NRR-PMDAPEm Resource

From: Orenak, Michael
Sent: Friday, February 03, 2017 3:17 PM
To: CRPIERCE (CRPIERCE@southernco.com)
Cc: Miller, Ed; Markley, Michael; McElroy, G. Ken; Goldstein, Kay; RidsNrrPMVogtle Resource; Martinez Navedo, Tania; Evans, Jonathan; Dinsmore, Stephen; Joyce, Ryan M.
Subject: VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2 – REQUEST FOR ADDITIONAL INFORMATION (CAC NOS. ME9555 AND ME9556)
Attachments: RAIs for Vogtle 4b.docx

Dear Mr. Pierce:

By letters dated September 13, 2012, as supplemented by letters dated August 2, 2013, July 17, 2014, November 11, 2014, December 12, 2014, March 16, 2015, and May 5, 2015, February 17, 2016, April 18, 2016, and July 13, 2016, Southern Nuclear Operating Company, Inc. (SNC), submitted a license amendment request to modify the Vogtle Electric Generating Plant Technical Specifications requirements to permit the use of Risk Informed Completion Times in accordance with Nuclear Energy Institute (NEI) Report NEI-06-09, Revision 0, *Risk Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS).* The U.S. Nuclear Regulatory Commission (NRC) staff finds that additional information is needed as set forth in the enclosed document.

The NRC staff is held public meetings with SNC to discuss these RAIs on January 26, 2015, and February 2, 2017.[1] There is an ongoing discussion about the clarity of RAI 10, however, the NRC staff is issuing the other questions to allow SNC time to work on them while the discussion on RAI 10 continues. The NRC staff requests a response to this letter within 30 days.

Sincerely,

Michael Orenak, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

[1] The draft RAI discussed at the meetings is available under Agencywide Documents Access Management System Accession No. ML17027A018.

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REQUEST FOR ADDITIONAL INFORMATION

BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

DOCKET NOS. 50-424 AND 50-425

By letter dated September 13, 2012, as supplemented by letters dated August 2, 2013, July 17, 2014, November 11, 2014, December 12, 2014, March 16, 2015, and May 5, 2015, February 17, 2016, April 18, 2016, and July 13, 2016 (ADAMS Accession Nos. ML12258A055, ML13217A072, ML14198A574, ML14315A051, ML14346A643, ML15075A479, ML15125A446, ML16048A096, ML16109A338, and ML16195A503, respectively), Southern Nuclear Company, Inc. (SNC), proposed changes to the Technical Specifications (TSs) for the Vogtle Electric Generating Plant (VEGP or Vogtle). The proposed amendment would modify TS requirements to permit the use of Risk Informed Completion Times (RICTs) in accordance with Topical Report (TR) Nuclear Energy Institute (NEI) 06-09, Revision 0-A, *Risk Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines*. The NRC staff has identified the following information needs associated with your amendment request.

The NRC staff notes that, over the course of the review and via the supplemental letters, the specific proposed revisions to the TSs have changed. Included as Attachment 1 to this request, the NRC staff has generated a list of those TS changes that currently remain in the license amendment request. Although not required, the NRC staff believes that it would be prudent for SNC to verify the list and, if appropriate identify discrepancies to ensure consistent understanding.

RAI 1:

On June 15, 2016, the staff issued a Request for Additional Information that included question PRA RAI S-1 (A). PRA RAI S-1 (A) requested that SNC adopt a 24 hour backstop for Conditions involving a technical specification loss of function (TS-LOF, i.e., loss of operability of all trains) but with retained PRA Functional, or to discuss a proposed alternative. In the letter dated July 13, 2016, SNC provided a response to the staff's RAI.

SNC's response proposed the adoption of a graduated approach to determine the backstop completion time for a TS LOF condition. Specifically, SNC proposed to use an administrative backstop of either 24 hours or 7 days based on the calculated plant configuration-specific RICT. The NRC Staff has found that the RAI response did not provide an evaluation justifying extending the backstop up to 7 days.

The proposed TS 5.5.22, Risk Informed Completion Time Program, states that the RICT for high risk plant configurations may not exceed 24 hours; the RICT for low risk plant configurations may not exceed 7 days. Please revise the proposed TS Admin Section 5.5.22, constraints (a) and (e), to specify that the RICT may not exceed 24 hours or provide a justification of how the reduction in defense-in-depth and safety margins associated with a 7 day backstop continues to be in accordance with the guidance in RG 1.174.

RAI 2:

In the Table provided on Page E1-3 in the RAI response dated July 13, 2016, SNC provided a list of systems with description of the TS LOF conditions. The proposed TS 5.5.22 in the same RAI response contains several constraints (e.g., 24 hour backstop and remaining mitigating capabilities) on developing a RICT that can be used for these conditions. However, the proposed TS changes do not identify the Conditions to which these constraints apply. Please propose a modification to the affected TS that stipulates that the Conditions will be subject to the 24 hour backstop and associated mitigating capabilities.

RAI 3:

The staff reviewed the proposed TS 5.5.22, Risk Informed Completion Time Program, as provided in Enclosure 3 in the letter dated July 13, 2016, and identified the need for some additional clarification.

(1) Enclosure 3, Part c. currently states:

c. When a RICT is being used, any plant configuration change within the scope of the RICT Program must be considered for the effect on the RICT.

This proposed wording appears to be circular. The parallel limitation from the NRC SE on NEI 06-09 is:

c. When a RICT is being used, any plant configuration change within the scope of the Configuration Risk Management Program (CRMP) must be considered for the effect on the RICT.

Please clarify the logic of the proposed limitation or revise TS 5.5.22 accordingly.

(2) Enclosure 3, Part e.2 and e.3 currently state:

e.2. For design basis accident scenarios that are not modeled in the PRA because they do not affect the CDF or the LERF, the PRA Functionality evaluation performed following a TS LOF Condition entry will ensure SSCs not supporting CDF/LERF will remain available and sufficient.

e.3. For design basis initiators modeled in the internal events PRA, the PRA Functionality determination performed subsequent to a TS LOF Condition entry will ensure design basis success criteria for parameters (e.g., flow rate, temperature limits) are met.

The NRC staff recognizes that the proposed changes are consistent with SNC's February 17, 2016, and April 18, 2016, RAI response that SNC referenced in the NRC Staff's June 15, 2016, RAI S-1(A). However, RAI S-1(A) summarized SNC's earlier proposed changes as:

ii. Design basis success criteria parameters shall be met for design basis accident

scenarios that are not modelled in the internal events PRA as described in the response to 2.a.

iii. Design basis success criteria parameters shall be met for design basis accident scenarios modelled in the internal events PRA as described in the response to 2.c.

SNC's July 13, 2016, response to RAI S-1(A) implied that the wording in NRC RAI S-1(A) would be used. The response did not clarify that the wording in the original SNC responses would be used which substantively changes the scope of the response.

The proposed wording in constraints e.2 and e.3 does not provide assurance that the plant will maintain its capability to mitigate all design basis accident scenarios when in a technical specification loss of function condition for which PRA Functional has been declared. To provide assurance that all design basis accidents can be mitigated during a loss of function, propose revised wording to constraints e.2 and e.3 to include all design basis accident scenarios in the determination of PRA Functional with as simple a statement as possible, e.g.;

e.2 Design basis success criteria parameters shall be met for all design basis accident scenarios

Alternatively, if SNC proposes to retain PRA Functional that does not include meeting all design basis success criteria for all design basis accident scenarios additional information is requested. The table provided on Page E1-3 retains the application of PRA Functional for the identified loss of function Conditions. For each such LCO and Condition, similarly to the information provided for LCO 3.7.14.B, "ESF Coolers and Chillers", please identify all the design basis functions fulfilled by the LCO and their design basis success parameter values. Compare these functions with the PRA Functions, including the PRA success parameter values. Summarize and justify the loss in defense-in-depth and safety margins for any design basis accident scenarios that would no longer be mitigated with the PRA Functional equipment.

RAI 4:

In a letter dated April 18, 2016, SNC furnished responses to the staff's RAI regarding the application of a RICT to selected Conditions in Technical Specification 3.8.1. The RAI response states:

> SNC has modified the license amendment request to eliminate the current risk-informed Condition B and to apply a Risk Informed Completion Time only to the condition with the 72 hour front stop (current VEGP LCO 3.8.1, Condition C).

However, in the TS mark-up provided in Enclosure 2 to the letter, existing Condition C, its Required Action and associated Completion Time, are marked for deletion; and the Completion Time associated with Required Action B.6 is shown with a Completion Time of 72 hours, and proposed to be retained.

During its review of the requested change, the staff compared the marked-up TS page 3.8.1-5 with the currently approved version of this page. It appears that in the currently approved version, the Completion Time associated with Required Action B.6 is "14 days from discovery of failure to meet LCO". This page was last modified in Amendment No. 100 for Unit 1 and Amendment No. 78 for Unit 2.

Please clarify the description of the proposed changes to TS 3.8.1.

RAI 5:

While the guidance in NEI 06-09 states that no common cause failure (CCF) adjustment is required for planned maintenance, the NRC approval of NEI 06-09 is based on RG 1.177, as indicated in the NRC safety evaluation to NEI 06-09. Specifically, Section 2.2 of the NRC safety evaluation for NEI 06-09 (ADAMS Accession No. ML071200238) states that, "specific methods and guidelines acceptable to the NRC staff are […] outlined in RG 1.177 for assessing risk-informed TS changes." Further, Section 3.2 of the NRC safety evaluation states that compliance with the guidance of RG 1.174 and RG 1.177, "is achieved by evaluation using a comprehensive risk analysis, which assesses the configuration-specific risk by including contributions from human errors and common cause failures."

The guidance in RG 1.177, Section 2.3.3.1, states that, "CCF modeling of components is not only dependent on the number of remaining inservice components, but is also dependent on the reason components were removed from service (i.e. whether for preventative or corrective maintenance)." In relation to CCF for preventive maintenance, the guidance in RG 1.177, Appendix A, Section A-1.3.1.1, states:

> If the component is down because it is being brought down for maintenance, the CCF contributions involving the component should be modified to remove the component and to only include failures of the remaining components (also see Regulatory Position 2.3.1 of Regulatory Guide 1.177).

According to RG 1.177, if a component from a CCF group of three or more components is declared inoperable, the CCF of the remaining components should be modified to reflect the reduced number of available components in order to properly model the as-operated plant. Please confirm and describe how the treatment of CCF either meets the guidance in RG 1.177 or meets the intent of this guidance when quantifying a RICT.

RAI 6:

According to Section A-1.3.2.1 of Appendix A of RG 1.177, when a component fails, the CCF probability for the remaining redundant components should be increased to represent the conditional failure probability due to CCF of these components, in order to account for the possibility that the first failure was caused by a CCF mechanism. When a component fails, the calculation of the plant risk, assuming that there is no increase in CCF potential in the redundant components before any extent of condition evaluation is completed, could lead to a non-conservative extended completion time calculation, as illustrated by inclusion of the guidance in Appendix A of RG 1.177. Much of the discussion in Appendix A describes how configuration specific risk calculations should be performed.

In Section 3.2 of the NRC safety evaluation for NEI 06-09, the NRC staff stated that compliance with the guidance of RG 1.174 and RG 1.177, "is achieved by evaluation using a comprehensive risk analysis, which assesses the configuration-specific risk by including contributions from human errors and common cause failures."

The limitations and conditions in Section 4.0 of the safety evaluation for NEI 06-09 state that:

> The [NRC] staff interprets TR NEI 06-09, Revision 0, as requiring consideration of [additional] RMAs [due to the potential for increased risks from common cause failure of similar equipment] whenever the redundant components are considered to remain operable, but the licensee has not completed the extent of condition evaluations.

The requirement to consider additional RMAs prior to the completion of the extent of condition evaluation was included by the NRC staff in the safety evaluation for NEI 06-09 as an additional measure to account for the increased potential that the first failure was caused by a CCF mechanism. However no exception to the RG 1.177 guidance was taken in the calculation of the RICT with regards to the quantification of the unresolved potential for CCF before the extent of condition evaluation is complete.

Please confirm and describe how the licensee's treatment of CCF, in the case of an emergent failure, either meets the guidance in RG 1.177 or meets the intent of this guidance when quantifying a RICT.

RAI 7:

LCO 3.5.1 A, "One accumulator inoperable due to boron concentration not within limits," is proposed in the scope of the RICT program. In response to RAI #12 provided in letter dated July 17, 2014, the licensee stated that this condition will be modeled in the PRA by assuming loss of accumulator as a surrogate. The RAI response further states that "loss of accumulator is the worst case surrogate for this degraded condition."

As described in the UFSAR, the minimum boron concentration requirement assures reactor subcriticality in a post LOCA environment. The maximum boron concentration is used in determining the cold leg to hot leg recirculation injection switchover time. Also maintaining the boron concentration within the specified limits "assures that the resulting sump pH will be maintained in an acceptable range so that the effect of chloride and stress corrosion on mechanical systems and components will be minimized." Since these considerations are typically not addressed in the PRA:

a) Explain how modeling the accumulator as unavailable (i.e., no injection) in the PRA represents the worst case impact of the accumulator boron concentration not being within limits or remove Condition 3.5.1.A from the RICT program.
b) Address how the response to part a) above affects proposed LCO 3.5.1.C, "Two or more accumulators inoperable", and propose any modifications to 3.5.1.C as deemed necessary.

RAI 8:

In Table provided on Page E1-3 in the RAI response dated July 13, 2016, SNC provided a list of TS LOF conditions in the RICT program. Condition 3.5.4 D, "RWST inoperable for reasons other than Conditions A and B" is recognized as a TS LOF condition, but condition 3.5.4 B, "One or more sludge mixing pump isolation valves inoperable" is not. As indicated in the response to question 1 provided in letter dated August 2, 2013, the sludge pump mixing isolation valves

provide the isolation capability to prevent loss of the RWST water volume. These valves isolate the safety related portion of the sludge mixing line (connecting to the RWST) from its non-safety related, non-seismically qualified portion of the line. It appears that one or more inoperable mixing isolation valves could result in loss of the RWST inventory in a seismic event, therefore justify why condition 3.5.4 B was not included in the list of TS LOF conditions or include it as a TS LOF and apply the 24-hour backstop and applicable conditions accordingly.

RAI 9:

LCO 3.4.11, "Power Operated Relief Valves; Condition E – 2 PORVs Inoperable and incapable of being manually cycled"

According to the UFSAR, the design success criteria for PORVs are to (a) depressurize the Reactor Coolant System (RCS) with 1 of 2 PORVs and to (b) not experience excessive seat leakage in 2 of 2 PORVs. Some required actions for this condition direct the licensee to close and remove power from the associated block valves within one hour if the associated PORV(s) become inoperable. The block valves, which are in a series with the PORVs, are required to be closed to isolate the PORVs in the case of excessive leakage or a stuck open PORV. However, de-energizing the block valves in the closed position renders them incapable of allowing RCS depressurization, which is also a design basis function. If both PORVs become inoperable this is a Technical Specification LOF condition (both PORVs inoperable) and the licensee must demonstrate that the system retains the ability to meet its design success criteria for parameters. With both block valves closed, the plant is unable to meet its design basis function of RCS depressurization, therefore please justify inclusion of this condition in the scope of the RICT program, or remove it from the program.

RAI 10:

RAI 10 is still being developed to ensure clarity of the question and will be issued to SNC via subsequent correspondence.

RAI 11:

Section 4.0 of the NRC safety evaluation for NEI 06-09 states:

> As part of its review and approval of a licensee's application requesting to implement the RMTS [Risk-Managed Technical Specifications], the NRC staff intends to impose a license condition that will explicitly address the scope of the PRA and non-PRA methods approved by the NRC staff for use in the plant-specific RMTS program. If a licensee wishes to change its methods, and the change is outside the bounds of the license condition, the licensee will need NRC approval, via a license amendment, of the implementation of the new method in its RMTS program.

The application does not propose a license condition; therefore, please propose a license condition limiting the scope of the PRA and non-PRA methods to what is approved by the NRC staff for use in the plant-specific RMTS program. An example of an appropriate license

condition is provided below:

> The risk assessment approach, methods, and data shall be acceptable to the NRC, be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant. Acceptable methods to assess the risk from extending the completion times may include methods that have been used in the peer-reviewed PRA model, methods that have been approved by NRC through a plant-specific license amendment, or NRC approval of generic methods or methods that have been demonstrated to bound the risk impact.

ATTACHMENT 1: NRC STAFF'S CURRENT UNDERSTANDING OF TS FOR WHICH A RICT IS BEING PROPOSED

The NRC Staff's current understanding of the propose application of the RICT Program to existing conditions.

LCO 3.4.10 Pressurizer Safety Valves

- Required Action A.1
  - Restore valve to OPERABLE status (Condition A: One pressurizer safety valve inoperable)
  - The Condition is modified by a NOTE that states that it is not applicable when pressurizer safety valve intentionally made inoperable.

LCO 3.4.11 Pressurizer Power Operated Relief Valves (PORVs)

- Required Action B.3
  - Revised Required Action is to restore power-operated relief valve (PORV) to OPERABLE status (Condition B: One PORV inoperable and not capable of being manually cycled)
- Required Action C.2
  - Restore block valve to OPERABLE status (Condition C: One block valve inoperable)
- Required Action E.3
  - Revised Required Action is to restore PORVs to OPERABLE status (Condition E: Two PORVs inoperable and not capable of being manually cycled)
  - Condition E is modified by a NOTE that states that it is not applicable when second PORV intentionally made inoperable.
  - The requirements for entry into Mode 3 and Mode 4 are relocated to Condition G if the Required Action and Completion Time for Condition E is not met.
- Required Action F.2
  - Restore one block valve to OPERABLE status (Condition F: More than one block valve inoperable)
- Required Action F.3
  - Restore remaining block valve to OPERABLE status (Condition F: More than one block valve inoperable)

LCO 3.5.1 Accumulators

- Required Action A.1
  - Restore boron concentration to within limits (Condition A: One accumulator inoperable due to boron concentration not within limits)
- Required Action B.1
  - Restore accumulator to OPERABLE status (Condition B: One accumulator inoperable for reasons other than Condition A)
- Required Action D.1 (renumbered as C.1)
  - Restore accumulators to OPERABLE status (Condition D (renumbered as Condition C): Two or more accumulators inoperable)
- Condition C (renumbered as Condition D) is revised to provide requirements to enter Mode 3 if the Required Action and Completion Time of Conditions A, B, C

or D are not met.

LCO 3.5.2 Emergency Core Cooling System (ECCS) - Operating

- Required Action A.1
  - Restore train(s) to OPERABLE status (Condition A: One of more trains inoperable AND at least 100% of the ECCS flow equivalent to a single OPERABLE ECCS train available)

LCO 3.5.4 Refueling Water Storage Tank (RWST)

- Required Action B.1
  - Restore the valve(s) to OPERABLE status (Condition B: One or more sludge mixing pump isolation valves inoperable)
- Required Action D.1
  - Restore RWST to OPERABLE status (Condition D: RWST inoperable for reasons other than Condition A or B)
  - Condition D is modified by a note that states that it is not applicable when the RWST is intentionally made inoperable.

LCO 3.6.2 Containment Air Locks

- Required Action C.3
  Restore air lock to OPERABLE status (Condition C: One or more containment air locks inoperable for reasons other than Condition A or B

LCO 3.6.3 Containment Isolation Valves

- Required Action A.1
  - Isolate the affected penetration flow path by use of at least one closed and de-activated automatic valve, closed manual valve, blind flange, or check valve with flow through the valve secured (Condition A: One or more penetration flow paths with one containment isolation valve inoperable except for purge valve leakage not within limit)
- Required Action B.1
  - Isolate the affected penetration flow path by use of at least one closed and de-activated automatic valve, closed manual valve, or blind flange (Condition B: One or more penetration flow paths with two containment isolation valves inoperable except for purge valve leakage not within limit)
- Required Action C.1
  - Isolate the affected penetration flow path by use of at least one closed and de-activated automatic valve, closed manual valve, or blind flange (Condition C: One or more penetration flow paths with one or more containment purge valves not within purge valve leakage limit)

LCO 3.6.6 Containment Spray (CS) and Cooling Systems

- Required Action A.1
  - Restore CS train to OPERABLE status (Condition A: One CS train inoperable)
- Required Action B.1
  - Restore containment cooling train to OPERABLE status (Condition B: One containment cooling train inoperable)

LCO 3.7.2 Main Steam Isolation Valves (MSIVs)

- Required Action A.1
  - Restore MSIV to OPERABLE status (Condition A: One or more steam line with one MSIV system inoperable in MODE 1)
- Required Action B.1
  - Restore one MSIV system to OPERABLE status in affected steam line (Condition B: One or more steam lines with two MSIV systems inoperable in MODE 1)
  - Condition B is modified by a NOTE that states that it is not applicable when second steam line with two MSIV systems inoperable intentionally made inoperable.

LCO 3.7.4 Atmospheric Relief Valves (ARVs)

- Required Action B.1
  - Restore at least two ARV lines to OPERABLE status (Condition B: Two or more required ARV lines inoperable)
  - The Condition is modified by a NOTE that states that it is not applicable when third ARV line intentionally made inoperable.

LCO 3.7.5 Auxiliary Feedwater (AFW) System

- Required Action A.1
  - Restore steam supply to OPERABLE status (Condition A: One steam supply to turbine driven AFW pump inoperable)
- Required Action B.1
  - Restore AFW train to OPERABLE status (Condition B: One AFW train inoperable for reasons other than Condition A)

LCO 3.7.7 Component Cooling Water (CCW) System

- Required Action A.1
  - Restore CCW train to OPERABLE status (Condition A: One CCW train inoperable)

LCO 3.7.8 Nuclear Service Cooling Water (NSCW) System

- Required Action A.1
  - Restore NSCW system to OPERABLE status (Condition A: One NSCW train inoperable)

LCO 3.7.9 Ultimate Heat Sink (UHS)

- Required Action B.1
  - Restore fan(s) and spray cell(s) to OPERABLE status (Condition B: One NSCW cooling tower with one or more required fans and/or spray cells inoperable)
- Required Action C.1
  - Restore fan(s)/spray cell(s) to OPERABLE status. (Condition C.: One NSCW cooling tower with one or more required fans/spray cells inoperable for reasons other than Condition B.)

LCO 3.7.14 Engineered Safety Features (ESF) Room Cooler and Safety Related Chiller System

- Required Action A.1

- Restore the ESF room cooler and safety-related chiller train to OPERABLE status (Condition A: One ESF room cooler and safety-related chiller train inoperable)

LCO 3.8.1 AC [Alternating Current] Sources - Operating

- Required Action A.3
  - Restore required offsite circuit to OPERABLE status (Condition A: One required offsite circuit inoperable)
- Required Action B.6 (Renumbered as Required Action B.4)
  - Restore Diesel Generator (DG) to OPERABLE status (Condition B: One DG inoperable)
- Required Action D.2 (Renumbered as C.2)
  - Restore one required offsite circuit to OPERABLE status (Condition D (Renumbered as Condition C: Two required offsite circuits inoperable)
- Required Action E.1 (Renumbered as D.1)
  - Restore required offsite circuit to OPERABLE status (Condition E (Renumbered as Condition D): One required offsite circuit inoperable AND One DG inoperable)
- Required Action E.2 (Renumbered as D.2)
  - Restore DG to OPERABLE status (Condition E(Renumbered as condition D): One required offsite circuit inoperable AND One DG inoperable)
- Required Action F.1 (Renumbered as E.1)
  - Restore one DG to OPERABLE status (Condition F (Renumbered as Condition E): Two DGs inoperable)
  - The Condition is modified by a NOTE that states that it is not applicable when second DG intentionally made inoperable.
- Required Action G.1 (Renumbered as F.1)
  - Restore automatic load sequencer to OPERABLE Status (Condition G (Renumbered as Condition F): One automatic load sequencer inoperable)
- Required Action I.1 (Renumbered as Required Action G.1)
  - Restore required inoperable AC sources to OPERABLE status (Condition I (Renumbered as Condition G): Three or more required AC sources inoperable.)
  - New Condition G is modified by a note that states that it is not applicable when three or more required AC sources intentionally made inoperable.

LCO 3.8.4 Direct Current (DC) Sources – Operating

- Required Action A.1
  - Restore DC electrical power source to OPERABLE status (Condition A: One DC electrical power source inoperable due to inoperable battery A or B)
- Required Action B.2
  - Restore DC electrical power source to OPERABLE status (Condition B: One DC electrical power source inoperable due to inoperable battery C or D)
- Required Action C.1
  - Restore DC electrical power source to OPERABLE status (Condition C: One DC electrical power source inoperable for reasons other than

Condition A or B)

LCO 3.8.7 Inverters – Operating

- Required Action A.1
  - Restore inverter to OPERABLE status (Condition A: One required inverter inoperable)

LCO 3.8.9 Distribution Systems – Operating

- Required Action A.1
  - Restore AC electrical power distribution subsystems to OPERABLE status (Condition A: One or more AC electrical power distribution subsystems inoperable)
- Required Action B.1
  - Restore AC vital bus electrical power distribution subsystems to OPERABLE status (Condition B: One or more AC vital bus electrical power distribution subsystems inoperable)
- Required Action C.1
  - Restore DC electrical power distribution subsystems to OPERABLE status (Condition C: One or more DC electrical power distribution subsystems inoperable)
- Revised Required Action E.1 (Renumbered as D.1)
  - Restore electrical power distribution subsystems to OPERABLE status to restore safety function. (Condition E (Renumbered as Condition D): Two or more electrical power distribution subsystems inoperable that result in a loss of safety function
  - Condition D is modified by a note that states that it is not applicable when two or more electrical power distribution subsystem intentionally made inoperable.
  - The Actions Table is revised to accommodate the renumbering.

The NRC Staff's current understanding of the propose application of the RICT Program to new conditions.

LCO 3.7.5 Auxiliary Feedwater (AFW) System

- New Condition C: Two AFW trains inoperable
- New Required Action C.1: Restore AFW trains to OPERABLE status
- Actions Table is revised to accommodate new Condition C.

LCO 3.7.7 Component Cooling Water (CCW) System

- New Condition B: Two CCW trains inoperable
- New Required Action B.1: Restore CCW trains to OPERABLE status
- Actions Table is revised to accommodate new Condition B

LCO 3.7.8 Nuclear Service Cooling Water (NSCW) System

- New Condition B: Two NSCW trains inoperable
- New Required Action B.1: Restore NSCW trains to OPERABLE status
- Actions Table is revised to accommodate new Condition B

LCO 3.7.14 Engineered Safety Features (ESF) Room Cooler and Safety Related Chiller System

- New Condition B: Two ESF room cooler and safety-related chiller trains inoperable
- New Required Action B.1: Restore one ESF room cooler and safety-related chiller train to OPERABLE status
- Actions Table is revised to accommodate new Condition B

LCO 3.8.4 DC Sources – Operating
- New Condition D: Two DC electrical power subsystems inoperable
- New Required Action D.1: Restore at least one DC electrical power subsystem to OPERABLE status
- Actions Table is revised to accommodate new Condition D.

LCO 3.8.7 Inverters – Operating
- New Condition B: Two or more required inverters inoperable
- New Required Action B.1: Restore inverters to OPERABLE status
- Actions Table is revised to accommodate new Condition B.