South Carolina Electric & Company

V. C. Summer Units 2 and 3

NND-14-0316

Enclosure 1

Request for License Amendment:
Tier 2* Editorial and Consistency Changes
(LAR 14-03)

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Pursuant to 10 CFR 50.90, South Carolina Electric & Gas Company (SCE&G) hereby requests an amendment to Combined License (COL) Numbers NPF-93 and NPF-94 for the V.C. Summer Nuclear Station Units 2 and 3, respectively.

1. Summary Description

The proposed changes would revise the Combined Licenses (COLs) in regard to changes to nontechnical Tier 2* material within the Updated Final Safety Analysis Report (UFSAR). This License Amendment Request provides proposed editorial changes (e.g. typing, spelling, data entry), clarifications, and consistency updates (e.g. inconsistencies with other plant-specific Tier 2* information and elsewhere in the UFSAR). The requested amendment requires changes to plant-specific Tier 2* information. No structure, system, or component (SSC), design function or analysis as described in the UFSAR will be adversely affected by the proposed changes. This enclosure requests approval of the license amendment necessary to implement these changes.

2. Detailed Description and Technical Evaluation

The proposed revisions address inconsistencies within and clarifications to the UFSAR. This document proposes changes to information identified as Tier 2* material, which, consistent with the provision in 10 CFR 52 Appendix D, Section VIII.B.6, is designated with italicized text or brackets and an asterisk. The requested modifications propose editorial changes, clarifications, and consistency updates to Tier 2* material.

1. **<u>Wall Thickness Consistency Changes to Figure 3.7.2-12 (SUNSI)</u>**

   a. Wall Thickness of E-W Shield Wall Between Column Lines 1 and 2 Extending from Column Line N East:

      Tier 2* information in UFSAR Figure 3.7.2-12 (Sheets 3 and 4) shows the wall thickness of E-W Shield Wall between Column Lines 1 and 2 extending from Column Line N East as 3'-0". Detailed design documentation, including the relevant shielding, structural, and fire protection evaluations, and Tier 1 Table 3.3-1 indicate that the wall thickness is 2'-9". To resolve this inconsistency, a change is proposed to replace the 3'-0" dimension with the appropriate 2'-9" dimension. This change would have no impact to the Aircraft Impact Assessment documented in UFSAR Appendix 19F.

   b. Wall Thickness of Column Line N Wall from 12'-9" North of 1 to 2:

      UFSAR Tier 2* Figure 3.7.2-12 (Sheet 3) does not display the 3'-0" thickness seen in Tier 1 Table 3.3-1 for Column Line N wall from 12'-9" north of 1 to 2. It is therefore proposed that Figure 3.7.2-12 (Sheet 3) be updated for consistency with Tier 1 Table 3.3-1 by adding the 3'-0" thickness dimension to

the figure. Detailed design documentation, including the relevant shielding, structural, and fire protection evaluations, and Tier 1 Table 3.3-1 indicate that the wall thickness is 3'-0". This change would have no impact to the Aircraft Impact Assessment documented in UFSAR Appendix 19F.

2. ACI 349-01 Reference Consistency Change to Subsection 3.8.3.2

Tier 2* information in UFSAR subsection 3.8.3.2 appropriately references ACI 349-01. The title associated with the document as referenced, however, reads "*Code Requirements for Nuclear Safety Related Structures*" rather than "*Code Requirements for Nuclear Safety Related Concrete Structures*". Additionally, ACI-349-01 is more typically formatted as ACI 349-01. Note that UFSAR subsection 1A.1, Reference Number 44 reflects the appropriate title. Verification of the code document confirms that Subsection 1A.1 is correct. To resolve this inconsistency, a change is proposed to UFSAR subsection 3.8.3.2 to reflect the appropriate title of ACI 349-01. The title of the code does not have a design function associated with it. Changing the title does not impact the implementation or take exemption to any part of the Code, but instead removes inconsistencies within the licensing basis. This change does not involve a technical (design, analysis, function, or qualification) change.

3. ACI 349-01 Reference Consistency Change to Subsection 3.8.4.2

Tier 2* information in UFSAR subsection 3.8.4.2 appropriately references ACI 349-01. The title associated with the document as referenced, however, reads "*Code Requirements for Nuclear Safety Related Structures*" rather than "*Code Requirements for Nuclear Safety Related Concrete Structures*". Additionally, ACI-349-01 is more typically formatted as ACI 349-01. Note that UFSAR subsection 1A.1, Reference Number 44 reflects the appropriate title. Verification of the code document confirms that Subsection 1A.1 is correct. To resolve this inconsistency, a change is proposed to UFSAR subsection 3.8.4.2 to reflect the appropriate title of ACI 349-01. The title of the code does not have a design function associated with it. Changing the title does not impact the implementation or take exemption to any part of the Code, but instead removes inconsistencies within the licensing basis. This change does not involve a technical (design, analysis, function, or qualification) change.

4. Auxiliary Building Description Clarifications to Subsection 3H.2.1

a. Motor Control Center Locations:

Tier 2* information in UFSAR Subsection 3H.2.1 states that "*The floor at grade level elevation 100'-0" has an electrical penetration room, a staging area for the equipment hatch, and the access opening to the annex building. The electrical penetration area, trip switchgears, and motor control centers occupy most of the floor at elevation 117'-6"*."

However, Table 9A-2 shows that one Motor Control Center (MCC) exists in each of Fire Areas 1201 AF02, 1201 AF03, 1202 AF03, and 1242 AF02. Fire Area 1242 AF 02 is the only Fire Area that includes a portion of the 117'-6" elevation thus the statement from UFSAR Subsection 3H.2 that "*…motor control centers occupy most of the floor at elevation 117'-6*"." is inconsistent with Table 9A-2.

Additionally, Table 3.11-1 (Sheet 4 of 51) shows that the four MCCs (IDSA-DK-1, IDSB-DK-1, IDSC-DK-1, and IDSD-DK-1) exist in Environmental Zone 2, which is defined in Table 3D.5-1 as consisting of the following rooms: 12101, 12102, 12103, 12104, 12105, 12111, 12112, 12113, 12201, 12202, 12203, 12204, 12205, 12207, 12211, 12212, 12213, 12301, 12302, 12303, **12304**, **12305**, 12311, 12312, **12313**, 12405, 12411, **12412**, 12501, and 12505. Design information confirms that MCCs are in fact located in rooms 12304, 12305, 12313, and 12412. Note that rooms 12304, 12305, 12313 are at elevation 100'-0" and room 12412 is at elevation 117'-6".

Furthermore, rooms 12304, 12305, 12313, and 12412 are located in Areas 1 and 2 of the Auxiliary Building, as shown in UFSAR Figure 3H.2-1. These Areas are described in paragraph two of UFSAR Subsection 3H.2.1. The MCC information is currently described in paragraph three, however, which describes Areas 2 and 3.

To resolve this inconsistency, a change is proposed to clarify the language such that reference to MCCs are included in the 100' elevation of Areas 1 and 2. This change does not involve a technical (design, analysis, function, or qualification) change.

b. Use of Steel Form Modules and Reinforced Concrete in Areas 5 and 6 of the Auxiliary Building:

Tier 2* information in UFSAR Subsection 3H.2.1, describing the use of concrete filled steel plate modules within Areas 5 and 6 of the Auxiliary Building, is inconsistent with other sections of the UFSAR that also describe the Auxiliary Building. This section states "The walls and major floors are constructed using concrete filled steel plate modules."

In contrast, UFSAR Subsection 3.8.3.1 describes how the containment internal structures are designed, stating: "At the lower elevations conventional concrete and reinforcing steel are used, except that permanent steel forms are used in some areas in lieu of removable forms based on constructability considerations." In addition, UFSAR Subsection 3.8.4.1.2, in describing the Auxiliary Building states: "The configuration and typical details of the structural modules are the same as for the structural modules described in Subsection 3.8.3.1 for the containment internal structures." Detailed design

documentation confirms that steel form modules and reinforced concrete are in fact used in Areas 5 and 6 of the Auxiliary Building.

To resolve this inconsistency, Subsection 3H.2.1 is proposed to be modified to include the use of steel form modules and reinforced concrete, consistent with the information provided in UFSAR Subsections 3.8.3.1 and 3.8.4.1.2.

5. ACI 349-01 Reference Consistency Change to Subsection 3H.3.1

Tier 2* information in UFSAR subsection 3H.3.1 appropriately references ACI 349-01. The title associated with the document as referenced, however, reads "*Code Requirement for Nuclear Safety-Related Structure Steel*" rather than "*Code Requirements for Nuclear Safety Related Concrete Structures*". The following changes are therefore being made to the title of ACI 349-01 in UFSAR subsection 3H.3.1:

1. Change "Requirement" to "Requirements" (plural).
2. Remove the hyphen between "Safety" and "Related" (consistent with published title).
3. Change "Structure Steel" to "Concrete Structures" (different construction elements).

Note that UFSAR subsection 1A.1, Reference Number 44 reflects the appropriate title. Verification of the code document confirms that subsection 1A.1 is correct. To resolve this inconsistency, a change is proposed to update the title of ACI 349-01 in Subsection 3H.3.1. The title of the code does not have a design function associated with it. Changing the title does not impact the implementation or take exemption from any part of the Code, but instead removes inconsistencies within the licensing basis. This change does not involve a technical (design, analysis, function, or qualification) change.

6. ACI 349-01 Reference Consistency Change to Subsection 3H.5.2

Tier 2* information in UFSAR subsection 3H.5.2 appropriately references ACI 349-01. The title associated with the document as referenced, however, reads "*Code Requirements for Nuclear Safety-Related Structures*" rather than "*Code Requirements for Nuclear Safety Related Concrete Structures*". The following changes are therefore being made to the title of ACI 349-01 in UFSAR subsection 3H.3.2:

1. Remove the hyphen between "Safety" and "Related" (consistent with published title).
2. Change "Structures" to "Concrete Structures" (specific construction elements).

Note that UFSAR subsection 1A.1, Reference Number 44 reflects the appropriate title.

Verification of the code document confirms that subsection 1A.1 is correct. To resolve this inconsistency, a change is proposed to update the title of ACI 349-01 in UFSAR Subsection 3H.5.2. The title of the code does not have a design function associated with it. Changing the reference to the title does not impact the implementation or take exemption to any part of the Code, but instead removes inconsistencies within the licensing basis. This change does not involve a technical (design, analysis, function, or qualification) change.

7. Auxiliary Building Modules Reference Consistency Change to Subsection 3H.5.5

Tier 2* information in UFSAR subsection 3H.5.5 provides a brief discussion of structural modules in the auxiliary building and states that "*Figure 3.8.4-5 shows the location of the structural modules in the auxiliary building*". Figure 3.8.4-5 shows the shield building, however, with the appropriate figure being Figure 3.8.4-4. To resolve this inconsistency, a change is proposed to update the figure reference in UFSAR subsection 3H.5.5 to Figure 3.8.4-4. This change does not involve a technical (design, analysis, function, or qualification) change.

8. Elevation Consistency Change to Figure 3H.5-2 (Sheet 1 of 3)

Tier 2* information in plant-specific DCD and UFSAR Figure 3H.5-2 (Sheet 1 of 3) shows the reference elevation at the bottom of the auxiliary building wall, top of the basemat, as 63'-6" instead of 66'-6". Figure 3H.5-2 Sheets 2 and 3 accurately state the elevation, however. To resolve this inconsistency, a change is proposed to modify the elevation to 66'-6" in Sheet 1 of UFSAR Figure 3H.5-2. This change does not involve a technical (design, analysis, function, or qualification) change.

9. ASME B31.1 Reference Consistency Change to Subsection 5.2.1.1

Tier 2* information in UFSAR subsection 5.2.1.1 states that "[*Fabrication, examination, inspection, and testing requirements as defined in Chapters IV, V, VI, and VII of the ASME B31.1 Code are applicable and used for the B31.1 (Piping Class D) CVS piping systems, valves, and equipment inside containment.*]*" Although Chapter VII was added to B31.1 in the 2007 version, Chapter VII does not exist in the version of ASME B31.1 referenced in the UFSAR (the 1989 Revision) and so a change is proposed to remove the reference to Chapter VII in this subsection 5.2.1.1 statement. The dimensional, fabrication, assembly, erection, inspection, examination, and testing requirements for the CVS piping systems, valves, and equipment are verified to be included within Chapters IV, V, and VI of the ASME B31.1 Code.

Tier 2* information in UFSAR Subsection 5.2.1.1 states that "[*Fabrication, examination, inspection, and testing requirements as defined in Chapters IV, V, VI, and VII of the ASME B31.1 Code are applicable and used for the B31.1 (Piping Class D) CVS piping systems, valves, and equipment inside*

containment.]*" The subjects of the B31.1 chapters, as presented in this sentence, are inconsistent with the stated chapter numbers, thus a change is proposed to revise the sentence such that the subjects of the B31.1 code chapters align with the chapter numbers. This change does not involve a technical (design, analysis, function, or qualification) change.

This licensing change package proposes editorial and consistency modifications to Tier 2* material and would make no technical change (i.e. the existing design is unaffected), and would maintain consistency between UFSAR (Tier 2 and Tier 2*) and Tier 1 design descriptions, tables, and figures. No structure, system, or component (SSC), design function, or analysis as described in the UFSAR would be adversely affected by the proposed changes. No defense-in-depth safety function would be adversely affected. No plant-specific ITAAC line item would be technically changed.

The requested changes propose editorial and consistency modifications, deleting unnecessarily detailed text, and making clarifications in Tier 2* material. Therefore, no design function as described in the UFSAR would be affected.

The proposed changes, being editorial in nature, do not adversely affect a feature used for the prevention or mitigation of accidents or their safety / design analyses. The proposed changes do not adversely affect any SSC accident initiator or initiating sequence of events. The proposed changes do not adversely affect any safety-related SSC or function used to mitigate an accident.

The proposed changes do not involve a change to a fission product barrier, nor do they result in a new failure mode, malfunction, or sequence of events that could adversely affect safety. The proposed changes would not allow for a new fission product release path, result in a new fission product barrier failure mode, or create a new sequence of events that would result in significant fuel cladding failures.

The proposed changes do not adversely affect any safety-related equipment, design code limit, safety-related function, safety-related design analysis, safety analysis input or result, design or safety margin. Therefore, no safety analysis or design basis acceptance limit or criterion would be challenged or exceeded.

This license amendment request does not involve a technical (design, analysis, function, or qualification) change, thus none of the associated SSCs used to contain, control, channel, monitor, process, or release radioactive or non-radioactive materials are adversely affected. The proposed editorial and consistency update would not affect the design or function of any SSC, but would instead provide consistency between the SSC designs and functions and the discussions currently presented in the UFSAR via Tier 2* information. The proposed amendment does not involve any design change. The proposed changes are unrelated to any aspect of plant construction or operation that would introduce any change to effluent types (e.g., effluents containing chemicals or biocides, sanitary system effluents, and other effluents), or adversely affect any plant radiological or non-radiological effluent release quantities. Furthermore, the proposed changes do not adversely 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.

Plant radiation zones, controls under 10 CFR 20, and expected amounts and types of radioactive materials are not adversely affected by the proposed changes. Therefore, individual and cumulative radiation exposures would not change.

3. Technical Evaluation (Incorporated into Section 2, above)

4. Regulatory Evaluation

4.1 Applicable Regulatory Requirements/Criteria

10 CFR 52, Appendix D, Section VIII.B, requires prior NRC approval for a departure from Tier 2* information. Although this departure does not adversely affect safety, it does involve departures from Tier 2* information. When evaluating the proposed departure, an applicant or licensee shall consider matters described in the UFSAR. Therefore, NRC approval is required prior to implementing the Tier 2* departures addressed in this license amendment request.

4.2 Precedent

No precedent is identified.

4.3 Significant Hazards Consideration Determination

The Licensee requests an amendment to the Combined Licenses (COLs) to change nontechnical Tier 2* material in the Updated Final Safety Analysis Report (UFSAR). This License Amendment Request proposes editorial changes (e.g., typing, spelling, data entry), clarifications, and consistency updates (to resolve inconsistencies between Tier 2* information and other licensing basis information) to plant-specific Tier 2* information. Because the proposed changes represent a departure from Tier 2* information, in accordance with 10 CFR Part 52, Appendix D, Paragraph VIII.B, NRC approval is required prior to implementing these changes. No structure, system, component (SSC), design function or analysis as described in the UFSAR will be adversely affected.

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, “Issuance of Amendment,” as discussed below:

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

Response: No

The proposed editorial and consistency update does not involve a technical change, i.e., there is no design parameter or requirement, calculation, analysis, function, or qualification change. No structure, system, component (SSC), design, or function would be adversely affected. No design or safety analysis would be adversely affected. The proposed changes do not adversely affect any accident initiating event or component failure, thus the probabilities of the accidents previously evaluated are not adversely affected. No function used to mitigate a radioactive material release and no radioactive material release source term is involved, thus the radiological releases in the accident analyses are not adversely affected. Therefore, the proposed amendment does not involve an increase in the probability or consequences of an accident previously evaluated.

4.3.2 Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed editorial and consistency update would not affect the design or function of any SSC, but will instead provide consistency between the SSC designs and functions and the discussions currently presented in the UFSAR via Tier 2* information. The proposed non-technical changes would not introduce a new failure mode, fault, or sequence of events that could result in a radioactive material release.

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

4.3.3 Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No

The proposed editorial and consistency update is non-technical and thus would not affect any design parameter, function, or analysis. There would be no change to an existing design basis, design function,

regulatory criterion, or analyses. No safety analysis or design basis acceptance limit/criterion is involved.

Therefore, the proposed amendment 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 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. The above evaluations demonstrate that the requested changes can be accommodated without an increase in the probability or consequences of an accident previously evaluated, without creating the possibility of a new or different kind of accident from any accident previously evaluated, and without a significant reduction in a margin of safety. Having arrived at negative declarations with regard to the criteria of 10 CFR 50.92, this assessment determined that the requested change does not involve a Significant Hazards Consideration.

5. Environmental Considerations

The requested amendment reflects proposed changes that would revise the COLs in regard to nontechnical Tier 2* information in the Updated Final Safety Analysis Report (UFSAR). This License Amendment Request proposes editorial changes (e.g., typing, spelling, data entry), clarifications, and consistency updates (to resolve inconsistencies between Tier 2* information and other licensing basis information) to plant-specific Tier 2* information. These changes address non-technical editorial and consistency updates and do not affect the plant itself. No structure, system, component (SSC), design function, or analysis as described in the UFSAR would be adversely affected. The details of the proposed changes are provided in Section 2 of this licensing amendment request.

This review has determined the proposed departure requires an amendment to the COL; however, a review of the anticipated construction and operational effects of the proposed amendment has determined the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and 10 CFR 51.21, 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 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 editorial and consistency update would not affect the design or function of any structure, system, or component (SSC), but would instead provide consistency between the SSC designs and functions and the discussions currently presented in the UFSAR via Tier 2* information. The proposed amendment does not involve any design change. The proposed changes are unrelated to any aspect of plant construction or operation that would introduce any change to effluent types (e.g., effluents containing chemicals or biocides, sanitary system effluents, and other effluents), or adversely affect any plant radiological or non-radiological effluent release quantities. Furthermore, the proposed changes do not adversely 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 clarifications and editorial changes to Tier 2* information do not adversely affect how the plant is designed, constructed, or operated. Plant radiation zones (addressed in UFSAR Section 12.3) are not affected, and controls established under 10 CFR 20 to preclude a significant increase in occupational radiation exposure are not affected. 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 construction and operational effects of the proposed amendment do 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) and 10 CFR 51.21. Therefore, pursuant to 10 CFR 51.22(b), an environmental impact statement or environmental assessment of the proposed amendment is not required.

6. References

None.

South Carolina Electric & Gas Company

V. C. Summer Units 2 and 3

NND-14-0316

Enclosure 2

Licensing Basis Proposed Changes - Public

(LAR 14-03)

UFSAR Subsection 3.8.3.2, Applicable Codes, Standards, and Specifications:

Revise Tier 2* information, as shown below:

[• *American Concrete Institute (ACI), Code Requirements for Nuclear Safety Related Concrete Structures, ACI- 349-01*]* (refer to subsection 3.8.4.5 for supplemental requirements)

UFSAR Subsection 3.8.4.2, Applicable Codes, Standards, and Specifications:

Revise Tier 2* information, as shown below:

[• *American Concrete Institute (ACI), Code Requirements for Nuclear Safety Related Concrete Structures, ACI- 349-01*]* (refer to Subsection 3.8.4.5 for supplemental requirements)

UFSAR Subsection 3H.2.1, Descriptions of Auxiliary Building:

Revise Tier 2* information, as shown below:

[*The auxiliary building is a reinforced concrete structure. The auxiliary building is one of the three buildings that make up the nuclear island and shares a common basemat with the containment building and the shield building. The auxiliary building general layout is shown in Figure 3H.2-1. It is a C-shaped section of the nuclear island that wraps around approximately half of the circumference of the shield building. The building dimensions are shown on key structural dimension drawings, Figure 3.7.2-12.*

The auxiliary building is divided into six areas, which are identified in Figure 3H.2-1. It is a 5-story building; three stories are located above grade and two are located below grade. Areas 1 and 2 (Figure 3H.2-1) have five floors, including two floors below grade level. The lowest floor at elevation 66'-6" is used exclusively for housing battery racks. The next higher floor, at elevation 82'-6", also has battery racks and some electrical equipment. The floor at the grade level, elevation 100'-0", has electrical penetration areas, a remote shutdown workstation room, motor control centers, and some Division A and Division C equipment. The main control room is situated on the floor at elevation 117'-6", which also has rooms for the main steam and feedwater lines. The floor at elevation 135'-3" carries air filtration and air handling units, chiller pumps, and other mechanical and electrical equipment. The roof for areas 1 and 2 is at elevation 153'-0".

Areas 3 and 4 of the auxiliary building are the areas east of the containment shield building.

Valve and piping areas, and some mechanical equipment, are located in the basement floor at elevation 66'-6". The floor at elevation 82'-6" has a piping penetration area, a radiation chemistry laboratory, makeup pumps, and other mechanical equipment. The floor at grade level elevation 100'-0" has an electrical penetration room, a staging area for the equipment

hatch, and the access opening to the annex building. The electrical penetration area, trip switchgears, and other electrical equipment ~~motor control centers~~ occupy most of the floor at elevation 117'-6". The floor at elevation 135'-3" is used for the storage of main control room air cylinders and provides access to the annex building. The roof for these areas is at elevation 160'-6".

*Areas 5 and 6 include facilities for storage and handling of new and spent fuel. The spent fuel pool, fuel transfer canal, and cask loading and cask washdown pits have concrete walls and floors. They are lined on the inside surface with stainless steel plate for leak prevention. ~~The~~ Interior structural walls and major floors are constructed using concrete filled steel plate modules, steel form modules, or reinforced concrete. The new fuel storage area is a separate reinforced concrete pit providing temporary dry storage for the new fuel assemblies. A 150-ton cask handling crane travels in the east-west direction. The location and travel of this crane prevents the crane from carrying loads over the spent fuel pool to preclude them from falling into the spent fuel pool. Mechanical equipment is also located in this area for spent fuel cooling, residual heat removal, and liquid waste processing. This equipment is generally nonsafety-related.]**

UFSAR Subsection 3H.3.1, Governing Codes and Standards:

Revise Tier 2* information, as shown below:

- *ACI 349-01, "Code Requirements for Nuclear Safety- Related Concrete Structures ~~Structure Steel~~" (refer to subsection 3.8.4.5 for supplementary requirements)*

UFSAR Subsection 3H.5.2, Composite Structures (Floors and Roof):

Revise Tier 2* information, as shown below:

- *Design of concrete slab*

  – *The concrete slab and the steel reinforcement of the composite section are evaluated for normal and extreme environmental conditions. The slab concrete and the reinforcement is designed to meet the requirements of American Concrete Institute standard ACI 349-01 "Code Requirements for Nuclear Safety- Related Concrete Structures."*

UFSAR Subsection 3H.5.5, Structural Modules:

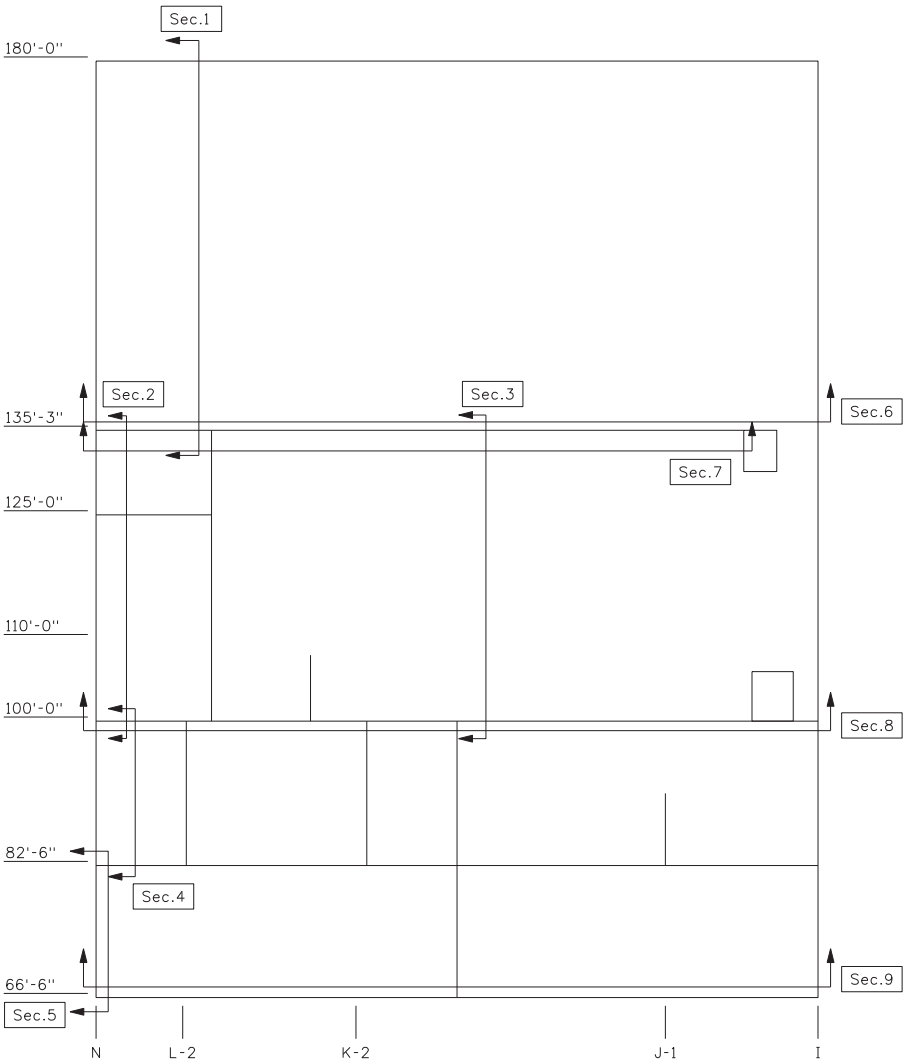
Revise Tier 2* information, as shown below:

These modules include the spent fuel pool, fuel transfer canal, and cask loading and cask washdown pits. The structural modules are similar to the structural modules for the containment internal structures (see description in subsection 3.8.3 and Figures 3.8.3-8, 3.8.3-14, 3.8.3-15 and 3.8.3-17). Figure 3.8.4-4~~5~~ shows the location of the structural modules in the auxiliary building. The structural modules extend from elevation 66'-6" to elevation 135'-3".

UFSAR Subsection 5.2.1.1, Compliance with 10 CFR 50.55a (last paragraph):

Revise Tier 2* information, as shown below:

*[Dimensional ~~F~~fabrication, ~~examination~~assembly, erection, inspection, examination, and testing requirements as defined in Chapters IV, V, and VI~~, and VII~~ of the ASME B31.1 Code are applicable and used for the B31.1 (Piping Class D) CVS piping systems, valves, and equipment inside containment.]**


Sec.1
180'-0"
Sec.2
Sec.3
Sec.6
135'-3"
Sec.7
125'-0"
110'-0"
100'-0"
Sec.8
82'-6"
Sec.4
66'-6"
Sec.9
Sec.5
N
L-2
K-2
J-1
I