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

Nine Mile Point Nuclear Station, Unit 2
Renewed Facility Operating License No. NPF-69
NRC Docket No. 50-410

Subject: Responses to Request for Additional Information Questions 17 and 26 for Nine Mile Point Nuclear Station, Unit 2, to Adopt TSTF-505, "Provide Risk-Informed Extended Completion Times - RITSTF Initiative 4b," Revision 2

References:

1. Letter from D. Gudger (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "License Amendment Request to Revise Technical Specifications to Adopt Risk-Informed Completion Times TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times - RITSTF Initiative 4b," dated October 31, 2019

2. Letter from M. Marshall (Senior Project Manager, U.S. Nuclear Regulatory Commission) to R. Reynolds (Exelon Generation Company, LLC), "Nine Mile Point Nuclear Station, Unit 2 – Request for Additional Information RE: Review of License Amendment Request to Revise Technical Specifications to Adopt Risk-Informed Completion Times (EPID L-2019-LLA-0234)," dated July 30, 2020

3. Letter from D. Gudger (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Request for Additional Information for Nine Mile Point Nuclear Station, Unit 2, to Adopt TSTF-505, 'Provide Risk-Informed Extended Completion Times - RITSTF Initiative 4b,' Revision 2," dated August 28, 2020

4. Letter from M. Marshall (Senior Project Manager, U.S. Nuclear Regulatory Commission) to R. Reynolds (Exelon Generation Company, LLC), "Nine Mile Point Nuclear Station, Unit 2 - Request for Additional Information to Support Review of License Amendment Request to Revise Technical Specifications to Adopt Risk-Informed Completion Times (EPID L-2019-LLA-0234)," dated September 2, 2020

5. Letter from D. Gudger (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Request for Additional Information for Nine Mile Point Nuclear Station, Unit 2, to Adopt TSTF-505, 'Provide Risk-Informed Extended Completion Times - RITSTF Initiative 4b,' Revision 2," dated October 2, 2020

6. Letter from M. Marshall (Senior Project Manager, U.S. Nuclear Regulatory Commission) to R. Reynolds (Exelon Generation Company, LLC), "Nine Mile Point Nuclear Station, Unit 2 - Withdrawal and Replacement of Request for Additional Information to Support Review of License Amendment Request to Revise Technical Specifications to Adopt Risk-Informed Completion Times (EPID L-2019-LLA-0234)," dated September 28, 2020

7. Letter from M. Marshall (Senior Project Manager, U.S. Nuclear Regulatory Commission) to R. Reynolds (Exelon Generation Company, LLC), "Nine Mile Point Nuclear Station, Unit 2 - Request for Additional Information Re: Review of License Amendment Request to Revise Technical Specifications to Adopt Risk-Informed Completion Times (EPID L-2019-LLA-0234)," dated September 28, 2020

By letter dated October 31, 2019 (Reference 1), Exelon Generation Company, LLC (Exelon) requested to change the Nine Mile Point Nuclear Station, Unit 2 (NMP2) Technical Specifications (TS). The proposed amendment would modify TS requirements to permit the use of Risk-Informed Completion Times in accordance with TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times - RITSTF Initiative 4b," (ADAMS Accession No. ML18183A493).

In a letter dated July 30, 2020 (Reference 2), the NRC provided a Request for Additional Information (RAI) to support their continued review of Reference 1. The letter contained RAI Questions 1 through 5. Exelon provided the responses to these RAIs in Reference 3.

On September 2, 2020, the NRC provided a second Request for Additional Information (RAI) (Reference 4) to support their continued review of Reference 1. This request contained RAI Questions 6 through 25. Exelon provided the responses to these RAIs (except for Question 17) in Reference 5.

On September 28, 2020, the NRC redacted Question 17 as written and provided a revised Question 17 (ML 20272A280) (Reference 6). In addition, the NRC provided a new RAI Question 26 (ML 20273A237) (Reference 7).

Attachment 1 to this letter contains the NRC's RAI Questions 17 and 26 immediately followed by Exelon's response.

Exelon has reviewed the information supporting a finding of no significant hazards consideration and the environmental consideration provided to the NRC in Reference 1. The supplemental information provided in this letter does not affect the bases for concluding that the proposed license amendment does not involve a significant hazards consideration. Furthermore, the supplemental information provided in this letter does not affect the bases for concluding that neither an environmental impact statement nor an environmental assessment needs to be prepared in connection with the proposed amendment.

There are no commitments contained in this response.

If you should have any questions regarding this submittal, please contact Ron Reynolds at 610-765-5247.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 22nd day of October 2020.

Respectfully,

David T. Gudger

David T. Gudger
Senior Manager - Licensing
Exelon Generation Company, LLC

Attachment 1: Response to Request for Additional Information

cc:	USNRC Region I Regional Administrator	w/attachments
	USNRC Senior Resident Inspector - NMP	"
	USNRC Project Manager, NRR - NMP	"
	A. L. Peterson, NYSERDA	"

ATTACHMENT 1

Nine Mile Point Nuclear Station, Unit 2
Renewed Facility Operating License NPF-69
Docket No. 50-410

Request for Additional Information
Adopt Risk-Informed Completion Times

Response to Request for Additional Information

RAI 17:

Section 2.3 of LAR Attachment 1 states that the application of an RICT will be evaluated using the guidance provided in Nuclear Energy Institute topical report (NEI) 06-09, Revision 0-A, "Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines, Industry Guidance Document," which was approved by the NRC on May 17, 2007 (ADAMS Accession No. ML071200238). The NRC safety evaluation for NEI 06-09, Revision 0-A, states, "The impact of the proposed change should be monitored using performance measurement strategies." NEI 06-09 considers the use of NUMARC 93-01, Revision F (ADAMS Accession No. ML18120A069), as endorsed by Regulatory Guide (RG) 1.160, Revision 4 (ADAMS Accession No. ML18220B281), for the implementation of the Maintenance Rule. NUMARC 93-01, Section 9.0, contains guidance for the establishment of performance criteria.

Furthermore, Section 2.3 of LAR Attachment 1 states:

> In addition, the NEI 06-09-A, methodology satisfies the five key safety principles specified in Regulatory Guide 1.177, "An Approach for Plant-Specific, Risk-Informed Decision making: Technical Specifications," dated August 1998 (ADAMS Accession No. ML003740176), relative to the risk impact due to the application of a RICT.

Staff position C.3.2 provided in RG 1.177 for meeting the fifth key safety principle acknowledges the use of performance criteria to assess degradation of operational safety over a period of time. It is unclear to NRC staff how the licensee's processes for the RICT application captures performance monitoring for the structures, systems, and components (SSCs) within-scope of the application. In light of these observations, address either (i) or (ii) below:

i) Confirm that the Nine Mile Point 2 Maintenance Rule program incorporates the use of performance criteria to evaluate SSC performance as described in the NRC-endorsed guidance in NUMARC 93-01.

   or

ii) Describe the approach/method used by Nine Mile Point 2 for SSC performance monitoring as described in Regulatory Position C.3.2 referenced in RG 1.177 for meeting the fifth key safety principle. In the description, include criteria (e.g., qualitative or quantitative) along with the appropriate risk metrics for the RICT application, and explain how the approach and criteria demonstrates the intent to monitor the potential degradation of SSCs for the applicable process of the risk-informed application.

Exelon Response to RAI 17:

Response to 17i:

Nine Mile Point 2 does not use performance criteria as described in NUMARC 93-01.

Response to 17ii:

Nine Mile Point 2 has implemented the guidance in NEI 18-10, Revision 0, "Monitoring the Effectiveness of Nuclear Power Plant Maintenance," as a means of meeting the requirements set in 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants." The overall purpose of NEI 18-10 is to provide utilities with a risk-informed

framework that supports the implementation and monitoring of a maintenance effectiveness program that complies with 10 CFR 50.65, effectively and efficiently leverages utility resources, and is focused on equipment performance commensurate with safety. NEI 18-10 is an alternative to the NUMARC 93-01/RG 1.160 guidance.

Both Regulatory Guide (RG) 1.160, Revision 4, and NUMARC 93-01, Revision 4F (endorsed by RG 1.160) allow for utilities to use alternative methods or approaches to ensure the requirements of 10 CFR 50.65 are being met. RG 1.160, Section D Implementation, Use by Applicants and Licensees:

> Applicants and licensees may voluntarily use the guidance in this document to demonstrate compliance with the underlying NRC regulations. Methods or solutions that differ from those described in this regulatory guide may be deemed acceptable if they provide sufficient basis and information for the NRC staff to verify that the proposed alternative demonstrates compliance with the appropriate NRC regulations. Current licensees may continue to use guidance the NRC found acceptable for complying with the identified regulations as long as their current licensing basis remains unchanged.

NUMARC 93-01 Section 2.0 Purpose and Scope:

> This guideline describes an acceptable approach to meet the Maintenance Rule. However, utilities may elect other suitable methods or approaches for implementation. This guideline does not address the many industry programs that have been put in place to upgrade maintenance and may be used when implementing the Maintenance Rule. For example, work planning and scheduling, preventive and corrective maintenance, maintenance procedures, training, post maintenance testing, work history, cause determination methods and other maintenance related programs are not discussed.

In accordance with NEI 18-10, Revision 0, all SSC in scope of 10 CFR 50.65 (b)(1) and (b)(2) are evaluated for safety significance. Safety significance is determined by a Maintenance Rule (MR) expert panel informed by importance measures; the following would be considered as potentially high safety significant (HSS) functions.

1. FV > 0.005
2. RAW > 2.0
3. Birnbaum > 1E-05/yr CDF or > 1E-06/yr LERF

All other functions in scope of MR are considered low safety significant (LSS).

SSCs that remain capable of performing their intended functions will be retained in (a)(2) status. If an event or failure occurs and an Issue Report (IR) is generated in the Corrective Action Program (CAP) associated with a scoped in SSC with HSS function(s), the IR will be reviewed for HSS Maintenance Rule Functional Failures (MRFF). Any HSS MRFF will result in an immediate (a)(1) determination (i.e. every HSS function has a performance criterion = 0). All IRs that represent a plant level event (PLE) will result in an immediate (a)(1) determination. For LSS functions the performance criteria is not a set number of MRFFs, but instead is when a trend in system/function performance is observed. This is still performance criteria/monitoring and when reached/observed would drive an immediate (a)(1) determination. Trends will be identified on an ongoing/continuous basis by identification through engineer SSC performance review, through OPEX review, or during the (a)(3) assessment.

An aggregate assessment of the balance between reliability and availability with be provided by Core Damage Frequency (CDF) trending. CDF trending looks at the risk impact associated with both planned and unplanned maintenance and considers the impact of failures, as failures that occur at power result in unplanned maintenance. CDF trending also provides an aggregate assessment of maintenance planning and execution. CDF trends will be reviewed during the (a)(3) assessment for a minimum of 1) long unavailability durations, 2) peak periods of risk increase, 3) need to update PRA, and 4) multiple occurrences of the same configuration due to ineffective maintenance. If the assessment determines that the increase in CDF average values was the result of an ineffective maintenance strategy, an immediate (a)(1) determination will be performed for the contributing SSC function(s).

Any SSC function determined to be (a)(1) will result in a CAP causal determination and (a)(1) goals will be established commensurate with the SSCs safety significance and performance and corrective actions will be planned and implemented to correct the cause of the degraded performance. Corrective actions will be tracked to completion. Goals are established to bring about the necessary improvements in performance. Monitoring consists of periodic trending and evaluating performance and/or availability of the SSC function(s) comparing the results with the established (a)(1) goals to verify that the goals are being met. Monitoring also provides a means for determining the effectiveness of the corrective actions. A goal is met and monitoring of SSC function(s) against the specific goal may be discontinued if any of the following criteria are satisfied 1) acceptable performance for three surveillance periods (when periodicity is <= 6 months), 2) acceptable performance for two surveillance periods (when periodicity is >= 6 months but less than 2 cycles), or 3) any approved and documented technical assessment that assures the cause is known and corrected thus monitoring against goals is unnecessary. If any of these conditions are met, the SSC function(s) may be returned to (a)(2) status. If none of these conditions are met then additional causal determination is necessary and new corrective actions, goal setting, and monitoring will be established to drive acceptable SSC performance.

All IRs that represent a PLE and all IRs that were determined to be HSS MRFF will result in an immediate (a)(1) determination.

SSC performance monitoring is performed on an ongoing/continuous basis and if a trend is identified, an (a)(1) determination will be performed. LSS trends and CDF trending are also reviewed during the periodic (a)(3) assessment. If the assessment determines the trends were the result of an ineffective maintenance strategy, an immediate (a)(1) determination will be performed at that time.

The (a)(1) determination will document the basis for remaining in (a)(2) status or the need for goal setting and monitoring under the requirements of (a)(1). For SSC function(s) determined to be (a)(1), goals will be established commensurate with the SSCs safety significance and performance. Monitoring will verify that goals are being met and determine the effectiveness of the corrective actions.

Every IR is reviewed for PLE or HSS MRFF. Every PLE or HSS MRFF will be evaluated to determine if the maintenance strategy is still effective. Events of lower safety significance are reviewed on an ongoing/continuous basis to determine if a trend or correlation exists between the events. If one is identified, the trend will be evaluated to determine if the maintenance strategy is still effective. CDF trending is reviewed periodically to determine the balance between reliability and availability, the effectiveness of maintenance planning and execution, and peak periods of risk increase and multiple occurrences of the same configuration. CDF trending will be used to determine if the maintenance strategy is still effective.

Anytime the maintenance strategy is determined to be ineffective, the SSC function(s) will be moved to (a)(1) status and goals will be established such that monitoring can verify performance against goals and determine the effectiveness of corrective actions.

RAI 26:

Section 2.3.1, Item 7, of Nuclear Energy Institute (NEI) 06-09, Revision 0-A (ADAMS Accession No. ML12286A322), states, "The impact of other external events risks shall be addressed in the RRMTS [Risk-Managed Technical Specifications] program," and explains that one method to do this is by "performing a reasonable bounding analysis and applying it along with the internal events risk contribution in calculating the configuration risk and the associated RICT [risk-informed completion time] RICT." The NRC staff's safety evaluation for NEI 06-09 (ADAMS Accession No. ML071200238) states, "Where PRA [probabilistic risk assessment] models are not available, conservative or bounding analyses may be performed to quantify the risk impact and support the calculation of the RICT."

LAR Enclosure 4, Section 3, states that to determine a bounding seismic core damage frequency, the peak ground acceleration hazard curve for the 50th percentile high confidence of low probability of failure (HCLPF) value of 0.42g was used from its individual plant evaluation of external events (IPEEE) seismic margins analysis (SMA). (Note: The SMA HCLPF value of 0.5g is the 84th percentile value). The IPEEE HCLPF value of 0.42g was used rather than the HCLPF value of 0.23g in Table C-2 of Results of Safety/Risk Assessment of Generic Issue 199 (GI-199), "Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States on Existing Plants" (ADAMS Accession No. ML100270582). The LAR states that related sensitivity studies were performed on the impact to risk of changing the ground motion frequencies and seismic hazard intervals. The LAR does not describe those sensitivity studies results or how insights from those studies were used. The exception to this is that sensitivity study results are presented in LAR Table E4-4 to justify the defined seismic hazard interval for the highest seismic bin, the %G8 interval (i.e., seismic hazard internal > 1.5g).

a) Explain why the IPEEE HCLPF value of 0.42g was used rather than the HCLPF value of 0.23g in GI-199 and why it is acceptable for this application.

b) Describe the cited sensitivity studies and results.

c) Explain how insights from the sensitivity studies were used to select to a bounding ground motion and to define the seismic hazard intervals.

Exelon Response to RAI 26:

Response to 26a:

Throughout NEI 06-09 Rev 0-A and the NRC SE for that document, reference is made to either a "bounding" or "conservative" analysis, or sometimes to a "reasonable bounding analysis", as being acceptable to account for risk for external hazards when a PRA model is not available. The estimation of seismic risk results for the NMP2 RICT program are more accurately characterized as a "conservative" analysis that uses an estimated averaged seismic conditional large early release probability (SCLERP) to determine a seismic LERF that is then conservatively used in RICT assessments. A truly "bounding" analysis would assume characteristics such as SCDF equal to the seismic hazard frequency of the SSE and an estimated averaged seismic conditional large early release probability (SCLERP) of 1.0, both of

which are neither reasonable nor useful estimates. The NMP2 evaluation estimates a nominal SCDF, estimates an averaged SCLERP that involves conservative analysis elements in the calculation, and then employs these estimates in a conservative manner in the RICT process by applying the total SCDF and total SLERF as delta SCDF and delta SLERF in each RICT calculation.

The RAI characterizes the 0.23g PGA HCLPF value in Table C-2 of the GI-199 risk assessment (ADAMS Accession No. ML100270582) as a "more recent" value than the NMP2 IPEEE values (SAS-TR-95-001, "Nine Mile Point Station - Unit 2 Individual Plant Examination for External Events (IPEEE)," June 1995). This characterization of a more recent value is not correct. The 0.23g PGA HCLPF value for NMP2 quoted in the 2010 GI-199 risk assessment is the same value as that documented in the 1995 NMP2 IPEEE submittal and it applies to the lowest calculated HCLPF of any item on the NMP2 IPEEE seismic safe shutdown success paths (in this case, the high pressure liquid nitrogen tanks). The 0.23g PGA HCLPF was not used in the NMP2 RICT SCDF seismic penalty calculation because it would result in an overly conservative estimate of SCDF, as discussed below.

The plant HCLPF value of 0.42g PGA used in the SPRA portion of the NMP2 IPEEE was used in the NMP2 RICT LAR seismic penalty calculation to estimate NMP2 seismic CDF rather than the HCLPF of 0.23g PGA identified in GI-199. Based on information in the SPRA portion of the NMP2 IPEEE, the HCLPF of 0.23g PGA is associated with an SSC fragility that does not have a high likelihood of leading directly to core damage. Using a HCLPF of 0.23g PGA would result in an overly conservative estimate of the seismic CDF for the RICT seismic penalty factor.

Pages 3.2-2 and 3.2-3 of the NMP2 IPEEE identify that the HCLPF of 0.23g PGA is associated with the non-safety related (non-seismic qualified) high pressure nitrogen supply. The HCLPF of 0.23g PGA is governed by the fragility of the liquid nitrogen tanks. Page 3.2-8 of the NMP2 IPEEE identifies that "the nitrogen supply was assumed to be required to keep the safety relief valves open in the long term (>24 hours after the seismic event) after emergency depressurization is required to provide low pressure ECCS makeup to the reactor vessel." However, the NMP2 IPEEE further identifies that two (2) redundant success paths (i.e., RCIC and HPCS for high pressure makeup) remain available as an alternate to the emergency depressurization and low-pressure injection success path. Both of the redundant success paths (i.e., RCIC and HPCS) were assessed to have a HCLPF greater than 0.5g PGA. Although a HCLPF of 0.23g PGA could be identified as the limiting "plant" fragility based on the SMA methodology from the NMP2 IPEEE, use of a HCLPF of 0.23g PGA for the "plant" fragility for the purposes of estimating SCDF for the RICT seismic penalty factor approach is assessed to be overly conservative based on the redundant success paths at NMP2.

The HCLPF value of 0.42g PGA is associated with the screening level for components in the SMA as shown on p. 3.2-9 of the IPEEE. Based on the redundant success paths identified in the IPEEE (i.e., RCIC and HPCS for high pressure makeup), a HCLPF of 0.42g PGA is judged to be a reasonable "plant" fragility for use in calculating an estimate of seismic CDF for the RICT seismic penalty factor approach.

Response to 26b:

The sensitivity studies referenced in LAR Enclosure 4, Section 3 include the following:

- Sensitivity Case 1: Change %G1 hazard interval from 0.09g – 0.3g to 0.09g – 0.2g and then reduce by 0.1g the upper end point (i.e., right hand g-levels) for each of the hazard intervals %G2 through %G8.

- Sensitivity Case 2: Change %G1 hazard interval from 0.09g – 0.3g to 0.09g – 0.15g and then make the widths for the lower hazard intervals thinner, while making the higher hazard intervals wider.
- Sensitivity Case 3: Same as base case but create new first interval of 0.03g – 0.09g to capture risk contribution of earthquakes above OBE of 0.075g.
- Sensitivity Case 4: Evaluate risk impact of using 2.5 Hz seismic hazard curve (PGA-based plant HCLPF also adjusted to 2.5 Hz-based HCLPF).
- Sensitivity Case 5: Use all seismic hazard data points from the NMP2 NTTF 2.1 Seismic Hazards Re-evaluation submittal (ML14099A196).

Compared to the base case estimated seismic CDF of 6.4E-7/yr, the sensitivity case results are as follows with identified percent difference from the base case:

- Sensitivity Case 1: 6.9E-7/yr (8% increase)
- Sensitivity Case 2: 6.5E-7/yr (2% increase)
- Sensitivity Case 3: 6.4E-7/yr (negligible change)
- Sensitivity Case 4: 3.7E-8/yr (order of magnitude decrease)
- Sensitivity Case 5: 6.4E-7/yr (negligible change)

Sensitivity Cases 1, 2 and 3 illustrate that the estimated SCDF is not overly sensitive to the interval divisions because sufficient intervals (e.g., 6 or more above the OBE) are already used. These three sensitivity cases change the widths of the hazard intervals (thinner and larger) as well as modifying the first hazard interval to very low g PGA values. Sensitivity Case 3 illustrates that OBE level earthquakes have a negligible contribution to SCDF and SSE level earthquakes have a minor contribution (i.e., 0.3% contribution) to SCDF.

For Sensitivity Case 4, a hazard curve with a different spectral frequency than PGA is used. Use of the PGA metric versus a lower spectral acceleration (e.g., in the 1- 10 Hz range) typically results in a higher calculated risk. The 2.5 Hz hazard curve, based on the data in the NMP2 NTTF 2.1 Seismic Hazards Re-evaluation submittal, is selected as it intersects (and drops below) the PGA hazard curve at a comparatively low g level (0.08g); as such, the 2.5 Hz seismic hazard curve was selected for a sensitivity case as it would show a large reduction in calculated risk in the simplified SCDF convolution calculation. This sensitivity case also appropriately scales the PGA-based plant HCLPF to a 2.5 Hz based plant HCLPF for use in the SCDF convolution calculation of this sensitivity case. The calculated SCDF from a simple convolution of the plant HCLPF (in terms of 2.5 Hz) and the 2.5 Hz hazard curve is approximately 4E-08/yr which is significantly less than the base case PGA-based SCDF estimate. This large reduction in calculated SCDF (i.e., using 2.5 Hz vs PGA in a simple plant HCLPF convolution) is likely not what would be shown from a full SPRA.

Sensitivity Case 5 uses all available PGA hazard curve data points and many more hazard intervals (eighteen intervals from 0.0005g to 10g PGA). The resulting SCDF from the use of many more, and thinner, hazard intervals in the calculation is the same result as the base case estimate of 6.4E-7/yr. By using all available data points from the NMP2 NTTF 2.1 Seismic Hazards Re-evaluation submittal, Sensitivity Case 5 provides a more precise convolution calculation, but the result shows what is typical knowledge of seismic risk convolution calculations, i.e., approximately 6-10 hazard intervals of widths of approximately 0.1 to 0.2g is sufficiently accurate.

Response to 26c:

PGA is the most common metric used in the NPP seismic PRAs. As can be seen from the response to RAI 26b, the 2.5 Hz metric sensitivity case results in a calculated SCDF over an order of magnitude lower than the base case SCDF calculation using the PGA metric. This large reduction in calculated SCDF (i.e., using 2.5 Hz vs PGA in a simple plant HCLPF convolution) is likely not what would be shown from a full SPRA. Regardless, use of the PGA metric is typical, and in the case of NMP2, assessed to result in the more conservative risk result. As can be seen from the results of the other sensitivity cases discussed above (i.e., those related to the number and widths of hazard intervals used in the SCDF convolution), the SCDF convolution result is not overly sensitive to the chosen seismic hazard interval divisions. Based on the sensitivity case insights, the use of the PGA ground motion and the seismic hazard interval definitions from the base case are judged appropriate to calculate an estimate of seismic CDF for the RICT seismic penalty factor approach.