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ENCLOSURE 1

License Amendment Request: Remove Tier 1 and Tier 2* Requirements (LAR 23-000)

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1. SUMMARY DESCRIPTION

Southern Nuclear Operating Company (SNC) requests an amendment to the combined license (COL) for Vogtle Electric Generating Plant (VEGP) Units 3 and 4 (License Numbers NPF-91 and NPF-92, respectively). The proposed change would effectively convert the applicable Tier 1 information and Tier 2* information to Tier 2 information for Units 3 and 4 and revise the Updated Final Safety Analysis Report (UFSAR) accordingly.

2. DETAILED DESCRIPTION

2.1 Design Control Document

Design control document (DCD) information is provided in the UFSAR (which includes the Tier 2 and Tier 2* plant-specific DCD information) and much of the UFSAR high-level information, and considerable detail, is repeated in the required plant-specific Tier 1 information.

2.2 Current Requirements

10 CFR Part 52, Appendix D, Section II, defines *Tier 1* as the portion of the design-related information contained in the generic DCD that is approved and certified by Appendix D and identifies that the Tier 1 information includes:

1. Definitions and general provisions;
2. Design descriptions;
3. Inspections, tests, analyses, and acceptance criteria (ITAAC);
4. Significant site parameters; and
5. Significant interface requirements.

The definition of Tier 1 also indicates that the design descriptions, interface requirements, and site parameters are derived from Tier 2 information.

10 CFR Part 52, Appendix D, Section X.A.2 requires that the licensee maintain a copy of the Tier 1 portion of the DCD that reflects generic and plant-specific changes made to the Tier 1 information.

Currently, SNC maintains a plant-specific document containing the Tier 1 information for both Unit 3 and Unit 4 that includes the generic and plant-specific departures. This Tier 1 information is updated and changes to the information are reported in accordance with 10 CFR Part 52, Appendix D, Section X.B. Compliance with this Tier 1 information is required as identified 10 CFR Part 52, Appendix D, Section III.B where it states in part “An applicant or licensee referencing this appendix... **shall incorporate by reference and comply with the requirements of this appendix, including Tier 1...**”

10 CFR Part 52, Appendix D, Section II, defines *Tier 2** as the portion of the Tier 2 information, designated as such in the generic DCD, which is subject to the change process in Section VIII.B.6. Section VIII.B.6 identifies the specifics of the twenty-four

matters that were specifically designated as Tier 2*. Eight items are identified as permanent Tier 2* matters. These are:

- (1) Maximum fuel rod average burn-up.
- (2) Fuel principal design requirements.
- (3) Fuel criteria evaluation process.
- (4) Fire areas. [[This matter was redesignated as Tier 2 information by Amendment No. 44.]]
- (5) Reactor coolant pump type.
- (6) Small-break loss-of-coolant accident (LOCA) analysis methodology.
- (7) Screen design criteria.
- (8) Heat sink data for containment pressure analysis. [[This matter was effectively redesignated as Tier 2 information by Amendment Nos. 142/141.]]

The remaining sixteen Tier 2* items are identified as matters that revert to Tier 2 information once the unit first achieves full power operation following the finding required by 10 CFR 52.103(g). (Note: VEGP Unit 3 achieved first full power operation on May 29, 2023. VEGP Unit 4 is currently scheduled to achieve first full power operation before the end of 2023.) These sixteen matters are:

- (1) Nuclear Island structural dimensions.
- (2) American Society of Mechanical Engineers Boiler & Pressure Vessel Code ASME Code) piping design and welding restrictions, and ASME Code Cases.
- (3) Design Summary of Critical Sections.
- (4) American Concrete Institute (ACI) 318, ACI 349, American National Standards Institute/American Institute of Steel Construction (ANSI/AISC) N-690, and American Iron and Steel Institute (AISI), "Specification for the Design of Cold Formed Steel Structural Members, Part 1 and 2," 1996 Edition and 2000 Supplement.
- (5) Definition of critical locations and thicknesses.
- (6) Seismic qualification methods and standards.
- (7) Nuclear design of fuel and reactivity control system, except burn-up limit.
- (8) Motor-operated and power-operated valves.
- (9) Instrumentation and control system design processes, methods, and standards.
- (10) Passive residual heat removal (PRHR) natural circulation test (first plant only).
- (11) Automatic depressurization system (ADS) and core make-up tank (CMT) verification tests (first three plants only).
- (12) Polar crane parked orientation.
- (13) Piping design acceptance criteria.
- (14) Containment vessel design parameters, including ASME Code, Section III, Subsection NE.
- (15) Human factors engineering.
- (16) Steel composite structural module details.

The UFSAR incorporates the plant-specific DCD, which includes the Tier 2 information, some of which has been designated as Tier 2*. Amendment No. 44 to the VEGP Unit 3

and Unit 4 COLs reclassified the above Tier 2* fire area matter as Tier 2 information. The remaining Tier 2* matters are subject to the change process in Section VIII.B.6 of 10 CFR Part 52, Appendix D (which requires that the licensee not depart from information included in the Tier 2* material without prior NRC approval), as modified by the criteria-based departure process approved by the NRC in License Amendment Nos. 142 and 141 for VEGP Unit 3 and Unit 4, respectively (which allows the application of the Tier 2 change process in 10 CFR Part 52, Appendix D, paragraph VIII.B.5, provided the specific criteria in License Condition 2.D.(13) are not present).

Thus, potential Tier 1 information impact and potential Tier 2* information impact are considered when any design change is proposed.

2.3 Reason for Proposed Change

As discussed and explained below in the Technical Evaluation, SNC believes that the Tier 1 and the Tier 2* designations have fulfilled their purpose and the additional requirements for proposed changes associated with Tier 1 information and Tier 2* information are no longer warranted.

2.4 Description of Proposed Change

The proposed change (and proposed exemption requested in Enclosure 2) would:

- modify the COLs to include a permanent exemption from the Tier 1 and Tier 2* requirements (as new exemption 2.F.(4)),
- remove the existing COL Condition 2.D.(13) related to the Tier 2* information change process,
- remove the completed ITAAC requirements from the Tier 1 information,
- convert the remaining pertinent Tier 1 information to Tier 2 information, and
- remove the Tier 2* designations to convert the Tier 2* information to Tier 2 information.

To effect the conversion of the Tier 1 information, SNC proposes to incorporate the information currently included in Tier 1 into the UFSAR as Tier 2 information (as proposed new Appendix 14B) except for a) the ITAAC (which have already been completed) and any information specific to the ITAAC (e.g., definitions or other references specific to the ITAAC), and b) a few minor changes for clarity.

In conjunction with the conversion of the "permanent" Tier 2* matters information to Tier 2 information and removal of the Tier 2* designations, some of the information will be identified in the UFSAR as "Integral to NRC Approval of the Methodology," summarized in a table, and discussed in Section 1.1. For the information integral to NRC approval of the methodology, the brackets, italics and * formatting will be retained and a related footnote will be added to read:

*This information considered integral to NRC approval of the methodology. In accordance with NEI 96-07, NRC Staff approval required prior to implementing a change in this information.

For conversion of one of the “permanent” Tier 2* matters information, a clear reference to approved use of the WCAP-12448 Fuel Criteria Evaluation Process (FCEP) for fulfillment of the 10 CFR Part 52, Appendix D, Section VIII, 50.59-like criteria is added to UFSAR Section 4.1 and as new Reference 201 in UFSAR Subsection 4.1.3.

Markups showing or describing these revisions are provided in the Attachment.

3. TECHNICAL EVALUATION

The proposed change would remove requirements related to the plant-specific design control document information designated as Tier 1 and Tier 2*. The effect is that the information would be treated as Tier 2 information that would be maintained and changed as Tier 2 information. Numerous changes are needed to implement this change (as identified above in section 2.4) and each is discussed below.

Tier 1 requirements are defined by 10 CFR Part 52, Appendix D, Section II.D, as:

“...the portion of the design-related information contained in the generic DCD that is approved and certified by this appendix (Tier 1 information). The design descriptions, interface requirements, and site parameters are derived from Tier 2 information. Tier 1 information includes:

1. Definitions and general provisions;
2. Design descriptions;
3. Inspections, tests, analyses, and acceptance criteria (ITAAC);
4. Significant site parameters; and
5. Significant interface requirements.”

On August 3, 2022, the NRC issued the 10 CFR 52.103(g) finding to VEGP Unit 3, recognizing that the ITAAC had been satisfied [ADAMS Accession No. ML20290A284]. On July 28, 2023, the NRC issued the 10 CFR 52.103(g) finding to VEGP Unit 4, recognizing that the ITAAC had been satisfied [ADAMS Accession No. ML22348A093].

As identified in 10 CFR Part 52, Appendix D, Section IX.B.3, “After the Commission has made the finding required by 10 CFR 52.103(g), the ITAAC do not, by virtue of their inclusion within the DCD, constitute regulatory requirements either for licensees or for renewal of the license; except for specific ITAAC, which are the subject of a §52.103(a) hearing, their expiration will occur upon final Commission action in such a proceeding.” No ITAAC are the subject of a §52.103(a) hearing. Thus, the plant-specific Tier 1 information identified as ITAAC is no longer a requirement for VEGP Unit 3 or Unit 4.

The remaining (i.e., non-ITAAC) portion of the plant-specific Tier 1 information required to be maintained by the regulations of 10 CFR Part 52, Appendix D, Section X.A.1 and Section X.A.2, includes design descriptions (including descriptive information provided in non-ITAAC tables and figures), significant site parameters, significant interface requirements, and the associated definitions and general provisions.

While the Tier 1 design descriptions, interface requirements, and site parameters are (as noted above) derived from Tier 2 information, it is noted that there may be some Tier 1 information which is not included in the Tier 2 information. To alleviate any potential for a loss of information in removing the regulatory requirements for Tier 1 (which allows deletion of Tier 1 information), SNC proposes to incorporate the Tier 1 definitions and general provisions, design descriptions (including descriptive information provided in non-ITAAC tables and figures), significant site parameters, and significant interface requirements into the UFSAR (with minor differences) as Tier 2 information as proposed new Appendix 14B.

Specifically, incorporation of the current Tier 1 information as proposed UFSAR Appendix 14B, Design Material that Supported ITAAC Closure, includes:

1. Introduction section is incorporated, with changes shown in the attached markups provided for clarity or to remove information related specifically to the ITAAC.
2. System Based Design Descriptions section (and associated Tables and Figures) is incorporated with changes related to the ITAAC sections (i.e., the specific ITAAC tables (which have already been met), and the references to those tables, are not incorporated; rather each ITAAC table will be identified as "not used").
3. Non-System Based Design Descriptions section (and associated Tables and Figures) is incorporated with changes related to the ITAAC sections (i.e., the specific ITAAC tables (which have already been met), and the references to those tables, are not incorporated; each ITAAC table will be identified as "not used").
4. Interface Requirements section is not incorporated except for the statement that indicates that no Tier 1 interface requirements were identified for the AP1000 standard plant design.
5. Site Parameters section (and associated Tables and Figures) is incorporated with no changes.
6. General – Changes are included to clarify the definitions and information references apply "in this Appendix."

It is also noted that the specific tables that include the ITAAC also include a Design Commitment column, but the information in that column is duplication of the Design Description information being retained and thus, does not represent a loss of information.

With incorporation of the Tier 1 information as described above, the impact would be to use the safety-impact based criteria of 10 CFR Part 52, Appendix D, Paragraph VIII.B.5 for evaluation of changes to determine if prior NRC approval is required, rather than the current Tier 1 criteria of 10 CFR Part 52, Appendix D, Paragraph VIII.A, which would impose the requirement that the NRC must review each change as an exemption and license amendment regardless of safety impact.

During the construction of the VEGP units, it was recognized that some changes required prior NRC approval only because the information was designated as Tier 1, i.e., some of the changes that were required to be reviewed and approved by the NRC had no impact to the health and safety of the public, and the change would not have met the Tier 2 change evaluation criteria that would have otherwise led to prior NRC review and approval. Some of these were simply editorial changes or changes to correct mislabeled equipment identification, or other similar changes that do not change the meaning or substance of the safety information presented. The purpose of the Tier 1 regulations is not served by

requiring prior NRC approval of an exemption for this type of change, and the additional administrative burden, implementation delays, and review costs are not justified.

The NRC staff acknowledged the above in SECY-22-0052 Enclosure 1 stating that “The NRC recognizes that some of the change requests in Tier 1 addressed information that may not have been important to safety.” The Staff suggested that changes of this type can be grouped together. However, grouping the changes diminishes the unnecessary expenditures of manpower and review fees, but does not remove them. The Staff also suggested that if the information in Tier 1 and Tier 2* is not appropriate, the solution may be to update the Tier 1 and Tier 2* information rather than revise the change control process for this information. A proposal is provided in SECY-22-0052 to change Commission regulations to add a definition that contains two general principles for Tier 1 information content: (1) Tier 1 information should be described at a qualitative and functional level of detail, and (2) Tier 1 information should not include detail that could necessitate NRC approval for departures from the certified design that have minimal safety significance, and that the NRC is proposing the same refinements to the definition of Tier 2* information. However, the rule changes proposed by SECY-22-0052 Enclosure 3 only state “Tier 1 and Tier 2* information should contain fundamental functional requirements.” Thus, determining the “fundamental functional requirements” (an undefined term) may be just as subjective as the original criteria which led to “more information in Tier 1 than necessary.” As such, SNC is concerned that attempting to refine the scope of Tier 1 and Tier 2* requirements will lead to significant expenditures of manpower and review fees. Further, it is SNC’s position that with Vogtle Unit 3 and Unit 4 in operation, the purposes of NRC review and approval of any Tier 1 and Tier 2* change (i.e., standardization and early resolution of issues) have been fulfilled and the requirements are no longer necessary to maintain an appropriate level of the health and safety of the public.

SNC also notes that SECY-22-0052 Enclosure 3 acknowledges that “Having different change process applicability requirements for FSARs and plant-specific DCDs in 10 CFR Part 50 and 10 CFR Part 52, respectively, may be unnecessary and could lead to confusion.” These concerns reflect the Commission expectations provided in the 1989 Statements of Consideration for the initial issuance of Part 52 (54FR15372) which states:

The Commission does expect ... that a rule certifying a design is likely to encompass roughly the same design features that § 50.59 prohibits changing without prior NRC approval.

If the expectation and intent was that the certified information would “encompass roughly the same design features that § 50.59 prohibits changing without prior NRC approval,” then the Tier 1 change criteria should be adequately addressed by the § 50.59-like change criteria, and thus, additional Tier 1 change criteria is unnecessary.

During the February 16, 2023, pre-submittal discussions, the NRC Staff indicated that “The Commission specifically chose the exemption process, and not 10 CFR 50.59, as the appropriate change control process for Tier 1 information.” SNC believes that with the application of a safety-impact based § 50.59-like criteria (provided by Tier 2 change process in 10 CFR Part 52, Appendix D, paragraph VIII.B.5), the exemption process adds no substantial benefit to maintaining the health and safety of the public. In addition, SNC’s view is that, once a plant has begun operation, maintaining Tier 1 requirements (and the

associated exemption process) through the remaining life of the plant is a significant regulatory burden and associated additional costs with no significant safety benefit.

With the requested changes, each design change would continue to be considered for potential impact in accordance with the § 50.59-like Tier 2 change criteria in 10 CFR Part 52 Appendix D, and for continued compliance with the COL and applicable regulations. Thus, design changes would continue to be submitted for NRC review and approval prior to implementation generally consistent with the change processes allowed for the Part 50 licensees, as modified by the 10 CFR Part 52, Appendix D, paragraph VIII.B.5 change criteria.

The statements of consideration discussion of the AP1000 Design Certification Final Rule (71FR04464) supports SNC's proposal. Specifically, Section B, "Definitions," pertinent to the appropriate change processes, provided:

- *In an earlier rulemaking (64 FR 53582; October 4, 1999), the Commission revised 10 CFR § 50.59 to incorporate new thresholds for permitting changes to a plant as described in the FSAR without NRC approval. For consistency and clarity, the Commission proposes to use these new thresholds in the proposed AP1000 DCR. Inasmuch as § 50.59 is the primary change mechanism for operating nuclear plants, the Commission believes that future plants referencing the AP1000 DCR should utilize thresholds as close to § 50.59 as is practicable and appropriate.*

While this discussion may have been specific to Tier 2 information, this same justification applies to information currently designated as Tier 1 and Tier 2*.

As noted in the statements of consideration for the 1999 revisions to 10 CFR 50.59 (64FR53582), "The intent of the § 50.59 process is to permit licensees to make changes to the facility, provided the changes maintain acceptable levels of safety as documented in the SAR. The process was thus structured around the licensing approach of design basis events (anticipated operational occurrences and accidents), safety-related mitigation systems, and consequence calculations for the design basis accidents." However, the design certification rulemakings have gone beyond this process to "maintain acceptable levels of safety as documented in the SAR" without any apparent significant benefits. On the contrary, as noted above, the additional requirements have, on several occasions, led to expenditure of licensee and NRC Staff resources with little or no impact on the safety of the plant or the public when the change could have been sufficiently addressed by considering the impact in accordance with the "50.59-like" process provided by Appendix D to 10 CFR Part 52. The continued expenditure of these significant additional resources without a corresponding significant increase in safety are not warranted and should be eliminated as identified in this amendment request.

The statements of consideration discussion of the AP1000 Design Certification Proposed Rule (at 70FR20062) included the following information pertinent to the Tier 1 designation.

- *The Tier 1 design descriptions serve as design commitments for the lifetime of a facility referencing the design certification.*
- *[S]ubsequent modifications to the facility must comply with the design descriptions in the plant-specific DCD unless changes are made in accordance with the change process in Section VIII of this appendix.*

- *The Tier 1 interface requirements are the most significant of the interface requirements for systems that are wholly or partially outside the scope of the standard design, which were submitted in response to 10 CFR 52.47(a)(1)(vii) and must be met by the site-specific design features of a facility that references this appendix.*
- *The Tier 1 site parameters are the most significant site parameters, which were submitted in response to 10 CFR 52.47(a)(1)(iii). An application that references this appendix must demonstrate that the site parameters (both Tier 1 and Tier 2) are met at the proposed site (refer to III.D of this SOC).*

Each of these points is considered below.

- *The Tier 1 design descriptions serve as design commitments for the lifetime of a facility referencing the design certification.*

The Tier 1 design descriptions are based on the more detailed Tier 2 design descriptions which also serve as design commitments for the lifetime of a facility. While the Tier 1 design descriptions, interface requirements, and site parameters are derived from Tier 2 information, it is noted that there may be some Tier 1 information that is not included in the Tier 2 information. To alleviate potential for loss of information in removing the regulatory requirement for Tier 1 (which allows deletion of Tier 1 information), SNC proposes to incorporate the information currently included in Tier 1 (except for ITAAC information) into the UFSAR as Tier 2 information (as proposed new Appendix 14B). Thus, these design commitments are not removed by the proposed amendment (and exemption from the Tier 1 requirements).

- *[S]ubsequent modifications to the facility must comply with the design descriptions in the plant-specific DCD unless changes are made in accordance with the change process in Section VIII of this appendix.*

Subsequent modifications to the facility design must still comply with the design descriptions in the plant-specific DCD unless changes are made in accordance with the change process in Section VIII applicable for the Tier 2 design descriptions. Thus, the review requirements for subsequent proposed modifications are not removed by the proposed exemption from the Tier 1 requirements, the proposed change to allow the use of Tier 2 change control criteria allows for an appropriate threshold for requiring prior NRC review and approval.

With regard to standardization, there are several pertinent points provided in the Statements of Consideration for the initial issuance of Part 52 (54FR15372) many of which indicate an intent of “early resolution” of issues:

In the Two General Responses to Comments discussion, “However, the Commission has stuck to the simple aim in this rulemaking of providing procedures for the standardization of nuclear power plants and more generally for the early resolution of safety and environmental issues in licensing proceedings.”

Under the Applicability of Existing Standards discussion, “Application of Parts 20, 50, 73, and 100 to the certification of new designs, as reflected in § 52.48, should go a long way toward establishing the regulatory standard that new designs must meet, and thereby provide the regulatory stability that is an essential prerequisite to realizing the benefits of standardization.”

More particularly, under the Finality discussion, “Standardization has the double aim of enhancing safety and making it possible to resolve design issues before construction. Of these two aims, enhanced safety is the chief, because pre-construction resolution of design issues could be achieved simply through combined construction permits and operating licenses with conditions. Achievement of the enhanced safety which standardization makes possible will be frustrated if too frequent changes to either a certified design or the plants referencing it are permitted.”

The rule put forward principally three means of preventing a continual regression from standardization. First, the rule required that any amendment proffered by the “holder” of a certification be considered in a notice and comment rulemaking and granted if the amendment complied with the Atomic Energy Act and the Commission’s regulations. Second, the rule prohibited the licensee of a plant built according to a certified design from making any change to any part of the plant which was described in the certification unless the licensee had been granted an exemption under 10 CFR 50.12 from the rule certifying the design. Third, the rule stated that the Commission would not backfit a certified design or the plants built according to it unless a backfit were necessary to assure compliance with the applicable regulations or to assure adequate protection of public health and safety. See § 52.63 of the proposed rule, 53 FR 32074, col. 3, to 32075, col. 2.”

The first of these “three means of preventing a continual regression from standardization” is not applicable to combined license holders. The second and third “means” are pertinent to the exemption request.

To-date, approvals have been granted for more than one hundred Tier 1 exemptions, more than fifty Tier 2* changes, and more than forty changes to the Technical Specifications. For completeness, there have also been fourteen changes that affected only the COL, three changes for approval based on a change to a method of evaluation, and a few other changes related to emergency planning and security topics.

Of note is that for the over one hundred Tier 1 exemption approvals and the over fifty Tier 2* departure approvals, the NRC Staff has not taken any action related to imposing the change via rulemaking pursuant to § 52.63 for either the certified design or to the other combined license holders. For each exemption approved, the 52.63(a)(4)(ii) “special circumstances” were justified to “outweigh any decrease in safety from the reduction in standardization.” As such, the divergence from standardization was not deemed to be a significant reduction in safety.

To the extent that “standardization of the certification information” is desired, the Commission can still implement the modification on the design certification rule under 52.63(a)(1) and apply the modification to plants referencing the AP1000 certified design per 52.63(a)(3), or through 50.109, “Backfitting,” as appropriate.

To envision the utilization of the 52.63(a)(4)(ii) “special circumstances” hurdle to enforce greater standardization (where reduction in safety is not present) inappropriately delegates the responsibility for achieving the standardization goal to the combined license holder. The requested amendment (and exemption) should not be withheld on this basis.

Should this requested amendment (and exemption) be approved, the maintenance of standardization would continue to be advantageous to the future combined license

holders (as it was deemed to be for VEGP Units 3 and 4) and the vast majority of the previously incorporated VEGP Units 3 and 4 changes would be expected to be requested by, and approved for, other AP1000 combined license holders. Similarly, there are numerous other Tier 2 or other licensing basis document changes that did not require prior NRC approval (~1400 non-LAR changes made for VEGP Units 3 and 4 to-date), that will also be advantageous (and thus likely) to be implemented by other AP1000 combined license holders, which will maintain appropriate standardization.

Finally, approval of the amendment (and exemption) for VEGP (and post construction for other AP1000 COLs) may actually promote standardization by reducing the cost and delay of implementation by each of the combined license holders through simplification of the process for evaluation and acceptance of future minor design improvements. Non-trivial cost and burden for non-safety significant license amendment and exemptions may actually deter from standardization in that licensees may avoid subjecting themselves to the license amendment and exemption processes. Thus, a simpler internal process under Part 52 Appendix D, Section VIII 50.59-like criteria could actually improve maintenance of standardization.

As noted in SECY-22-0052 Enclosure 3, "experience shows that the requirement for maintaining standardization as a criterion for allowing changes is often burdensome to a licensee without significant benefit." As a result, the SECY proposes Part 52 revisions to remove the Part 52 requirement to consider standardization as a criterion for justification for making changes in a combined license.

- *The Tier 1 interface requirements are the most significant of the interface requirements for systems that are wholly or partially outside the scope of the standard design, which were submitted in response to 10 CFR 52.47(a)(1)(vii) and must be met by the site-specific design features of a facility that references this appendix.*

The Tier 1 interface requirements were addressed during the COL application review and shown to be met by the site-specific design features of the facility in the safety analysis report which incorporates the plant-specific and more detailed Tier 2 design descriptions. Thus, the interface requirements and their relationship to the site-specific design features of the facility continue to be described and met even with the proposed amendment removing the Tier 1 requirements.

- *The Tier 1 site parameters are the most significant site parameters, which were submitted in response to 10 CFR 52.47(a)(1)(iii). An application that references this appendix must demonstrate that the site parameters (both Tier 1 and Tier 2) are met at the proposed site (refer to III.D of this SOC).*

The Tier 1 site parameters were addressed during the COL application review and shown to be met by the facility site in the safety analysis report which incorporates the plant-specific and more detailed Tier 2 design descriptions. Thus, the site parameters and their relationship to the facility site continue to be described and met even with the proposed amendment removing the Tier 1 requirements.

The NRC has also identified in Appendix D to 10 CFR Part 52 that some Tier 2 information (designated as Tier 2*) must also be reviewed and approved by NRC prior to implementing changes to that information. As such, the above discussions regarding prior approval of Tier 1 information would also be generally applicable to Tier 2* information.

Similar to the above Tier 1 discussion, the statements of consideration discussion of the AP1000 Design Certification Final Rule (71FR04464) included the following information pertinent to the Tier 2* designation.

- *Certain Tier 2 information has been designated in the generic DCD with brackets and italicized text as “Tier 2*” information and, as discussed in greater detail in the section-by-section explanation for paragraph VIII.B, a plant-specific departure from Tier 2* information requires prior NRC approval.*

The Tier 2* design description information also continues to serve as design commitments for the lifetime of a facility. Thus, the Tier 2* design commitments are not removed by the proposed exemption from the Tier 2* requirements but would continue to be treated as Tier 2 design commitments.

Thus, as noted above, approval of the proposed amendment to add new COL exemptions from the Tier 1 and Tier 2* requirements would not remove design information from the licensing basis. Subsequent changes to the facility design would continue to maintain acceptable levels of safety through evaluations in accordance with the “50.59-like” criteria provided in Section VIII of Appendix D to 10 CFR Part 52.

SNC previously requested via LAR 17-037 (and was granted) a site-specific permanent exemption and license amendment that allows use of alternate criteria to determine whether a proposed Tier 2* departure can be treated as a departure from Tier 2 information under 10 CFR Part 52, Appendix D, paragraph VIII.B.5 (similar to the § 50.59 change process), or whether the departure requires prior NRC approval under Appendix D, paragraph VIII.B.6.1. The safety evaluation for the amendment states “The staff focused on whether the proposed exemption and new license condition would assure that departures from Tier 2* information would be governed by regulatory controls commensurate with the safety significance of the information.” As noted above, SNC agrees with “The intent of the § 50.59 process is to permit licensees to make changes to the facility, provided the changes maintain acceptable levels of safety as documented in the SAR.” Thus, it is reasonable to deduce that if the § 50.59 process maintains acceptable levels of safety for Part 50 plants, that the Tier 2 change control process that is similar to the § 50.59 process would also be appropriate “regulatory controls commensurate with the safety significance of the information” and that the additional Tier 2* designations and change controls are, therefore, unnecessary.

Some Tier 2* information has been designated as such because the NRC Staff determined that a change in the input to an analysis should receive NRC approval prior to implementation. The specific affected UFSAR information includes information in Subsections 4.1.1, 4.3.1.1.1, 5.4.1.2.1, 6.3.2.2.7.1, 15.6.5.4B.2.2 and 15.6.5.4B.2.3. However, a change to this type of information has also been addressed in the Part 50 change processes (§ 50.59(c)(2)(viii) for changes to a method of evaluation). NEI 96-07, Section 4.2.1.3, Screening Changes to UFSAR Methods of Evaluation, indicates that a change does not screen out if it involves a change to an input parameter that was integral to NRC approval of the methodology. This guidance is similarly applied for changes to a method of evaluation under Part 52 through NEI 96-07, Appendix C, Section 3.6. Thus, this information need not be designated as Tier 2* to accomplish the prior NRC review and approval for proposed changes and the Tier 2* designations will be removed.

In order to be clear about this in the licensing basis and identify these methodology concerns with the need for NRC review and approval prior to implementation, the Tier 2* information

of concern will be specifically identified in the appropriate UFSAR subsection as “Integral to NRC Approval of the Methodology,” and summarized in a revised Table 1.1-201, with the revised table identified and discussed in Section 1.1. In the above identified subsections, the information will be revised to Tier 2 information; however, the brackets, italics and * formatting will be retained, and a related footnote will be added (to reflect that the information is integral to the methodology) to read:

*This information considered integral to NRC approval of the methodology. In accordance with NEI 96-07, a change to this information is considered a change to the methodology.

A Tier 2* designation is also currently applied to UFSAR Table 6.2.1.1-10. However, NRC approval of VEGP Units 3 and 4 LAR 17-037 effectively removed the Tier 2* designation from the heat sink data for containment peak pressure analysis (Topic 8 in the LAR) as this Tier 2* matter was not included in the approved License Condition 2.D.(13) departure considerations that would require prior NRC approval. The SER for the amendment [ML18207A262] stated “the staff also finds the Tier 2 departure requirements in the “50.59-like” criteria found in 10 CFR Part 52, Appendix D, paragraph VIII.B.5 and applied to Tier 2* Topic 8 as part of License Condition 2.D.(13) sufficient to address departures related to heat sinks for containment pressure analysis. The staff reached this finding based on guidance contained in NEI 96-07 (as endorsed by RG 1.187) regarding containment pressure analysis, the staff evaluation contained in Supplement 2 of NUREG-1793, and SECY-17-0075.” As such, the heat sink data is currently being evaluated as Tier 2 information. Thus, the Tier 2* designations are removed from Table 6.2.1.1-10 and the heat sink data is removed from Table 1.1-201.

A Tier 2* designation is also currently applied in several places in the UFSAR (as identified in UFSAR Table 1.1-201) to require that changes to WCAP-12488, Westinghouse Fuel Criteria Evaluation Process (FCEP), would require NRC review and approval prior to implementation. Technical Specification 4.2.1, Fuel Assemblies, requires that “Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff approved codes and methods and shown by tests or analyses to comply with fuel safety design bases” which limits changes to prior NRC review and approval. Therefore, the Tier 2* designation is a duplication of regulatory requirements, and thus, unnecessary. As such, the Tier 2* designations are removed and the WCAP is removed from Table 1.1-201.

Additionally, the WCAP specifically states in Section 3.1 “The FCEP allows for 10CFR50.59 conclusions to be reached by demonstrating that the criteria defined in this document are used for the evaluation of the fuel mechanical change(s) and are met.” For the AP1000, NUREG-1793, the NRC safety evaluation report for the AP1000, identifies in Section 4.2.5 that “WCAP-12488-A describes the design bases and acceptance limits used by the applicant to analyze the AP1000 fuel rods and assemblies,” and that “Moreover, a combined license (COL) applicant or holder will evaluate future changes to the in-core components (including control rods, burnable absorber rods, and neutron source rods) using the criteria defined in WCAP-12488-A.” A clear statement of the approved use of the WCAP FCEP in the fuel area to reach the 10 CFR Part 52, Appendix D, Section VIII, 50.59-like criteria conclusions is added to UFSAR Section 4.1 and as new Reference 201 (AP1000 SER) in UFSAR Subsection 4.1.3.

With these changes, the Tier 2* designations and associated footnotes can be deleted (with footnotes for some items revised as noted above).

Finally, this request is also considered to be consistent with the NRC's Principles of Good Regulation (ML14135A076) for "efficiency" which state: "Regulatory activities should be consistent with the degree of risk reduction they achieve. Where several effective alternatives are available, the option which minimizes the use of resources should be adopted." As discussed above, no significant increase in safety is observable from the additional regulatory requirements associated with the continued designation of design information as Tier 1 or Tier 2*.

With consideration of the above information, SNC is requesting an amendment to provide a permanent exemption from the provisions of 10 CFR Part 52, Appendix D, to maintain, and to evaluate and document departures and further exemptions from, the plant-specific Tier 1 and Tier 2* information applicable to the VEGP Unit 3 and Unit 4 COLs. With approval of the requested amendment (and exemption), SNC would maintain the current Tier 1 information (as shown in the Attachment) and the Tier 2* information as Tier 2 information for future change considerations.

10 CFR 52.98(c) requires NRC approval for any modification to, addition to, or deletion from the terms and conditions of a COL. This request involves changes to a license condition related to exemptions. Therefore, this activity requires NRC approval of the proposed amendment to the COL.

4 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

The AP1000 Design Control Document (DCD) Tier 1 information is defined and controlled in accordance with 10 CFR Part 52, Appendix D, as regulation. The DCD Tier 2* information is also identified and controlled as incorporated into the VEGP Updated Final Safety Analysis Report (UFSAR).

4.2 Precedent

In response to SNC amendment and exemption application dated March 6, 2015, an exemption was granted along with Amendment No. 44 to redesignate Tier 2* information on fire area figures as Tier 2 information [ML15191A128].

In response to SNC amendment and exemption application dated December 21, 2017, as supplemented by letters dated April 6, May 11, June 18, August 3, August 10, and September 13, 2018, an exemption was granted along with Amendment Nos. 142 and 141 (for VEGP Units 3 and 4, respectively) to approve implementation of a criteria-based evaluation process for Tier 2* information. This approval also effectively redesignated Tier 2* information on heat sink data as Tier 2 information.

4.3 Significant Hazards Consideration

Southern Nuclear Operating Company (SNC) is requesting an amendment to Combined License (COL) Nos. NPF-91 and NPF-92 for Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4. The license amendment request (LAR) proposes to revise the VEGP Unit 3 and Unit 4 combined licenses (COLs) to effectively convert the applicable Tier 1 and Tier 2* information to Tier 2 information for future considerations and revise the Updated Final Safety Analysis Report (UFSAR) accordingly.

An evaluation to determine whether or not a significant hazards consideration is involved with the proposed amendment was completed by focusing on the three standards set forth in 10 CFR 50.92(c), "Issuance of amendment," as discussed below.

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed changes do not affect accident evaluations since there are no changes to the plant, no changes to analysis of the plant, and no changes to testing of the plant. The proposed changes do not adversely affect the design or operation of any structures, systems, or components (SSCs) associated with an accident initiator or initiating sequence of events. The proposed changes continue to maintain the initial conditions and operating limits assumed during normal operation, assumed by the accident analysis, and assumed in anticipated operational occurrences. Therefore, the proposed changes do not result in any increase in probability of an analyzed accident occurring.

The proposed changes do not involve a change to any mitigation systems or features or the predicted radiological releases due to postulated accident conditions. Thus, the consequences of the accidents previously evaluated are not adversely affected.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed changes do not involve a change to any structure, system or component and do not change the function of the related systems, and thus, the changes do not introduce a new or different kind of accident from any previously evaluated.

Therefore, the proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response:

No.

The proposed changes continue to provide the required functional capability of the safety systems for previously evaluated accidents and anticipated operational occurrences. The proposed changes do not change the function of the related systems nor significantly affect the margins provided by the systems. No safety analysis or design basis acceptance limit/criterion is challenged or exceeded by the requested changes.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, it is concluded that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of “no significant hazards consideration” is justified.

4.4 Conclusions

Based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission’s regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public. Therefore, it is concluded that the requested amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of “no significant hazards consideration” is justified.

5 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed changes require an amendment to the COL. A review of the anticipated operational effects of the requested amendment has determined that the requested amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9), in that:

(i) *There is no significant hazards consideration.*

As documented in Section 4.3, Significant Hazards Consideration, of this license amendment request, an evaluation was completed to determine whether or not a significant hazards consideration is involved by focusing on the three standards set forth in 10 CFR 50.92, “Issuance of amendment.” The Significant Hazards Consideration evaluation determined that (1) the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated; (2) the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated; and (3) the proposed amendment does not involve a significant reduction in a margin of safety. Therefore, it is concluded that the proposed amendment does not involve a significant hazards consideration under the

standards set forth in 10 CFR 50.92(c), and accordingly, a finding of “no significant hazards consideration” is justified.

- (ii) *There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.*

The proposed changes are unrelated to any aspect of plant operation that would introduce any change to effluent types (e.g., effluents containing chemicals or biocides, sanitary system effluents, and other effluents) or affect any plant radiological or non-radiological effluent release quantities. Furthermore, the proposed changes do not affect any effluent release path or diminish the functionality of any design or operational features that are credited with controlling the release of effluents during plant operation. Therefore, it is concluded that the proposed amendment does not involve a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite.

- (iii) *There is no significant increase in individual or cumulative occupational radiation exposure.*

The proposed change in the requested amendment does not affect the shielding capability of, or alter any walls, floors, or other structures that provide shielding. Plant radiation zones and controls under 10 CFR 20 preclude a significant increase in occupational radiation exposure. Therefore, the proposed amendment does not involve a significant increase in individual or cumulative occupational radiation exposure.

Based on the above review of the proposed amendment, it has been determined that anticipated operational effects of the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in the individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

ENCLOSURE 2

Exemption Request: Exemption from Tier 1 and Tier 2* Requirements (LAR 23-000)

1.0 PURPOSE

2.0 BACKGROUND

3.0 TECHNICAL JUSTIFICATION OF ACCEPTABILITY

4.0 JUSTIFICATION OF EXEMPTION

5.0 RISK ASSESSMENT

6.0 PRECEDENT EXEMPTIONS

7.0 ENVIRONMENTAL CONSIDERATION

8.0 CONCLUSION

1.0 Purpose

Southern Nuclear Operating Company (SNC or the Licensee) requests a permanent exemption from the provisions of 10 CFR Part 52, Appendix D, for Tier 1 and Tier 2* information as applicable to the Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 combined licenses (COLs). With approval of the requested exemption, all non- Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Tier 1 and Tier 2* information would convert to, and be addressed as, Tier 2 information.

With construction and ITAAC complete and confirmed to comply with the certified design (as amended and exempted), SNC believes the applicable controls for Tier 2 and plant-specific final safety analysis report information are sufficient to evaluate changes to the approved information that are required to be submitted to the NRC for prior review and approval.

This request for exemption provides the technical and regulatory basis to demonstrate that 10 CFR 52.63, § 52.7, and § 50.12 requirements are met and applies the requirements of 10 CFR Part 52, Appendix D, to allow departures from Tier 1 information and to allow departures from Tier 2* information for Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4.

2.0 Background

SNC is the holder of Combined License Nos. NPF-91 and NPF-92, which authorizes construction and operation of a Westinghouse Electric Company AP1000 nuclear plants named VEGP Unit 3 and Unit 4, respectively.

Southern Nuclear Operating Company (SNC) notified the NRC on July 29, 2022, that all the Unit 3 acceptance criteria for the inspections, tests, and analyses, and acceptance criteria (ITAAC) are met [ADAMS Accession No. ML22210A090]. On August 3, 2022, the NRC issued their 10 CFR 52.103(g) finding that the acceptance criteria in the ITAAC are met [ADAMS Accession No. ML20290A284].

Similarly, SNC notified the NRC on July 20, 2023, that all the Unit 4 acceptance criteria for the ITAAC are met [ADAMS Accession No. ML23201A266]. On July 28, 2023, the NRC issued their 10 CFR 52.103(g) finding that the acceptance criteria in the ITAAC are met [ADAMS Accession No. ML22348A093].

As noted in SECY-22-0052 Enclosure 1, providing proposed rule revisions based on reviews of lessons learned from new reactor licensing, “requiring licensees subject to the DC change process to obtain NRC approval before making certain physical changes, while allowing part 50 licensees to proceed with the physical changes before asking for NRC approval may impose an unnecessary burden on those licensees subject to the DC change process.”

3.0 Technical Justification of Acceptability

The proposed change would remove requirements related to the plant-specific design control document information designated as Tier 1 and Tier 2*. The effect is that the information would be treated as Tier 2 information that would be maintained and changed

as Tier 2 information. Numerous changes are needed to implement this change (as identified in the Attachment) and each is discussed below.

Tier 1 requirements are defined by 10 CFR Part 52, Appendix D, Section II.D, as:

“...the portion of the design-related information contained in the generic DCD that is approved and certified by this appendix (Tier 1 information). The design descriptions, interface requirements, and site parameters are derived from Tier 2 information. Tier 1 information includes:

1. Definitions and general provisions;
2. Design descriptions;
3. Inspections, tests, analyses, and acceptance criteria (ITAAC);
4. Significant site parameters; and
5. Significant interface requirements.”

On August 3, 2022, the NRC issued the 10 CFR 52.103(g) letter to VEGP Unit 3, recognizing that the ITAAC had been satisfied [ADAMS Accession No. ML20290A284]. On July 28, 2023, the NRC issued the 10 CFR 52.103(g) letter to VEGP Unit 4, recognizing that the ITAAC had been satisfied [ADAMS Accession No. ML22348A093].

As identified in 10 CFR Part 52, Appendix D, Section IX.B.3, “After the Commission has made the finding required by 10 CFR 52.103(g), the ITAAC do not, by virtue of their inclusion within the DCD, constitute regulatory requirements either for licensees or for renewal of the license; except for specific ITAAC, which are the subject of a §52.103(a) hearing, their expiration will occur upon final Commission action in such a proceeding.” No ITAAC are the subject of a §52.103(a) hearing. Thus, the plant-specific Tier 1 information identified as ITAAC is no longer a requirement for VEGP Unit 3 or Unit 4.

The remaining (i.e., non-ITAAC) portion of the plant-specific Tier 1 information required to be maintained by the regulations of 10 CFR Part 52, Appendix D, Section X.A.1 and Section X.A.2, includes design descriptions (including descriptive information provided in non-ITAAC tables and figures), significant site parameters, significant interface requirements, and the associated definitions and general provisions.

While the Tier 1 design descriptions, interface requirements, and site parameters are (as noted above) derived from Tier 2 information, it is noted that there may be some Tier 1 information which is not included in the Tier 2 information. To alleviate any potential for a loss of information in removing the regulatory requirements for Tier 1 (which allows deletion of Tier 1 information), SNC proposes to incorporate the Tier 1 definitions and general provisions, design descriptions (including descriptive information provided in non-ITAAC tables and figures), significant site parameters, and significant interface requirements into the UFSAR (with minor differences) as Tier 2 information as proposed new Appendix 14B.

Specifically, incorporation of the current Tier 1 information as proposed UFSAR Appendix 14B, Design Material that Supported ITAAC Closure, includes:

1. Introduction section is incorporated, with changes shown in the attached markups provided for clarity or to remove information related specifically to the ITAAC.

2. System Based Design Descriptions section (and associated Tables and Figures) is incorporated with changes related to the ITAAC sections (i.e., the specific ITAAC tables (which have already been met), and the references to those tables, are not incorporated; rather each ITAAC table will be identified as “not used”).
3. Non-System Based Design Descriptions section (and associated Tables and Figures) is incorporated with changes related to the ITAAC sections (i.e., the specific ITAAC tables (which have already been met), and the references to those tables, are not incorporated; rather each ITAAC table will be identified as “not used”).
4. Interface Requirements section is not incorporated except for the statement that indicates that no Tier 1 interface requirements were identified for the AP1000 standard plant design.
5. Site Parameters section (and associated Tables and Figures) is incorporated with no changes.
6. General – Changes are included to clarify the definitions and information references apply “in this Appendix.”

It is also noted that the specific tables that include the ITAAC also include a Design Commitment column, but the information in that column is duplication of the Design Description information being retained and thus, does not represent a loss of information.

With incorporation of the Tier 1 information as described above, the impact would be to use the safety-impact based criteria of 10 CFR Part 52, Appendix D, Paragraph VIII.B.5 for evaluation of changes to determine if prior NRC approval is required, rather than the current Tier 1 criteria of 10 CFR Part 52, Appendix D, Paragraph VIII.A, which would impose the requirement that the NRC must review each change as an exemption and license amendment regardless of safety impact.

During the construction of the VEGP units, it was recognized that some changes required prior NRC approval only because the information was designated as Tier 1, i.e., some of the changes that were required to be reviewed and approved by the NRC had no impact to the health and safety of the public, and the change would not have met the Tier 2 change evaluation criteria that would have otherwise led to prior NRC review and approval. Some of these were simply editorial changes or changes to correct mislabeled equipment identification, or other similar changes that do not change the meaning or substance of the safety information presented. The purpose of the Tier 1 regulations is not served by requiring prior NRC approval of an exemption for this type of change, and the additional administrative burden, implementation delays, and review costs are not justified.

The NRC staff acknowledged the above in SECY-22-0052 Enclosure 1 stating that “The NRC recognizes that some of the change requests in Tier 1 addressed information that may not have been important to safety.” The Staff suggested that changes of this type can be grouped together. However, grouping the changes diminishes the unnecessary expenditures of manpower and review fees, but does not remove them. The Staff also suggested that if the information in Tier 1 and Tier 2* is not appropriate, the solution may be to update the Tier 1 and Tier 2* information rather than revise the change control process for this information. A proposal is provided in SECY-22-0052 to change Commission regulations to add a definition that contains two general principles for Tier 1 information content: (1) Tier 1 information should be described at a qualitative and functional level of detail, and (2) Tier 1 information should not include detail that could necessitate NRC approval for departures from the certified design that have minimal safety significance, and

that the NRC is proposing the same refinements to the definition of Tier 2* information. However, the rule changes proposed by SECY-22-0052 Enclosure 3 only state “Tier 1 and Tier 2* information should contain fundamental functional requirements.” Thus, determining the “fundamental functional requirements” (an undefined term) may be just as subjective as the original criteria which led to “more information in Tier 1 than necessary.” As such, SNC is concerned that attempting to refine the scope of Tier 1 and Tier 2* requirements will lead to significant expenditures of manpower and review fees. Further, it is SNC’s position that with Vogtle Unit 3 and Unit 4 in operation, the purposes of NRC review and approval of any Tier 1 and Tier 2* change (i.e., standardization and early resolution of issues) have been fulfilled and the requirements are no longer necessary to maintain an appropriate level of the health and safety of the public.

SNC also notes that SECY-22-0052 Enclosure 3 acknowledges that “Having different change process applicability requirements for FSARs and plant-specific DCDs in 10 CFR Part 50 and 10 CFR Part 52, respectively, may be unnecessary and could lead to confusion.” These concerns reflect the Commission expectations provided in the 1989 Statements of Consideration for the initial issuance of Part 52 (54FR15372) which states:

The Commission does expect ... that a rule certifying a design is likely to encompass roughly the same design features that § 50.59 prohibits changing without prior NRC approval.

If the expectation and intent was that the certified information would “encompass roughly the same design features that § 50.59 prohibits changing without prior NRC approval,” then the Tier 1 change criteria should be adequately addressed by the § 50.59-like change criteria, and thus, additional Tier 1 change criteria is unnecessary.

During the February 16, 2023, pre-submittal discussions, the NRC Staff indicated that “The Commission specifically chose the exemption process, and not 10 CFR 50.59, as the appropriate change control process for Tier 1 information.” SNC believes that with the application of a safety-impact based § 50.59-like criteria (provided by Tier 2 change process in 10 CFR Part 52, Appendix D, paragraph VIII.B.5), the exemption process adds no substantial benefit to maintaining the health and safety of the public. In addition, SNC’s view is that, once a plant has begun operation, maintaining Tier 1 requirements (and the associated exemption process) through the remaining life of the plant is a significant regulatory burden and associated additional costs with no significant safety benefit.

With the requested changes, each design change would continue to be considered for potential impact in accordance with the § 50.59-like Tier 2 change criteria in 10 CFR Part 52 Appendix D, and for continued compliance with the COL and applicable regulations. Thus, design changes would continue to be submitted for NRC review and approval prior to implementation generally consistent with the change processes allowed for the Part 50 licensees, as modified by the 10 CFR Part 52, Appendix D, paragraph VIII.B.5 change criteria.

The statements of consideration discussion of the AP1000 Design Certification Final Rule (71FR04464) supports SNC’s proposal. Specifically, Section B, “Definitions,” pertinent to the appropriate change processes, provided:

- *In an earlier rulemaking (64 FR 53582; October 4, 1999), the Commission revised 10 CFR § 50.59 to incorporate new thresholds for permitting changes to a plant as described in the FSAR without NRC approval. For consistency and clarity, the Commission proposes to use these new thresholds in the proposed AP1000 DCR. Inasmuch as § 50.59 is the primary change mechanism for operating nuclear plants, the Commission believes that future plants referencing the AP1000 DCR should utilize thresholds as close to § 50.59 as is practicable and appropriate.*

While this discussion may have been specific to Tier 2 information, this same justification applies to information currently designated as Tier 1 and Tier 2*.

As noted in the statements of consideration for the 1999 revisions to 10 CFR 50.59 (64FR53582), "The intent of the § 50.59 process is to permit licensees to make changes to the facility, provided the changes maintain acceptable levels of safety as documented in the SAR. The process was thus structured around the licensing approach of design basis events (anticipated operational occurrences and accidents), safety-related mitigation systems, and consequence calculations for the design basis accidents." However, the design certification rulemakings have gone beyond this process to "maintain acceptable levels of safety as documented in the SAR" without any apparent significant benefits. On the contrary, as noted above, the additional requirements have, on several occasions, led to expenditure of licensee and NRC Staff resources with little or no impact on the safety of the plant or the public when the change could have been sufficiently addressed by considering the impact in accordance with the "50.59-like" process provided by Appendix D to 10 CFR Part 52. The continued expenditure of these significant additional resources without a corresponding significant increase in safety are not warranted and should be eliminated as identified in this exemption request.

The statements of consideration discussion of the AP1000 Design Certification Final Rule (at 70FR20062) included the following information pertinent to the Tier 1 designation.

- *The Tier 1 design descriptions serve as design commitments for the lifetime of a facility referencing the design certification.*
- *[S]ubsequent modifications to the facility must comply with the design descriptions in the plant-specific DCD unless changes are made in accordance with the change process in Section VIII of this appendix.*
- *The Tier 1 interface requirements are the most significant of the interface requirements for systems that are wholly or partially outside the scope of the standard design, which were submitted in response to 10 CFR 52.47(a)(1)(vii) and must be met by the site-specific design features of a facility that references this appendix.*
- *The Tier 1 site parameters are the most significant site parameters, which were submitted in response to 10 CFR 52.47(a)(1)(iii). An application that references this appendix must demonstrate that the site parameters (both Tier 1 and Tier 2) are met at the proposed site (refer to III.D of this SOC).*

Each of these points is considered below.

- *The Tier 1 design descriptions serve as design commitments for the lifetime of a facility referencing the design certification.*

The Tier 1 design descriptions are based on the more detailed Tier 2 design descriptions which also serve as design commitments for the lifetime of a facility. While the Tier 1 design descriptions, interface requirements, and site parameters are derived from Tier 2 information, it is noted that there may be some Tier 1 information that is not included in the Tier 2 information. To alleviate potential for loss of information in removing the regulatory requirement for Tier 1 (which allows deletion of Tier 1 information), SNC proposes to incorporate the information currently included in Tier 1 (except for ITAAC information) into the UFSAR as Tier 2 information (as proposed new Appendix 14B). Thus, these design commitments are not removed by the proposed exemption from the Tier 1 requirements.

- *[S]ubsequent modifications to the facility must comply with the design descriptions in the plant-specific DCD unless changes are made in accordance with the change process in Section VIII of this appendix.*

Subsequent modifications to the facility design must still comply with the design descriptions in the plant-specific DCD unless changes are made in accordance with the change process in Section VIII applicable for the Tier 2 design descriptions. Thus, the review requirements for subsequent proposed modifications are not removed by the proposed exemption from the Tier 1 requirements, the proposed change to allow the use of Tier 2 change control criteria allows for an appropriate threshold for requiring prior NRC review and approval.

With regard to standardization, there are several pertinent points provided in the Statements of Consideration for the initial issuance of Part 52 (54FR15372) many of which indicate an intent of “early resolution” of issues:

In the Two General Responses to Comments discussion, “However, the Commission has stuck to the simple aim in this rulemaking of providing procedures for the standardization of nuclear power plants and more generally for the early resolution of safety and environmental issues in licensing proceedings.”

Under the Applicability of Existing Standards discussion, “Application of Parts 20, 50, 73, and 100 to the certification of new designs, as reflected in § 52.48, should go a long way toward establishing the regulatory standard that new designs must meet, and thereby provide the regulatory stability that is an essential prerequisite to realizing the benefits of standardization.”

More particularly, under the Finality discussion, “Standardization has the double aim of enhancing safety and making it possible to resolve design issues before construction. Of these two aims, enhanced safety is the chief, because pre-construction resolution of design issues could be achieved simply through combined construction permits and operating licenses with conditions. Achievement of the enhanced safety which standardization makes possible will be frustrated if too frequent changes to either a certified design or the plants referencing it are permitted.”

The rule put forward principally three means of preventing a continual regression from standardization. First, the rule required that any amendment proffered by the “holder” of a certification be considered in a notice and comment rulemaking and granted if the amendment complied with the Atomic Energy Act and the Commission's regulations. Second, the rule prohibited the licensee of a plant built according to a certified design from making any change to any part of the plant which was described in the certification

unless the licensee had been granted an exemption under 10 CFR 50.12 from the rule certifying the design. Third, the rule stated that the Commission would not backfit a certified design or the plants built according to it unless a backfit were necessary to assure compliance with the applicable regulations or to assure adequate protection of public health and safety. See § 52.63 of the proposed rule, 53 FR 32074, col. 3, to 32075, col. 2.”

The first of these “three means of preventing a continual regression from standardization” is not applicable to combined license holders. The second and third “means” are pertinent to the exemption request.

To-date, approvals have been granted for more than one hundred Tier 1 exemptions, more than fifty Tier 2* changes, and more than forty changes to the Technical Specifications. For completeness, there have also been fourteen changes that affected only the COL, three changes for approval based on a change to a method of evaluation, and a few other changes related to emergency planning and security topics.

Of note is that for the over one hundred Tier 1 exemption approvals and the over fifty Tier 2* departure approvals, the NRC Staff has not taken any action related to imposing the change via rulemaking pursuant to § 52.63 for either the certified design or to the other combined license holders. For each exemption approved, the § 52.63(a)(4)(ii) “special circumstances” were justified to “outweigh any decrease in safety from the reduction in standardization.” As such, the divergence from standardization was not deemed to be a significant reduction in safety.

To the extent that “standardization of the certification information” is desired, the Commission can still implement the modification on the design certification rule under § 52.63(a)(1) and apply the modification to plants referencing the AP1000 certified design per § 52.63(a)(3), or through § 50.109, “Backfitting,” as appropriate.

To envision the utilization of the § 52.63(a)(4)(ii) “special circumstances” hurdle to enforce greater standardization (where reduction in safety is not present) inappropriately delegates the responsibility for achieving the standardization goal to the combined license holder. The exemption should not be withheld on this basis.

Should this requested exemption (and amendment) be approved, the maintenance of standardization would continue to be advantageous to the future combined license holders (as it was deemed to be for VEGP Units 3 and 4) and the vast majority of the previously incorporated VEGP Units 3 and 4 changes would be expected to be requested by, and approved for, other AP1000 combined license holders. Similarly, there are numerous other Tier 2 or other licensing basis document changes that did not require prior NRC approval (~1400 non-LAR changes made for VEGP Units 3 and 4 to-date), that will also be advantageous (and thus likely) to be implemented by other AP1000 combined license holders, which will maintain appropriate standardization.

Finally, approval of the exemption (and amendment) for VEGP (and post construction for other AP1000 COLs) may actually promote standardization by reducing the cost and delay of implementation by each of the combined license holders through simplification of the process for evaluation and acceptance of future minor design improvements. Non-trivial cost and burden for non-safety significant license amendment and exemptions may actually deter from standardization in that licensees may avoid subjecting themselves to the license amendment and exemption processes. Thus, a

simpler internal process under Part 52 Appendix D, Section VIII 50.59-like criteria could actually improve maintenance of standardization.

As noted in SECY-22-0052 Enclosure 3, “experience shows that the requirement for maintaining standardization as a criterion for allowing changes is often burdensome to a licensee without significant benefit.” As a result, the SECY proposes Part 52 revisions to remove the Part 52 requirement to consider standardization as a criterion for justification for making changes in a combined license.

- *The Tier 1 interface requirements are the most significant of the interface requirements for systems that are wholly or partially outside the scope of the standard design, which were submitted in response to 10 CFR 52.47(a)(1)(vii) and must be met by the site-specific design features of a facility that references this appendix.*

The Tier 1 interface requirements were addressed during the COL application review and shown to be met by the site-specific design features of the facility in the safety analysis report which incorporates the plant-specific and more detailed Tier 2 design descriptions. Thus, the interface requirements and their relationship to the site-specific design features of the facility continue to be described and met even with the proposed exemption from the Tier 1 requirements.

- *The Tier 1 site parameters are the most significant site parameters, which were submitted in response to 10 CFR 52.47(a)(1)(iii). An application that references this appendix must demonstrate that the site parameters (both Tier 1 and Tier 2) are met at the proposed site (refer to III.D of this SOC).*

The Tier 1 site parameters were addressed during the COL application review and shown to be met by the facility site in the safety analysis report which incorporates the plant-specific and more detailed Tier 2 design descriptions. Thus, the site parameters and their relationship to the facility site continue to be described and met even with the proposed exemption from the Tier 1 requirements.

The NRC has also identified in Appendix D to 10 CFR Part 52 that some Tier 2 information (designated as Tier 2*) must also be reviewed and approved by NRC prior to implementing changes to that information. As such, the above discussions regarding prior approval of Tier 1 information would also be generally applicable to Tier 2* information.

Similar to the above Tier 1 discussion, the statements of consideration discussion of the AP1000 Design Certification Final Rule (71FR04464) included the following information pertinent to the Tier 2* designation.

- *Certain Tier 2 information has been designated in the generic DCD with brackets and italicized text as “Tier 2*” information and, as discussed in greater detail in the section-by-section explanation for paragraph VIII.B, a plant-specific departure from Tier 2* information requires prior NRC approval.*

The Tier 2* design description information also continues to serve as design commitments for the lifetime of a facility. Thus, the Tier 2* design commitments are not removed by the proposed exemption from the Tier 2* requirements but would continue to be treated as Tier 2 design commitments.

Thus, as noted above, approval of the proposed exemptions from the Tier 1 and Tier 2* requirements would not remove design information from the licensing basis. Subsequent changes to the facility design would continue to maintain acceptable levels of safety through

evaluations in accordance with the “50.59-like” criteria provided in Section VIII of Appendix D to 10 CFR Part 52.

SNC previously requested via LAR 17-037 (and was granted) a site-specific permanent exemption and license amendment that allows use of alternate criteria to determine whether a proposed Tier 2* departure can be treated as a departure from Tier 2 information under 10 CFR Part 52, Appendix D, paragraph VIII.B.5 (similar to the § 50.59 process), or whether the departure requires prior NRC approval under Appendix D, paragraph VIII.B.6.1. The safety evaluation for the amendment states “The staff focused on whether the proposed exemption and new license condition would assure that departures from Tier 2* information would be governed by regulatory controls commensurate with the safety significance of the information.” As noted above, SNC agrees with “The intent of the § 50.59 process is to permit licensees to make changes to the facility, provided the changes maintain acceptable levels of safety as documented in the SAR.” Thus, it is reasonable to deduce that if the § 50.59 process maintains acceptable levels of safety for Part 50 plants, that the Tier 2 change control process that is similar to the § 50.59 process would also be appropriate “regulatory controls commensurate with the safety significance of the information” and that the additional Tier 2* designations and change controls are, therefore, unnecessary.

Some Tier 2* information has been designated as such because the NRC Staff determined that a change in the input to an analysis should receive NRC approval prior to implementation. The specific affected UFSAR information includes information in Subsections 4.1.1, 4.3.1.1.1, 5.4.1.2.1, 6.3.2.2.7.1, 15.6.5.4B.2.2 and 15.6.5.4B.2.3. However, a change to this type of information has also been addressed in the Part 50 change processes (§ 50.59(c)(2)(viii) for changes to a method of evaluation). NEI 96-07, Section 4.2.1.3, Screening Changes to UFSAR Methods of Evaluation, indicates that a change does not screen out if it involves a change to an input parameter that was integral to NRC approval of the methodology. This guidance is similarly applied for changes to a method of evaluation under Part 52 through NEI 96-07, Appendix C, Section 3.6. Thus, this information need not be designated as Tier 2* to accomplish the prior NRC review and approval for proposed changes. In order to be clear about this in the licensing basis and identify these methodology concerns with the need for NRC review and approval prior to implementation, the Tier 2* information of concern will be specifically identified in the appropriate UFSAR subsection as “Integral to NRC Approval of the Methodology,” and summarized in a revised Table 1.1-201, with the revised table identified and discussed in Section 1.1. In the above identified subsections, the information will be revised to Tier 2 information; however, the brackets, italics and * formatting will be retained and a related footnote will be added (to reflect that the information is integral to the methodology) to read:

*This information considered integral to NRC approval of the methodology. In accordance with NEI 96-07, a change to this information is considered a change to the methodology.

A Tier 2* designation is also currently applied to UFSAR Table 6.2.1.1-10. However, NRC approval of VEGP Units 3 and 4 LAR 17-037 effectively removed the Tier 2* designation from the heat sink data for containment peak pressure analysis (Topic 8 in the LAR) as this Tier 2* matter was not included in the approved License Condition 2.D.(13) departure considerations that would require prior NRC approval. The SER for the amendment [ML18207A262] stated “the staff also finds the Tier 2 departure requirements in the “50.59-like” criteria found in 10 CFR Part 52, Appendix D, paragraph VIII.B.5 and applied to Tier 2* Topic 8 as part of License Condition 2.D.(13) sufficient to address departures related to heat

sinks for containment pressure analysis. The staff reached this finding based on guidance contained in NEI 96-07 (as endorsed by RG 1.187) regarding containment pressure analysis, the staff evaluation contained in Supplement 2 of NUREG-1793, and SECY-17-0075." As such, the heat sink data is currently being evaluated as Tier 2 information. Thus, the Tier 2* designations are removed from Table 6.2.1.1-10 and the heat sink data is removed from Table 1.1-201.

A Tier 2* designation is also currently applied in several places in the UFSAR (as identified in UFSAR Table 1.1-201) to require that changes to WCAP-12488, Westinghouse Fuel Criteria Evaluation Process (FCEP), would require NRC review and approval prior to implementation. Technical Specification 4.2.1, Fuel Assemblies, requires that "Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff approved codes and methods and shown by tests or analyses to comply with fuel safety design bases" which limits changes to prior NRC review and approval. Therefore, the Tier 2* designation is a duplication of regulatory requirements, and thus, unnecessary. As such, the Tier 2* designations are removed and the WCAP is removed from Table 1.1-201.

Additionally, the WCAP specifically states in Section 3.1 "The FCEP allows for 10CFR50.59 conclusions to be reached by demonstrating that the criteria defined in this document are used for the evaluation of the fuel mechanical change(s) and are met." For the AP1000, NUREG-1793, the NRC safety evaluation report for the AP1000, identifies in Section 4.2.5 that "WCAP-12488-A describes the design bases and acceptance limits used by the applicant to analyze the AP1000 fuel rods and assemblies," and that "Moreover, a combined license (COL) applicant or holder will evaluate future changes to the in-core components (including control rods, burnable absorber rods, and neutron source rods) using the criteria defined in WCAP-12488-A." A clear statement of the approved use of the WCAP FCEP in the fuel area to reach the 10 CFR Part 52, Appendix D, Section VIII, 50.59-like criteria conclusions is added to UFSAR Section 4.1 and as new Reference 201 (AP1000 SER) in UFSAR Subsection 4.1.3.

With these changes, the Tier 2* designations and associated footnotes can be deleted (with footnotes for some items revised as noted above).

Finally, this request is also considered to be consistent with the NRC's Principles of Good Regulation (ML14135A076) for "efficiency" which state: "Regulatory activities should be consistent with the degree of risk reduction they achieve. Where several effective alternatives are available, the option which minimizes the use of resources should be adopted." As discussed above, no significant increase in safety is observable from the additional regulatory requirements associated with the continued designation of design information as Tier 1 or Tier 2*.

With consideration of the above information, SNC is requesting an amendment to provide a permanent exemption from the provisions of 10 CFR Part 52, Appendix D, to maintain, and to evaluate and document departures and further exemptions from, the plant-specific Tier 1 and Tier 2* information applicable to the VEGP Unit 3 and Unit 4 COLs. With approval of the requested exemption (and amendment), SNC would maintain the current Tier 1 information (as shown in the Attachment) and the Tier 2* information as Tier 2 information for future design change considerations.

4.0 Justification of Exemption

10 CFR Part 52, Appendix D, Sections VIII.A.4 and VIII.B.6 and 10 CFR 52.63(b)(1) govern the issuance of exemptions from the design information for AP1000 nuclear power plants. Since SNC is requesting to eliminate the Tier 1 and Tier 2* requirements, an exemption from 10 CFR Part 52, Appendix D, is needed.

10 CFR Part 52, Appendix D, and 10 CFR 50.12, § 52.7, and § 52.63 state that the NRC may grant exemptions from the requirements of the regulations provided six conditions are met: 1) the exemption is authorized by law [§ 50.12(a)(1)]; 2) the exemption will not present an undue risk to the health and safety of the public [§ 50.12(a)(1)]; 3) the exemption is consistent with the common defense and security [§ 50.12(a)(1)]; 4) special circumstances are present [§ 50.12(a)(2)]; 5) the special circumstances outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption [§ 52.63(b)(1)]; and 6) the changes do not result in a significant decrease in the level of safety [Part 52, App. D, VIII.A.4].

The requested exemption satisfies the criteria for granting specific exemptions, as described below.

1. This exemption is authorized by law

The NRC has authority under 10 CFR 52.63, § 52.7, and § 50.12 to grant exemptions from the requirements of NRC regulations. Specifically, 10 CFR 50.12 and § 52.7 state that the NRC may grant exemptions from the requirements of 10 CFR Part 52 upon a proper showing. No law exists that would preclude the changes covered by this exemption request. Additionally, granting of the proposed exemption does not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations.

Accordingly, this requested exemption is "authorized by law," as required by 10 CFR 50.12(a)(1).

2. This exemption will not present an undue risk to the health and safety of the public

The proposed exemption from the requirements of 10 CFR Part 52 Appendix D would allow elements of the VEGP Units 3 and 4 design to depart from the AP1000 Tier 1 and Tier 2* plant-specific design information based on criteria consistent with Part 50 licensed nuclear power plants. The VEGP Units 3 and 4 safety analysis report (incorporating the plant-specific DCD) will continue to reflect the approved licensing basis for VEGP Units 3 and 4 and will maintain the level of detail currently provided in the UFSAR. Therefore, the affected VEGP Unit 3 and Unit 4 plant-specific DCD will continue to serve its required purpose.

Approval of the proposed exemptions from the Tier 1 and Tier 2* requirements would maintain the Tier 2 detailed design information within the licensing basis via Tier 2 information (Tier 1 information retained as Tier 2 Appendix 14B) and Tier 2* information retained as Tier 2 with removal of Tier 2* designations), and subsequent changes to the facility design would continue to maintain acceptable levels of safety through evaluations

in accordance with the “50.59-like” criteria provided in Section VIII of Appendix D to 10 CFR Part 52.

With continued compliance with the Tier 2 information, the proposed activity does not involve a significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

Therefore, the requested exemption from 10 CFR Part 52 Appendix D as shown in the Attachment would not present an undue risk to the health and safety of the public.

3. The exemption is consistent with the common defense and security

The requested exemption from the requirements of 10 CFR Part 52, Appendix D, would allow the licensee to depart from elements of the VEGP Units 3 and 4 Tier 1 and Tier 2* plant-specific DCD design information without submitting an exemption request (for Tier 1), and/or license amendment request (for Tier 1 and Tier 2*), for NRC approval simply because it is designated as Tier 1 or Tier 2*. The proposed exemption does not alter the design, function, or operation of any structures or plant equipment that is necessary to maintain a safe and secure status of the plant. The proposed exemption has no impact on plant security or safeguards procedures.

Therefore, the requested exemption is consistent with the common defense and security.

4. Special circumstances are present

10 CFR 50.12(a)(2) lists six “special circumstances” for which an exemption may be granted. Pursuant to the regulation, it is necessary for one of these special circumstances to be present in order for the NRC to consider granting an exemption request. The requested exemption meets the special circumstances of 10 CFR 50.12(a)(2)(ii). That subsection defines special circumstances as when “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.” The requested exemption also meets the special circumstances of 10 CFR 50.12(a)(2)(iii). That subsection defines special circumstances as when “Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated.”

The rule under consideration in this request for exemption is the portion of 10 CFR Part 52, Appendix D, which requires that a licensee referencing the AP1000 Design Certification Rule (10 CFR Part 52, Appendix D) maintain, and evaluate and document departures and further exemptions from, the plant-specific Tier 1 and Tier 2* information applicable to the combined licenses (COLs).

As previously noted, exemptions and/or associated license amendment requests have been required to make even editorial Tier 1 and Tier 2* changes. Processing of such editorial or other changes that are not consequential to safety unnecessarily utilizes resources and could delay application of the resources to actual improvements in safety. Approval of the proposed exemptions from the Tier 1 and Tier 2* requirements would maintain the detailed design information within the licensing basis via Tier 2 information (Tier 1 information retained as Tier 2 Appendix 14B) and Tier 2* information

retained as Tier 2 with removal of Tier 2* designations), and subsequent changes to the facility design would continue to maintain acceptable levels of safety through evaluations in accordance with the “50.59-like” criteria provided in Section VIII of Appendix D to 10 CFR Part 52. Thus, the existing change processes are not necessary to achieve the underlying purpose of the rule, i.e., maintain adequate safety. Significant changes that are consequential to safety would still require NRC review prior to implementation under the “50.59-like” criteria provided in Section VIII of Appendix D to 10 CFR Part 52 for information currently addressed as Tier 1 or Tier 2*. Thus, the existing change processes would result in undue hardship or other costs that are significantly in excess of those incurred by others similarly situated, i.e., other plants in the operating fleet.

Therefore, since the underlying purpose of the rules is to consider proposed design changes and maintain acceptable levels of safety, the application of the Tier 1 and Tier 2* regulations are not necessary to achieve the underlying purpose of the rules.

5. The special circumstances outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption.

Since the revised processes for evaluating changes to the plant-specific design would continue to maintain acceptable levels of safety through evaluations in accordance with other regulations and the “50.59-like” criteria provided in Section VIII of Appendix D to 10 CFR Part 52, there is no significant benefit to be achieved by the added burden of existing Tier 1 and Tier 2* processes. It is expected that similar changes would be requested by other AP1000 stations once their § 52.103(g) finding is complete. Maintaining the existing Tier 1 and Tier 2* processes during construction will continue to support a high level of standardization since the construction period is when most major changes would be proposed.

The reduction in standardization resulting from potential future departures from the current Tier 1 and Tier 2* information where other AP1000 licensees and applicants do not request this same departure, would still provide that the key design functions will continue to be maintained at acceptable levels of safety. Further, as discussed above, maintenance of the standardized design has not been a significant factor in approvals of previously requested changes, and thus, future standardization has been effectively delegated to the combined license holder decisions. Finally, approval of the exemption may actually promote standardization by reducing the cost and delay of implementation by each of the combined license holders through simplification of the process for evaluation and acceptance of many of the changes.

Therefore, the special circumstances associated with the requested exemption outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption.

6. The design change will not result in a significant decrease in the level of safety.

There are no design changes associated with this request. The proposed exemption from the requirements of 10 CFR Part 52 Appendix D would allow elements of the VEGP Units 3 and 4 design to depart from the AP1000 Tier 1 and Tier 2* plant-specific design information without submitting an exemption request (for Tier 1), and/or license amendment request (for Tier 1 and Tier 2*), for NRC approval. The VEGP Units 3 and 4 safety analysis report (incorporating the plant-specific DCD) will continue to reflect the approved licensing basis for VEGP Units 3 and 4 and will maintain a consistent level of detail with that which is currently provided in the Tier 1 and Tier 2* information via Tier 2 information (Tier 1 information retained as Tier 2 Appendix 14B and Tier 2* information retained as Tier 2 with removal of Tier 2* designations). Therefore, the VEGP Units 3 and Unit 4 plant-specific DCD will continue to serve its required purpose with the revised change control processes.

With continued consideration of the Tier 2 information, the proposed activity does not involve a significant increase in the individual or cumulative occupational radiation exposure.

Approval of the proposed exemptions from the Tier 1 and Tier 2* change control requirements would not alleviate the requirement to maintain the detailed design information within the licensing basis, nor the requirement to continue to maintain acceptable levels of safety through evaluations in accordance with the "50.59-like" criteria provided in Section VIII of Appendix D to 10 CFR Part 52. Thus, there is no reduction in the level of safety as a result of this activity.

5.0 Risk Assessment

A risk assessment was determined to not be applicable to address the acceptability of this proposal.

6.0 Precedent Exemptions

In response to SNC amendment and exemption application dated March 6, 2015, an Exemption was granted along with Amendment No. 44 to redesignate Tier 2* information on fire area figures as Tier 2 information [ML15191A128].

In response to SNC amendment and exemption application dated December 21, 2017, as supplemented by letters dated April 6, May 11, June 18, August 3, August 10, and September 13, 2018, an exemption was granted along with Amendment Nos. 142 and 141 (for VEGP Units 3 and 4, respectively) to approve implementation of a criteria-based evaluation process for Tier 2* information. This approval also effectively redesignated Tier 2* information on heat sink data as Tier 2 information.

7.0 Environmental Consideration

The Licensee requests a departure from the Tier 1 and Tier 2* requirements of 10 CFR Part 52, Appendix D. The Licensee has determined that the proposed departure would require a permanent exemption from the requirements of 10 CFR Part 52, Appendix D, with respect to maintaining a Tier 1 document, Tier 2* designations, and to the processes

used to determine that a proposed change would require NRC review and approval prior to implementation; The Licensee evaluation of the proposed exemption has determined that the proposed exemption meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9).

Based on the above review of the proposed exemption and the corresponding Enclosure 1 review, the Licensee has determined that the proposed activity does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in the individual or cumulative occupational radiation exposure. Accordingly, the proposed exemption meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), an environmental impact statement or environmental assessment of the proposed exemption is not required.

8.0 Conclusion

The proposed change removes requirements related to VEGP Unit 3 and Unit 4 design change processes that have no identified benefit to offset the additional burden imposed by the restrictions. The exemption request meets the requirements of 10 CFR 52.63, *Finality of design certifications*, 10 CFR 52.7, *Specific exemptions*, 10 CFR 50.12, *Specific exemptions*, and 10 CFR Part 52 Appendix D, *Design Certification Rule for the AP1000*. Specifically, the exemption request meets the criteria of 10 CFR 50.12(a)(1) in that the request is authorized by law, presents no undue risk to public health and safety, and is consistent with the common defense and security. Furthermore, approval of this request does not result in a significant decrease in the level of safety, satisfies the underlying purpose of the AP1000 Design Certification Rule, and does not present a significant decrease in safety as a result of a reduction in standardization.

The Tier 1 portion of the plant-specific design control document is removed from the Licensing Basis Documents for Units 3 and 4.

Units 3 and 4 Combined License (COL) Markups:

COL Section 2.F.(4), Exemptions, is added:

- (4) The licensees are exempt from the requirements of 10 CFR Part 52, Appendix D, with respect to Tier 1 information requirements and with respect to Tier 2* information requirements because the exemption meets the requirements of 10 CFR 52.7, because the exemption is authorized by law, will not present an undue risk to the public health or safety, and is consistent with the common defense and security. Additionally, special circumstances are present in that a) the application of the regulation in this particular circumstance is not necessary to achieve the underlying purpose of the rule (10 CFR 50.12(a)(2)(ii)) and b) the application of the regulation in this particular circumstance would result in undue hardship or other costs that are significantly in excess of those incurred by other operating power plants (10 CFR 50.12(a)(2)(iii)), as described in the staff SER dated MONTH ##, ####.

COL Section 2.D.(13) is removed:

~~(13) Departures from Plant-specific DCD Tier 2* Information~~

~~(a) SNC is exempt from the requirements of 10 CFR Part 52, Appendix D, Paragraphs VIII.B.6 and VIII.B.5.a for prior NRC approval of departures from Tier 2* information and departures from Tier 2 information involving a change to or departure from Tier 2* information; except for departures that:~~

- ~~1. Involve a deviation from a code or standard credited in the plant-specific DCD for establishing the criteria for the design or construction of a structure, system, or component (SSC) important to safety;~~
- ~~2. Result in a change to a design process described in the plant-specific DCD that is material to implementation of an industry standard or endorsed regulatory guidance;~~
- ~~3. (i) Result in a change to the fuel criteria evaluation process, the fuel principal design requirements, or the nuclear design of the fuel or the reactivity control system that is material to a fuel or reactivity control system design function, or the evaluation process in WCAP-12488, "Westinghouse Fuel Criteria Evaluation Process," or~~
~~(ii) Result in any change to the maximum fuel rod average burn up limits; or the small break LOCA analysis information in UFSAR Subsections 15.6.5.4B.2.2 or 15.6.5.4B.2.3;~~
- ~~4. Adversely affect the containment debris limits or debris screen design criteria;~~
- ~~5. Change the Reactor Coolant Pump (RCP) type from a canned motor to a different type of RCP;~~
- ~~6. Result in a change to the Passive Residual Heat Removal Heat Exchanger natural circulation test (first plant test), the Core Makeup Tank Heated Recirculation Tests (first three plants test), or the Automatic Depressurization System Blowdown Test (first three plants test) that is material to the test objectives or test performance criteria;~~
- ~~7. Involve structural materials or analytical or design methods, including design codes and analytical assumptions, that deviate from those credited in the plant-specific DCD for critical sections;~~

- ~~8. Result in a change to the design of the steel faceplates, internal trusses, tie bars, or headed studs of the steel-concrete (SC) module walls in the Nuclear Island or the Shield Building, including SC-to-reinforced concrete (RC) connections;~~
- ~~9. Result in an increase in the demand to capacity (D/C) ratio of a critical section of the structure. SNC shall determine the D/C ratio under this condition for each critical section structural member including, but not limited to, wall segments, wall sections, concrete panels, slabs, or basemat sections, affected by a departure by:~~
- ~~(i) Using the Tier 2* information in the UFSAR Section 3.8 or Appendix 3H table that directly states the D/C ratio or states the area of steel provided and the area of steel required for the affected structural member, or~~
 - ~~(ii) Providing the same total area of steel across the entire critical section using any combination of rebar sizes and spacing allowed by the design basis codes used in the UFSAR as the total area of steel specified in UFSAR Section 3.8 and Appendix 3H tables marked Tier 2*;~~
- ~~(b) For a departure from Tier 2* information that does not require prior NRC approval under the exemption in License Condition 2.D.(13)(a), SNC may take the departure provided that SNC complies with the requirements for Tier 2 departures in 10 CFR Part 52, Appendix D, Paragraph VIII.B.5, as modified by the exemption in License Condition 2.D.(13)(a). For each departure authorized by this License Condition:~~
- ~~1. The departure or change to Tier 2* information shall remain Tier 2* information in the plant-specific DCD.~~
 - ~~2. SNC shall prepare and maintain a written evaluation that provides the bases for its determinations regarding the criteria in License Condition 2.D.(13)(a). In the report that 10 CFR Part 52, Appendix D, Section X.B.1 requires SNC to submit, SNC shall include a brief description of each departure and a summary of the evaluation of the departure.~~

The UFSAR is revised as follows:

UFSAR Section 1.1 is revised to read:

A limited set of DCD Tier 2 information was further designated as Tier 2* matter information. As provided by approved exemption from 10 CFR Part 52, Appendix D, Sections VIII.B.5 and VIII.B.6, the Tier 2* matter information was reverted to Tier 2 information and the Tier 2* designations removed. Table 1.1-201 identifies that changes to certain original Tier 2* matter information would continue to require prior NRC approval because the information is considered integral to NRC approval of the pertinent methodology.

~~As provided in 10 CFR Part 52, Appendix D, Section VIII.B.6.c, much of the Tier 2* matter information reverts to Tier 2 information for the unit once the unit first achieves full power operation. Tier 2* matter information that continues to be designated as Tier 2* for the unit beyond the unit's first full power operation is identified in Table 1.1-201. Changes to Tier 2* matter information may require prior NRC approval pursuant to License Condition 2.D.(13) in accordance with the departure evaluation process specified therein.~~

Appendix D to 10 CFR Part 52 is hereby incorporated by reference into the COL application as modified by approved exemptions.

UFSAR Section 4.1 (last paragraph) is revised to read:

Table 4.1-2 tabulates the analytical techniques employed in the core design. The design basis must be met using these analytical techniques. Enhancements may be made to these techniques provided that the changes are bounded by NRC-approved methods, models, or criteria. In addition, application of the process described in WCAP-12488-A, (Reference 9) allows the Combined License holder to make fuel mechanical changes through use of the fuel criteria evaluation process (FCEP) to reach 10 CFR Part 52, Appendix D, Section VIII, 50.59-like conclusions (Reference 201). Table 4.1-3 tabulates the mechanical loading conditions considered for the core internals and components. Specific or limiting loads considered for design purposes of the various components are listed as follows: fuel assemblies in Subsection 4.2.1.5; control rods (RCCAs and GRCAs), burnable absorber rods, and neutron source rods, in Subsection 4.2.1.6. The dynamic analyses, input forcing functions, and response loadings for the control rod drive system and reactor vessel internals are presented in Subsections 3.9.4 and 3.9.5.

UFSAR Subsection 4.1.3, References, is revised to read:

11. Conner, M. E., et al., "Enhanced GRCA Rodlet Design," WCAP-16943-P-A (Proprietary) and WCAP-16943-NP-A (Non-Proprietary), September, 2012.
201. NRC Safety Evaluation Report for AP1000 Design, NUREG-1793, Section 4.2.5, Design Basis, 2004.

UFSAR (all affected sections) will be revised to remove the Tier 2* designations and associated footnotes except for the following: Subsections 4.1.1, 4.3.1.1.1, 5.4.1.2.1, 6.3.2.2.7.1, 15.6.5.4B.2.2 and 15.6.5.4B.2.3.

The brackets, italics and * formatting will be retained for the above identified Subsections and Table, and the Tier 2* related footnote will be revised to read:

*This information is considered integral to NRC approval of the methodology. In accordance with NEI 96-07, a change in this information is considered a change to the methodology.

UFSAR Table 1.1-201, "Post First Full Power Operation Continuing Tier 2* Matter Information," is revised to read:

1.1-201
~~Post First Full Power Operation Continuing~~
Information Considered
"Integral to NRC Approval of the Methodology"

Tier 2* Matter <u>UFSAR Information</u>	UFSAR Information Location(s)
Fuel principal design requirements.	4.1.1
Fuel criteria evaluation process. WCAP-12488-P-A, "Fuel Criteria Evaluation Process," October 1994 WCAP-14204-A, "Fuel Criteria Evaluation Process," October 1994	Table 1.6-1 (4.1-WCAP-12488-P-A) Table 1.6-1 (4.2-WCAP-12488-P-A) Table 1.6-1 (4.3-WCAP-12488-P-A) Table 1.6-1 (4.4-WCAP-12488-P-A) 4.1.3 4.2 4.2.1 4.2.1.1.2 4.2.1.1.3 4.2.1.5 4.2.1.6 4.2.3 4.2.6 4.3.1 4.3.1.1.1 4.3.5 4.4.8
Maximum fuel rod average burn-up of 62,000 MWD/MTU.	4.3.1.1.1
Reactor coolant pump type.	5.4.1.2.1
Heat sink data for containment peak pressure analysis.	Table 6.2.1.1-10
Screen design criteria.	6.3.2.2.7.1
Small-break loss-of-coolant accident (LOCA) analysis methodology - <u>entrainment</u> .	15.6.5.4B.2.2 15.6.5.4B.2.3
<u>Small-break LOCA analysis methodology – heat flux.</u>	<u>15.6.5.4B.2.3</u>

UFSAR Table 1.1-201 title revision shown above also revised the List of Tables for Chapter 1 as follows:

Table Number	Title	Page
1.1-1	AP1000 Acronyms.....	1.1-5
1.1-201	Post First Full Power Operation Continuing Tier 2* Matter Information <u>Considered "Integral to NRC Approval of the Methodology" ...</u>	1.1-14

UFSAR Appendix 14B, Design Material that Supported ITAAC Closure, is added as identified below: [Note that changes from information currently provided in the plant-specific Tier 1 document are shown with deletions in redline strikeout, additions in blue underline, and due to the size of the document, some changes are described with *[[INSTRUCTIONS]] provided as italicized text within double brackets.*]

Appendix 14B Design Material that Supported ITAAC Closure

1.0 Introduction

1.1 Definitions

The following definitions apply to terms used in the design descriptions in this Appendix, ~~and associated inspections, tests, analyses, and acceptance criteria (ITAAC).~~

~~**Acceptance Criteria** means the performance, physical condition, or analysis result for a structure, system, or component that demonstrates that the design commitment is met.~~

~~**Analysis** means a calculation, mathematical computation, or engineering or technical evaluation. Engineering or technical evaluations could include, but are not limited to, comparisons with operating experience or design of similar structures, systems, or components.~~

As-built means the physical properties of a structure, system, or component following the completion of its installation or construction activities at its final location at the plant site. In cases where it is technically justifiable, determination of physical properties of the as-built structure, system, or component may be based on measurements, inspections, or tests that occur prior to installation, provided that subsequent fabrication, handling, installation, and testing does not alter the properties.

Column Line is the designation applied to a plant reference grid used to define the location of building walls and columns. Column lines may not represent the center line of walls and columns.

~~**Design Commitment** means that portion of the design description that is verified by ITAAC.~~

~~**Design Description** means that portion of the design that is certified.~~

Design Plant Grade means the elevation of the soil around the nuclear island assumed in the design of the AP1000, i.e., floor elevation 100'-0".

Division (for electrical systems or electrical equipment) is the designation applied to a given safety-related system or set of components that is physically, electrically, and functionally independent from other redundant sets of components.

Floor Elevation is the designation applied to name a floor. The actual elevation may vary due to floor slope and layout requirements.

Functional Arrangement (for a system) means the physical arrangement of systems and components to provide the service for which the system is intended, and which is described in the system design description.

~~Inspect or Inspection means visual observations, physical examinations, or reviews of records based on visual observation or physical examination that compare the structure, system, or component condition to one or more design commitments. Examples include walkdowns, configuration checks, measurements of dimensions, or nondestructive examinations.~~

Inspect for Retrievability of a display means to visually observe that the specified information appears on a monitor when summoned by the operator.

L_a is the maximum allowable containment leakage as defined in 10 CFR 50 Appendix J.

Physical Arrangement (for a structure) means the arrangement of the building features (e.g., floors, ceilings, walls, and basemat) and of the structures, systems, and components within, which are described in the building design description.

Qualified for Harsh Environment means that equipment can withstand the environmental conditions that would exist before, during, and following a design basis accident without loss of its safety function, for the time required to perform the safety function. These environmental conditions include applicable time-dependent temperature and pressure profiles, humidity, chemical effects, radiation, aging, submergence, and their synergistic effects which have a significant effect on the equipment performance. Equipment identified in the Design Description as being Qualified for Harsh Environment includes the:

- a. equipment itself
- b. sensors, switches and lubricants that are an integral part of the equipment
- c. electrical components connected to the equipment (wiring, cabling and terminations)

Items b and c are Qualified for Harsh Environment only when they are necessary to support operation of the equipment to meet its safety-related function listed in the Design Description table and to the extent such equipment is located in a harsh environment during or following a design basis accident.

Sensor means a transmitter, resistance temperature detector, thermocouple or other transducer, plus associated cables, connectors, preamplifiers, reference junction boxes, or other signal processing equipment that is located in the immediate proximity of the sensor and subject to the same environmental conditions.

Site Grade means the as-built elevation of the soil to the west side of the nuclear island. Adjacent buildings are located on the other sides of the nuclear island.

Tag Number ~~in the ITAACs~~ represents the complete tag number or a portion of the tag number used to identify the actual hardware (or associated software). For instrumentation, the tag number identified ~~in the ITAACs~~ does not include the type of instrument (for example, the Containment Exhaust Fan A Flow Sensor, VFS-11A, does not include the designators FE [flow element] or FT [flow transmitter], which would appear on the actual hardware or in the associated software). This is because the designator VFS-11A and the equipment description are sufficient to uniquely identify the channel associated with the designated instrument function, and this method of identification eliminates the need to list every portion of the instrumentation channel required to perform the function. In most cases, the channel number

includes physical hardware. There are, however, a few places where the channel number represents only a calculation in software. In those cases, the channel data can be displayed. In many instances, the word “sensor” is used in the equipment description to identify that the item is an instrument.

~~Test means the actuation, operation, or establishment of specified conditions to evaluate the performance or integrity of as-built structures, systems, or components, unless explicitly stated otherwise.~~

Transfer Open (Closed) means to move from a closed (open) position to an open (closed) position.

Type Test means a test on one or more sample components of the same type and manufacturer to qualify other components of the same type and manufacturer. A type test is not necessarily a test of the as-built structures, systems, or components.

UA of a heat exchanger means the product of the heat transfer coefficient and the surface area.

1.2 General Provisions

The following general provisions are applicable to the design descriptions [in this Appendix](#), and ~~associated ITAAC.~~

Treatment of Individual Items

The absence of any discussion or depiction of an item in the design description or accompanying figures shall not be construed as prohibiting a licensee from utilizing such an item, unless it would prevent an item from performing its safety functions as discussed or depicted in the design description or accompanying figures.

~~If an inspections, tests, or analyses (ITA) requirement does not specify the temperature or other conditions under which a test must be run, then the test conditions are not constrained.~~

~~When the term "operate," "operates," or "operation" is used with respect to an item discussed in the acceptance criteria, it refers to the actuation and running of the item. When the term "exist," "exists," or "existence" is used with respect to an item discussed in the acceptance criteria, it means that the item is present and meets the design commitment.~~

When the Design [Description Commitment](#) or ITAAC provides that an item or activity must comply with ASME Code Section III, this means compliance with the ASME Code Section III, as incorporated by reference in 10 CFR 50.55a with specific conditions, or in accordance with alternatives authorized by the NRC pursuant to 10 CFR 50.55a.

Implementation of ITAAC

~~The ITAAGs are provided in tables with the following three-column format:~~

Design	Inspections,	Acceptance
Commitment	Tests, Analyses	Criteria

~~Each design commitment in the left-hand column of the ITAAC tables has an associated ITA requirement specified in the middle column of the tables.~~

~~The identification of a separate ITA entry for each design commitment shall not be construed to require that separate inspections, tests, or analyses must be performed for each design commitment. Instead, the activities associated with more than one ITA entry may be combined, and a single inspection, test, or analysis may be sufficient to implement more than one ITA entry.~~

~~An ITA may be performed by the licensee of the plant or by its authorized vendors, contractors, or consultants. Furthermore, an ITA may be performed by more than a single individual or group, may be implemented through discrete activities separated by time, and may be performed at any time prior to fuel load (including before issuance of the combined license for those ITAACs that do not necessarily pertain to as-installed equipment). Additionally, an ITA may be performed as part of the activities that are required to be performed under 10 CFR Part 50 (including, for example, the quality assurance (QA) program required under Appendix B to Part 50); therefore, an ITA need not be performed as a separate or discrete activity.~~

~~Many of the acceptance criteria include the words "A report exists and concludes that..." When these words are used, it indicates that the ITAAC for that design commitment will be met when it is confirmed that appropriate documentation exists and the documentation shows that the design commitment is met. Appropriate documentation can be a single document or a collection of documents that show that the stated acceptance criteria are met. Examples of appropriate documentation include design reports, test reports, inspection reports, analysis reports, evaluation reports, design and manufacturing procedures, certified data sheets, commercial dedication procedures and records, quality assurance records, calculation notes, and equipment qualification data packages. For plants at sites which are qualified using the hard rock high frequency (HRHF) ground motion response spectra (GMRS), high frequency seismic screening and qualification testing required as a result of the evaluation of potential high frequency sensitive components is included in the equipment qualification data packages.~~

~~Many entries in the ITA column of the ITAAC tables include the words "Inspection will be performed for the existence of a report verifying..." When these words are used it indicates that the ITA is tests, type tests, analyses, or a combination of tests, type tests, and analyses and a report will be produced documenting the results. This report will be available to inspectors.~~

~~Many ITAAC are only a reference to another Tier 1 location, either a section, subsection, or ITAAC table entry (for example, "See Tier 1 Material..."). A reference to another ITAAC location is always in both the ITA and acceptance criteria columns for a design commitment. This reference is an indication that the ITA and acceptance criteria for that design commitment are satisfied when the referenced ITA are completed and the acceptance criteria for the referenced Tier 1 sections, subsections, or table entries are satisfied. If a complete Tier 1 section is referenced, this indicates that all the ITA and acceptance criteria in that section must be met before the referencing design commitment is satisfied.~~

Discussion of Matters Related to Operations

In some cases, the design descriptions in this [Appendix document](#) refer to matters that relate to operation, such as normal valve or breaker alignment during normal operation modes. Such discussions are provided solely to place the design description provisions in context (for example, to explain automatic features for opening or closing valves or breakers upon off-normal conditions). Such discussions shall not be construed as requiring operators during operation to take any particular action (for example, to maintain valves or breakers in a particular position during normal operation).

Interpretation of Figures

In many but not all cases, the design descriptions in Section 2 [of this Appendix](#) include one or more figures. The figures may represent a functional diagram, general structural representation, or another general illustration. For instrumentation and control (I&C) systems, figures may also represent aspects of the relevant logic of the system or part of the system. Unless specified explicitly, the figures are not indicative of the scale, location, dimensions, shape, or spatial

relationships of as-built structures, systems, and components. In particular, the as-built attributes of structures, systems, and components may vary from the attributes depicted on the figures, provided that those safety functions discussed in the design description pertaining to the figure are not adversely affected.

Maximum Reactor Core Thermal Power

The initial rated reactor core thermal power for the AP1000 certified design is 3400 megawatts thermal (MWt).

1.3 Figure Legend

The conventions used in this section are for figures described in the design description [s in this Appendix](#). The figure legend is provided for information ~~and is not part of the Tier 1 Material~~.

...

MISCELLANEOUS

A component that is part of the system functional arrangement shown on the figure and is included in the design [description commitments](#) for the system. *[[INSTRUCTIONS ...the rest of Section 1.3 is incorporated with no further changes including the figures associated with the Miscellaneous section change above...]]*

1.4 List of Acronyms and Abbreviations

The acronyms presented in this section are used in ~~the Tier 1 Material~~ [this Appendix](#). The acronyms are provided for information ~~and is not part of the Tier 1 Material~~.

...

~~AC — Acceptance Criteria~~

...

~~DC — Design Commitment~~

[[INSTRUCTIONS ...the rest of Section 1.4 is incorporated with no further changes ...]]

2.0 System Based Design Descriptions ~~and ITAAC~~

2.1 Reactor

2.1.1 Fuel Handling and Refueling System

Design Description

[[INSTRUCTIONS ...the Design Description of Section 2 is incorporated with no further changes (including the referenced Tables and Figures)...]]

~~Inspections, Tests, Analyses, and Acceptance Criteria~~

~~Table 2.1.1-4 specifies the inspections, tests, analyses, and associated acceptance criteria for the RCS.~~

[[INSTRUCTIONS ITAAC Table 2.1.1-4 is also NOT incorporated. The table number is retained, the table content is omitted, and the table is identified as "[Not used](#)". For example:

Table 2.1.1-4

Not used.]]

[[INSTRUCTIONS ...the rest of Section 2 is similarly incorporated with no further changes (except that the ITAAC Tables and the references to those tables are not incorporated as shown in the Section 2.1.1 example above; and Figure 2.1.2-2 is not incorporated since it is referenced only by the ITAAC table acceptance criteria column.)...]]

3.0 Non-System Based Design Descriptions and ITAAC

[[INSTRUCTIONS ...Section 3 is incorporated as shown above for Section 2 with no further changes (except that the ITAAC Tables and the references to those tables are not incorporated as shown in the Section 2.1.1 example above)...]]

4.0 Interface Requirements

~~The 10 CFR 52.47 (a)(25) requires identification of the interface requirements to be met by those portions of the plant for which the application does not seek certification. The 10 CFR 52.47 (a)(26) requires justification that these interfaces be verifiable through inspection, testing (either in the plant or elsewhere), or analysis. An applicant for a combined license (COL) that references the Certified Design must provide design features or characteristics that comply with the interface requirements for the plant design and inspections, tests, analyses, and acceptance criteria (ITAAC) for the site-specific portion of the facility design, in accordance with 10 CFR 52.79 (c).~~

No Tier 1 interfaces were identified for the AP1000 standard plant design.

5.0 Site Parameters

[[INSTRUCTIONS ...Section 5 is incorporated with no changes...]]