

ATTACHMENT 1

10 CFR 50.54(q)(5) Change Summary Analysis

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Document Titles

Exelon Generation Company, LLC (Exelon) has issued the following Emergency Plan Annex and Addendum revisions for Calvert Cliffs Nuclear Power Plant (CCNPP), James A. FitzPatrick Nuclear Power Plant (JAF), and Nine Mile Point Nuclear Station (NMP):

- EP-AA-1011, Revision 2, "*Exelon Nuclear Radiological Emergency Plan Annex for Calvert Cliffs Station*"
- EP-AA-1014, Revision 0, "*Exelon Nuclear Radiological Emergency Plan Annex for James A. FitzPatrick Station*"
- EP-AA-1014, Revision 1, "*Exelon Nuclear Radiological Emergency Plan Annex for James A. FitzPatrick Station*"
- EP-AA-1014, Addendum 1, Revision 0, "*On-Shift Staffing Analysis Report for James A. FitzPatrick Nuclear Power Plant*"
- EP-AA-1014, Addendum 2, Revision 0, "*James A. FitzPatrick Nuclear Power Plant Evacuation Time Estimates*"
- EP-AA-1014, Addendum 3, Revision 0, "*James A. FitzPatrick Nuclear Power Plant Emergency Action Levels*"
- EP-AA-1013, Revision 5, "*Exelon Nuclear Radiological Emergency Plan Annex for Nine Mile Point Station*"

In addition, in support of revising the Emergency Plan documentation for JAF, the previous site Emergency Plan including related documentation (i.e., James A. FitzPatrick Nuclear Power Plant Emergency Plan, Revision 28) has been superseded. A copy of the superseded document is not included as an attachment in this submittal.

Description of Procedures

Emergency Plan Annexes (CCNPP, JAF, and NMP)

The Emergency Plan Annexes listed (i.e., EP-AA-1011, EP-AA-1014, and EP-AA-1013) contain emergency planning information and guidance unique to each station. This includes facility geography, emergency response facility locations, and process and radiation monitoring instrumentation that provides a description of the station's emergency response capabilities, as well as any station unique commitments.

In conjunction with the Emergency Plan Annex for each site, Exelon maintains a Nuclear Standardized Radiological Emergency Plan (i.e., EP-AA-1000 - referred to as the Standard Plan) that outlines the basis for the response actions that would be implemented during an emergency. The planning efforts common to applicable Exelon nuclear stations are encompassed within the Standard Plan.

The Standard Plan provides the overall description of Exelon's Emergency Preparedness (EP) program. Required deviations from the Standard Plan are contained in the site Annexes for each station. Where a station Annex deviates from the general requirements of the Standard Plan, the station Annex shall serve as the controlling document.

Emergency Plan Addendums (JAF)

Site Emergency Plan Annexes also include Addendums. The following Emergency Plan Addendums have been established for JAF:

- EP-AA-1014, Addendum 1 – describes the on-shift staffing analysis that examines the capability of the minimum staff listed in Table 5-1 of the JAF Emergency Plan to perform the actions for the key functional areas of events described in NSIR/DPR-ISG-01, *Interim Staff Guidance – Emergency Planning for Nuclear Power Plants*, until augmenting Emergency Response Organization (ERO) staff arrives in accordance with the Emergency Plan.
- EP-AA-1014, Addendum 2 – describes the analyses performed and the results obtained by a study to update the Evacuation Time Estimates (ETE) for the JAF as well as NMP.
- EP-AA-1014, Addendum 3 – describes the Emergency Action Levels (EALs) implemented at JAF for entering Emergency Classification Levels (ECLs).

Description of Changes

EP-AA-1011 (CCNPP)

The following changes were in Revision 2 to EP-AA-1011 for CCNPP:

- Updated the name of the Maryland Core Emergency Operations Plan.
- Assigned the responsibility for emergency classification from the Emergency Operations Facility (EOF) to the Technical Support Center (TSC).
- Reassigned the responsibility for emergency exposure control from the EOF to the TSC.
- Allowed the Shift Manager (functioning as an Emergency Director) to transfer responsibilities to the Station Emergency Director at the TSC and deleted the prohibition against the TSC Station Emergency Director from performing the duty.
- Modified the Recovery Organization to remove the limitation that Emergency Directors only be from Corporate.
- Corrected three (3) incorrect references to EP-AA-1012 and replaced them with EP-AA-1011.
- Revised the discussion of contractors and local services to delineate which agreements are managed by Corporate versus the station.

- Revised the Letters of Agreement to reflect only the letters that are required and maintained to support the Emergency Plan.
- Revised a reference to an Emergency Plan Implementing Procedure (EPIP) in Appendix 3, since it was superseded by another EPIP.
- Updated the name of a local hospital.
- Removed references to some of the Severe Accident Management Guideline (SAMG) series procedures. SAMGs remain an integral part of Emergency Preparedness; however, it is not necessary to reference all SAMG-related procedures in the Emergency Plan. It is considered sufficient to include a reference to the governing procedure which directs the use of the other SAMG procedures.

EP-AA-1014 and Addendums 1, 2, and 3 – Revision 0 (JAF)

In support of the integration of JAF into the Exelon standardized EP process, the existing Emergency Plan (which includes other supporting documents) was superseded and new Emergency Plan documentation was adopted consistent with the Exelon format.

Based on the scope of changes associated with the JAF conversion to the Exelon standardized EP process, a detailed comparison between the existing JAF Emergency Plan (i.e., Revision 28) to the Exelon fleet Standard Plan (i.e., Revision 29) and the new Emergency Plan Annex for JAF (i.e., EP-AA-1014, Revision 0) was performed, which include the evaluation of specific additions and deletions,

The methodology used for determining whether a reduction in effectiveness has occurred was based on the guidance published by in Regulatory Guide (RG) 1.219, "*Guidance on Making Changes to Emergency Plans for Nuclear Power Reactors.*"

Many of the changes resulting from the incorporation of the JAF Emergency Plan into the Exelon format are editorial changes. Step 2.6 of Regulatory Guide 1.219 provides the following guidance with regard to editorial changes:

"Editorial Change: Editorial changes do not require a 10 CFR 50.54(q) review. The following are examples of Editorial Changes:

- *Procedure title change*
- *Reference or annotation change*
- *Correction of location description*
- *Correction of typographical errors and punctuation*
- *Reformatting changes that do not change intent, purpose, or order of procedural steps*
- *Changes on plant drawing grid coordinates*
- *Change to position titles when no responsibilities for that position have changed*
- *Correction in page or step numbering."*

Existing commitments under the existing JAF Emergency Plan (i.e., Revision 28) were maintained with the incorporation into the Exelon format. The more significant changes resulting from this revision are summarized as follows:

1. An Introduction Section was added to link the Exelon Standard Plan to the JAF Emergency Plan Annex (i.e., EP-AA-1014) which further explains the relation of the two documents.
2. Three (3) Addendums (i.e., EP-AA-1014, Addendum 1, 2, and 3) were added to the Emergency Plan which contain information regarding of the On-Shift Staffing Analysis, the ETEs, and the EALs.
3. The JAF Emergency Response Organization (ERO) positions identified within the EP program are re-named to match the Exelon position titles.
4. The JAF EIPs and other program procedures are incorporated into the Exelon program. This changes JAF procedure numbers and procedure titles. Any specific changes to these procedures would be evaluated pursuant to the requirements of 10 CFR 50.54(q).

EP-AA-1014, Revision 1 (JAF)

This revision to EP-AA-1014 addressed changes associated with the implementation of the NRC-approved Amendment No. 318 for JAF. As documented in a letter dated March 26, 2018 (ML17289A175), the NRC issued Amendment No. 318 along with its supporting Safety Evaluation Report (SER). The amendment revises the license to authorize changes to the Emergency Plan description for the emergency response organization requalification training frequency from "annually" to "once per calendar year not to exceed 18 months between training sessions."

In addition, this revision to EP-AA-1014 incorporates changes to reflect the addition of a new main security access building and installing a new pre-access facility. These buildings are in different locations than the current buildings. The new locations do not impact the timeliness of individuals accessing the Protected Area (PA) for TSC and Operations Support Center (OSC) staffing. The changed PA fence line brings the Training Center inside the PA boundary. Consequently, the PA evacuation process is replaced by the PA Area Assembly process, whereby personnel continue to assemble in the Training Center Auditorium which is now inside the PA boundary.

This revision also includes changes to Table of Contents (TOC) to add references to EP-AA-1014, Addendums 1, 2, and 3.

EP-AA-1013 (NMP)

The following changes were in Revision 5 to EP-AA-1013 for NMP:

- Aligned the NMP EP guidance with the Exelon fleet regarding Command and Control and the transfer of the non-delegable responsibilities.

- Replaced a reference to an EPIP concerning NMP dose assessment functions with more applicable EIPs.
- Replaced the specific procedure numbers and titles with generic terms to maintain the requirement and reference but reduce the need to revise the Annex when a procedure is revised, re-numbered, or re-titled.
- Revised the Annex to reflect the deletion of an EPIP related to emergency access control. The deletion of this EPIP was evaluated separately pursuant to 10 CFR 50.54(q).
- Revised the Annex to reflect the deletion of an EPIP concerning radiation emergencies. The deletion of this EPIP was evaluated separately pursuant to 10 CFR 50.54(q).
- Changed the name of the Technical Information Line to the Operations Status Line.

Description of How the Changes Still Comply with Regulations

EP-AA-1011 (CCNPP)

The changes described in this revision to EP-AA-1011 for CCNPP are primarily administrative and editorial in nature. The changes do not alter how the Emergency Plan is implemented and existing EP-related regulatory commitments continue to be met. Existing EP requirements and capabilities have not been deleted or reduced as part of this revision. The changes continue to meet the applicable EP planning standard requirements established in 10 CFR 50.47 and 10 CFR 50, Appendix E, as well as program elements described in the guidance of NUREG-0654.

EP-AA-1014 and Addendums 1, 2, and 3 (JAF)

The station Annexes and associated Addendums contain information and guidance unique to each station. This includes facility geography, emergency response facility locations, and process and radiation monitoring instrumentation that provides a description of each station's emergency response capabilities, as well as any station unique commitments. The station Annex is subject to the same review and audit requirements as the Exelon Standard Plan.

Included in the station Annex and incorporated as part of the Emergency Plan are three Addendums. Addendum 1 consists of the On-Shift Staffing Analysis which was developed based on the 2011 EP Rulemaking initiative. Addendum 2 consists of the station's ETEs and Addendum 3 consist of the described the station's EALs.

With regard to the change in the PA fence line, the Training Center is now contained within the PA boundary. Under the current plan, a PA Evacuation may be ordered by the Shift Manager or Site Emergency Director for all of the PA based on initiating conditions such as: high radiation levels, fire, toxic gases, etc. A PA Assembly may now be ordered by the Shift Manager or Site Emergency Director for all of the PA based on the similar initiating conditions noted. When a PA Assembly is ordered, personnel will be instructed to proceed to the primary assembly area via a route that bypasses the hazardous area. Once at the primary assembly areas,

accountability will be conducted. The Shift Manager or Site Emergency Director will then decide whether to implement a Site Evacuation, order an early dismissal, or to allow personnel to return to their normal work stations. The onsite protective actions of the Emergency Plan are maintained in that: 1) personnel are removed from the hazard; 2) personnel assemble in the same facility as before; 3) accountability is performed; and 4) the Shift Manager or Site Emergency Director maintains the ability to decide whether to evacuate personnel to a remote assembly area offsite, order an early dismissal, or to allow personnel to return to their normal work stations. The protective action options of accountability, assembly onsite, and evacuation are all maintained with the PA fencing modification. The onsite assembly area is maintained at the Training Center, although it is now within the PA boundary. Card readers are installed as part of the modification to ensure accountability can still be performed at the Training Center in a timely manner.

The change to the Annex TOC (EP-AA-1014) to add the supporting Addendum references is considered administrative in nature and do not reduce emergency planning requirements.

The changes described are consistent with the guidance provided in RG 1.219 and continue to meet the applicable EP planning standard requirements established in 10 CFR 50.47 and 10 CFR 50, Appendix E, as well as program elements described in the guidance of NUREG-0654. EP commitments to the NRC continue to be met.

EP-AA-1013 (NMP)

The changes described in this revision to EP-AA-1013 for NMP align the station with the Exelon fleet regarding command and control and the transfer of the non-delegable responsibilities. The changes do not alter how the Emergency Plan is implemented and existing EP-related regulatory commitments continue to be met. Existing EP requirements and capabilities have not been deleted or reduced as part of this revision. The changes continue to meet the applicable EP planning standard requirements established in 10 CFR 50.47 and 10 CFR 50, Appendix E, as well as program elements described in the guidance of NUREG-0654.

Description of Why the Changes are Not a Reduction in Effectiveness (RIE)

The revisions to the Emergency Plan Annexes and Addendums cited: 1) address and correct administrative/editorial issues with the Emergency Plans for CCNPP and NMP, and 2) support the integration and conversion of the existing JAF Emergency Plan into the Exelon standardized fleet process and format as well as subsequent administrative changes. The JAF changes to the PA boundary and implementation of the PA Assembly process do not reduce emergency planning requirements since the required onsite protective actions continued to be maintained. The changes do not change the meaning or intent of Emergency Plan requirements for the affected plants. Existing EP requirements and capabilities in the stations' Emergency Plan have not been deleted or reduced as a result of these revisions. The changes do not alter the capability of the ERO to implement required Emergency Plan actions, and do not affect the timeliness or effectiveness of the performance of EP functions. The changes described continue to satisfy existing regulatory EP commitments and remain consistent with the applicable EP planning standard requirements specified in 10 CFR 50.47 and 10 CFR 50, Appendix E, and the program elements described in the guidance of NUREG-0654 and guidance described in RG 1.219.

Therefore, the revisions to the Emergency Plan Annexes and Addendum described do not constitute a reduction in effectiveness since the changes are consistent with existing EP planning standards, program requirements, and regulatory commitments.