ENCLOSURE 4

Point Beach Units 1 and 2
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"

Information Supporting Justification of Excluding Sources of Risk Not Addressed by PRA Models

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1.0 Introduction and Scope

Section 4.0, item 5 of the Nuclear Regulatory Commission's (NRC) Final Safety Evaluation (Reference 1) for NEI 06-09, Revision 0, "Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines" (Reference 3) requires that the License Amendment Request (LAR) provide a justification for excluding any risk sources determined to be insignificant to the calculation of configuration-specific risk, and provide a discussion of any conservative or bounding analyses to be applied to the calculation of Risk-Informed Completion Times (RICTs) for sources of risk not addressed by the PRA models.

This attachment provides information supporting justification of excluding sources of risk not addressed by the Point Beach Nuclear Plant (PBNP) PRA.

The scope of this enclosure is consideration of the hazards listed in Table E4-1 for applicability to PBNP. Seismic events in particular are evaluated quantitatively in Section 2.2, and the other listed external hazards are evaluated and screened as low risk in Section 4.0.

2.0 Technical Approach

The guidance contained in NEI 06-09 Rev, 0-A states that all hazards that contribute significantly to incremental risk of a configuration must be quantitatively addressed in the implementation of RMTS. The process of assessing the risk from Other Hazards starts by identifying a comprehensive list of potential hazards that could affect the site. Each identified hazard is then characterized to describe specifically how the hazard could impact the plant. Finally, a progressive screening process is used that includes:

- A qualitative screening of hazards based on their limited potential impact, using a set of screening criteria (QL-1 to QL-6) listed in Table E4-2 below;
- A quantitative screening based on conservative estimates of the hazard and consequences, using the screening criteria (QN-1, QN-2) listed in Table E4-2 below; or
- A detailed quantification of specific hazard scenarios. Hazard scenarios that do not screen out qualitatively or quantitatively are included in the PRA.

Table E4-2 summarizes the qualitative (QL) and quantitative (QN) screening criteria used in this analysis.

The methodologies used for identification, characterization, qualitative screening, and quantitative assessment are documented in the fleet procedure, Guidance for Periodic Updates of Other Hazards PRAs. These methods are consistent with the screening and assessment processes identified in the supporting requirements of Parts 6 and 7 of the ASME/ANS PRA Standard Addendum A (Reference 4), as endorsed by NRC Regulatory Guide 1.200 Rev 2 (Reference 6).

2.1 High Winds (WPRA):

The high winds hazard was screened from applicability in the Point Beach IPEEE (Reference 7) based on a CDF of 3.4E-7 /yr (Figure 1.4-1 of IPEEE). Note that in other sections of the IPEEE, a high winds CDF value of 2.6E-7 /yr is stated; however, the NRC's TER and SER quotes the higher value so that is what will be used here. This conclusion is consistent with the screening criteria in Section 6-2 of the ASME/ANS RA-Sa 2009. Significant plant modifications installed since the IPEEE will lower the high winds CDF; therefore, continuing to screen this hazard from applicability based on the low risk determined in the IPEEE is judged to be conservative (QN-1). The significant plant modifications that are not included in the IPEEE evaluation include:

- Added two new emergency diesel generators in a new building
- Relocated the B-Train 4,160 VAC switchgear to a new building
- Added three new sets of safety-related batteries
- Added three new safety related battery chargers
- Added two new 125 VDC distribution panels
- Added two new motor-driven AFW pumps
- Added missile protection for condensate storage tank (CST)
- Protected CST level instrumentation
- Incorporated strategies for FLEX, including low-leakage RCP seals,
- AFW cross-tie capabilities, and portable equipment for inventory makeup and decay heat removal

2.2 Seismic

The original seismic CDF (~1995) estimate from IPEEE (Reference 7) is 1.31E-5 /yr using the 1993 seismic hazard curves developed by LLNL. It is estimated in the IPEEE that a reduction to 1.1E-5 /yr would be obtained once the seismic upgrades, committed to be performed in the USI A-46 program, were completed. The Point Beach seismic CDF estimate was revised to 6.24E-6 /yr using the 2013 EPRI seismic hazard curves. The EPRI seismic hazard curves (GMRS) were submitted to the NRC (Reference 9) in response to the Fukushima 50.54(f) request for information. The ratio of LERF to CDF from the current Internal Events model is 0.042 (9.81E-8 / 2.36E-6 for Unit 1 and 9.63E-8 / 2.30E-6 for Unit 2). Applying this current LERF/CDF ratio to the revised seismic CDF estimate provides an estimated seismic LERF value of 2.62E-7 /yr (6.24E-6 * 0.042).

Seismic risk is adequately assessed for RMTS using a bounding Seismic adder. Per Reference 9, EPRI Report 3002020744 key findings:

- While seismic risk can be an important contributor to overall plant risk, its impact on the delta-risk calculations used to support RMTS is much less significant.

- The impact on calculated RICTs was insignificant for most cases and limited to a maximum of one day for those cases in which an effect was observed.

- The most significant impact on RICT calculations was noted for intermediate seismic intensity ranges, which suggests that modeling simplifications can be implemented for the low- and high-intensity ranges because their contributions to risk are less significant.

2.3 Risks from Hazard Challenges

While the direct CDF contribution from beyond design basis hazard conditions can be shown to be non-significant without a full PRA, there may be risks that are related to the fact that some external hazards can cause a plant challenge even for hazard severities that are less than the design basis limit. For example, high winds, tornadoes, and seismic events below design basis levels can cause extended loss of offsite power conditions. Additionally, depending on the site, external floods can challenge the availability of normal plant heat removal mechanisms.

The approach to be taken in this step is to identify the plant challenges caused by the occurrence of the hazard within the design basis and evaluate whether the risks associated with these events are either already considered in the existing PRA model or they not significant to the risk. Section 2.2 provides the analysis of the beyond design basis seismic hazards for the PBNP site, and Table E4-1 provides an analysis of the representative external hazards for PBNP.

The review and disposition of each external hazard is addressed in Table E4-1. All external hazards were screened from applicability to PBNP, Units 1 and 2 per a plant-specific evaluation in accordance with GL 88-20 and updated to use the criteria in ASME PRA Standard RA-Sa-2009. Table E4-1 provides a summary of the other external hazards screening results. Table E4-2 provides a summary of the progressive screening approach for external hazards.

Table E4-1
Evaluation of Risks from External Hazards

External Hazard	Evaluation	Disposition for RICT Program
Aircraft Impacts	One airport was identified that fell within the takeoff / landing crash probability footprint from DOE-STD-3014:The Manitowoc County Airport is 11 nautical miles from Point Beach Nuclear Plant. This airfield is restricted to general aviation only, but does have significant number of daily operations (~100). The total CDF from crashes not involving containment is 1.82e-8 /yr. LERF from containment impact is 3.74E-10/yr.	Screened based on low probability of aircraft crash and small target size of SR structures. It is concluded that no unique PRA model for Aircraft Impacts is required in order to assess configuration risk for the RICT Program. Screening criteria PS4.
Avalanche	Avalanche impacting transmission lines or switchyard or SR structures	Excluded due to site topography that would not support snow buildup that would lead to an avalanche. Screening criteria C3
Biological Event – Animal Infestation	Animal infestation (e.g., squirrels building nests) in transmission structures causing LOOP, in onsite structures causing equipment failure. Note, a LOOP event occurred at Fermi 2, 9/14/2012 due to animal (bird) intrusion; offsite power was recovered in ~3.5 hrs. (EPRI TR-30020000697, July 2013) LOOP at Fermi 2 in 1988 due to a raccoon.	Included implicitly in LOOP initiator. Slow developing with limited impact. Screening criteria C4, C5
Biological Event – Aquatic Grown	Storm-induced intake clogging is a more credible scenario to cause intake blockage than normal aquatic growth. Slow developing hazard, can be detected and managed. Plant programs are in place to periodically inspect and clean Differential pressure across the SW strainers and the service water header pressure are alarmed in the control room. (ARB C01 A 1-5, ARB C01 A 2-5, ARB C01 A 3-5, AOP-9A) SW strainer plugging and failure to operate are modeled in the Point Beach PRA	Organic Material in Water is a more credible scenario to cause intake blockage than normal aquatic growth. Screening criteria C1, C3, C5
Biological Event – Organic Material in Water	Storm induced clogging of SW screen wash and/or SW strainers are addressed in detail in the SW System Notebook. In summary, storms large enough to cause intake clogging have warning time. The screen wash system functions to remove such debris	Slow developing hazard, can be detected and managed. Screening criteria C3, C5
Coastal Erosion	Coastal erosion undermining SW structure (river, lake, ocean intake), causing loss of UHS	Excluded based on design of plant. Screening criteria C3

Table E4-1
Evaluation of Risks from External Hazards

External Hazard	Evaluation	Disposition for RICT Program
Drought	Drought resulting in low water level in UHS (lake, river)	Excluded since the capacity of the Ultimate Heat Sink (UHS) is not impacted by drought. Screening criteria C3
External Flooding	The external flooding hazard at the site was recently evaluated as a result of the post-Fukushima 50.54(f) Request for Information and the flood hazard reevaluation report (FHRR) was submitted to NRC for review on March 12, 2015 (Reference 12). The results indicate that flooding from all hazards, except local intense precipitation, are bounded by the current licensing basis (CLB) and do not pose a challenge to the plant. Flooding from local intense precipitation was subsequently evaluated (Reference 13). Point Beach's focused evaluation and Mitigating Strategies Assessment (MSA) for flooding (Reference 14) conclude that the current station procedures for implementing the FLEX strategy provide an acceptable method of assuring safe shutdown.	This external hazard is effectively screened based on being an event of equal or lesser damage potential than previous events for which the plant has been designed. It is concluded that no unique PRA model for External Flooding is required in order to assess configuration risk for the RICT Program. Screening criteria C1.
Extreme Winds and Tornados (including generated missiles)	Significant plant modifications installed since the IPEEE will lower the high winds CDF; therefore, continuing to screen this hazard from applicability based on the low risk determined in the IPEEE is judged to be conservative. The significant plant modifications that are not included in the IPEEE evaluation include: o Added two new emergency diesel generators in a new building o Relocated the B-Train 4,160 VAC switchgear to a new building o Added three new sets of safety-related batteries o Added three new safety related battery chargers o Added two new 125 VDC distribution panels o Added two new motor-driven AFW pumps o Added missile protection for condensate storage tank (CST) o Protected CST level instrumentation o Incorporated strategies for FLEX, including low-leakage RCP seals, o AFW cross-tie capabilities, and portable equipment for inventory makeup and decay heat removal	The High Winds hazard was screened from applicability in the IPEEE. This conclusion is consistent with the screening criteria in Section 6-2 of the ASME/ANS RA-Sa 2009. Significant plant modifications installed since the IPEEE will lower the High Winds CDF; therefore, screening this hazard from applicability based on the IPEEE is judged to be conservative. It is concluded that no unique PRA model for Extreme Winds and Tornados is required in order to assess configuration risk for the RICT Program. Screening criteria PS4.

Table E4-1
Evaluation of Risks from External Hazards

External Hazard	Evaluation	Disposition for RICT Program
Fog	Fog / mist leading to transportation accidents	Fog and mist may increase the frequency of accidents involving aircraft, ships, or vehicles. This weather condition is included implicitly in the accident rate data for these Transportation Accidents. Screening criteria C4.
Forest Fires	Forest fires in the plant vicinity were evaluated as having a minimal potential impact on the plant, and are bounded by the effects of a loss of offsite power.	Included implicitly in LOOP initiator. Forest & grass are somewhat distant from the plant with no immediate impact on equipment. It is concluded that no unique PRA model for External Fires is required in order to assess configuration risk for the RICT Program. Screening criteria C1, C3, C4, C5
Frost	Weight of ice failing transmission lines, causing LOOP	Included implicitly in weather-related LOOP. Screening criteria C4
Hail	Extreme sized hail, causing failure of SR equipment due to direct impact; Extreme sized hail impacting transmission lines, causing LOOP	Building design for high wind and missiles is bounding. Included implicitly in weather-related LOOP initiator. Screening criteria C1, C4
High Summer Temperature - Air	High air temperature impacting ventilation or high water temperature impacting UHS.	Plant AC ventilation is designed for extreme heat load. Slow developing hazard, can be detected and managed. Screening criteria C1, C5
High Summer Temperature - Water	High water temperature in lake / river, reducing effectiveness of UHS	Plant is designed for extreme high Lake Michigan temperature. Slow developing hazard, can be detected and managed. Screening criteria C1, C5
High Tide, Lake Level, or River Stage	Site flooding due to the combined effects of high tide, hurricane or other extreme storms, intense precipitation, storm surge, tsunami, and wave runup. Flooding can result in excess leakage into site buildings, but can potentially cause failure of structures, doors or penetrations due to hydrostatic and/or hydrodynamic loads and impacts from floating debris.	High Tide and River Stage hazards are not applicable to Point Beach since Point Beach is not located on an ocean or a river. Lake Level hazard is included in External Flooding PRA documented in IPEEE. Screening criteria C3, C4

Table E4-1
Evaluation of Risks from External Hazards

External Hazard	Evaluation	Disposition for RICT Program
Hurricane		Not applicable to Point Beach since Point Beach is not located in a Hurricane zone. Screening criteria C3
Ice Cover	Weight of ice failing transmission lines, causing LOOP	Included implicitly in weather-related LOOP. Screening criteria C4
Accidents From Nearby Facilities	There are no industrial or military facilities in the vicinity of Point Beach Nuclear Plant which would cause: 1) pressure wave that would fail a SR structure, 2) sufficient ground vibration for relay chatter, 3) control room habitability issues, or 4) chemical release into the water sufficient to impact the UHS. PBNP Site calculation concluded that there were no hazardous chemicals on or near the site which would cause control room habitability issues.	It is concluded that no unique PRA model for Accidents From Nearby Facilities is required in order to assess configuration risk for the RICT Program. Screening criteria C1, C3
Landslide	Landslide impacting transmission lines or switchyard or SR structures	Excluded due to site topography that would not support landslide of any significance. Screening Criteria C3
Lightning	Direct lightning strike on SY or multiple strikes on transmission lines causing LOOP Lightning causing electrical over-current, failing of SR electrical equipment Lightning causing fire in electrical equipment	Included implicitly in weather-related LOOP. The plant grounding system provides protection to emergency AC power to reduce the likelihood of lightning-induced failure. Screening Criteria C1, C4
Low Lake Level or River Stage		Excluded based on location of intake which is approximately 22 feet below the surface of Lake Michigan. Screening Criteria C3
Low Winter Temperature - Air	Low temperature impacting Heat Sink	Seasonal Readiness process prepares site for reliable operation sustained cold weather periods. Screening Criteria C1, C5

Table E4-1
Evaluation of Risks from External Hazards

External Hazard	Evaluation	Disposition for RICT Program
Low Winter Temperature - Water	Low temperature impacting Heat Sink	Excluded based on location of intake which is approximately 22 feet below the surface of Lake Michigan. Screening Criteria C1, C3
Meteorite or Satellite Impact	Meteorite penetrating SR structure, failing SR equipment or causing fire or flood due to direct impact or due to concrete spalling	Conservative bounding assessment shows that these events can be screened. Extremely unlikely for satellite debris of any significant size to hit the site. Any such strike would be localized and not expected to cause direct core damage. Screening Criteria PS4, C2
Pipeline Accidents (e.g., natural gas)	There are no pipelines in the vicinity of Point Beach Nuclear Plant.	It is concluded that no unique PRA model for Pipeline Accidents is required in order to assess configuration risk for the RICT Program. Screening criteria C3
Release of Chemicals Stored at the Site	PBNP Site calculation concluded that there were no hazardous chemicals on or near the site which would cause control room habitability issues.	It is concluded that no unique PRA model for Release of Chemicals Stored at the Site is required in order to assess configuration risk for the RICT Program. Screening criteria C1
River Diversion	River diversion resulting in low water level in UHS (lake, river)	Excluded since UHS does not depend on a river. Screening criteria C3
Sand or Dust Storm	Sand overloading air filters, which fail allowing sand to impact mechanical / electrical equipment	Plant equipment is protected from or designed to preclude foreign material. Screening criteria C1, C3
Seiche		Included in External Flooding PRA documented in IPEEE.
Snow	Structural failure due to weight of snow Snowfall / drifts plugging air intakes, causing failure of SR equipment (e.g., DGs)	Plant design includes snow loads and other bounding loads. Included implicitly in weather-related LOOP initiator. Screening criteria C1, C4, C5

Table E4-1
Evaluation of Risks from External Hazards

External Hazard	Evaluation	Disposition for RICT Program
Soil Shrink-Swell Consolidation	Soil shrink causing differential movement of SR structures or buried pipe	Excluded based on structures founded on bedrock and/or engineered fill. Screening criteria C3
Storm Surge	Site flooding due to the combined effects of high tide, hurricane or other extreme storms, intense precipitation, storm surge, tsunami, and wave runup. Flooding can result in excess leakage into site buildings, but can potentially cause failure of structures, doors or penetrations due to hydrostatic and/or hydrodynamic loads and impacts from floating debris.	Included in External Flooding PRA documented in IPEEE.
Toxic Gas	Chemical release from toxic gas release, impacting CR habitability	There are no hazardous chemicals on or near the site which would cause control room habitability issues. Screening criteria C3
Transportation Accidents	Ship-related hazards are screened based on the relatively flat slope of the lake bottom in the vicinity of the intake structure, the pump house structure, and the quantity and type of materials shipped. These are not expected to change. Thus, this hazard does not need to be assessed periodically. The nearest major highway, Interstate 43, is located more than 11 miles from Point Beach Nuclear Plant. The only other numbered highway in the vicinity of Point Beach Nuclear Plant is Wisconsin State Highway 42, which at its nearest point is approximately 4000 feet from the center of Point Beach Nuclear Plant. The nearest railway is approximately 10 miles from Point Beach Nuclear Plant. Impact from a large vehicle is not likely since the area with three of four transmission lines is not the main access road to the plant for trucks. While a truck could potentially cause damage to one of the lines, there is always at least one line which would not be affected and thus a loss of offsite power will not occur.	It is concluded that no unique PRA model for Transportation Accidents is required in order to assess configuration risk for the RICT Program. Screening criteria C1, C2, C3, C4
Tsunami	Site flooding due to the combined effects of high tide, hurricane or other extreme storms, intense precipitation, storm surge, tsunami, and wave runup. Flooding can result in excess leakage into site buildings, but can potentially cause failure of structures, doors or	Not applicable to Point Beach since Point Beach is not located on an ocean. Screening criteria C3

Table E4-1
Evaluation of Risks from External Hazards

External Hazard	Evaluation	Disposition for RICT Program
	penetrations due to hydrostatic and/or hydrodynamic loads and impacts from floating debris.	
Turbine-Generated Missiles	PBNP site evaluation determined the conservative estimate of CDF from turbine wheel failure is 2.35E-08 /yr for Unit 1 and 2.33E-08 /yr for Unit 2. This low CDF total allows the risk from turbine missiles to be screened quantitatively based (CDF < ~1e-7 /yr). Because turbine missiles are not expected to have sufficient energy to penetrate containment because the containment has 3 foot thick reinforced concrete walls and ceiling and because the containment liner should prevent spalling, the ratio of CDF to LERF from internal events would apply. LERF is approximately an order of magnitude less than CDF for Point Beach. Therefore, LERF for Unit 1 is estimated to be 2.35E-09 and Unit 2 LERF 2.33E-09.	It is concluded that no unique PRA model for Turbine-Generated Missiles is required in order to assess configuration risk for the RICT Program. Screening criteria PS4
Volcanic Activity	Volcanoes can cause direct impact from hot lava or volcanic dust clogging filters and impacting ventilation systems	Excluded due to distance from nearest potentially active volcano. Screening criteria C3, C5
Waves	Site flooding due to the combined effects of high tide, hurricane or other extreme storms, intense precipitation, storm surge, tsunami, and wave runup. Flooding can result in excess leakage into site buildings, but can potentially cause failure of structures, doors or penetrations due to hydrostatic and/or hydrodynamic loads and impacts from floating debris.	Included in External Flooding PRA documented in IPEEE.

E4-2: Progressive Screening Approach for Addressing External Hazards			
Event Analysis	**Criterion**	**Source**	**Comments**
Initial Preliminary Screening	C1. Event damage potential is < events for which plant is designed.	NUREG/CR-2300 and ASME/ANS Standard RA-Sa-2009	
	C2. Event has lower mean frequency and no worse consequences than other events analyzed.	NUREG/CR-2300 and ASME/ANS Standard RA-Sa-2009	
	C3. Event cannot occur close enough to the plant to affect it.	NUREG/CR-2300 and ASME/ANS Standard RA-Sa-2009	
	C4. Event is included in the definition of another event.	NUREG/CR-2300 and ASME/ANS Standard RA-Sa-2009	Not used to screen. Used only to include within another event.
	C5. Event develops slowly, allowing adequate time to eliminate or mitigate the threat.	ASME/ANS Standard	
Progressive Screening	PS1. Design basis hazard cannot cause a core damage accident.	ASME/ANS Standard RA-Sa-2009	
	PS2. Design basis for the event meets the criteria in the NRC 1975 Standard Review Plan (SRP).	NUREG-1407 and ASME/ANS Standard RA-Sa-2009	
	PS3. Design basis event mean frequency is < 1E-5/y and the mean conditional core damage probability is < 0.1.	NUREG-1407 as modified in ASME/ANS Standard RA-Sa-2009	
	PS4. Bounding mean CDF is < 1E-6/y.	NUREG-1407 and ASME/ANS Standard RA-Sa-2009	
Detailed PRA	Screening not successful. PRA needs to meet requirements in the ASME/ANS PRA Standard.	NUREG-1407 and ASME/ANS Standard RA-Sa-2009	

3.0 References

1. Nuclear Regulatory Commission (NRC), “Final Revised Model Safety Evaluation of Traveler TSTF-505, Revision 2, ‘Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b’”, ADAMS Accession No. ML18253A085, dated November 21, 2018.
2. Risk-Infomed Technical Specification Task Force,TSTF Comments on Draft Safety Evaluation for Traveler TSTF-505, ‘Provide Risk-Informed Extended Completion Times’ and Submittal of TSTF-505, Revision 2," ADAMS Accession No. ML18183A493, dated July 2, 2018.
3. Nuclear Energy Institute (NEI),“Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines,” ADAMS Accession No. ML12286A322 Revision 0, dated October 2012.
4. ASME/ANS,“Addenda to ASME/ANS RA-S-2008 Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Plant Applications,” RA-Sa-2009, dated February 2, 2009.
5. NRC, NUREG 1855 “Guidance on the Treatment of Uncertainties Associated with PRAs in Risk-Informed Decision Making,” ADAMS Accession No. ML17062A466, Revision 1, dated March 2017.
6. NRC, Regulatory Guide 1.200, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities”, Revision 2, March 2009 (ADAMS Accession No. ML090410014).
7. Wisconsin Electric letter to NRC, Summary Report On Individual Plant Examination Of External Events For Severe Accident Vulnerabilities Point Beach Nuclear Plant, Units 1 and 2, VPNPD-95-056, June 30, 1995.
8. Electric Power Research Institute, *Investigation of Seismic Probabilistic Risk Assessment (SPRA) Quantification to Simplify PRA Models Used to Assess Risk-Informed Completion Times,* 3002020744, June 2021
9. NEE letter to NRC, *NextEra Energy Point Beach. LLC Seismic Hazard and Screening Report (CEUS Sites), Response NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident*, NRC 2014-0024, March 31, 2014.

ENCLOSURE 5

Point Beach Units 1 and 2
License Amendment Request to Revise Technical Specifications
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"Provide Risk-Informed Extended Completion Times - RITSTF Initiative 4b"

Total Plant (Baseline) CDF and LERF

1.0 Discussion

Section 4.0, Item 6 of the Nuclear Regulatory Commission's (NRC) Final Safety Evaluation (included in Reference 1) for NEI 06-09-A, "Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines," (Reference 1) requires that the license amendment request (LAR) provide the plant-specific total CDF and LERF to confirm applicability of the limits of Regulatory Guide (RG) 1.174, Revision 1 (Reference 2). Note that RG 1.174, Revision 3 (Reference 3), issued by the NRC in January 2018, did not revise these limits.

This attachment demonstrates that the total CDF and total LERF are below the guidance of RG 1.174, specifically, 1E-4/year for CDF and 1E-5/year for LERF, such that the risk metrics of NEI 06-09-A may be applied to the Point Beach Risk-Informed Completion Time (RICT) Program.

Table 5-1 provides the CDF and LERF values from quantification of the baseline average test and maintenance PRA models, which include contributions from internal events, internal flooding, internal fire, seismic, and construction truss hazards. Other external hazards are below accepted screening criteria and therefore do not contribute significantly to the totals.

Table 5-1: Total PBN Baseline CDF and LERF from All Hazards

	Unit 1		Unit 2	
Hazard	**CDF (/yr)**	**LERF (/yr)**	**CDF (/yr)**	**LERF (/yr)**
Internal Events	2.36E-6	9.81E-8	2.30E-6	9.63E-8
Internal Flooding	4.33E-7	3.33E-8	4.68E-7	3.21E-8
Internal Fire	5.77E-5	9.01E-7	6.84E-5	1.04E-6
Seismic	6.24E-6	2.62E-7	6.24E-6	2.62E-7
Construction Truss	1.23E-6	5.92E-7	1.24E-6	5.95E-7
Other Hazards	<1E-6	<1E-7	<1E-6	<1E-7
Total	**6.90E-5**	**1.99E-6**	**7.96E-5**	**2.13E-6**

At the time of implementation of the RICT Program, the current PRA models will be used.

As demonstrated in the table, the total CDF and total LERF are within the guidance of RG 1.174 to permit small changes in risk which may occur during RICT Program implementation of extended Completion Times. Therefore, the Point Beach RICT Program is consistent with NEI 06-09 guidance.

References

1. NEI 06-09-A, Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines, Rev. 0, November 2006.
2. Regulatory Guide 1.174, An Approach For Using Probabilistic Risk Assessment In Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis, Revision 1, November 2002.
3. Regulatory Guide 1.174, An Approach For Using Probabilistic Risk Assessment In Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis, Revision 3, January 2018.

ENCLOSURE 6

Point Beach Units 1 and 2
License Amendment Request to Revise Technical Specifications
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Statement of Applicability of At-Power PRA Models to Shutdown Modes

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1.0 Purpose

This attachment is not applicable to the Point Beach Point submittal. NextEra is proposing to apply the Risk-Informed Completion Time Program only in Modes 1 and 2 and not in the shutdown Modes.

ENCLOSURE 7

Point Beach Units 1 and 2
License Amendment Request to Revise Technical Specifications
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PRA Model Update Process

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1.0 INTRODUCTION

Section 4.0 Limitations and Conditions, Item 8 of the Nuclear Regulatory Commission's (NRC) Final Safety Evaluation (Reference 1) for NEI 06-09, Revision 0, "Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines," (Reference 2) requires that the license amendment request (LAR) provide a discussion of the licensee's programs and procedures which assure the PRA models which support the RMTS are maintained consistent with the as-built/as-operated plant.

This attachment describes the administrative controls and procedural processes applicable to the configuration control of PRA models used to support the Risk-Informed Completion Time (RICT) Program, which will be in place to ensure that these models reflect the as-built/as-operated plant. Plant changes, including physical modifications and procedure revisions, will be identified and reviewed prior to implementation to determine if they could impact the PRA models per EN-AA-105, *Probabilistic Risk Assessment (PRA) Program* (Reference 3), and EN-AA-105-1000, *PRA Configuration Control and Model Maintenance* (Reference 4). The configuration control program will ensure these plant changes are incorporated into the PRA models as appropriate. The process will include discovered conditions associated with the PRA models, which will be addressed by the applicable site Corrective Action Program and/ or the sites model change database (MCDB) as applicable.

Should a plant change or a discovered condition be identified that has a significant impact to the RICT Program calculations as defined by the Configuration Control Program, an interim maintenance of the PRA model will be implemented. Otherwise, the PRA model change is incorporated into a subsequent periodic model maintenance or upgrade. Such pending changes are considered when evaluating other changes until they are fully implemented into the PRA models. Periodic maintenance is performed no less frequently than every two refueling cycles, of both units in a two unit site.

2.0 PRA MODEL UPDATE PROCESS

2.1 Internal Event, Internal Flood, and Fire PRA Maintenance and Update

The Fleet risk management process ensures that the applicable PRA model used for the RICT Program reflects the as-built/as-operated plant for each of the NextEra/FPL units. The PRA configuration control process delineates the responsibilities and guidelines for updating the full power internal event, internal flood, and fire PRA models, and includes both periodic and interim PRA model maintenance. The process includes provisions for monitoring potential impact areas affecting the technical elements of the PRA models (e.g., due to plant changes, plant/industry operational experience, or errors or limitations identified in the model), assessing the individual and cumulative risk impact of unincorporated changes, and controlling the model and necessary computer files, including those associated with the configuration risk management program (CRMP) model.

2.2 Review of Plant Changes for Incorporation into the PRA Model

(1) Plant changes or discovered conditions, as defined in the PRA Configuration Control Program, are reviewed for potential impact to the PRA models and including the CRMP model and the subsequent risk calculations which support the RICT Program (Reference 2 Section 2.3.4, Items 7.2 and 7.3, and 2.3.5, Items 9.2 and 9.3).

(2) Plant changes that meet the criteria defined in the PRA configuration control program (including consideration of the cumulative impact of other pending changes) will be immediately incorporated in the applicable PRA model(s), consistent with the NEI 06-09 guidance. Otherwise, the change is assigned a priority and is incorporated at a subsequent periodic update consistent with procedural requirements. (Section 2.3.5, Item 9.2)

(3) PRA updates for plant changes are performed at least once every two refueling cycles, of both units in a two unit site, consistent with the guidance of NEI 06-09 (Section 2.3.4, Item 7.1, and 2.3.5, Item 9.1).

(4) If a PRA model change is required for the CRMP model, but cannot be immediately implemented for a significant plant change or discovered condition, either:

A. Alternative analyses to conservatively bound the expected risk impact of the change will be performed. In such a case, these alternative analyses become part of the RICT Program calculation process until the plant changes are incorporated into the PRA model during the next update. The use of such bounding analyses is consistent with the guidance of NEI 06-09.

B. Appropriate administrative restrictions on the use of the RICT Program for extended Completion Times are put in place until the model changes are completed, consistent with the guidance of NEI 06-09.

These actions satisfy NEI 06-09 Section 2.3.5, Item 9.3.

3.0 REFERENCES

1. ML071200238, Final Safety Evaluation for Nuclear Energy Institute (NEI) Topical Report (TR) NEI 06-09, “Risk-Informed Technical Specifications Initiative 4B, Risk-Managed Technical Specifications (RMTS) Guidelines (TAC No. MD4995),” Letter from Jennifer M. Golder (NRR) to Biff Bradley (NEI), May 17, 2007.

2. ML12286A322, NEI 06-09, Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines, Revision 0-A, October 22, 2012.

3. EN-AA-105, *Probabilistic Risk Assessment (PRA) Program.*

4. EN-AA-105-1000, *PRA Configuration Control and Model Maintenance*.