

RS-12-083
RA-12-057
TMI-12-082

May 10, 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 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

Reference: 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

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 the letter contains specific Requested Actions and Requested Information 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.

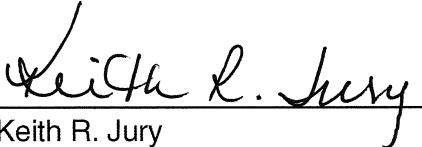
The letter states that if an addressee cannot meet the requested response date, then the addressee must provide a response within 60 days of the date of the letter and describe the alternative course of action that it proposes to take, including the basis of the acceptability of the proposed alternative course of action and estimated completion date. After a careful review of the requested actions and information, we propose to take the alternative course of action described in Enclosure 1 of this letter. The basis for our proposal is explained in Enclosure 2.

A list of regulatory commitments contained in this letter is provided in Enclosure 3.

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 May 2012.

Respectfully,



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

Enclosures

1. Proposed Alternative Course of Action for Responding to Recommendation 9.3 Information Request
2. Basis for Proposed Alternative Course of Action for Responding to Emergency Preparedness (EP) Requested Information
3. 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

U.S. Nuclear Regulatory Commission
60-Day Response to 50.54(f) Letter
NTTF Recommendations 2.1, 2.3, and 9.3
May 10, 2012
Page 4

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

bcc: Site Vice President - Braidwood Station
Site Vice President - Byron Station
Site Vice President - Clinton Power Station
Site Vice President - Dresden Nuclear Power Station
Site Vice President - LaSalle County Station
Site Vice President - Limerick Generating Station
Site Vice President - Oyster Creek Nuclear Generating Station
Site Vice President - Peach Bottom Atomic Power Station
Site Vice President - Quad Cities Nuclear Power Station
Site Vice President - Three Mile Island Nuclear Station
Regulatory Assurance Manager - Braidwood Station
Regulatory Assurance Manager - Byron Station
Regulatory Assurance Manager - Clinton Power Station
Regulatory Assurance Manager - Dresden Nuclear Power Station
Regulatory Assurance Manager - LaSalle County Station
Regulatory Assurance Manager - Limerick Generating Station
Regulatory Assurance Manager - Oyster Creek Nuclear Generating Station
Regulatory Assurance Manager - Peach Bottom Atomic Power Station
Regulatory Assurance Manager - Quad Cities Nuclear Power Station
Regulatory Assurance Manager - Three Mile Island Nuclear Station
Site Operations Director - Braidwood Station
Site Operations Director - Byron Station
Site Operations Director - Clinton Power Station
Site Operations Director - Dresden Nuclear Power Station
Site Operations Director - LaSalle County Station
Site Operations Director - Limerick Generating Station
Site Operations Director - Oyster Creek Nuclear Generating Station
Site Operations Director - Peach Bottom Atomic Power Station
Site Operations Director - Quad Cities Nuclear Power Station
Site Operations Director - Three Mile Island Nuclear Station
Corporate Licensing Manager - East
Corporate Licensing Managers - West
Corporate Licensing Director - East
Corporate Licensing Director - West
Exelon Records Management
Commitment Tracking Coordinator - East
Commitment Tracking Coordinator - West
PA DEP BRP Inspector - LGS

Enclosure 1
 Proposed Alternative Course of Action for
 Responding to Recommendation 9.3 Information Request

Communications

Request #	Estimated Completion Date *	Requested Information
1	10/31/12	<p>Provide an assessment of the current communications systems and equipment used during an emergency event to identify any enhancements that may be needed to ensure communications are maintained during a large scale natural event meeting the conditions described in the Discussion section. The assessment should:</p> <ul style="list-style-type: none"> • Identify any planned or potential improvements to existing onsite communications systems and their required normal and/or backup power supplies, • Identify any planned or potential improvements to existing offsite communications systems and their required normal and/or backup power supplies, • Provide a description of any new communications system(s) or technologies that will be deployed based upon the assumed conditions described above, and • Provide a description of how the new and/or improved systems and power supplies will be able to provide for communications during a loss of all AC power.
2	6/11/12	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.
3A	9/28/12	Conduct a communications assessment.
3B	10/31/12	Provide an implementation schedule of the time needed to conduct and implement the results of the communications assessment.

* Except as noted, estimated completion dates are applicable to all stations listed on pages 1 and 2 of the cover letter.

Enclosure 1
Proposed Alternative Course of Action for
Responding to Recommendation 9.3 Information Request

Staffing

Request #	Estimated Completion Date *	Requested Information
1		<p>Provide an assessment of the onsite and augmented staff needed to respond to a large scale natural event meeting the conditions described in the Discussion section. This assessment should include a discussion of the onsite and augmented staff available to implement the strategies as discussed in the emergency plan and/or described in plant operating procedures. The following functions are requested to be assessed:</p> <ul style="list-style-type: none"> • How onsite staff will move back-up equipment (e.g., pumps, generators) from alternate onsite storage facilities to repair locations at each reactor as described in the order regarding the NRC Near-Term Task Force (NTTF) Recommendation 4.2. It is requested that consideration be given to the major functional areas of NUREG-0654, Table B-1, such as plant operations and assessment of operational aspects, emergency direction and control, notification/communication, radiological accident assessment, and support of operational accident assessment, as appropriate. • New staff or functions identified as a result of the assessment. • Collateral duties (personnel not being prevented from timely performance of their assigned functions).
1A	4/30/2013 [Applicable to multi-unit stations listed in Enclosure 1, Table 2]	Provide onsite and augmented staffing assessment considering all requested functions except those related to NTTF Recommendation 4.2. [Phase 1 staffing assessment]
1B	4 months prior to beginning of second refueling outage**	<p>Provide onsite and augmented staffing assessment considering functions related to NTTF Recommendation 4.2. [Phase 2 staffing assessment]</p> <p>See Enclosure 1, Tables 1 and 2 for site specific completion dates.</p> <p>** As used within the context of NRC Order EA-12-049</p>

* Except as noted, estimated completion dates are applicable to all stations listed on pages 1 and 2 of the cover letter.

Enclosure 1
 Proposed Alternative Course of Action for
 Responding to Recommendation 9.3 Information Request

Staffing

Request #	Estimated Completion Date *	Requested Information
2		Provide an implementation schedule of the time needed to conduct the onsite and augmented staffing assessment. If any modifications are determined to be appropriate, please include in the schedule the time to implement the changes.
2A	3/29/13 [Applicable to multi-unit stations listed in Enclosure 1, Table 2.]	1. Conduct the onsite and augmented staffing assessment: The onsite and augmented staffing assessment considering all requested functions except those related to NTTF Recommendation 4.2. [Phase 1 staffing assessment]
2B	[See Enclosure 1, Table 1 and Table 2.]	The onsite and augmented staffing assessment considering functions related to NTTF Recommendation 4.2. [Phase 2 staffing assessment]
2C	4/30/13 [Applicable to multi-unit stations listed in Enclosure 1, Table 2.]	2. A schedule of the time needed to implement changes will be provided as follows: Those associated with the Phase 1 staffing assessment.
2D	4 months prior to beginning of second refueling outage**	Those associated with the Phase 2 staffing assessment. See Enclosure 1, Tables 1 and 2 for site specific completion dates. ** As used within the context of NRC Order EA-12-049
3	6/11/12	Identify how the augmented staff would be notified given degraded communications capabilities.
4	6/11/12	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.

* Except as noted, estimated completion dates are applicable to all stations listed on pages 1 and 2 of the cover letter.

Enclosure 1
 Proposed Alternative Course of Action for
 Responding to Recommendation 9.3 Information Request

Staffing

Request #	Estimated Completion Date *	Requested Information
5	6/11/12	Identify any interim actions that have been taken or are planned prior to the completion of the staffing assessment.
6		<p>Identify changes that have been made or will be made to your emergency plan regarding the on-shift or augmented staffing changes necessary to respond to a loss of all AC power, multi-unit event, including any new or revised agreements with offsite resource providers (e.g., staffing, equipment, transportation, etc.).</p> <p>Changes will be identified as follows:</p>
6A	4/30/13 [Applicable to multi-unit stations listed in Enclosure 1, Table 2.]	Those associated with the Phase 1 staffing assessment.
6B	4 months prior to beginning of second refueling outage**	<p>Those associated with the Phase 2 staffing assessment. See Enclosure 1, Tables 1 and 2 for site specific completion dates.</p> <p>** As used within the context of NRC Order EA-12-049</p>

* Except as noted, estimated completion dates are applicable to all stations listed on pages 1 and 2 of the cover letter.

Enclosure 1
 Proposed Alternative Course of Action for
 Responding to Recommendation 9.3 Information Request

Staffing

TABLE 1: SINGLE UNIT STATIONS

Station	Estimated Completion Date for Staffing Request Nos. 2B	Estimated Completion Date for Staffing Request Nos. 1B, 2D, 6B
Clinton	5 months prior to C1R15 (Fall 2015)	4 months prior to C1R15
Oyster Creek	5 months prior to OC1R26 (Fall 2016)	4 months prior to OC1R26
Three Mile Island Unit 1	5 months prior to T1R21 (Fall 2015)	4 months prior to T1R21

TABLE 2 : MULTI-UNIT STATIONS

Station	Estimated Completion Date for Staffing Request No. 2B	Estimated Completion Date for Staffing Request Nos. 1B, 2D, 6B
Braidwood Unit 1	5 months prior to A1R18 (Spring 2015)	4 months prior to A1R18
Braidwood Unit 2	5 months prior to A1R18 (Spring 2015)	4 months prior to A1R18
Byron Unit 1	5 months prior to B2R18 (Fall 2014)	4 months prior to B2R18
Byron Unit 2	5 months prior to B2R18 (Fall 2014)	4 months prior to B2R18
Dresden Unit 2	5 months prior to D2R24 (Fall 2015)	4 months prior to D2R24
Dresden Unit 3	5 months prior to D2R24 (Fall 2015)	4 months prior to D2R24
LaSalle Unit 1	5 months prior to L1R16 (Winter 2015)	4 months prior to L1R16
LaSalle Unit 2	5 months prior to L1R16 (Winter 2015)	4 months prior to L1R16
Limerick Unit 1	5 months prior to Li2R13 (Spring 2015)	4 months prior to Li2R13
Limerick Unit 2	5 months prior to Li2R13 (Spring 2015)	4 months prior to Li2R13
Peach Bottom Unit 2	5 months prior to P3R20 (Fall 2015)	4 months prior to P3R20
Peach Bottom Unit 3	5 months prior to P3R20 (Fall 2015)	4 months prior to P3R20
Quad Cities Unit 1	5 months prior to Q1R23 (Spring 2015)	4 months prior to Q1R23
Quad Cities Unit 2	5 months prior to Q1R23 (Spring 2015)	4 months prior to Q1R23

Enclosure 2
 Basis for Proposed Alternative Course of Action for
 Responding to EP Requested Information

Communications

There are two separate responses to the information requests related to communications. The alternative timing of responses to requests #1 and #3 proposed in this letter reflects the higher priority placed by the staff, and approved by the Commission in SRM-SECY-12-0025, upon the completion of licensee actions necessary to comply with the Final EP Rule issued on November 23, 2011 (76 Fed. Reg. 72,560). The proposed alternative timing is warranted as many of the licensee staff resources necessary for performing the communications assessment are the same resources involved in implementing new EP Rule requirements, responding to Institute of Nuclear Power Operations (INPO) initiatives related to enhancing communications capabilities (e.g., IER 11-4), and maintaining existing EP communications equipment.

In addition, the estimated completion date assigned to information request #3 will promote alignment between the out-year budgeting/funding of future enhancements, and the development of an accurate and complete enhancement implementation schedule.

Staffing

As presented in Enclosure 1 of this letter, a 2-phase approach will be used to respond to the information requests associated with Staffing. The table below summarizes this approach.

Plant Type	Phase 1 Staffing Assessment (for functions except those related to NTTF Recommendation 4.2)	Phase 2 Staffing Assessment (for functions related to NTTF Recommendation 4.2)
Single-unit plants	Perform staffing assessment and implement actions as required by recent EP Rule using ISG and NEI 10-05.	Perform staffing assessment as requested by 50.54(f) letter using NEI 12-01; provide results per Enclosure 1 of this letter.
Multi-unit plants	<ul style="list-style-type: none"> • Perform staffing assessment and implement actions as required by recent EP Rule using ISG and NEI 10-05. • Perform staffing assessment as requested by 50.54(f) letter using NEI 12-01 and material from NEI 10-05; provide results per Enclosure 1 of this letter. 	<ul style="list-style-type: none"> • Perform staffing assessment as requested by 50.54(f) letter using NEI 12-01; provide results per Enclosure 1 of this letter.

Enclosure 2
Basis for Proposed Alternative Course of Action for
Responding to EP Requested Information

The basis for this approach is discussed below.

- For multi-unit plants, the Phase 1 staffing assessment will be performed by March 29, 2013, and provided by April 30, 2013. This assessment will consider all requested functions except those related to Fukushima Near-Term Task Force (NTTF) Recommendation 4.2. An assessment considering these functions will be performed in Phase 2.

The timing of the Phase 1 staffing assessment reflects the higher priority placed by the staff, and approved by the Commission in SECY-12-0025, upon the completion of licensee actions necessary to comply with the Final EP Rule issued on November 23, 2011 (76 Fed. Reg. 72,560). In particular, Section IV.A.9 of 10 CFR 50, Appendix E, requires that licensees complete a detailed analysis demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan. As stated in the EP Rule, this analysis must be completed by December 24, 2012.

Following completion of EP Rule staffing analysis, the staffing assessment associated with the NRC letter will be performed. Based on staffing analysis experience to date, it is anticipated that a multi-unit staffing analysis will require approximately three months to complete and validate. One additional month is allotted for processing of an assessment submittal package.

As requested, an implementation schedule for any modifications that are determined to be appropriate will be included with the Phase 1 staffing assessment.

Single-unit plants do not need to provide a Phase 1 staffing assessment in response to the 50.54(f) letter as performance of this activity is governed by the recent EP Rule and existing license requirements.

- The Phase 2 staffing assessments will be performed by the estimated completion dates listed in Tables 1 and 2 of Enclosure 1, and provided by each site listed therein by 4 months prior to beginning the earliest second refueling outage for any unit on that respective site after the February 28, 2013, submittal of the Implementation Plans (as required by NRC Order EA-12-049). This assessment will consider the requested functions related to Fukushima Near-Term Task Force (NTTF) Recommendation 4.2.

The industry will be responding to multiple regulatory actions resulting from the recommendations contained in the Fukushima NTTF Report, as modified in related Commission Papers and Staff Requirements Memoranda. One of these actions, in

Enclosure 2
Basis for Proposed Alternative Course of Action for
Responding to EP Requested Information

particular, has the potential to impact emergency response staffing levels. This action is associated with Fukushima NTTF Recommendation 4.2 and subsequently issued as NRC Order to Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events EA-12-049 [the Order]. A summary of the Order is provided below.

This Order requires a three-phase approach for mitigating beyond-design-basis external events. The initial phase requires the use of installed equipment and resources to maintain or restore core cooling, containment and spent fuel pool (SFP) cooling. The transition phase requires providing sufficient, portable, onsite equipment and consumables to maintain or restore these functions until they can be accomplished with resources brought from off site. The final phase requires obtaining sufficient offsite resources to sustain those functions indefinitely. Additional details on an acceptable approach for complying with this Order will be contained in final Interim Staff Guidance (ISG) scheduled to be issued by the NRC in August 2012.

In response to the Order, each licensee must develop new strategies for mitigating beyond-design-basis external events. To ensure accurate results, the staffing assessment for response functions related to NTTF Recommendation 4.2 must be based on the actions delineated in procedures and guidelines developed in response to the Order. Once the site-specific actions associated with the new response strategies are defined (e.g., down to the procedure or guideline step level), the staffing needed to perform these actions can be assessed with the necessary level of accuracy.

Based on a review of the planned actions necessary to comply with the Order, an assessment of the staffing for the functions related to NTTF Recommendation 4.2 will be provided by 4 months prior to beginning of the second refueling outage (as used within the context of NRC Order EA-12-049) for single unit stations listed in Table 1 of Enclosure 1. For multi-unit sites listed in Table 2 of Enclosure 1, these staffing assessments will be provided by 4 months prior to the first occurrence of a second refueling outage (i.e., the first "second refueling outage") as used within the context of NRC Order EA-12-049.

As requested, an implementation schedule for any modifications that are determined to be appropriate will be included with the Phase 2 staffing assessment.

The Phase 2 staffing assessment is one component of the overall work plan necessary to implement the requirements of the Order. Exelon Generation Company, LLC (EGC), as stated in the Order, "...shall complete full implementation no later than two (2) refueling cycles after submittal of the overall integrated plan, as required in Condition C.1.a, or December 31, 2016, whichever comes first." "Full compliance shall include procedures, guidance, training, and acquisition, staging, or installing of equipment needed for the strategies."

Enclosure 3

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. Exelon Generation Company, LLC (EGC) will provide the requested information for the Communications Assessment (Communications Request No. 2) and Staffing Assessment (Staffing Request Nos. 3, 4 and 5) by June 11, 2012, for each site listed in Tables 1 and 2 of Enclosure 1.	June 11, 2012	Yes	No
2. EGC will provide the requested information for the Communication Assessment (Communications Request Nos. 1 and 3B) by October 31, 2012, for each site listed in Tables 1 and 2 of Enclosure 1.	October 31, 2012	Yes	No

COMMITMENT	COMMITTED DATE OR "OUTAGE"	COMMITMENT TYPE	
		ONE-TIME ACTION (Yes/No)	PROGRAMMATIC (Yes/No)
3. EGC will provide the requested information for Phase 1 (all functions except those related to NTTF Recommendation 4.2) of the Staffing Assessment (Staffing Request Nos. 1A, 2C and 6A) by April 30, 2013, for each multi-unit site listed in Table 2 of Enclosure 1.	April 30, 2013	Yes	No
4. EGC will provide the requested information for Phase 2 (all functions considering the results of NTTF Recommendation 4.2) of the Staffing Assessment (Staffing Request Nos. 1B, 2D, and 6B) by four months prior to the earliest second refueling outage at each site listed in Tables 1 and 2 of Enclosure 1, after the February 28, 2013, submittal of the Implementation Plans (as required by NRC Order EA-12-049).	See Enclosure 1, Tables 1 and 2	Yes	No