UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

September 20, 2017

Mr. Bryan C. Hanson
Senior Vice President
Exelon Generation Company, LLC
President and Chief Nuclear Officer
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: NINE MILE POINT NUCLEAR STATION, UNITS 1 AND 2 – STAFF ASSESSMENT OF FLOODING FOCUSED EVALUATION (CAC NOS. MG0087 AND MG0088)

Dear Mr. Hanson:

By letter dated March 12, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12053A340), the U.S. Nuclear Regulatory Commission (NRC) issued a request for information to all power reactor licensees and holders of construction permits in active or deferred status, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.54(f), "Conditions of Licenses" (hereafter referred to as the "50.54(f) letter"). The request was issued in connection with implementing lessons learned from the 2011 accident at the Fukushima Dai-ichi nuclear power plant, as documented in the NRC's Near-Term Task Force (NTTF) report (ADAMS Accession No. ML111861807). Enclosure 2 to the 50.54(f) letter requested that licensees reevaluate flood hazards for their sites using present-day methods and regulatory guidance used by the NRC staff when reviewing applications for early site permits and combined licenses (ADAMS Accession No. ML12056A046). By letter dated March 12, 2013 (ADAMS Accession No. ML13074A032), Exelon Generation Company, Inc. (Exelon, the licensee), previously doing business as Constellation Energy Nuclear Group, responded to this request for Nine Mile Point Nuclear Station, Units 1 and 2 (Nine Mile Point).

After its review of the licensee's response, the NRC issued a staff assessment by letter dated July 24, 2014 (ADAMS Accession No. ML14153A410), and a supplement to the staff assessment dated November 4, 2015 (ADAMS Accession No. ML15306A502). As stated in the supplement, the staff concluded that the licensee's reevaluated flood hazard information is suitable for the assessment of mitigation strategies developed in response to Order EA-12-049, as well as other assessments associated with NTTF Recommendation 2.1 "Flooding." The reevaluated flood hazard results for local intense precipitation (LIP) were not bounded by the current design basis flood hazard, therefore, additional assessment of the flood hazard mechanism are necessary.

By letter dated March 10, 2017 (ADAMS Accession No. ML17069A005), the licensee submitted its focused evaluation (FE) for Nine Mile Point. The FEs are intended to confirm that licensees have adequately demonstrated, for unbounded mechanisms identified in the interim staff response letter, that: 1) a flood mechanism is bounded based on further reevaluation of flood

mechanism parameters; 2) effective flood protection is provided for the unbounded mechanism; or 3) a feasible response is provided if the unbounded mechanism is local intense precipitation. The purpose of this letter is to provide the NRC's assessment of the Nine Mile Point FE.

The NRC staff has concluded that the Nine Mile Point FE was performed consistent with the guidance described in Nuclear Energy Institute (NEI) 16-05, Revision 1, "External Flooding Assessment Guidelines" (ADAMS Accession No. ML16165A178). Guidance document NEI 16-05, Revision 1, has been endorsed by Japan Lessons-Learned Division (JLD) interim staff guidance (ISG) JLD-ISG-2016-01, "Guidance for Activities Related to Near-Term Task Force Recommendation 2.1, Flood Hazard Reevaluation" (ADAMS Accession No. ML16162A301). The NRC staff has further concluded that the licensee has demonstrated that effective flood protection, if appropriately implemented, exists for the LIP flood mechanism during a beyond-design-basis external flooding event. This closes out the licensee's response for Nine Mile Point for the reevaluated flooding hazard portion of the 50.54(f) letter and the NRC's efforts associated with CAC Nos. MG0087 and MG0088.

If you have any questions, please contact me at 301-415-1056 or at Lauren.Gibson@nrc.gov.

Sincerely,

Lauren Kate Gibson

Lauren K. Gibson, Project Manager
Hazards Management Branch
Japan Lessons-Learned Division
Office of Nuclear Reactor Regulation

Enclosure:
Staff Assessment Related to the
Flooding Focused Evaluation for Nine
Mile Point

Docket Nos: 50-220 and 50-410

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STAFF ASSESSMENT BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO THE FOCUSED EVALUATION FOR

NINE MILE POINT NUCLEAR STATION, UNITS 1 AND 2

AS A RESULT OF THE REEVALUATED FLOODING HAZARD NEAR-TERM TASK FORCE

RECOMMENDATION 2.1 - FLOODING

(CAC NOS. MG0087 AND MG0088)

1.0 INTRODUCTION

By letter dated March 12, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12053A340), the U.S. Nuclear Regulatory Commission (NRC) issued a request for information to all power reactor licensees and holders of construction permits in active or deferred status, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.54(f) (hereafter referred to as the "50.54(f) letter"). The request was issued in connection with implementing lessons learned from the 2011 accident at the Fukushima Dai-ichi nuclear power plant, as documented in the NRC's Near-Term Task Force (NTTF) report (ADAMS Accession No. ML111861807).

Enclosure 2 of the 50.54(f) letter requested that licensees reevaluate flood hazards for their respective sites using present-day methods and regulatory guidance used by the NRC staff when reviewing applications for early site permits and combined licenses (ADAMS Accession No. ML12056A046). If the reevaluated hazard for any flood-causing mechanism is not bounded by the plant's current design basis (CDB) flood hazard, an additional assessment of plant response would be necessary. Specifically, the 50.54(f) letter states that an integrated assessment should be submitted, and described the information that the integrated assessment should contain. By letter dated November 30, 2012 (ADAMS Accession No. ML12311A214), the NRC staff issued Japan Lessons-Learned Division (JLD) interim staff guidance (ISG) JLD-ISG-2012-05, "Guidance for Performing the Integrated Assessment for External Flooding."

On June 30, 2015 (ADAMS Accession No.ML15153A104), the NRC staff issued COMSECY-15-0019, describing the closure plan for the reevaluation of flooding hazards for operating nuclear power plants. The Commission approved the closure plan on July 28, 2015 (ADAMS Accession No. ML15209A682). COMSECY-15-0019 outlines a revised process for addressing cases in which the reevaluated flood hazard is not bounded by the plant's CDB. The revised process describes a graded approach in which licensees with hazards exceeding their CDB flood will not be required to complete an integrated assessment, but instead will perform a focused evaluation (FE). As part of the FE, licensees will assess the impact of the hazard(s) on their site and then evaluate and implement any necessary programmatic, procedural, or plant modifications to address the hazard exceedance.

Nuclear Energy Institute (NEI) 16-05, Revision 1, "External Flooding Assessment Guidelines" (ADAMS Accession No. ML16165A178), has been endorsed by the NRC as an appropriate methodology for licensees to perform the focused evaluation in response to the 50.54(f) letter. The NRC's endorsement of NEI 16-05, including exceptions, clarifications, and additions, is described in NRC JLD-ISG-2016-01, "Guidance for Activities Related to Near-Term Task Force

Recommendation 2.1, Flood Hazard Reevaluation" (ADAMS Accession No. ML16162A301). Therefore, NEI 16-05, Revision 1, describes acceptable methods for demonstrating that Nine Mile Point Nuclear Station, Units 1 and 2 (Nine Mile Point) has effective flood protection.

2.0 BACKGROUND

This provides the final NRC staff assessment associated with the information that the licensee provided in response to the reevaluated flooding hazard portion of the 50.54(f) letter. Therefore, this background section includes a summary description of the reevaluated flood information provided by the licensee and the associated assessments performed by the NRC staff. The reevaluated flood information includes: 1) the flood hazard reevaluation report (FHRR); 2) the mitigation strategies assessment (MSA); and 3) the focused evaluation.

Flood Hazard Reevaluation Report

By letter dated March 12, 2013 (ADAMS Accession No. ML13074A032), Exelon Generation Company, Inc. (Exelon, the licensee), previously doing business as Constellation Energy Nuclear Group, submitted its flood hazard reevaluation report (FHRR) for Nine Mile Point Nuclear Station, Units 1 and 2 (Nine Mile Point). After its review of the licensee's response, the NRC issued a staff assessment by letter dated July 24, 2014 (ADAMS Accession No. ML14153A410), and a supplement to the staff assessment dated November 4, 2015 (ADAMS Accession No. ML15306A502). As stated in the supplement, the staff concluded that the licensee's reevaluated flood hazard information is suitable for the assessment of mitigation strategies developed in response to Order EA-12-049, as well as other assessments associated with NTTF Recommendation 2.1 "Flooding." The reevaluated flood hazard results for local intense precipitation (LIP) were not bounded by the current design basis flood hazard, therefore, additional assessment of the flood hazard mechanism are necessary.

Mitigation Strategies Assessment

By letter dated December 14, 2016 (ADAMS Accession No. ML16349A029), Exelon submitted its MSA for Nine Mile Point for review by the NRC staff. The MSAs are intended to confirm that licensees have adequately addressed the reevaluated flooding hazards within their mitigation strategies for beyond-design-basis external events. By letter dated September 11, 2017 (ADAMS Accession No. ML17209A524), the NRC issued its assessment of the Nine Mile Point MSA. The NRC staff has concluded that the Nine Mile Point MSA was performed consistent with the guidance described in Appendix G of NEI 12-06, Revision 2, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide" (ADAMS Accession No. ML16005A625). The NRC's endorsement of NEI 12-06, Revision 2, is described in JLD-ISG-2012-01, Revision 1, "Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" (ADAMS Accession No. ML15357A163). The NRC staff further concluded that the licensee has demonstrated that the mitigation strategies, if appropriately implemented, are reasonably protected from reevaluated flood hazards conditions for beyond-design-basis external events.

Focused Evaluation

By letter dated March 10, 2017 (ADAMS Accession No. ML17069A005), the licensee submitted its FE for Nine Mile Point. The licensee supplemented the FE by e-mail dated August 29, 2017 (ADAMS Accession No. ML ML17241A270), in response to a request for additional information (RAI). The FEs are intended to confirm that licensees have adequately demonstrated, for

unbounded mechanisms identified supplement to the staff assessment, that: 1) a flood mechanism is bounded based on further reevaluation of flood mechanism parameters; 2) effective flood protection is provided for the unbounded mechanism; or 3) a feasible response is provided if the unbounded mechanism is local intense precipitation. These three options associated with performing an FE are referred to as Path 1, 2, or 3, as described in NEI 16-05, Revision 1. The purpose of this staff assessment is to provide the results of the NRC's evaluation of the Nine Mile Point FE.

3.0 TECHNICAL EVALUATION

Exelon stated that its FE followed Path 2 of NEI 16-05, Revision 1 and utilized Appendix B for guidance on evaluating the site strategy. The Nine Mile Point FE addresses the LIP flooding mechanism, which was found to exceed the plant's CDB as described in the FHRR and the supplement to the staff assessment. This technical evaluation will address the following topics: characterization of flood parameters; evaluation of flood impact assessments; evaluation of available physical margin; reliability of flood protection features; and overall site response. The licensee has committed to reassessing its use of warning time; therefore, the NRC considered both the scenario in which the warning time is sufficient to place the temporary flood barriers and the scenario in which it is not.

3.1 Characterization of Flood Parameters

Associated effects (AE) and flood event duration (FED) parameters were assessed by Exelon and have already been reviewed by the NRC, as summarized by letter dated September 11, 2017 (ADAMS Accession No. ML17209A524). Exelon used the AE and FED parameters as input to the Nine Mile Point FE and concluded that the site's flood strategy is effective in protecting structures, systems, and components (SSCs) that support key safety functions (key SSCs).

However, in its August 2017 RAI response, the licensee explains that, in the time since the MSA was submitted, there was a change in understanding of the available warning time from their third party rainfall forecasting vendor. The MSA submittal states the licensee would need 6.5 hours to install the flood barriers and would have sufficient warning time to do so. The FE discusses the possibility that the warning time may be less than the 6.5 hours. In its FE, the licensee commits to performing additional analysis of consequential rainfall, and, if needed, to enhance site procedures. The licensee will continue to use the guidance in NEI 15-05, "Warning Time for Local Intense Precipitation Events." Furthermore, in its RAI response, the licensee demonstrated adequate available physical margin without the flood barriers being deployed as well as reliable flood protection features for LIP if they are able to be deployed. In its FE for Nine Mile Point, Exelon indicated that the deployment of the temporary flood barriers is a manual action by plant personnel, therefore an evaluation of the overall site response was provided.

For both units at Nine Mile Point, the finished floor elevations are 261.0 feet (ft.) U.S. Lake Survey 1935 datum (USLS35). As discussed below, the licensee commits to establishing a revised warning time in order to deploy temporary flooding barriers. Furthermore, should the temporary flooding barriers not be deployed, the licensee demonstrates that there is sufficient available physical margin that the safe shutdown equipment is not affected. The potential impacts from this flooding-causing mechanism were further evaluated by Exelon as part of the Nine Mile Point FE.

Table 3.1 Summary of Reevaluated Flood Hazards Elevations Included in the Nine Mile Point FE.

Flood-Causing Mechanism	Maximum Stillwater Elevation Feet (USLS35)		Wave Run-up	
Local Intense Precipitation (LIP)	Unit 1	Unit 2	Unit 1	Unit 2
	262.2 ft.	262.4 ft.	Not Applicable	

3.2 Evaluation of Flood Impact Assessment for LIP—Temporary Barriers Deployed

3.2.1 Description of Impact of Unbounded Hazard

Unlike Unit 1, Unit 2's CDB bounds its reevaluated flood hazard level for LIP (with a margin of 0.1 ft.). The duration of the flooding is not bounded for either unit, however. The strategy is the same for protecting each unit: deploying temporary flood barriers if sufficient warning time is available.

In Unit 1, temporary flood protection barriers will be installed in front of certain doors in order to provide a flooding boundary for the following areas:

- Battery Board Room;
- Foam Room;
- Emergency Diesel Generator Room;
- Aux Control Room; and
- Reactor Building (except for two doors that are assumed watertight due to their design).

These barriers protect to an elevation of 262.6 ft. USLS35, which provides a minimum of 0.4 ft margin for Unit 1.

For Unit 2, temporary flood protection barriers will be installed in front of certain doors in order to provide a flooding boundary for the following areas:

- Reactor Building (except for two doors that are assumed watertight due to their design);
- Control Building; and
- Specific Electric Tunnels.

These barriers protect to an elevation of 262.6 ft. USLS35, which provides a minimum of 0.2 ft margin for Unit 2.

3.2.2 Evaluation of Available Physical Margin and Reliability of Flood Protection Features

The licensee relies on temporary flood barriers and existing doors to justify that there is available margin using a deterministic approach. Therefore, the licensee described the expected hydrostatic, hydrodynamic, and debris loads.

The temporary barriers are 19.7 inches high and provide a minimum margin of 0.4 ft (Unit 1) and 0.2 ft. (Unit 2). They will be placed in pre-determined locations to prevent water ingress into areas with equipment that supports key safety functions. The locations are discussed in the FE

as well as in the licensee's Meteorological Monitoring Operating Procedure N2-OP-102, Attachment 11.

Significant hydrodynamic or debris loads are not expected during a LIP event due, in part, to low flow velocities. According to the licensee's submittal, the manufacturer of the barriers states that the barriers are designed to accommodate hydrostatic loads to the top of the barriers.

The flood barriers are stored in a covered trailer near a storage building. The NRC does not anticipate any degradation of the barriers due to their storage situation.

Because increased focus has been placed on flood protection since the accident at Fukushima, licensees and NRC inspectors have identified deficiencies with equipment, procedures, and analyses relied on to either prevent or mitigate the effects of external flooding at a number of licensed facilities. Recent examples include those found in Information Notice 2015-01, "Degraded Ability to Mitigate Flooding Events" (ADAMS Accession No. ML14279A268). In addition, the NRC is cooperatively performing research with the Electric Power Research Institute to develop flood protection systems guidance that focuses on flood protection feature descriptions, design criteria, inspections, and available testing methods in accordance with a memorandum of understanding dated September 28, 2016 (ADAMS Accession No. ML16223A495). Therefore, the NRC staff expects that licensees will continue to maintain flood protection features in accordance with their current licensing basis. The NRC staff further expects that continued research involving flood protection systems will be performed and shared with licensees in accordance with the guidance provided in Management Directive 8.7, "Reactor Operating Experience Program," (ADAMS Accession No. ML122750292) as appropriate.

Therefore, the NRC concludes that, with the presence of the temporary flood barriers, the Nine Mile Point flood protection features meet the definition of being reliable to maintain key safety functions found in Appendix B of NEI 16-05, Rev 1.

3.2.3 Overall Site Response

The validity of the overall site response depends, in part, on the determination of the warning time. As mentioned earlier, the licensee's understanding of the available warning time has changed since the licensee submitted its MSA. The licensee has committed to performing a consequential rainfall analysis in accordance with NEI 15-05 to determine the available warning time.

The time sensitive action is to deploy and install temporary flood barriers. The licensee simulated deployment and installation as described in the licensee's procedures and found that installing the barriers is feasible and can be done in 6.5 hours. This time takes into account potential environmental factors by using an environmental adjustment factor ranging from 1.5 to 2. This simulation meets the criteria in NEI 12-06, which describes how to validate time sensitive actions for FLEX response.

However, the success of deploying and installing temporary flood barriers depends on whether or not a warning time commensurate with the 6.5 hrs is available. Since the warning time could be as little as 1 hour according to the meteorological vendor contractual obligations, the licensee is planning additional monitoring and action triggers to ensure that the barriers are installed prior to the beginning of the rainfall event. The licensee has committed to performing a

consequential rainfall analysis that would enable them to determine whether those triggers are necessary and what they should be. Those commitments are:

Commitment 1. Perform an analysis to more accurately define the consequential rainfall estimate using the existing FLO-2D model. (Commitment date 12/31/2017)

Commitment 2. As an optional task, if the consequential rainfall is determined to be low, a site-specific evaluation of storm types and seasonality will be conducted to determine the types of storms that could produce consequential rainfall and the meteorological parameters that could produce such events. This step may not be required if the consequential rainfall is sufficiently large to use available NWS and/or meteorological vendor tools and provide the necessary 6.5 hours of warning time (Commitment date 12/31/2017)

Commitment 3. Enhance site procedures to better define a monitoring threshold for longer forecasting periods (3 to 7 days) and the action trigger (per NEI 15-05) Based on the results of the above actions, existing site severe weather procedures will be updated and/or the meteorological vendor contract will be modified to incorporate the monitoring threshold and action trigger. (Commitment date 06/30/2018)

Commitment 4. Modify the flood protection strategy if severe weather procedure enhancements and/or NWS/meteorological vendor contract forecast periods are determined not to be viable once the consequential rainfall and meteorological assessments described in Commitment Nos. 1 and 2 above are complete. (Commitment date 06/30/2018)

The NRC anticipates that the licensee will continue to follow the NRC-approved guidance in NEI 15-05 while fulfilling these commitments. The NRC cannot make a determination of the validity of the overall site response at this time due to the uncertainty in the warning time and associated action triggers. Therefore, the NRC also considered the plant response if no barriers were used.

3.2 Evaluation of Flood Impact Assessment for LIP—Temporary Barriers Not Deployed

The licensee presented what would happen if the temporary barriers were not deployed as defense-in-depth information rather than as a primary strategy. The NRC agrees that, given the commitments to further refine existing analysis and procedures, this is appropriate. The NRC therefore did not perform an in-depth audit of the water ingress calculations equivalent to the review that would be given for a site whose primary strategy is to rely on the internal elevations from water ingress not reaching the safe shutdown equipment. The NRC also notes the significant available physical margin, which is further discussed below.

3.2.1 Description of Impact of Unbounded Hazard

The Nine Mile Point FE states that "calculations indicate that ingress volumes during the LIP flood, without the FloodStop barriers in place, would not impact key SSCs." The licensee provided further justification for this statement in its RAI response by describing ingress volume

calculations that show that the interior flooding elevation would be less than the elevation of safe shutdown equipment.

The ingress volume calculations are based on the original 2013 FHRR LIP analysis, which was later corrected to account accurately for roof run-off. The licensee evaluated the effect of this change in a 2014 sensitivity analysis. The licensee found that although the level of water was not significantly impacted in the areas of concern, the duration of the flooding event was longer. The NRC provided its assessment by letter dated September 11, 2017 (ADAMS Accession No. ML17209A524).

The license states that the ingress calculations for Unit 1 show no significant water buildup at the ground elevation (261 ft.) where the safe shutdown equipment is located. Water may build up at a lower elevation (250 ft.) with an average depth of 31 inches. However, this would not affect safe shutdown equipment. There is 8.5 ft of available physical margin before reaching the floor elevation of the area where the safe shutdown equipment is located.

Water ingress would occur in Unit 2's Control Building and Electrical Tunnels. The water ingress calculations are based on the original 2013 FHRR LIP results, prior to the more conservative roof runoff modeling approach. A sensitivity analysis showed only minimal changes in the flood depth that could affect the Control Building and Electrical Tunnels. The licensee states that the internal flooding would rise to an elevation of approximately 225 ft., and that there is no safety shutdown equipment located below 261 ft. The available physical margin is 36 ft. Therefore, the NRC agrees that the key safety functions would not be affected in either unit.

3.2.2 Evaluation of Availability and Reliability of Flood Protection Features

The licensee relies on passive features and existing doors to justify that there is available physical margin using a deterministic approach. Therefore, the licensee evaluated the key SSC elevations compared to the water ingress accumulation. As described in Section 3.2.1, the internal flooding elevation caused by water ingress during LIP would be lower than the location of the safe shutdown equipment (261 ft.).

The NRC staff concludes that the Nine Mile Point flood protection features described above are sufficient as a defense-in-depth measure until such time as the regulatory commitments in Section 4 are fulfilled.

3.2.3 Overall Site Response

In the scenario in which the flood barriers are not deployed, the licensee does not rely on any personnel actions or new modifications to the plant in order to respond to the beyond-design-basis LIP event. As described above, the licensee's evaluation relies on passive existing flood protection features to demonstrate available physical margin; therefore, there is no need to review overall site response.

3.3 Conclusion

The licensee has demonstrated an adequate site response for LIP. The temporary flood barriers may be deployed and installed within 6.5 hours. The plant's current strategies were designed based on sufficient warning time being available to deploy and install the temporary flood barriers; however, based on a new understanding of the available warning time from the new contractor, the licensee is undergoing additional analysis as described in the commitments in Section 4. As the licensee will continue to follow the NRC-approved guidance in NEI 15-05, the NRC finds this approach acceptable.

Until such time as the analyses and related commitments are completed, in the event that a 6.5 hr. warning time is not available, then the expected water ingress would not rise to an elevation that would affect the safe shutdown equipment.

4.0 COMMITMENTS

The NRC acknowledges the following regulatory commitments as expressed in the FE submittal and the RAI response:

Commitment 1. Perform an analysis to more accurately define the consequential rainfall estimate using the existing FLO-2D model. (Commitment date 12/31/2017)

Commitment 2. As an optional task, if the consequential rainfall is determined to be low, a site-specific evaluation of storm types and seasonality will be conducted to determine the types of storms that could produce consequential rainfall and the meteorological parameters that could produce such events. This step may not be required if the consequential rainfall is sufficiently large to use available NWS and/or meteorological vendor tools and provide the necessary 6.5 hours of warning time (Commitment date 12/31/2017)

Commitment 3. Enhance site procedures to better define a monitoring threshold for longer forecasting periods (3 to 7 days) and the action trigger (per NEI 15-05) Based on the results of the above actions, existing site severe weather procedures will be updated and/or the meteorological vendor contract will be modified to incorporate the monitoring threshold and action trigger. (Commitment date 06/30/2018)

Commitment 4. Modify the flood protection strategy if severe weather procedure enhancements and/or NWS/meteorological vendor contract forecast periods are determined not to be viable once the consequential rainfall and meteorological assessments described in Commitment Nos. 1 and 2 above are complete. (Commitment date 06/30/2018)

5.0 AUDIT REPORT

The July 18, 2017, generic audit plan describes the NRC staff's intention to issue an audit report that summarizes and documents the NRC's regulatory audit of the licensee's FE. The NRC staff's Nine Mile Point audit was limited to a conference call with the licensee on August 15, 2017, to discuss the differences in characterization of the warning time between the MSA and the FE. The resulting RAI was issued by e-mail dated August 15, 2017 (ADAMS Accession No. ML17240A310). The licensee responded by e-mail dated August 29, 2017 (ADAMS Accession No. ML17241A270).

Because this staff assessment appropriately summarizes the results of the audit, the NRC staff concludes a separate audit report is not necessary, and that this document serves as the audit report described in the July 18, 2017, letter.

6.0 CONCLUSION

The NRC staff concludes that Exelon performed the Nine Mile Point FE in accordance with the guidance described in NEI 16-05, Revision 1, as endorsed by JLD-ISG-2016-01, and that the licensee has demonstrated, if appropriately implemented as described in the FE, that effective flood protection exist from the reevaluated flood hazards. Furthermore, the NRC staff concludes that Nine Mile Point screens out of performing an integrated assessment based on the guidance found in JLD-ISG-2016-01. As such, in accordance with Phase 2 of the process outlined in the 50.54(f) letter, additional regulatory actions associated with the reevaluated flood hazard, beyond those associated with mitigation strategies assessment, are not warranted. The licensee has satisfactorily completed providing responses to the 50.54(f) activities associated with the reevaluated flood hazards.

NINE MILE POINT NUCLEAR STATION, UNITS 1 AND 2 – STAFF ASSESSMENTOF FLOODING FOCUSED EVALUATION DATED SEPTEMBER 20, 2017

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