

In the Matter of: PSEG POWER, LLC AND PSEG NUCLEAR, LLC
(Early Site Permit Application)



ASLBP #: 15-943-01-ESP-BD01
 Docket #: 05200043
 Exhibit #: PSEG008-MA-BD01
 Admitted: 03/24/2016
 Rejected:
 Other:

Identified: 03/24/2016
 Withdrawn:
 Stricken:

PSEG008

COMBINED LICENSE

SOUTH TEXAS PROJECT UNIT 3

NUCLEAR INNOVATION NORTH AMERICA LLC

STP NUCLEAR OPERATING COMPANY

NINA TEXAS 3 LLC

CITY OF SAN ANTONIO, TEXAS, ACTING BY AND THROUGH THE CITY PUBLIC SERVICE BOARD

Docket No. 52-012

License No. NPF-097

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for a combined license (COL) for South Texas Project Unit 3 (STP 3) filed by Nuclear Innovation North America LLC (NINA), on behalf of itself and STP Nuclear Operating Company (STPNOC), NINA Texas 3 LLC (NINA 3), and the City of San Antonio, Texas, acting by and through the City Public Service Board (CPS Energy), (collectively, "the licensees"), which incorporates by reference Appendix A to 10 CFR Part 52, complies with the applicable standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;
 - B. There is reasonable assurance that the facility will be constructed and will operate in conformity with the license, the provisions of the Act, and the Commission regulations set forth in 10 CFR Chapter I, except as exempted from compliance in Section 2.F below;
 - C. There is reasonable assurance (i) that the activities authorized by this COL can be conducted without endangering the health and safety of the public and (ii) that such activities will be conducted in compliance with the Commission regulations set forth in 10 CFR Chapter I, except as exempted from compliance in Section 2.F below;
 - D. NINA and STPNOC* are technically qualified to engage in the activities authorized by this license in accordance with the Commission regulations set forth in 10 CFR Chapter I. The licensees are financially qualified to engage in the activities authorized by this COL in accordance with the Commission regulations set forth in 10 CFR Chapter I;
 - E. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements;"

* NINA is authorized by NINA 3 and CPS Energy to exercise responsibility and control over the physical construction and maintenance of the facility. STPNOC is authorized by NINA 3 and CPS Energy to exercise responsibility and control over the physical operation and maintenance of the facility.

- F. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;
 - G. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering reasonable available alternatives, the issuance of this license subject to the conditions for protection of the environment set forth herein is in accordance with Subpart A of 10 CFR Part 51 and all applicable requirements have been satisfied; and
 - H. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this license will be in accordance with the applicable regulations in 10 CFR Parts 30, 40, and 70.
2. On the basis of the foregoing findings regarding this facility, COL No. NPF-097 is hereby issued to NINA, STPNOC, NINA 3, and CPS Energy to read as follows:
- A. This COL applies to STP 3, a light-water nuclear reactor and associated equipment (the facility), owned by NINA 3 and CPS Energy. The facility would be located on the existing South Texas Project Electric Generating Station site adjacent to existing Units 1 and 2 in Matagorda County, Texas; approximately 12 miles south-southwest of Bay City, Texas; approximately 89 miles southwest of Houston, Texas; and approximately 200 miles southeast of Austin, Texas, as is described in the licensee's final safety analysis report (FSAR), as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - (1) (a) NINA, pursuant to Sections 103 and 185b. of the Act and 10 CFR Part 52, to construct, possess, and use the facility at the designated location in accordance with the procedures and limitations set forth in this license;
 - (b) STPNOC, pursuant to Sections 103 and 185b. of the Act and 10 CFR Part 52, after a Commission finding under 10 CFR 52.103(g), to possess, use, and operate the facility at the designated location in accordance with the procedures and limitations set forth in this license;
 - (c) NINA 3, pursuant to Sections 103 and 185b. of the Act and 10 CFR Part 52, to possess the facility at the designated location in accordance with the procedures and limitations set forth in this license;
 - (d) CPS Energy, pursuant to Sections 103 and 185b. of the Act and 10 CFR Part 52, to possess the facility at the designated location in accordance with the procedures and limitations set forth in this license;
 - (2) (a) STPNOC, pursuant to the Act and 10 CFR Part 70, to receive and possess at any time after a Commission finding under 10 CFR 52.103(g) has been made, special nuclear material as reactor fuel, in accordance with the limitations for storage and in amounts necessary for reactor operation, described in the FSAR, as supplemented and amended;

- (b) STPNOC, pursuant to the Act and 10 CFR Part 70, to use special nuclear material as reactor fuel, after a Commission finding under 10 CFR 52.103(g) has been made, in accordance with the limitations for storage and in amounts necessary for reactor operation, described in the FSAR, as supplemented and amended;
- (3) (a) NINA, pursuant to the Act and 10 CFR Parts 30 and 70, to receive, possess, and use, at any time before a Commission finding under 10 CFR 52.103(g), such byproduct and special nuclear material (but not uranium hexafluoride) as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts not exceeding those specified in 10 CFR 30.35(d) and 10 CFR 70.25(d) for establishing decommissioning financial assurance, and not exceeding those specified in 10 CFR 30.72 and 10 CFR 70.22(i)(1);
- (b) STPNOC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use, after a Commission finding under 10 CFR 52.103(g), any byproduct, source, and special nuclear material (but not uranium hexafluoride) as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts, as necessary;
- (4) (a) NINA, pursuant to the Act and 10 CFR Parts 30 and 70, to receive, possess, and use, before a Commission finding under 10 CFR 52.103(g), any byproduct or special nuclear material (but not uranium hexafluoride) that is (1) in unsealed form, (2) on foils or plated surfaces, or (3) sealed in glass, for sample analysis or instrument calibration or other activity associated with radioactive apparatus or components, in amounts not exceeding those specified in 10 CFR 30.35(d) and 10 CFR 70.25(d) for establishing decommissioning financial assurance, and not exceeding those specified in 10 CFR 30.72 and 10 CFR 70.22(i)(1);
- (b) STPNOC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use, after a Commission finding under 10 CFR 52.103(g), in amounts as necessary, any byproduct, source, or special nuclear material (but not uranium hexafluoride) without restriction as to chemical or physical form, for sample analysis or instrument calibration or other activity associated with radioactive apparatus or components; and
- (5) STPNOC, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. The license is subject to, and the licensees shall comply with, all applicable provisions of the Act and the rules, regulations, and orders of the Commission, including the conditions set forth in 10 CFR Chapter I, now or hereafter in effect.
- D. The license is subject to, and the licensees shall comply with, the conditions specified and incorporated below:

(1) Changes during Construction

- (a) NINA may request use of a preliminary amendment request (PAR) process for license amendments at any time before a Commission finding under 10 CFR 52.103(g). To use the PAR process, NINA shall submit a written request to the Office of New Reactors (NRO) in accordance with COL-ISG-025, "Changes During Construction Under 10 CFR Part 52."
- (b) Before NRO's issuance of a written PAR notification, NINA shall submit the license amendment request (LAR). Thereafter, NRO will issue a written PAR notification, setting forth whether NINA may proceed in accordance with the PAR, LAR, and COL-ISG-025. If NINA elects to proceed and the LAR is subsequently denied, NINA shall return the facility to its current licensing basis.

(2) Preoperational and Startup Test Specifications

NINA shall provide Preoperational and Startup Test Specifications and Test Procedures, containing the testing objectives and acceptance criteria, to the NRC at least six months prior to the start of the Initial Test Program.

(3) Startup Administrative Manual (SAM), Construction/Component Tests, and Preoperational Test Procedures

- (a) The SAM shall govern the ITP and NINA shall issue the updated SAM no later than the beginning of the construction/component test phase and no later than 60 days prior to the beginning of the preoperational test phase.
- (b) NINA shall complete construction/component test procedures and construction/component tests before preoperational tests begin.
- (c) NINA shall make available the NINA-approved preoperational test procedures for the NRC to inspect no later than 60 days prior to intended use but no later than 60 days prior to scheduled initial fuel load.

(4) Startup Test Procedures

NINA shall make available the NINA-approved startup test procedure for the NRC to inspect no later than 60 days prior to scheduled initial fuel load.

(5) Nuclear Fuel Loading and Pre-Critical Testing

- (a) Upon a Commission finding in accordance with 10 CFR 52.103(g) that all the acceptance criteria in the inspections, tests, analyses, and acceptance criteria (ITAAC) in Appendix C to this license are met, STPNOC is authorized to perform pre-critical tests in accordance with the conditions specified herein;
- (b) STPNOC shall perform the pre-critical tests identified in FSAR Subsections 14.2.10.1, 14.2.10.2, 14.2.10.3, and 14.2.12.2;
- (c) STPNOC shall review and evaluate the results of the tests identified in Condition 2.D.(5)(b) of this license and confirm that these test results are within the range

of acceptable values predicted, or otherwise confirm that the tested systems perform their specified functions in accordance with FSAR Subsections 14.2.10.1, 14.2.10.2, 14.2.10.3, and 14.2.12.2; and

- (d) STPNOC shall notify the Director of NRO or the Director's designee, in writing, upon successful completion of the pre-critical tests identified in Condition 2.D.(5)(b) of this license.

(6) Initial Criticality and Low-Power Testing

- (a) Upon submission of the notification required by Condition 2.D.(5)(d) of this license, STPNOC is authorized to operate the facility at reactor steady-state core power levels not to exceed 5-percent thermal power in accordance with the conditions specified herein;
- (b) STPNOC shall perform the initial criticality and low-power tests at the Open Vessel (OV) and Nuclear Heat-Up (HU) testing plateaus identified in FSAR Table 14.2-1 and FSAR Subsections 14.2.10.4 and 14.2.12.2;
- (c) STPNOC shall review and evaluate the results of the tests identified in Condition 2.D.(6)(b) of this license and confirm that these test results are within the range of acceptable values predicted, or otherwise confirm that the tested systems perform their specified functions in accordance with FSAR Subsections 14.2.10.4 and 14.2.12.2; and
- (d) STPNOC shall notify the Director of NRO, or the Director's designee, in writing, upon successful completion of initial criticality and low power tests identified in Condition 2.D.(6)(b) of this license.

(7) Power Ascension Testing

- (a) Upon submission of the notification required by Condition 2.D.(6)(d) of this license, STPNOC is authorized to operate the facility at reactor steady-state core power levels not to exceed 100-percent thermal power in accordance with the conditions specified herein, but only for the purpose of performing power ascension testing;
- (b) STPNOC shall perform the power ascension tests at the Low Power (LP), Mid Power (MP) and High Power (HP) testing plateaus identified in FSAR Table 14.2-1 and FSAR Subsection 14.2.12.2;
- (c) STPNOC shall review and evaluate the results of the tests identified in Condition 2.D.(7)(b) of this license and confirm that these test results are within the range of acceptable values predicted, or otherwise confirm that the tested systems perform their specified functions in accordance with FSAR Subsection 14.2.12.2; and
- (d) STPNOC shall notify the Director of NRO, or the Director's designee, in writing, upon successful completion of power ascension tests identified in Condition 2.D.(7)(b) of this license.

(8) Maximum Power Level

Upon submission of the notification required by Condition 2.D.(7)(d) of this license, STPNOC is authorized to operate the facility at steady state reactor core power levels not to exceed 3926 MW thermal (100-percent thermal power), as described in the FSAR, in accordance with the conditions specified herein.

(9) Reporting Requirements

- (a) Within 30 days of a change to the initial test program described in FSAR Section 14, "Initial Test Program," made in accordance with 10 CFR 50.59 or in accordance with 10 CFR Part 52, Appendix A, Section VIII, "Processes for Changes and Departures," NINA (before the 10 CFR 52.103(g) finding) and STPNOC (after the 10 CFR 52.103(g) finding) shall report the change to the Director of NRO or the Director's designee, in accordance with 10 CFR 50.59(d).
- (b) STPNOC shall report any violation of a requirement in Conditions 2.D.(5), 2.D.(6), 2.D.(7) and 2.D.(8) of this license within 24 hours. Initial notification shall be made to the NRC Operations Center in accordance with 10 CFR 50.72, with written follow up in accordance with 10 CFR 50.73.

(10) Incorporation

The Technical Specifications, Environmental Protection Plan, and ITAAC in Appendices A, B, and C, respectively, of this license are hereby incorporated into this license.

(11) Technical Specifications

The technical specifications in Appendix A to this license become effective upon a Commission finding that the acceptance criteria in this license (ITAAC) are met in accordance with 10 CFR 52.103(g).

(12) Operational Program Implementation

- (a) NINA shall implement the following programs or portions of programs before initial fuel load:
 - 1. Environmental Qualification Program
 - 2. Reactor Vessel Material Surveillance Program
 - 3. Preservice Testing Program
 - 4. Process and Effluent Monitoring and Sampling Program to include
 - (i) Standard Radiological Effluent Controls
 - (ii) Offsite Dose Calculation Manual
 - (iii) Radiological Environmental Monitoring Program, and

- (iv) Process Control Program.
- 5. Motor Operated Valve Testing Program.
- (b) NINA (before the 10 CFR 52.103(g) finding) or STPNOC (after the 10 CFR 52.103(g) finding) shall implement the Radiation Protection Program (RPP) (including the ALARA principle) or the applicable portions thereof as follows:
 - 1. RPP features applicable to byproduct, source, or special nuclear materials shall be implemented before the initial receipt of such materials.
 - 2. RPP features (including the ALARA principle) applicable to new fuel shall be implemented before initial receipt of fuel on site.
 - 3. All other RPP features (including the ALARA principle), except for those applicable to control radioactive waste shipment, shall be implemented before initial fuel load.
 - 4. RPP features (including the ALARA principle) applicable to radioactive waste shipment shall be implemented before the first shipment of radioactive waste.
- (c) No later than 18 months before scheduled fuel load NINA shall implement the Reactor Operator Training Program.
- (d) Transportation Physical Security Program
 - 1. Three months before fuel is transported onsite (protected area), NINA shall implement the transportation physical security program.
 - 2. In the first update of the FSAR after issuance of this license, NINA shall update FSAR Section 13.6.4, "Transportation Physical Security Plan," to include requirements to inspect the integrity of the fuel's containers and the tamper seals upon receipt of shipments of nuclear power reactor fuel and to notify the shipper of receipt of the material in accordance with 10 CFR 74.15.
- (e) Initial Test Program Milestones
 - 1. NINA shall implement the Construction Test Program before the first construction test,
 - 2. NINA shall implement the Preoperational Test Program before the first preoperational test, and
 - 3. NINA shall implement the Startup Test Program before initial fuel load.

(f) Fire Protection Program

1. NINA shall implement the fire protection measures for designated storage building areas (including adjacent fire areas that could affect the storage area) before initial receipt of byproduct or special nuclear materials that are not fuel (excluding exempt quantities as described in 10 CFR 30.18);
2. STPNOC shall implement the fire protection measures for new fuel storage areas (including adjacent fire areas that could affect the new fuel storage area) before receipt of fuel on site;
3. Before receipt of fuel on site, a formal letter of agreement shall be in place with the local fire department specifying the arrangements in support of the Fire Protection Program;
4. All fire protection features shall be implemented before initial fuel load.

(g) The Suppression Pool Cleanliness Program shall be implemented before initiation of the Startup Test Program.

(h) The Special Nuclear Material Control and Accounting Program shall be implemented before initial receipt of special nuclear material.

(13) Operational Program Implementation Schedule

(a) No later than 12 months after issuance of the COL, NINA shall submit to the Director of NRO, or the Director's designee, a schedule for completing the milestones set forth in FSAR Table 13.4S-1, including the associated estimated date for initial loading of fuel, and for implementing the transportation physical security program and the strategies developed in accordance with 10 CFR 50.54(hh)(2). The schedule shall be updated every 6 months until 12 months before scheduled fuel loading, and every month thereafter until all the milestones have been completed.

(14) Site- and Unit-specific Conditions

(a) NINA shall perform detailed geologic mapping of excavations for safety-related structures; examine and evaluate geologic features discovered in the excavations; and notify the Director of NRO, or the Director's designee, in writing, once excavations for safety-related structures are open for examination by the NRC staff.

(b) STPNOC shall, as part of its turbine maintenance program, perform the following:

1. Volumetrically inspect all low-pressure turbine rotors at the second refueling outage and every other (alternate) refueling outage thereafter, and
2. test, at least once a week during normal operation, the main steam control and stop valves, intermediate intercept and stop valves, and steam extraction non-return valves.

- (c) NINA shall prepare a Steam Dryer Monitoring Plan (SDMP) for the STP 3 steam dryer and provide it to the NRC project manager for STP 3 no later than 30 days before startup of STP 3. The SDMP shall reflect industry experience with the performance of steam dryer power ascension testing. The SDMP shall include the following, which shall be augmented as appropriate to address industry experience:
1. NINA shall provide details of the installation and calibration of the steam dryer instrumentation (such as number and types of sensors, locations, orientation, attachment methods, installer training, and calibration methods). The instrumentation shall be mounted and calibrated in accordance with the manufacturers' instructions to accurately measure the dynamic response.
 2. Between 60 and 65 percent of full thermal power, STPNOC shall record pressures, strains, and accelerations from the dryer-mounted instrumentation.
 - (i) STPNOC shall benchmark the methodology for the steam dryer load definition and determine appropriate bias errors and uncertainties from measurements on the dryer.
 - (ii) The steam dryer maximum stress and minimum stress ratio must be computed from the predictive analysis using up to a ± 10 percent frequency sweep of load application and appropriate additional bias errors and uncertainties as described in Section 6.2 of WCAP-17385-P, Revision 6 (FSAR Reference 3.9-25).
 - (iii) Level 1 and Level 2 limit curves must be generated for at least eight pressure transducer locations on the steam dryer (four on the outer bank hoods and four on the skirt) as described in Section 6.2 of WCAP-17385-P, Revision 6.
 - (iv) Limit curves must include bias error and uncertainties as described in Sections 6.5.1 and 6.5.2 of WCAP-17385-P, Revision 6.
 3. At the 70 (± 3) percent, 80 (± 3) percent, and 90 (± 3) percent thermal power levels, STPNOC shall measure, record, and evaluate steam dryer data. STPNOC shall develop revised limit curves at each of these power levels. STPNOC shall generate data trending and a projection of pressure levels for the next monitoring power level and for full thermal power.
 4. During power ascension, should a Level 2 limit curve be exceeded, or if data trending indicates that a Level 1 limit curve may be challenged before the next power level to be monitored, the power must be held at that power level, and STPNOC shall perform a real-time stress analysis to develop new limit curves and to demonstrate that the stress acceptance limits will be satisfied at the next thermal power level before increasing power to the next level. Should a Level 1 limit curve be exceeded, the power must be reduced to a previous power level where the Level 1 limit curve was not exceeded and STPNOC shall perform a real-time stress analysis to develop new limit curves and to demonstrate that the stress acceptance limits will be satisfied at the

next thermal power level in accordance with Section 6.3 of WCAP-17385-P, Revision 6, before increasing power to the next level.

5. STPNOC shall perform end-to-end comparisons between the predicted and measured strains on the steam dryer at the 80 (± 3) percent, 90 (± 3) percent, and full thermal power levels to confirm the conservatism of the predicted dryer stress field. If any of the measured sensor data at that power level exceeds the adjusted predictions, STPNOC shall either (a) modify the bias errors and uncertainty values and limit curves and ensure measured sensor responses do not exceed the adjusted predictions, or (b) quantitatively evaluate the effect on fatigue life.
6. At the power levels where steam dryer monitoring is required in Conditions 2.D.(14)(c)2. and 2.D.(14)(c)3. of this license, STPNOC shall provide the steam dryer data analysis and results to the NRC project manager for STP 3 by facsimile or electronic transmission; and shall not exceed the power level at which it performed the steam dryer monitoring for at least 72 hours after the NRC project manager for STP 3 has confirmed receipt of the transmission.
7. After full power thermal has been achieved, STPNOC shall provide data collected from the steam dryer monitoring at full thermal power to the NRC project manager for STP 3 by facsimile or electronic transmission within 72 hours of completing the collection of that data. STPNOC shall submit a full thermal power stress analysis report and evaluation to the NRC document control desk in accordance with 10 CFR 52.4 within 90 days of first reaching the full thermal power level. The report must include the minimum stress ratio and the final dryer load definition using steam dryer instrumentation and associated bias errors and uncertainties, and must demonstrate that the steam dryer will maintain its structural integrity over its design life considering variations in plant parameters, including, but not limited to, reactor pressure and core flow rate. If the structural integrity of the steam dryer for the full plant life is not demonstrated by the stress analysis, STPNOC shall describe its compensatory actions, such as future dryer replacement, in the stress analysis report.
8. During the first two scheduled refueling outages after reaching full thermal power, STPNOC shall conduct a visual inspection of all accessible areas and susceptible locations of the steam dryer in accordance with industry guidance on steam dryer inspection in the latest NRC staff-approved version of BWRVIP-139-A, "BWR Vessel and Internals Project, Steam Dryer Inspection and Flaw Evaluation Guidelines," with any conditions or limitations specified in the NRC staff approval. STPNOC shall submit the results of these baseline inspections to the NRC within 60 days of startup after each such outage.
9. At the end of the second refueling outage after reaching full thermal power, STPNOC shall update the SDMP to include a long-term inspection plan based on plant-specific and industry operating experience and shall submit the updated plan to the NRC project manager for STP 3 within 180 days following startup from the second refueling outage.

10. Condition 2.D.(14)(c) of this license shall expire upon the submittal of the inspection plan described in Condition 2.D.(14)(c)9. of this license.

- (d) NINA shall conduct a downstream fuel effects test and provide the results to the Director of NRO, or the Director's designee, no later than 18 months before scheduled initial fuel load. The test plan, analysis basis, and debris assumptions must be in accordance with FSAR Chapter 6, Appendix 6C, Subsection 6C.3.1.8. NINA must provide the test procedures to the Director of NRO, or the Director's designee, no later than 24 months before scheduled initial fuel load. The following equation establishes the acceptance criteria for this test, and fuel will not be loaded until this acceptance criteria is met:

$$(\Delta P_f / \Delta P_i)^2 \leq 1200 \times (w_f / w_i)^2$$

Where subscript "i" denotes initial (i.e., unfouled) conditions, and "f" indicates fouled conditions, w is the flow rate into the assembly, and Δp is the pressure drop from the bundle inlet to downstream of the third grid.

- (e) The licensee may not modify or delete the information in final safety analysis report Tables 12.2-3b or 12.2-3c, including associated footnotes, or use the information in these tables as the basis for any detailed facility design, including shielding design and evaluation of equipment qualification, as the basis for operational procedures, or as the basis for any changes to the FSAR.
- (f) Emergency Planning
1. No later than 180 days before the date scheduled for initial fuel load as set forth in the notification submitted in accordance with 10 CFR 52.103(a), NINA shall submit to the Director of NRO, or to the Director's designee, in writing, a fully developed set of site-specific emergency action levels (EALs) for STP 3 in accordance with the Nuclear Energy Institute (NEI) 99-01, Revision 5 endorsed EAL scheme with the exceptions noted below:
 - (i) NINA shall exclude NEI 99-01 (Revision 5) Initiating Conditions (ICs) SU3, SA4, and SS6.
 - (ii) NINA shall put replacement ICs for SA4 and SS6 into the final Emergency Action Level Bases Document for STP 3. These replacement ICs are included as Enclosures 2 (SA4) and 3 (SS6) to the letter dated September 28, 2009 (ML092730445).
 - (iii) NINA shall add ICs for Cold Shutdown CU9 and CA5 into the final Emergency Action Level Bases Document for STP 3. These ICs are included as Enclosures 4 (CU9) and 5 (CA5) to the letter dated September 28, 2009 (ML092730445).

These fully developed EALs shall include the requirement to make an emergency declaration within 15 minutes of the existence of the condition in order to satisfy 10 CFR Part 50, Appendix E, Section IV.C.2.

2. NINA shall validate the existing on-shift staffing submitted in COL application Part 5 "Emergency Plan" Section C using the method in the NRC endorsed version of NEI 10-05, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities," Revision 0, when a physical plant and plant procedures are available. NINA shall submit the results of the analysis to the Director of NRO, or the Director's designee, for confirmation at least 180 days before scheduled initial fuel load.

(g) Beyond Design Basis External Events

1. NINA shall complete development of an overall integrated plan of strategies to mitigate beyond-design-basis external events at least one year before the latest date set forth in the schedule submitted in accordance with 10 CFR 52.99(a) for completing the inspections, tests, and analyses in the ITAAC.
2. The overall integrated plan required by Condition 2.D.(14)(g) of this license must include guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities. The overall integrated plan must include provisions to address all accident mitigation procedures and guidelines (including the guidance and strategies required by this section, emergency operating procedures, abnormal operating procedures, and extensive damage management guidelines).
3. The guidance and strategies required by Condition 2.D.(14)(g) of this license must be capable of (i) mitigating a simultaneous loss of all alternating current (ac) power and loss of normal access to the ultimate heat sink (UHS) and (ii) providing for adequate capacity to perform the functions upon which the guidance and strategies rely for all units on the STP site and in all modes at each unit on the site.
4. Before initial fuel load, NINA shall fully implement the guidance and strategies required by Condition 2.D.(14)(g) of this license, including:
 - (i) Procedures and guidance;
 - (ii) Training;
 - (iii) Acquisition, staging, or installation of equipment and consumables relied upon in the strategies; and
 - (iv) Configuration controls and provisions for maintenance and testing (including testing procedures and frequencies for preventive maintenance) of the equipment upon which the strategies and guidance required by Condition 2.D.(14)(g) of this license rely, as described in FSAR Chapter 1, Appendix 1E, Section 1E.2.4.
5. The training required by Condition 2.D.(14)(g)4.(ii) of this license must use a Systems Approach to Training (SAT), and must be based upon plant equipment and procedures upon which the guidance and strategies required by Condition 2.D.(14)(g) of this license rely.

6. Before initial fuel load, NINA shall analyze:
 - (i) The habitability of the RCIC room, RSS room and the main control room in regard to heat-up during a loss of all ac power and loss of normal access to the UHS to confirm that the RCIC, RSS and main control room temperature will not prevent the completion of the intermittent operator actions upon which the guidance and strategies required by Condition 2.D.(14)(g) of this license rely, in accordance with the acceptance criteria in Table D-2 of NUREG/CR-6146 "Local Control Stations: Human Engineering Issues and Insights"; and
 - (ii) The RCIC and RSS room temperatures in regard to heat-up during a loss of all ac power and loss of normal access to the UHS to confirm that the RCIC and RSS room temperature will not exceed the maximum temperature at which the equipment located in these rooms can perform the functions on which the guidance and strategies required by Condition 2.D.(14)(g) of this license rely, in accordance with the environmental conditions for which the equipment is qualified as described in FSAR Chapter 3, Appendix 3I.
7. Before initial fuel load, NINA shall update the design calculation for Class 1E battery discharge to reflect 'as-built' plant design information to verify that the Class 1E batteries function as relied upon to support Phase 1 of the mitigation guidance and strategies required by Condition 2.D.(14)(g) of this license, as described in FSAR Chapter 1, Appendix 1E.
8. Before initial fuel load, NINA shall complete a successful integrated system validation of the extended loss of all ac power and loss of normal access to the UHS timeline in accordance with guidance in Revision 3 of NUREG-0711, "Human Factor Engineering Program Review Model," Section 11.4.3, "Integrated System Validation," to verify that operator actions can be completed consistent with the start of the battery duty cycle, as described in the FLEX Integrated Plan, Revision 2.
9. NINA (before the 10 CFR 52.103(g) finding) and STPNOC (after the 10 CFR 52.103(g) finding) shall maintain the guidance and strategies described in the application upon issuance of the license, and the integrated accident management capability upon its completion as required by Condition 2.D.(14)(g) of this license. NINA (before the 10 CFR 52.103(g) finding) and STPNOC (after the 10 CFR 52.103(g) finding) may change the strategies and guidelines required by Condition 2.D.(14)(g) of this license provided that the licensee evaluates each such change to ensure that the provisions of Conditions 2.D.(14)(g)1. and 2.D.(14)(g)2. of this license continue to be satisfied and the licensee documents the evaluation in an auditable form.

(h) Physical Security

No later than 8 months before fuel is allowed onsite (protected area), NINA shall develop a written protective strategy that describes in detail the physical protection measures, security systems, and deployment of the armed response

team relative to site-specific conditions, including but not limited to, the final facility layout, and the location of target set equipment and elements in accordance with 10 CFR Part 73, Appendix C.II.B.3.c.(v).

(i) Cyber Security

No later than 8 months before fuel is allowed onsite (within the protected area), NINA shall develop a written protective strategy that describes in detail the cyber protection measures, systems, and deployment of the cyber security program relative to site-specific conditions to include, but not be limited to, the final facility design and the location of target set equipment and elements in accordance with 10 CFR 73.54.

(j) Emergency Planning Actions

1. Communications

- (i) At least 18 months before the latest date set forth in the schedule submitted in accordance with 10 CFR 52.99(a) for completing the inspections, tests, and analyses in the ITAAC, NINA shall have performed an assessment of on-site and off-site communications systems and equipment relied upon during an emergency event to ensure communications capabilities can be maintained during an extended loss of all ac power. The communications capability assessment shall be performed in accordance with NEI-12-01, Revision 0, "Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities."
- (ii) At least one hundred eighty (180) days before the date scheduled for initial fuel load set forth in the notification submitted in accordance with 10 CFR 52.103(a), NINA shall complete implementation of corrective actions identified in the communications capability assessment described above, including any related emergency plan and implementing procedure changes and associated training.

2. Staffing

- (i) At least 18 months before the latest date set forth in the schedule submitted in accordance with 10 CFR 52.99(a) for completing the inspections, tests, and analyses in the ITAAC, NINA shall have performed assessments of the on-site and augmented staffing capability for responding to a multi-unit event. The staffing assessments will be performed in accordance with NEI 12-01, Revision 0, "Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities."
- (ii) At least 180 days before the date scheduled for initial fuel load set forth in the notification submitted in accordance with 10 CFR 52.103(a), NINA shall revise the Emergency Plan to include the following:

- a. Incorporation of corrective actions identified in the staffing assessment required by Condition 2.D.(14)(j)2.(i) of this license.
- b. Identification of how the augmented staff will be notified given degraded communications capabilities.

(k) Financial Qualification

1. NINA shall notify the NRC at least 60 days prior to its anticipated date of construction that this license condition has been fulfilled and that the following are available for inspection:
 - (i) An updated cost estimate.
 - (ii) Documentation justifying any material variances from the original cost estimate provided in the application; and
 - (iii) Documentation demonstrating that the licensee has secured financing to fund the updated cost estimate for the project. This documentation will include operative closing documents, and may include documented proof of parent and affiliate assurances, or capital from other sources (as required to close the financing) that reflect financing for the project.
2. NINA shall notify the NRC at least 60 days prior to the scheduled initial loading of fuel that this license condition has been fulfilled and that the following are available for inspection:
 - (i) An updated cost estimate for each of the first 5 years of operation.
 - (ii) Documentation justifying any material variance from the original cost estimate provided in the application, and
 - (iii) Documentation of sources of funds to cover each of the first 5 years of operations. Such funds may come from, but are not limited to, power purchase agreements, parent assurances, and/or revenues from the anticipated sale of power.

(l) Foreign Ownership, Control, or Domination

1. Within 60 days of the issuance of the license, the proposed "Fourth Amended and Restated Operating Agreement of Nuclear Innovation North America LLC" shall be executed by NINA and enter in to force.
2. Any proposed change to the Negation Action Plan in Appendix 1D of the FSAR that would result in a decrease in the effectiveness of the Negation Action Plan may not be implemented without prior approval of the NRC.
3. The Fourth Amended and Restated Operating Agreement of Nuclear Innovation North America LLC may not be modified in any material respect concerning decision-making authority of the Security Committee as defined therein without prior approval of the NRC.

4. NINA shall take no action allowing Toshiba America Nuclear Energy Corporation (TANE) to have, and in any event NINA shall not recognize TANE as having, more than 10 percent of the voting equity interests of NINA in any membership class.
5. Following issuance of the COLs, NINA shall assure that any loans procured exclusively from foreign sources may only be used for purposes of project development and maintaining the licenses. NINA shall assure that at least 50% of the funding for any licensed construction activity is funded from U.S. sources whether through loans or through equity.
6. NINA's Chief Executive Officer (CEO) and Chief Nuclear Officer, the Chairman of NINA's Board of Directors, the members of NINA's Security Committee and Nuclear Advisory Committee, and the CEO of STPNOC must all be U.S. citizens.
7. More than 50% of the voting interests in NINA shall be represented by Members of NINA's Board of Directors who shall be appointed by non-foreign owners and shall be U.S. citizens.
8. The certificates that the Negation Action Plan requires the NINA CEO and the members of the NINA Security Committee to execute, including certificates to be executed upon the appointment of a new CEO or member of the Security Committee, shall be submitted to the NRC within 30 days of the execution of the certificate.

(m) Insurance and Indemnity

1. Prior to the scheduled date of initial fuel load, and within ninety (90) days after the NRC publishes the notice of intended operation in the *Federal Register*, the licensees shall provide evidence to the Director of NRO, or the Director's designee, that they would have the ability to pay into the industry self-insurance program in the event of a nuclear incident and in the amount specified in 10 CFR Part 140.11(a)(4) for one calendar year using one of the following methods:
 - (i) Surety bond,
 - (ii) Letter of credit,
 - (iii) Revolving credit/term loan arrangement,
 - (iv) Maintenance of escrow deposits of government securities, or
 - (v) Annual certified financial statement showing either that a cash flow (i.e., cash available to a company after all operating expenses, taxes, interest charges, and dividends have been paid) can be generated and would be available for payment of retrospective premiums within three (3) months after submission of the statement, or a cash reserve or a combination of cash flow and cash reserve.

2. Upon the date of initial fuel load, the licensees shall provide satisfactory documentary evidence to the Director of the Office of Nuclear Reactor Regulation or the Director's designee that they have obtained the appropriate amount of insurance required of licensees pursuant to 10 CFR 50.54(w).

(n) Reactor Vessel Material Surveillance Program

STPNOC shall, as part of its reactor vessel material surveillance program, withdraw and test three surveillance capsules in accordance with the schedule provided in Column 1 (Predicted transition temperature shift at vessel inner surface of less than or equal to 100 °F) of Table 1, "Minimum Recommended Number of Surveillance Capsules and Their Withdrawal Schedule," in the 1982 Revision of ASTM Standard E185 (ASTM E185-82), "Standard Practice for Conducting Surveillance Tests of Light-Water Cooled Nuclear Power Reactor Vessels." The scheduling of capsule withdrawals to meet this condition shall be in accordance with ASTM E185-82.

- E. The licensees shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

F. Exemptions

- (a) The following exemptions from the regulations were granted in the rulemaking for the design certification rule that is referenced in the application. In accordance with 10 CFR Part 52, Appendix A, Section V, Applicable Regulations, Subsection B, and pursuant to 10 CFR 52.63(a)(5), the licensees are exempt from the following portions of the regulations: (a) Paragraph (f)(2)(iv) of 10 CFR 50.34 – Separate Plant Safety Parameter Display Console; (b) Paragraph (f)(2)(viii) of 10 CFR 50.34 – Post-Accident Sampling for Boron, Chloride, and Dissolved Gasses; (c) Paragraph (f)(3)(iv) of 10 CFR 50.34 – Dedicated Containment Penetration.

- (b) For the reasons set forth below, the following specific exemption which is outside the scope of the design certification rule referenced in the application is granted:

The licensees are exempt from the requirements of 10 CFR 70.22(b), 10 CFR 70.32(c), 10 CFR 74.31, 10 CFR 74.41, and 10 CFR 74.51 because the licensees meet the requirements of 10 CFR 70.17 and 74.7 as discussed in Section 1.11S.3 of the final safety evaluation report (FSER) associated with this license. The exemption meets the requirements of 10 CFR 52.7 because it is authorized by law, will not present an undue risk to public health and safety, and is consistent with the common defense and security. Additionally, special circumstances are present in that the application of the regulations in this particular circumstance is not necessary to achieve the underlying purpose of the rule (10 CFR 50.12(a)(ii)) as described in the FSER associated with this license.

- (c) For the reasons set forth below, the following specific exemption which is outside the scope of the design certification rule referenced in the application is granted:

As discussed in Sections 1.5S.2 and 1.11S.5 of the FSER associated with this license, the licensees are exempt from the requirements of 10 CFR 50.33(f), Appendix C to 10 CFR Part 50, and 10 CFR 52.77 (to the extent that 10 CFR 52.77 requires compliance with 10 CFR 50.33(f)) because the licensees meet the 10 CFR Part 70 standard of “appears to be financially qualified” in accordance with the “Financial Qualifications for Reactor Licensing Rulemaking; Draft Regulatory Basis Document,” dated June 2015. The exemption meets the requirements of 10 CFR 52.7 because it is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. Additionally, special circumstances are present because there is a material circumstance not considered when the regulations were adopted for which it would be in the public interest to grant an exemption (10 CFR 50.12(a)(vi)) as discussed in the FSER associated with this license.

- (d) For the reasons set forth below, the following exemptions associated with departures from Tier 1 of the U.S. Advanced Boiling Water Reactor (ABWR) design certification are granted:

The Tier 1 departures listed below meet the requirements of 10 CFR Part 52, Appendix A, Section VIII.A.4 and the regulations referenced therein because as discussed in Section 1.11S of the FSER associated with this license:

- The Tier 1 departures will not significantly decrease the level of safety otherwise provided by the design;
- The Tier 1 departures are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security;
- Special circumstances are present as required by 10 CFR 50.12(a)(2); specifically, as discussed in Section 1.11S of the final safety evaluation report for this license, the staff finds that there are special circumstances under 10 CFR 50.12(a)(2)(ii) for the following Tier 1 exemptions because application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule:

STD DEP T1 1.1-1	Definition of As-Built
STP DEP T1 2.5-1	Elimination of New Fuel Storage Racks from the New Fuel Vault
STD DEP T1 2.10-1	Addition of Condensate Booster Pumps
STD DEP T1 2.12-1	Electrical Breaker/Fuse Coordination and Low Voltage Testing
STD DEP T1 2.14-1	Hydrogen Recombiner Requirements Elimination
STD DEP T1 2.15-1	Re-classification of Radwaste Building Substructure from Seismic Category 1 to Non-Seismic

STD DEP T1 2.15-2 Reactor Building Safety related Diesel Generator (RBSRDG) Heating Ventilation and Air Conditioning (HVAC)

STP DEP T1 5.0-1 Site Parameters

- The special circumstances shown under 10 CFR 50.12(a)(2) outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption.

The Tier 1 departures listed below meet the requirements of 10 CFR Part 52, Appendix A Section VIII.A.4 and the regulations referenced therein because as discussed in Section 1.11S of the final safety evaluation report associated with this license:

- The Tier 1 departures will not significantly decrease the level of safety otherwise provided by the design;
- The Tier 1 departures are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security;
- Special circumstances are present as required by 10 CFR 50.12(a)(2); specifically, as discussed in Section 1.11S of the final safety evaluation report for this license, the staff finds that there are special circumstances under 10 CFR 50.12(a)(2)(iv) for the following Tier 1 exemptions because the exemption would result in a benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption:

STD DEP T1 2.1-2 Reactor Pressure Vessel System Reactor Internal Pump (RIP) Motor Casing Cladding

STD DEP T1 2.2-1 Control Systems Changes to Inputs, Tests, and Hardware

STD DEP T1 2.3-1 Deletion of Main Steam Isolation Valves (MSIVs) Closure and Scram on High Radiation

STD DEP T1 2.4-1 Residual Heat Removal System and Spent Fuel Pool Cooling

STD DEP T1 2.4-2 Feedwater Line Break Mitigation

STD DEP T1 2.4-3 Reactor Core Isolation Cooling (RCIC) Turbine/Pump

STD DEP T1 2.4-4 Residual Heat Removal (RHR), High Pressure Core Flooder (HPCF) and RCIC Turbine/Pump Net Positive Suction Head (NPSH)

STD DEP T1 2.12-2 Instrumentation and Control (I&C) Power Divisions

STD DEP T1 3.4-1 Safety-Related I&C Architecture

- The special circumstances shown under 10 CFR 50.12(a)(2) outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption.

(c) For the reasons set forth below, the following exemptions associated with departures from the generic technical specifications in the ABWR design certification are granted:

The generic technical specification departures listed below meet the requirements of 10 CFR Part 52, Appendix A, Section VIII.C.4, and the regulations referenced therein because as discussed in Section 1.11S of the FSER associated with this license:

- The generic technical specification departures are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security; and
- Special circumstances are present as required by 10 CFR 50.12(a)(2); specifically, as discussed in Section 1.11S of the final safety evaluation report for this license, the staff finds that there are special circumstances under 10 CFR 50.12(a)(2)(ii) for the following Tier 1 exemptions because application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule:

STD DEP 7.3-12	Leak Detection and Isolation System Sump Monitoring
STD DEP 7.7-18	Rod Control and Information System Operator Information
STD DEP 8.3-1	Plant Medium Voltage Electrical System Design
STP DEP 8.3-3	Electrical Site Specific Power and Other Changes
STD DEP 16.2-1	Safety Limit Violation
STD DEP 16.3-78	Limiting Condition for Operation (LCO) 3.3.6.1, Post Accident Monitoring Instrumentation
STD DEP 16.5-1	Unit Responsibility
STD DEP 16.5-2	Unit Staff
STD DEP 16.5-3	Technical Specification Bases Control Program
STD DEP 16.5-4	Reporting Requirements
STD DEP 16.5-5	Unit Staff – Working Hours

STD DEP 16.5-6	Inservice Testing Program
STD DEP 16.2-2	Safety Limits
STD DEP 16.3-1	Section 3.0, LCO Applicability
STD DEP 16.3-2	LCO 3.0 and Surveillance Requirements (SRs)
STD DEP 16.3-4	LCO 3.1.1, Shutdown Margin (SDM)
STD DEP 16.3-5	LCO 3.4.1, RIPs –Operating
STD DEP 16.3-6	LCO 3.4.1, RIPs –Operating
STD DEP 16.3-7	LCO 3.4.2, Safety/Relief Valves (S/RVs)
STD DEP 16.3-8	LCO 3.4.9, Reactor Coolant System (RCS) Pressure/Temperature (P/T) Limits
STD DEP 16.3-9	LCO 3.4.7, Alternate Decay Heat Removal
STD DEP 16.3-10	LCO 3.5.1, Emergency Core Cooling System (ECCS) – Operating
STD DEP 16.3-11	RCS Operational LEAKAGE
STD DEP 16.3-13	LCO 3.9.8, RHR – “Low Water Level” Applicability
STD DEP 16.3-14	LCO 3.9.2, Refuel Position Rod – Out Interlock
STD DEP 16.3-15	LCO 3.9.5, Control Rod OPERABILITY – Refueling
STD DEP 16.3-16	LCO 3.7.1, Reactor Building Cooling Water (RCW) System, Reactor Service Water (RSW) System, and Ultimate Heat Sink (UHS) – Operating, LCO 3.7.2, RCW/RSW System and UHS – Shutdown and LCO 3.7.3, RCW/RSW System and UHS – Refueling
STD DEP 16.3-17	LCO 3.10.12, Multiple Control Rod Drive Subassembly Removal – Refueling
STD DEP 16.3-18	LCO 3.10.8 SDM Test – Refueling
STD DEP 16.3-19	LCO 3.10.4, Control Rod Withdrawal – Cold Shutdown

STD DEP 16.3-20	LCO 3.10.4, Control Rod Withdrawal – Cold Shutdown
STD DEP 16.3-21	LCO 3.10.5, Control Rod Drive (CRD) Removal – Refueling
STD DEP 16.3-23	LCO 3.10.5, CRD Removal – Refueling
STD DEP 16.3-24	LCO 3.10.3, Control Rod Withdrawal – Hot Shutdown Bases
STD DEP 16.3-25	LCO 3.9.1, Refueling Equipment Interlocks
STD DEP 16.3-26	LCO 3.10.2, Reactor Mode Switch Interlock Testing
STD DEP 16.3-27	LCO 3.10.2, Reactor Mode Switch Interlock Testing
STD DEP 16.3-28	LCO 3.10.1, In-Service Leak and Hydrostatic Testing Operation
STD DEP 16.3-29	LCO 3.6.4.1, Secondary Containment
STD DEP 16.3-30	LCO 3.6.4.1, Secondary Containment
STD DEP 16.3-31	LCO 3.6.4.3, Standby Gas Treatment (SGT) System
STD DEP 16.3-32	LCO 3.6.2.1, Suppression Pool Average Temperature
STD DEP 16.3-33	LCO 3.6.2.1, Suppression Pool Average Temperature
STD DEP 16.3-34	LCO 3.6.1.6, Wetwell-to-Drywell Vacuum Breakers
STD DEP 16.3-35	LCO 3.9.6, Reactor Pressure Vessel (RPV) Water Level
STD DEP 16.3-36	LCO 3.6.2.3, RHR Suppression Pool Cooling
STD DEP 16.3-37	LCO 3.6.2.3, RHR Suppression Pool Cooling
STD DEP 16.3-40	LCO 3.8.2, Alternating Current (AC) Sources – Shutdown
STD DEP 16.3-41	LCO 3.8.2, AC Sources – Shutdown
STD DEP 16.3-42	LCO 3.8.4, Direct Current (DC) Sources – Operating
STD DEP 16.3-43	LCO 3.6.1.1, Primary Containment

STD DEP 16.3-45	LCO 3.6.1.1, Primary Containment
STD DEP 16.3-46	LCO 3.7.2, RCW, RSW, and UHS Applicability
STD DEP 16.3-47	LCO 3.7.4, Control Room Habitability Area (CRHA) – Emergency Filtration (EF) System
STD DEP 16.3-48	LCO 3.7.4, CRHA – Emergency Filtration (EF) System
STD DEP 16.3-49	LCO 3.8.1, AC – Sources-Operating
STD DEP 16.3-50	LCO 3.3.1.4, Engineered Safeguards Features (ESF) Actuation Instrumentation
STD DEP 16.3-51	LCO 3.8.3, Diesel Fuel Oil, Lube Oil, and Starting Air
STD DEP 16.3-52	LCO 3.8.8, Inverters – Shutdown
STD DEP 16.3-55	LCO 3.3.4.1, Anticipated Transient Without Scram (ATWS) and End-of-Cycle Recirculation Pump Trip (EOC-RPT) Instrumentation
STD DEP 16.3-57	LCO 3.3.1.2, Reactor Protection System (RPS) and MSIV Actuation
STD DEP 16.3-58	LCO 3.8.6, Battery Cell Parameters
STD DEP 16.3-59	LCO 3.3.6.2, Remote Shutdown System
STD DEP 16.3-60	LCO 3.3.6.2, Remote Shutdown System
STD DEP 16.3-61	LCO 3.3.7.1, CRHA EF System Instrumentation
STD DEP 16.3-62	LCO 3.3.8.1, Electric Power Monitoring
STD DEP 16.3-63	LCO 3.3.8.2, Reactor Coolant Temperature Monitoring – Shutdown
STD DEP 16.3-64	LCO 3.3.5.1, Control Rod Block Instrumentation
STD DEP 16.3-65	LCO 3.3.5.1, Control Rod Block Instrumentation
STD DEP 16.3-66	LCO 3.3.5.1, Control Rod Block Instrumentation
STD DEP 16.3-67	LCO 3.3.5.1, Control Rod Block Instrumentation
STD DEP 16.3-69	LCO 3.6.1.2, Primary Containment Air Locks

STD DEP 16.3-70	LCO 3.6.1.2, Primary Containment Air Locks
STD DEP 16.3-73	LCO 3.6.1.3, Primary Containment Isolation Valves (PCIVs)
STD DEP 16.3-74	LCO 3.6.1.3, PCIVs
STD DEP 16.3-75	LCO 3.7.6, Main Condenser Offgas
STD DEP 16.3-76	LCO 3.7.5, CRHA – Air Conditioning System
STD DEP 16.3-77	LCO 3.3.6.1, Post Accident Monitoring (PAM) Instrumentation
STD DEP 16.3-78	LCO 3.3.6.1, PAM Instrumentation
STD DEP 16.3-80	LCO 3.8.1, AC Sources – Operating
STD DEP 16.3-81	LCO 3.3.1.2, RPS and MSIV Actuation
STD DEP 16.3-82	LCO 3.3.1.2, RPS and MSIV Actuation
STD DEP 16.3-83	LCO 3.3.1.3, Standby Liquid Control (SLC) and Feedwater Runback (FWRB) Actuation
STD DEP 16.3-84	LCO 3.3.1.1, Safety System Logic Controller (SSLC) Sensor Instrumentation
STD DEP 16.3-85	LCO 3.3.1.1, SSLC Sensor Instrumentation
STD DEP 16.3-86	LCO 3.3.1.4, ESF Actuation Instrumentation
STD DEP 16.3-87	LCO 3.3.1.4, ESF Actuation Instrumentation
STD DEP 16.3-91	LCO 3.3.1.1, SSLC Sensor Instrumentation
STD DEP 16.3-92	LCO 3.3.1.1, SSLC Sensor Instrumentation
STD DEP 16.3-93	LCO 3.3.1.1, SSLC Sensor Instrumentation
STD DEP 16.3-94	LCO 3.3.1.4, ESF Actuation Instrumentation
STD DEP 16.3-95	LCO 3.2.3 Linear Heat Generation Rate (LHGR) (Non-GE Fuel)
STD DEP 16.3-96	LCO 3.4.1, RIPs Operating
STD DEP 16.3-97	Technical Specification Editorial Changes
STD DEP 16.3-98	SR 3.3.1.1.4, DIVISION FUNCTIONAL TEST for Source Range Neutron Monitors (SRNMs)

STD DEP 16.3-99	Bases Allowable Value Misstatements
STD DEP 16.3-100	Setpoint Control Program Implementation
STD DEP 16.3-101	Bases LCO 3.3.5.1, REQUIRED ACTIONS A.1 and C.1
STD DEP 16.3-102	Bases SR 3.3.5.1.6
STD DEP 16.3-103	SR 3.8.1.15, Note 1
STD DEP 16.3-104	SR 3.3.4.2.2 - CHANNEL FUNCTIONAL TEST – Feedwater Pump and Main Turbine Trip Instrumentation
STD DEP 16.3-105	LCO 3.3.1.1, ACTIONS Q.1, Q.2.1 and Q.2.2; LCO 3.3.1.2, ACTIONS L.1, L.2.1 and L.2.2, and LCO 3.6.1.3, ACTIONS A.1 and A.2 - Operation with an Isolated Main Steamline

The generic technical specification departures listed below meet the requirements of 10 CFR Part 52, Appendix A, Section VIII.C.4, and the regulations referenced therein because as discussed in Section 1.11S of the FSER associated with this license:

- The generic technical specification departures are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security; and
- Special circumstances are present as required by 10 CFR 50.12(a)(2); specifically, as discussed in Section 1.11S of the final safety evaluation report for this license, the staff finds that there are special circumstances under 10 CFR 50.12(a)(2)(iv) for the following Tier 1 exemptions because the exemption would result in a benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption:

STD DEP 6.2-2	Containment Analysis
STD DEP 7.3-17	Automatic Depressurization System (ADS) Electrical Interface
STD DEP 7.5-1	Post-Accident Monitoring (Drywell Pressure)
STD DEP 7.7-10	Control Rod Drive Control System Interfaces
STD DEP 10.4-5	Condensate and Feedwater System

G. NINA (before the 10 CFR 52.103(g) finding) and STPNOC (after the 10 CFR 52.103(g) finding) shall maintain the guidance and strategies developed in accordance with 10 CFR 50.54(hh)(2).

H. This license is effective as of February 12, 2016 and shall expire at midnight on the date 40 years from the date that the Commission finds that the acceptance criteria in the combined license are met in accordance with 10 CFR 52.103(g).

FOR THE NUCLEAR REGULATORY
COMMISSION

/RA/

Jennifer L. Uhle, Director
Office of New Reactors

Appendices:

Appendix A – Technical Specifications

Appendix B – Environmental Protection Plan

Appendix C – Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)