Parts 50 and 52, effective December 23, 2011. Although limited to the first hour following event initiation, this assessment is being conducted at each site and will provide initial indication of the adequacy of staffing to respond to an SBO event.

In accordance with the letter from Anthony R. Pietrangelo, NEI Senior Vice President and Chief Nuclear Officer, to The Honorable Gregory B. Jaczko, Chairman US Nuclear Regulatory Commission (Reference 3), EGC has submitted orders for supplies, including food and sleeping supplies, to support extended presence of emergency workers at the nuclear sites. These additional provisions will be in place by August 31, 2012.



**Attachment 2**

**SUMMARY OF REGULATORY COMMITMENTS**

The following table identifies commitments made in this document. (Any other actions discussed in the submittal represent intended or planned actions. They are described to the NRC for the NRC's information and are not regulatory commitments.)

COMMITMENT	COMMITTED DATE OR "OUTAGE"	COMMITMENT TYPE	
		ONE-TIME ACTION (Yes/No)	PROGRAMMATIC (Yes/No)
1. Purchase orders have been submitted for three (3) portable battery operated satellite telephones for each of the ten (10) EGC stations and the Emergency Operations Facilities (EOF) in Pennsylvania (Peach Bottom, Limerick and TMI) and New Jersey (Oyster Creek). Delivery of the satellite phones will occur by August 31, 2012.	August 31, 2012	Yes	No
2. Programming of the "Talk Around" radio frequency for Limerick, Peach Bottom and TMI will be completed by December 7, 2012.	December 7, 2012	Yes	No
3. Portable generators (3 for single unit sites, 6 for dual unit sites) have been ordered and will be available for charging satellite phone and radio batteries at each of the EGC stations. Delivery of the portable generators will occur by August 31, 2012.	August 31, 2012	Yes	No
4. The guidance to Emergency Response Organization members will be revised by October 31, 2012, to include site-specific details regarding muster points that will be used in association with logistical support in the event of a large scale natural disaster that inhibits site access.	October 31, 2012	No	Yes
5. EGC is in the process of developing agreements with the states of Illinois, Iowa, Maryland, New Jersey, and Pennsylvania under the Mutual Aid framework to obtain logistical support for the transport of emergency responders to designated emergency response facilities in the event of	October 31, 2012	No	Yes

COMMITMENT	COMMITTED DATE OR "OUTAGE"	COMMITMENT TYPE	
		ONE-TIME ACTION (Yes/No)	PROGRAMMATIC (Yes/No)
a large-scale natural disaster that inhibits site access. Any applicable agreements will be verified or updated by October 31, 2012.			
6. EGC Nuclear is developing agreements with the electrical distribution companies serving each of the site areas to obtain available heavy equipment/trucks that may be available to facilitate site access under these conditions. Any applicable agreements will be established by October 31, 2012.	October 31, 2012	No	Yes
7. In support of these agreements EGC is establishing staging areas to be used by the emergency responders as common locations for transport to the affected site. The selected areas will be identified by October 31, 2012.	October 31, 2012	No	Yes
8 EGC has submitted orders for supplies, including food and sleeping supplies, to support extended presence of emergency workers at the nuclear sites. These additional provisions will be in place by August 31, 2012.	August 31, 2012	Yes	No