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10 CFR 50.4
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January 8, 2009

UN#09-004

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: UniStar Nuclear Energy, NRC Docket No. 52-016
Response to Request for Additional Information for the
Calvert Cliffs Nuclear Power Plant, Unit 3,
RAI No. 40, Revision 2, Standard Review Plan Section 05.04.02.02,
Steam Generator Program

Reference: John Rycyna (NRC) to George Wrobel (UniStar), "RAI No 40 CIB1 1501.doc
(P)," email dated December 9, 2008

The purpose of this letter is to respond to the request for additional information (RAI) identified in the NRC e-mail correspondence to UniStar Nuclear, dated December 9, 2008 (reference). This RAI addresses the Steam Generator Program, as discussed in Section 5.4.2.5 of the Final Safety Analysis Report (FSAR), as submitted in Part 2 of the Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3 Combined License Application (COLA), Revision 3.

The enclosure provides our response to RAI No. 40, Revision 2. This response does not include any new regulatory commitments. COLA impacts associated with RAI responses are noted with the question responses. A Licensing Basis Document Change Request has been initiated to incorporate these changes into a future revision of the COLA. This letter provides a complete response to RAI No. 40, Revision 2.

If there are any questions regarding this transmittal, please contact me at (410) 470-4205, or Mr. Michael J. Yox at (410) 495-2436.

D079
NR0

I declare under penalty of perjury that the foregoing is true and correct.

Executed on January 8, 2009

A handwritten signature in black ink, appearing to read 'Greg Gibson', with a long horizontal flourish extending to the right.

Greg Gibson

Enclosure: Response to NRC Request for Additional Information, RAI No. 40, Revision 2,
Final Safety Analysis Report Section 5.4.2.5, Steam Generator Program

cc: U.S. NRC Region I
U.S. NRC Resident Inspector, Calvert Cliffs Nuclear Power Plant, Units 1 and 2
NRC Environmental Project Manager, U.S. EPR Combined License Application
NRC Project Manager, U.S. EPR Combined License Application
NRC Project Manager, U.S. EPR Design Certification Application (w/o enclosure)

Enclosure

Response to NRC Request for Additional Information, RAI No. 40, Revision 2

Standard Review Plan Section 05.04.02.02

Steam Generator Program

RAI No. 40, Revision 2

Question 05.04.02.02-1

According to SRP Section 5.4.2.2, the Steam Generator Program is an operational program that should be fully described, with implementation milestones listed in the appropriate table in Chapter 13 of the FSAR. It is not clear to the staff that the application's FSAR at Table 13.4-1 ("Operational Programs Required by NRC Regulations and Program Implementation") includes the Steam Generator Program because it does not reference the applicant's FSAR, Section 5.4, or the technical specifications containing the implementation requirements for steam generator tube inspection. Please discuss how the application ensures the Steam Generator Program is included as an operational program.

Response

10 CFR 50.55a(g), requires that in-service inspection (ISI) programs (of which the SG program is a part) meet the inspection requirements of ASME Section XI. A reference to FSAR Section 5.4.2, which describes the steam generator program, will be added to the FSAR Table 13.4-1 entry associated with the In-service Inspection Program (Item 1).

COL Impact

CCNPP Unit 3 FSAR Table 13.4-1 will be updated to include a reference to FSAR Section 5.4.2.5 for the In-service Inspection Program (Item 1) in a future COL revision.

Question 05.04.02.02-2

According to SRP Section 5.4.2.2, an acceptable steam generator inspection program will ensure all tubes are inspected before being placed into service, using techniques that are expected to be used during subsequent inspections. Although a preservice inspection is described in Section 5.4.2.5.2.2 of the U.S. EPR FSAR, it is not part of the requirements in the applicant's technical specifications. Therefore, please modify the FSAR to ensure that the preservice inspection is performed (for example, by adding a reference to FSAR Section 5.4.2.5 in Table 13.4-1), or justify an alternative.

Response

A reference to FSAR Section 5.4.2, which describes the steam generator program, will be added to the FSAR Table 13.4-1 entry associated with the Preservice Inspection Program (Item 6).

COL Impact

CCNPP Unit 3 FSAR Table 13.4-1 will be updated to include a reference to FSAR Section 5.4.2.5 for the Preservice Inspection Program (Item 6) in a future COL revision.

Question 05.04.02.02-3

Part 4 of the application, Technical Specifications, Section 5.5.8.b.2 states that “[t]he primary to secondary accident induced leakage rate for any design basis accident, other than a SG tube rupture, shall not exceed the leakage rate assumed in the accident analysis in terms of total leakage rate for all SGs and leakage rate for an individual SG.” It does not include a maximum leakage rate.

As incorporated by SRP Section 5.4.2.2, Standard Technical Specifications Section 5.5.9.b.2 provides in part that “[l]eakage is not to exceed [1 gpm] [gallon per minute] per SG [steam generator], except for specific types of degradation at specific locations as described in paragraph c of the Steam Generator Program.” The 1 gpm limit is based on severe accident considerations and may be more (or less) than the value assumed in the radiological dose assessment. Please modify Section 5.5.8.b.2 to comply with the SRP, or justify an alternative.

Response

The following information was provided by AREVA in response U.S. EPR FSAR RAI 63, Question 05.04.02.02-1 (reference).

U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Section 5.5.8.b.2 will be revised to be consistent with TSTF-449-A, Rev. 4 by adding a statement to indicate leakage rate is not to exceed 0.125 gpm per steam generator. As this leakage rate is the value assumed in the plant’s dose assessment for design basis accidents, no change is needed to U.S. EPR, Tier 2, Section 5.4.2.5.1.3.

Reference:

Response to Request for Additional Information No. 63, Revision 0, dated 10/3/2008, U. S. EPR Standard Design Certification, AREVA NP Inc., Docket No. 52-020, SRP Section: 05.04.02.01 - Steam Generator Materials, SRP Section: 05.04.02.02 - Steam Generator Program, Application Section: FSAR 5.4.2, CIB1 Branch (ML083110337).

COL Impact

As described in the referenced U.S. EPR FSAR RAI response, U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Section 5.5.8.b.2 will be revised. The CCNPP Unit 3 Technical Specifications will be updated to incorporate the described change upon incorporation into the U.S. EPR Technical Specifications.

Question 05.04.02.02-4

The applicant's Technical Specifications (TS) concerning limiting conditions for operation, in Section 3.4.12.d and Surveillance Requirement 3.4.12.2 (Reactor Coolant System Operational Leakage) differ from the language in the Standard Technical Specifications (STS), as incorporated by SRP Section 5.4.2.2. The applicant's TS proposes an operational leakage limit of 150 gallons per day (gpd) through "each steam generator." The STS language provides for operational leakage of 150 gpd through "any one steam generator." The applicant's language could be interpreted as allowing more than 150 gpd through one or more steam generators as long as at least one of the steam generators has not exceeded 150 gpd. The STS language is meant to ensure that action is taken as soon as one SG exceeds the 150 gpd limit. This is also the case concerning the applicant's TS Bases. Please modify these provisions to comply with the STS, or justify an alternative.

Response

The following information was provided by AREVA in response U.S. EPR FSAR RAI 63, Question 05.04.02.02-3 (reference).

U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Sections 3.4.12 and B3.4.12 will be revised to be consistent with TSTF-449-A, Rev. 4.

The proposed changes to U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Sections 3.4.12 and B3.4.12 are shown on page markups that are included with the referenced RAI response, and clarify that primary to secondary leakage through "any one" steam generator is limited to less than or equal to 150 gallons per day.

Reference:

Response to Request for Additional Information No. 63, Revision 0, dated 10/3/2008, U. S. EPR Standard Design Certification, AREVA NP Inc., Docket No. 52-020, SRP Section: 05.04.02.01 - Steam Generator Materials, SRP Section: 05.04.02.02 - Steam Generator Program, Application Section: FSAR 5.4.2, CIB1 Branch (ML083110337).

COL Impact

As described in the referenced U.S. EPR FSAR RAI response, U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Sections 3.4.12 and B3.4.12 will be revised to be consistent with TSTF-449-A, Rev. 4. The CCNPP Unit 3 Technical Specifications will be updated to incorporate the described change upon incorporation into the U.S. EPR Technical Specifications.

Question 05.04.02.02-5

In the applicant's Technical Specifications (TS), the definition of "Identified LEAKAGE" on page 1.1-4 reads, in part, as "Reactor Coolant System (RCS) LEAKAGE through a steam generator (SG) to the Secondary System" The Standard Technical Specifications (STS), as incorporated in SRP Section 5.4.2.2, define identified leakage, in part, as "Reactor Coolant System (RCS) LEAKAGE through a steam generator to the Secondary System (*primary to secondary LEAKAGE*)" (Emphasis added.) This last portion, "(primary to secondary LEAKAGE)," is absent from the applicant's definition. Please modify the definition in the TS to comport with the language of the STS, or justify an alternative.

Response

The following information was provided by AREVA in response U.S. EPR FSAR RAI 63, Question 05.04.02.02-7 (reference).

U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Section 1.1 will be revised to be consistent with TSTF-449-A, Rev. 4.

The proposed change to the U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Section 1.1 definition for Identified LEAKAGE is shown on a page markup that is included with the referenced RAI response. The page markup clarifies that Identified LEAKAGE includes, "Reactor Coolant System (RCS) LEAKAGE through a steam generator to the Secondary System '(primary to secondary LEAKAGE)';"

Reference:

Response to Request for Additional Information No. 63, Revision 0, dated 10/3/2008, U. S. EPR Standard Design Certification, AREVA NP Inc., Docket No. 52-020, SRP Section: 05.04.02.01 - Steam Generator Materials, SRP Section: 05.04.02.02 - Steam Generator Program, Application Section: FSAR 5.4.2, CIB1 Branch (ML083110337).

COL Impact

As described in the referenced U.S. EPR FSAR RAI response, U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Section 1.1 will be revised to be consistent with TSTF-449-A, Rev. 4. The CCNPP Unit 3 Technical Specifications will be updated to incorporate the described change upon incorporation into the U.S. EPR Technical Specifications.

Question 05.04.02.02-6

In the applicant's Technical Specifications (TS), the definition of "Pressure Boundary LEAKAGE" on page 1.1-4 reads, "LEAKAGE (except SG LEAKAGE) through a nonisolable fault in an RCS component body, pipe wall, or vessel wall." The Standard Technical Specifications (STS), as incorporated in SRP Section 5.4.2.2, define pressure boundary leakage as "LEAKAGE (*except primary to secondary LEAKAGE*) through a nonisolable fault in an RCS component body, pipe wall, or vessel wall." (Emphasis added.) The parenthetical "(except primary to secondary LEAKAGE)" was changed to "(except SG LEAKAGE)." Please modify the definition in the TS to comport with the language of the STS, or justify an alternative.

Response

The following information was provided by AREVA in response U.S. EPR FSAR RAI 63, Question 05.04.02.02-8 (reference).

U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Section 1.1 will be revised to be consistent with TSTF-449-A, Rev. 4.

The proposed change to the U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Section 1.1 definition for Pressure Boundary LEAKAGE is shown on a page markup that is included with the referenced RAI response. The page markup clarifies that pressure boundary LEAKAGE is, "LEAKAGE (except 'primary to secondary' LEAKAGE) through a nonisolable fault in an RCS component body, pipe wall, or vessel wall."

Reference:

Response to Request for Additional Information No. 63, Revision 0, dated 10/3/2008, U. S. EPR Standard Design Certification, AREVA NP Inc., Docket No. 52-020, SRP Section: 05.04.02.01 - Steam Generator Materials, SRP Section: 05.04.02.02 - Steam Generator Program, Application Section: FSAR 5.4.2, CIB1 Branch (ML083110337).

COL Impact

As described in the referenced U.S. EPR FSAR RAI response, U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Section 1.1 will be revised to be consistent with TSTF-449-A, Rev. 4. The CCNPP Unit 3 Technical Specifications will be updated to incorporate the described change upon incorporation into the U.S. EPR Technical Specifications.

Question 05.04.02.02-7

The applicant's description of Condition A in its Technical Specifications (TS) for limiting condition for operation (LCO) 3.4.16, "Steam Generator (SG) Tube Integrity," provides for LCO when "[o]ne or more SG tubes satisfying the tube plugging criteria and not plugged in accordance with the Steam Generator Program." The Standard Technical Specifications (STS), as incorporated in SRP Section 5.4.2.2, provide in LCO 3.4.20 that "SG tube integrity shall be maintained. . . . AND . . . All SG tubes satisfying the tube repair criteria shall be plugged [or repaired] in accordance with the Steam Generator Program." The use of "plugging" instead of "repair" also occurs in Surveillance Requirement 3.4.16.2, TS 5.5.8 (c and d), and corresponding sections in the TS Bases. Please modify the above TS sections to comport with the STS or justify an alternative.

Response

The following information was provided by AREVA in response U.S. EPR FSAR RAI 63, Question 05.04.02.02-9 (reference).

U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications (TS) Sections 3.4.16, B3.4.16, and 5.5.8 will be revised to be consistent with TSTF-449-A, Rev. 4. To provide consistency between the FSAR and the TS, U.S. EPR FSAR Tier 2, Sections 5.4.2.5.2.1 and 5.4.2.5.2.3 will be revised to change the wording for the maintenance of steam generator from "plugging" to "repair."

Reference:

Response to Request for Additional Information No. 63, Revision 0, dated 10/3/2008, U. S. EPR Standard Design Certification, AREVA NP Inc., Docket No. 52-020, SRP Section: 05.04.02.01 - Steam Generator Materials, SRP Section: 05.04.02.02 - Steam Generator Program, Application Section: FSAR 5.4.2, CIB1 Branch (ML083110337).

COL Impact

CCNPP Unit 3 FSAR Sections 5.4.2.5.2.1 and 5.4.2.5.2.3 contain only statements directly referencing to the U.S. EPR FSAR, and therefore no changes to the CCNPP Unit 3 FSAR text are required. As described in the referenced U.S. EPR FSAR RAI response, U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Sections 3.4.16, B3.4.16, and 5.5.8 will be revised to be consistent with TSTF-449-A, Rev. 4. The CCNPP Unit 3 Technical Specifications will be updated to incorporate the described changes upon incorporation into the U.S. EPR Technical Specifications.

Question 05.04.02.02-8

The applicant's Technical Specifications (TS), Section 5.5.8.c concern "[p]rovisions for SG tube plugging criteria. Tubes found by inservice inspection to contain indications with a depth equal to or exceeding 40% of the nominal tube wall thickness per eddy current results shall be plugged." The Standard Technical Specifications (STS), as incorporated in SRP Section 5.4.2.2, provide in Section 5.5.9.c that "[t]ubes found by inservice inspection to contain flaws with a depth equal to or exceeding [40%] of the nominal tube wall thickness shall be plugged [or repaired]." Please modify the above TS section and applicable TS bases to use the term "flaws" instead of "indications," or justify an alternative. Further, please remove the phrase "per eddy current results" in the above TS and applicable TS bases, or justify an alternative, since other examination techniques may be used.

Response

The following information was provided by AREVA in response U.S. EPR FSAR RAI 63, Question 05.04.02.02-10 (reference).

U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications (TS) Section 5.5.8 will be revised to be consistent with TSTF-449-A, Rev. 4. To provide consistency between the FSAR and the TS, U.S. EPR FSAR Tier 2, Section 5.4.2.5.2.1 will be revised to change the wording from "indications" to "flaws."

The proposed changes to the U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Section 5.5.8 are shown on a page markup that is included with the referenced RAI response. In addition to changing the wording from "indications" to "flaws", the words "per eddy current results" are removed.

Reference:

Response to Request for Additional Information No. 63, Revision 0, dated 10/3/2008, U. S. EPR Standard Design Certification, AREVA NP Inc., Docket No. 52-020, SRP Section: 05.04.02.01 - Steam Generator Materials, SRP Section: 05.04.02.02 - Steam Generator Program, Application Section: FSAR 5.4.2, CIB1 Branch (ML083110337).

COL Impact

CCNPP Unit 3 FSAR Section 5.4.2.5.2.1 contains only statements directly referencing to the U.S. EPR FSAR, and therefore no changes to the CCNPP Unit 3 FSAR text are required. As described in the referenced U.S. EPR FSAR RAI response, U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Section 5.5.8 will be revised to be consistent with TSTF-449-A, Rev. 4. The CCNPP Unit 3 Technical Specifications will be updated to incorporate the described changes upon incorporation into the U.S. EPR Technical Specifications.

Question 05.04.02.02-9

The applicant's Technical Specifications (TS), Section 5.5.8.d.1, specify that the applicant will "[i]nspect 100% of the tubes in each steam generator during the first refueling outage." Section 5.5.9.d.1 of the Standard Technical Specifications (STS), as incorporated by SRP, Section 5.4.2.2, provide that the applicant will "[i]nspect 100% of the tubes in each SG during the first refueling outage following SG replacement." Therefore, as the applicant's TS exist currently, if the steam generators were replaced, the TS would not require 100 percent inspection of the new SGs during the first refueling outage. Please modify the above section to provide for tube inspection following SG installation, or justify an alternative.

Response

The following information was provided by AREVA in response U.S. EPR FSAR RAI 63, Question 05.04.02.02-11 (reference).

The wording of TS 5.5.9.d.1 as approved by the NRC on May 6, 2005 in TSTF-449-A, Rev. 4 is:

"Inspect 100% of the tubes in each SG during the first refueling outage following SG replacement."

This TS was written and approved for currently operating plants and did not consider new plants. Earlier versions of the steam generator (SG) Program required a first inservice inspection after 6 effective full power months but within 24 calendar months of initial criticality. There was no mention of steam generator (SG) replacement. Inspection of SGs "following SG replacement" was added to the TS by license amendment by utilities seeking NRC approval for SG replacement.

Therefore, AREVA will take exception to the wording in TSTF-449-A to instead inspect 100 percent of the tubes in each SG during the first refueling outage and following SG replacement.

The proposed changes to the U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Section 5.5.8.d.1 are shown on a page markup that is included with the referenced RAI response, and will require inspection of 100 percent of the tubes in each SG during the first refueling outage and following SG replacement.

Reference:

Response to Request for Additional Information No. 63, Revision 0, dated 10/3/2008, U. S. EPR Standard Design Certification, AREVA NP Inc., Docket No. 52-020, SRP Section: 05.04.02.01 - Steam Generator Materials, SRP Section: 05.04.02.02 - Steam Generator Program, Application Section: FSAR 5.4.2, CIB1 Branch (ML083110337).

COL Impact

As described in the referenced U.S. EPR FSAR RAI response, U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications Section 5.5.8.d.1 will be revised to require inspection of 100 percent of the tubes in each SG during the first refueling outage and following SG replacement.

The CCNPP Unit 3 Technical Specifications will be updated to incorporate the described changes upon incorporation into the U.S. EPR Technical Specifications.

Question 05.04.02.02-10

The applicant's Technical Specifications (TS), in Section 5.6.7.h, provide that a "report shall be submitted within 180 days after the initial entry into MODE 4 following completion of an inspection performed in accordance with the Specification 5.5.8, "Steam Generator (SG) Program". The report shall include: . . . h. The plugging percentage for all plugging in each SG." The Standard Technical Specifications (STS), as incorporated in SRP Section 5.4.2.2, in Section 5.6.7, provide for such a report, including "h. The *effective* plugging percentage for all plugging [and tube repairs] in each SG" (Emphasis added.) Please modify the above TS section to comport with the STS (i.e., by adding "effective" before "plugging percentage"), or justify an alternative.

Response

The following information was provided by AREVA in response U.S. EPR FSAR RAI 63, Question 05.04.02.02-14 (reference).

The term "effective plugging percentage" refers to the effect of repair methods such as tube sleeving. Technical Specification (TS) 5.6.7.h is shown in brackets in TSTF-449-A, Rev.4 and is therefore to be included if needed. Since no approved repair methods have been listed in U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications 5.5.8.c, Technical Specification 5.6.7.h is not needed and is repetitious of 5.6.7.f. To provide consistency between the FSAR and the TS, U.S. EPR Tier 2, Section 5.4.2.5.3 will delete the bullet, "The effective plugging for all plugging in each steam generator."

As described above, TS 5.6.7.h will be deleted from the U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications, Section 5.6.7. This change will be reflected into the CCNPP Unit 3 Technical Specifications once it is incorporated into U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications. As a result, it is not necessary to add the word "effective" to CCNPP Unit 3 Technical Specification 5.6.7.h.

Reference:

Response to Request for Additional Information No. 63, Revision 0, dated 10/3/2008, U. S. EPR Standard Design Certification, AREVA NP Inc., Docket No. 52-020, SRP Section: 05.04.02.01 - Steam Generator Materials, SRP Section: 05.04.02.02 - Steam Generator Program, Application Section: FSAR 5.4.2, CIB1 Branch (ML083110337).

COL Impact

As described above, TS 5.6.7.h will be deleted from the U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications, Section 5.6.7. This change will be reflected into the CCNPP Unit 3 Technical Specifications once it is incorporated into U.S. EPR FSAR Tier 2, Chapter 16, Technical Specifications.

Question 05.04.02.02-11

Concerning the applicant's FSAR, Section 5.4.2.5.2.2, "Tube Inspection," (COL Item 5.4-1); please clarify the relationship between the proposed Steam Generator Tube Inspection Program and the applicant's obligations under 10 C.F.R. 50.55a. Specifically, it is the NRC Staff's understanding that the word "initial" in the first paragraph of the applicant's description of its Steam Generator Tube Inspection program refers to the program described therein. This is potentially confusing, because in 10 C.F.R. 50.55a, the word "initial" is used to refer to the first 120-month inservice inspection interval. In addition, the first sentence of the second paragraph of Section 5.4.2.2 does not use the word "initial," but apparently addresses the initial inservice inspection interval.

Response

The text in CCNPP Unit 3 FSAR Section 5.4.2.5.2.2 will be revised as follows to clarify the Steam Generator Program with respect to preservice and inservice requirements:

~~The initial Steam Generator Tube Inspection Program~~ Steam Generator Program tube inspections for preservice inspection and the initial inservice inspection interval will comply with ASME Boiler and Pressure Vessel Code, Section XI, 2004 edition (ASME, 2004). This code is consistent with that established in U.S. EPR FSAR Section 5.4.2. No relief requests or alternatives are required for use of the 2004 Edition of ASME Section XI.

~~The Steam Generator Tube Inspection Program~~ Steam Generator Program tube inspections for the initial inservice inspection interval shall incorporate the latest edition and addenda of the ASME Boiler and Pressure Vessel Code approved in 10 CFR 50.55a(b) (CFR, 2008) on the date 12 months before initial fuel load. Inservice ~~examination of components and system pressure tests~~ inspections conducted during successive 120-month inspection intervals must comply with the requirements of the latest edition and addenda of the Code incorporated by reference in 10 CFR 50.55a(b) 12 months before the start of the 120-month inspection interval (or the optional ASME Code cases listed in Regulatory Guide 1.147 (NRC, 2007), that are incorporated by reference in 10 CFR 50.55a(b), subject to the limitations and modifications listed in 10 CFR 50.55a(b)).

Should relief requests be required due to the use of code additions/addenda later than the 2004 Edition, they will be developed through the regulatory process and submitted to the NRC for approval in accordance with 10 CFR 50.55a(g)(5). The relief requests shall include appropriate justifications and proposed alternative inspection methods.

COL Impact

CCNPP Unit 3 FSAR Section 5.4.2.5.2.2 will be updated as shown in the response to this question in a future COLA revision.

Question 05.04.02.02-12

The applicant's FSAR, Section 5.4.2.5.2.2, "Tube Inspection," (COL Item 5.4-1) states that "[t]he initial Steam Generator Tube Inspection Program will comply with ASME Boiler and Pressure Vessel Code, Section XI, 2004 edition (ASME, 2004). This code is consistent with that established in U.S. EPR FSAR Section 5.4.2. *No relief requests or alternatives are required.* . . . "Should relief requests be required, they will be developed through the regulatory process and submitted to the NRC for approval in accordance with 10 CFR 50.55a(g)(5). The relief requests shall include appropriate justifications and proposed alternative inspection methods." The first paragraph states that no relief requests are required, while the third paragraph indicates relief requests may be required. Please clarify this apparent discrepancy.

Response

The text in CCNPP Unit 3 FSAR Section 5.4.2.5.2.2 will be revised as follows to clarify the how code cases will be used relative to the Steam Generator Program:

~~The initial Steam Generator Tube Inspection Program~~ Steam Generator Program tube inspections for preservice inspection and the initial inservice inspection interval will comply with ASME Boiler and Pressure Vessel Code, Section XI, 2004 edition (ASME, 2004). This code is consistent with that established in U.S. EPR FSAR Section 5.4.2. No relief requests or alternatives are required for use of the 2004 Edition of ASME Section XI.

~~The Steam Generator Tube Inspection Program~~ Steam Generator Program tube inspections for the initial inservice inspection interval shall incorporate the latest edition and addenda of the ASME Boiler and Pressure Vessel Code approved in 10 CFR 50.55a(b) (CFR, 2008) on the date 12 months before initial fuel load. Inservice examination of components and system pressure tests inspections conducted during successive 120-month inspection intervals must comply with the requirements of the latest edition and addenda of the Code incorporated by reference in 10 CFR 50.55a(b) 12 months before the start of the 120-month inspection interval (or the optional ASME Code cases listed in Regulatory Guide 1.147 (NRC, 2007), that are incorporated by reference in 10 CFR 50.55a(b), subject to the limitations and modifications listed in 10 CFR 50.55a(b)).

Should relief requests be required due to the use of code additions/addenda later than the 2004 Edition, they will be developed through the regulatory process and submitted to the NRC for approval in accordance with 10 CFR 50.55a(g)(5). The relief requests shall include appropriate justifications and proposed alternative inspection methods.

COL Impact

CCNPP Unit 3 FSAR Section 5.4.2.5.2.2 will be updated as shown in the response to this question in a future COLA revision.