

**Attachment 1: Industry Comments on Draft Safety Evaluation for WCAP-16294-NP**

| COMMENT NO. | DRAFT SE PAGE & LINE NO.                                      | COMMENT   | JUSTIFICATION  |
|-------------|---|---|--|
| 1           | P1/L39<br>P1/L40-L43<br><br>P1/L43                            | Replace: “certain” with “specific TS”<br>Delete the sentence:<br>“The proposed change to the TSs would allow time to perform short-duration repairs which would otherwise necessitate exiting the original Mode of operation. Short duration repairs are on the order of 2-to-3 days, but not more than a week.”<br>Delete the sentence:<br>“The Mode 4 TS endstate is applied, if risk is assessed and managed.” | Editorial<br>WCAP-16294 justified Mode 4 as an acceptable end state. WCAP-16294 did not include any limitations on the period of time that a unit can remain in Mode 4.<br><br>10CFR50.65 is applicable during all conditions of plant operation, including normal shutdown operations. 10CFR50.65(a)(4) requires licensees to assess and manage the increase in risk that may result from proposed maintenance activities. Therefore compliance with this regulation ensures that risk will be assessed and managed during the proposed endstate. |
| 2           | P1/L44-L46  | Delete the following:<br>“(1) entry into the shutdown mode is for a short interval,”<br>Re-number Item 2 to 1 and Item 3 to 2.  | WCAP-16294 justified Mode 4 as an acceptable end state. WCAP-16294 did not include any limitations on the period of time that a unit can remain in Mode 4.   |
| 3           | P2 Table  | Include complete titles for TS 3.6.6A, 3.6.6.B, and 3.6.6C.   | The revision makes the TS titles complete and consistent with NUREG-1431.  |
| 4           | P4/L12  | Revise “TSs” to “TS”.   | Editorial  |
| 5           | P5/L32  | Revise: “...assessing proposed permanent TS changes in AOT.”<br><br>To: “...assessing proposed permanent AOT and STI TS changes.”   | The revision is a more accurate description of the TS changes discussed in RG 1.77.  |
| 6           | P5/L45  | Revise: “The objective of Tier 2 evaluation...”<br><br>To: “The objective of the Tier 2 evaluation...”  | Editorial  |
| 7           | P7/L19, L21, L23, L24, L27-L29 and L31.<br>P8/L1, L2, and L3. | Revise TS Mode definitions as follows:<br>Mode 1 - Revise “rated power” to “rated thermal power”<br>Mode 2 – Revise “rated power” to “rated thermal power” and delete the sentence: “The reactor vessel head closure bolts are fully tensioned.”  | The revisions make the Mode definitions in the draft SE consistent with the corresponding TS Mode definitions in NUREG-1431.<br><br>The operational considerations discussed for Mode 4 and 5 are not part of the Mode definitions in NUREG-1431.  |

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|             |                          | <p>Mode 3 – Delete the sentence: “The reactor vessel head closure bolts are fully tensioned.”</p> <p>Mode 4 - Delete the sentence: “The RCS pressure would typically be low enough to permit operation of the shutdown cooling (SDC) system, although low pressure is not a requirement of the mode and heat removal may be via the steam generators (SGs).”</p> <p>Mode 5 – Delete the sentence: “The RCS pressure permits operation of the SDC system, since heat removal via the SGs cannot maintain RCS temperature below 200°F.”</p> <p>Mode 6 – Revise: “The reactor mode is shutdown...” To: “The reactor in this mode is shutdown...”</p> | <p>The Mode 6 change is editorial</p>   |
| 8           | P8/L5 and L6             | <p>Revise: “End states for unit conditions are prescribed in TS...”</p> <p>To: “End states for unit conditions are prescribed in the TS...”</p> <p>Revise: “The current TS actions require placing a plant in...”</p> <p>To: “The current TS actions require placing the unit in...”</p>  | <p>Change is for editorial (the) and consistency (unit) reasons.</p>  |
| 9           | P8/L12                   | <p>Revise: “operations”</p> <p>To: “operation”</p>  | <p>Editorial</p>  |
| 10          | P8/L14                   | <p>Revise: “...and actions were implemented...”</p> <p>To: “and guidance was issued...”</p>   | <p>The revision clarifies that guidance (NUMARC 91-06) was developed to address shutdown operation. The current wording implies some Action (e.g., TS changes) was implemented.</p>   |
| 11          | P8/L18                   | <p>Revise: “ accident mitigation in Modes 4 and 5...”</p> <p>To: “ accident mitigation (with the remaining operable train of equipment) in Modes 4 and 5...”</p>  | <p>The revision clarifies that the assessment of the availability of plant equipment performed in WCAP-16294 for accident mitigation discussed that the remaining operable train of equipment was available.</p>                          |
| 12          | P8/L21                   | <p>Delete: “to support the return to service”</p>   | <p>This change improves the accuracy of statements referring to the assessments performed in WCAP-16294. Other than discussing the Mode change required by the TS, WCAP-16294 does not address specific reasons for the Mode changes.</p> |

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| 13          | P8/L40 and L41                          | Revise: "...the comparative risk of completing repairs in Mode 4 or proceeding to Mode 5 for repairs and then returning to Mode 4 for plant startup."<br>To: "...the comparative risk of remaining in Mode 4 or proceeding to Mode 5 and then returning to Mode 4 for plant startup." | This change improves the accuracy of statements referring to the assessments performed in WCAP-16294. Other than discussing the Mode change required by the TS, WCAP-16294 does not address specific reasons for the Mode changes.  |
| 14          | P9/L16 and L21                          | Revise: "allowances"<br>To: "allowance"   | Editorial   |
| 15          | P9/L17 and 18                           | Delete: "(i.e., unanalyzed)"  | The term "unanalyzed" implies that a FSAR Chapter 15 safety analysis is associated with this change. The addition of the Note ensures the correct usage of the TS. The Note being added to the affected TS Required Action merely assures that LCO 3.0.4a is applied as intended.             |
| 16          | P9/L22                                  | Revise: "...therefore, appropriate operational limits are applied with the addition of Notes to affected TS..."<br>To: "...therefore, an appropriate limitation is applied by the addition of Notes to the affected TS..."  | The use of "operational" in this context is unnecessary and potentially confusing given that the change only assures the proper use of the existing TS requirement.<br>The other changes are editorial.   |
| 17          | P9/L26                                  | Revise: "...applied to corresponding..."<br>To: "applied to the corresponding..."   | Editorial   |
| 18          | P9/L33                                  | Revise: "...mitigate several events."<br>To: "...mitigate potential events."  | The affected sentence refers to manual SI actuation capability in Mode 4. The existing wording implies that there are analyzed events for which SI is required in Mode 4. There are no specific events analyzed in Mode 4 for which SI is required.   |
| 19          | P9/L34-L36                              | Delete the following sentence: "During the proposed end state (MODE 4), the event mitigating systems, structures and their components such as pumps, and valves must be assessed at predetermined, periodic interval to ensure safety."   | WCAP-16294 does not include any requirements or assumptions regarding a periodic assessment of the mitigating systems, structures and their components while in Mode 4. This sentence adds a requirement for periodic monitoring that is not part of the assessments performed in WCAP-16294. |
| 20          | P9/L36-L39<br>P15/L23-L25<br>P16/L15-18 | P9 Delete the following sentence:<br>"The NRC staff's review was based, in part, on the assumption that while remaining at Mode 4, that plants would be at the lower end of RCS pressure range so that it will reduce the potential for LOCA  | Except for providing information regarding the range of RCS pressures that are indicative of operation in Mode 4, WCAP-16294 does not contain any guidance, requirements, or assumptions regarding what RCS pressure should be maintained while a plant is in                                 |

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|             |                          | <p>and will limit coolant inventory loss in the event of a LOCA, as described further in Sections 3.1.4 and 3.1.5 of this SE.”</p> <p>P15 Delete the following:<br/>                     “Though lower RCS pressure in Mode 5 compared to Mode 4 enables the unit to reduce RCS leakage to lower amounts, RCS pressure in Mode 4 must be maintained at the lower end of the pressure range at Mode 4.”</p> <p>P16 Delete the following:<br/>                     “Though PIV leakage can be reduced to a lower level in Mode 5 compared to Mode 4 because of lower pressure, the unit should be brought to lower part of Mode 4 where the RCS pressure can be maintained significantly lower than at power which will reduce the effects of the PIV leakage.”</p> | <p>Mode 4. The WCAP did not provide a basis for this NRC staff assumption (page 9) and requirements (pages 15 and 16).</p>  |
| 21          | P9/L41                   | <p>Revise: “...allowable value of...”<br/>                     To: “...setpoint for...”</p>   | <p>The change improves the accuracy of the statement as the setpoint (not allowable value) provides the protection being discussed.</p>   |
| 22          | P10/L4                   | <p>Revise: “...coverage of...”<br/>                     To: “...covering...”</p>  | <p>Editorial</p>  |
| 23          | P10/L16, L20, and L31    | <p>Delete “...from MODE 5”</p>  | <p>The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&amp;W and CE).</p> |
| 24          | P10/L29                  | <p>Revise: “...proposed amendment to delete Required Actions...”<br/>                     To: “...proposed change to revise Required Actions...”</p>  | <p>The reference to an amendment and the deletion of Required Actions is incorrect. NUREG-1431 is a generic document.</p>   |
| 25          | P10/L43                  | <p>Revise: “...train to prevent inadvertent actuation of CS.”<br/>                     To: “...train. Two switches are used to prevent inadvertent actuation of CS.</p>   | <p>The revision improves the clarity of the description.</p>  |

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| 26          | P10/L44                    | Revise the word “set” to “train”  | The revision improves the clarity and consistency in the context of this description.  |
| 27          | P11/L25                    | Revise: “...are required to be operational.”<br>To: “are required to be operable in Mode 4.”  | The revision is more consistent with the applicable TS terminology for systems required to be operable. The addition of Mode 4 is consistent with the proposed change.   |
| 28          | P11/L11,L12, L16, and L29  | Delete “...from MODE 5”   | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 29          | P11/L29                    | In the paragraphs addressing the staff’s acceptance of each proposed change, the reference to the limitations and conditions of Section 4.0 is inconsistent.    | Section 4.0 is applicable to the entire SE, it does not need to be individually referenced for each change. The reference to Section 4.0 is used in some acceptance paragraphs (e.g., P11/L29) and not in others (e.g., P12/L20)   |
| 30          | P12/L12, L18, L37, and L43 | Delete “...from MODE 5”   | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 31          | P12/L16                    | Revise; “In addition, CI valves, CS system, and CCW systems are available.”<br>To: “In addition, CI valves, CS system, and CCW systems are available in Mode 4. | The revision provides additional clarity and is consistent with the proposed change.   |
| 32          | P12/L19                    | Revise: “amendment”<br>To: “change”   | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 33          | P13/L1                     | Revise: “amendment”   | In this case the word amendment is not   |

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|             |                           | To: "change"  | applicable. NUREG-1431 is a generic document.  |
| 34          | P13/L4                    | Add " <u>Coincident With Safety Injection and</u> " after RWST Level – Low Low in the title of Function 7c. | The change makes the title of this instrument Function consistent with the title used in NUREG-1431.   |
| 35          | P13/L22 and L32           | Delete: "...from Mode 5."   | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include "from MODE 5". The change (deletion of "from Mode 5" from the Note) was made to conform to the similar NOTES used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 36          | P13/L33                   | Revise: "amendment"<br>To: "change"   | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 37          | P14/L6, L15, L34, and L42 | Delete: "...from Mode 5."   | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include "from MODE 5". The change (deletion of "from Mode 5" from the Note) was made to conform to the similar NOTES used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 38          | P14/L16 and L43           | Revise: "amendment"<br>To: "change"   | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 39          | P15/L19                   | Add: "or primary to secondary leakage is not within limit" after "or pressure boundary leakage exists"      | This change makes the Conditions addressed by Required Action B.2 complete and consistent with NUREG-1431.   |
| 40          | P15/L20 and L34           | Delete: "...from Mode 5."   | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does   |

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|             |                          |  | not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE).   |
| 41          | P15/L32                  | Revise: “amendment”<br>To: “change”  | In this case the word amendment is not applicable. NUREG-1431 is a generic document.  |
| 42          | P15/L21                  | Revise: “A RCS leakage that is considered to be not large enough...”<br>To: “RCS leakage that is not large enough...”  | Editorial   |
| 43          | P15/L28-31               | Revise the following sentence:<br>“If any pressure boundary leakage leakage exists, or if unidentified leakage, identified leakage, or primary to secondary leakage cannot be reduced to within limits within 4 hours, the reactor must be brought to lower pressure conditions to reduce the severity of the leakage and its potential consequences.”<br>To:<br>“If RCS operational leakage is not within limits for reasons other than pressure boundary leakage or primary to secondary leakage the leakage must be reduced to within the limit in 4 hours consistent with Required Action A.1. If operational leakage is not restored to within the limit in 4 hours, in accordance with Required Action A.1, or pressure boundary leakage exists, or primary to secondary leakage is not within the limit, Required Actions B.1 and B.2 become applicable. Required Actions B.1 and B.2 require that the unit be placed in Mode 3 within 6 hours and Mode 4 within 12 hours. Thus, the reactor must be brought to lower pressure conditions to reduce the severity of the leakage and its potential consequence.” | The revised description of the applicable RCS operational leakage requirements is more consistent with the actual TS requirements specified in NUREG-1431.  |
| 44          | P16/L13, L23, and L40    | Delete: “...from Mode 5.”  | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. |

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|             |                          |   | Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE).   |
| 45          | P16/L24                  | Revise: “amendment”<br>To: “change”   | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 46          | P16/L41                  | Add the word “an” before the word “indication”  | Editorial  |
| 47          | P17/L4,                  | Delete: “...from Mode 5.”   | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 48          | P17/L5 and L35           | Revise: “amendment”<br>To: “change”   | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 49          | P17/L14, L16, and L18    | L14 – Capitalize “a” in word “action”<br>L16 – Delete “RHR” and capitalize the word “operable”<br>L18 – Add “sub” to word system. | The revisions make the text consistent with the NUREG-1431 TS being discussed.   |
| 50          | P17/L27                  | Revise “C.1” to “A.1”   | The Required Action being revised by WCAP-16294 is A.1 not C.1.  |
| 51          | P18/L5                   | Revise “E.2” to ‘C.2”   | The Required Action being discussed in this text is C.2 not E.2.   |
| 52          | P18/L6 and L25           | Delete: “...from Mode 5.”   | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes  |

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|             |                          |  | used in the other NSSS Vendors TSTFs (e.g., B&W and CE).   |
| 53          | P18/L7                   | Revise: “Since SI and recirculation are not available due to inoperable RWST...”<br><br>To: “Since SI and recirculation may not be available due to an inoperable RWST...” | The revision clarifies that variations in level or boron concentration outside the limits of the RWST TS would not necessarily make SI and recirculation unavailable, although the capability of the systems to perform their intended safety function may be degraded.  |
| 54          | P18/L12                  | Add the word “the” before the word “lower”.  | Editorial  |
| 55          | P18/L16                  | Delete the following:<br>“for reasons other than boron concentration or temperature”   | The revision simplifies the sentence and eliminates an incomplete list of reasons why the RWST may be inoperable. If the deleted text is retained, boron concentration and temperature not within limits must be added to this sentence to list all the reasons why the RWST may be inoperable.  |
| 56          | P18/L26                  | Revise: “amendment”<br>To: “change”  | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 57          | P19/L5                   | Revise: “60 hours” to “54 hours”   | This change is consistent with the TS changes previously transmitted to the NRC in NEI Letter dated 9/20/09 (B. Bradley (NEI) to T. M. Mensah (NRC)). Note this letter was actually sent by email to the NRC on 11/20/09   |
| 58          | P19/L7, L18, and L44     | Delete: “...from Mode 5”   | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 59          | P19/L13                  | Revise: “Action F” to “Condition F”  | Reflects the correct TS terminology.   |
| 60          | P19/L16                  | Capitalize “b” in word “bases”<br>Revise: “technical specification” to “TS”  | Reflects consistent TS terminology and use of acronyms.  |
| 61          | P19/L18                  | Delete “applicants”  | This word is not required in the SE for a TR. It is not used in other similar sentences in this SE.  |

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| 62          | P20/L2 and L3            | Delete the following:<br>“...and it also serves to remove iodine.”   | No credit is taken for iodine removal in TS 3.6.6.B of NUREG-1431.   |
| 63          | P20/L3                   | Revise: “Action G” to “Condition G”  | Reflects the correct TS terminology.   |
| 64          | P20/L3 and L4            | L3 - Delete: “...two CS trains are inoperable or...”<br>L4 – Revise “...more trains inoperable...”<br>To: “...more trains are inoperable | The revision simplifies the L3 statement consistent with the TS wording and makes an editorial change in L4.   |
| 65          | P20/L5                   | Delete: “The proposed changes to the TS bases were also reviewed as input to the TS change.”   | This sentence is applicable to the TS and Bases revised consistent with the changes included in NEI Letter dated 9/20/09 but actually transmitted by email dated 11/20/09 from B. Bradley (NEI) to T. M. Mensah (NRC).<br>TS 3.6.6B, where this sentence was applied in P20/L5 is not addressed in the NEI letter.   |
| 66          | P20/L7,L32, and L43      | Delete: “...from Mode 5...”  | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar NOTES used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 67          | P20/L9                   | Add the word “System” to the TS title.   | This change makes the TS title consistent with NUREG-1431.   |
| 68          | P20/L30                  | Revise: “60 hours” to “54 hours”   | This change is consistent with the TS changes previously transmitted to the NRC in NEI Letter dated 9/20/09 (B. Bradley (NEI) to T. M. Mensah (NRC)). Note this letter was actually sent by email to the NRC on 11/20/09   |
| 69          | P20/L41                  | Capitalize “b” in word “bases”   | Reflects consistent TS terminology   |
| 70          | P20/L41                  | Add: “TS” in front of the word “change”  | Clarification  |
| 71          | P21/L16, and L24-25      | Delete: “...from Mode 5...”  | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T.  |

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|             |                             |   | Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE).   |
| 72          | P21/L23 and L24             | Delete: “The proposed changes to the TS bases were also reviewed as input to the TS change.”                                  | This sentence is applicable to the TS and Bases revised consistent with the changes included in NEI Letter dated 9/20/09 but actually transmitted by email dated 11/20/09 from B. Bradley (NEI) to T. M. Mensah (NRC).<br>TS 3.6.6D, where this sentence was applied (in P21/L23&24) is not addressed in the NEI letter.   |
| 73          | P21/L20                     | Revise: “...in full...” to “...at full...”  | Editorial  |
| 74          | P22/L2, and L46             | Revise: “60 hours” to “54 hours”  | This change is consistent with the TS changes previously transmitted to the NRC in NEI Letter dated 9/20/09 (B. Bradley (NEI) to T. M. Mensah (NRC)). Note this letter was actually sent by email to the NRC on 11/20/09   |
| 75          | P22/L4, L13, and L48        | Delete: “...from Mode 5...”   | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 76          | P22/L9                      | Revise: “...in full power.”<br>To: “...at full power.”  | Editorial  |
| 77          | P22/L11                     | Capitalize “b” in word “bases”  | Reflects consistent TS terminology   |
| 78          | P22/L38 and L39             | L38 - Add the word “spray” in front of “additive tank”.<br>L39 – Add the word “containment” in front of “spray pump suction.” | Revises the system names to be consistent with the TS terminology used in NUREG-1431.  |
| 79          | P23/L2, L5,L35, L38 and L40 | Delete the word “applicant”   | This word is not required in the SE for a TR. It is not used in other similar sentences in this SE.  |

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| COMMENT NO. | DRAFT SE PAGE & LINE NO. | COMMENT  | JUSTIFICATION  |
|-------------|--------------------------|--|--|
| 80          | P23/L2 and L35           | Delete brackets around “e” in word “events”  | Editorial  |
| 81          | P23/L9 and L44           | Revise word “cooling” to “coolant”   | Correct system terminology.  |
| 82          | P23/L32                  | Add the word “The” before “Mode 5”   | Editorial  |
| 83          | P23/L33                  | Revise “60 hours” to “54 hours”  | This change is consistent with the TS changes previously transmitted to the NRC in NEI Letter dated 9/20/09 (B. Bradley (NEI) to T. M. Mensah (NRC)). Note this letter was actually sent by email to the NRC on 11/20/09   |
| 84          | P24/L19 and L33          | Delete: “...from Mode 5...”  | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 85          | P24/L27                  | Delete the word “applicant”  | This word is not required in the SE for a TR. It is not used in other similar sentences in this SE.  |
| 86          | P24/L26-L28              | Revise:<br><p>“Action A states that with one ICS train inoperable the licensee has seven days to restore the ICS train to OPERABLE status. The TR requests that if Action A cannot be accomplished within the seven day limit, Required Action B.1 requires the unit to be in Mode 3 in six hours and in Mode 4 in twelve hours.”</p> <p>To:<br/>                     “For Condition A, one ICS train inoperable, seven days are allowed to restore the ICS train to OPERABLE status. The TR requests that if Required Action A.1 cannot be accomplished within the seven day limit, Required Action B.1 be revised to allow the unit to be in Mode 3 in</p> | Minor corrections, clarifications, and editorial changes to improve understanding and clarity.   |

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|             |                          | six hours and in Mode 4 in twelve hours.”  |  |
| 87          | P24/L31 and L32          | Delete: “The proposed changes to the TS bases were also reviewed as input to the TS change.”   | This sentence is applicable to the TS and Bases revised consistent with the changes included in NEI Letter dated 9/20/09 but actually transmitted by email dated 11/20/09 from B. Bradley (NEI) to T. M. Mensah (NRC).<br>TS 3.6.11, where this sentence was applied (in P24/L31&32) is not addressed in the NEI letter.   |
| 88          | P25/L3, L20, and L44     | Delete: “...from Mode 5...”  | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 89          | P25/L11 and L12          | Revise:<br>“Action A states that if one vacuum relief line is inoperable, the licensee has 72 hours to restore vacuum relief line to OPERABLE status.<br><br>To:<br>“For Condition A, if one vacuum relief line is inoperable, 72 hours are allowed to restore the vacuum relief line to OPERABLE status.” | Editorial clarifications   |
| 90          | P26/L3 and L4            | Revise:<br>“Action A states that if one SBACS train is inoperable the licensee has seven days to restore SBACS train to OPERABLE status.”<br><br>To:<br>“For Condition A, one SBACS train is inoperable, seven days are allowed to restore the SBACS train to OPERABLE status.”                            | Editorial clarifications   |

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| 91          | P26/ L6-L9               | <p>Revise:</p> <p>“The energy released to containment from a LOCA will be lower than for the maximum design basis accident. CS systems and containment cooling systems, and ECCS will be available. The loads on these systems will be well within their design basis.”</p> <p>To:</p> <p>“The energy released to containment from a LOCA will be lower than for the limiting design basis accident. The CS system, containment cooling system (for a dual containment design) and ECCS will be available. The capability of these systems will be well within their design basis should an event occur in Mode 4.”</p> | <p>Clarifications, and editorial changes to improve understanding.</p>  |
| 92          | P26/L12                  | <p>Delete: “The proposed changes to the TS bases were also reviewed.”</p>   | <p>This sentence is applicable to the TS and Bases revised consistent with the changes included in NEI Letter dated 9/20/09 but actually transmitted by email dated 11/20/09 from B. Bradley (NEI) to T. M. Mensah (NRC).</p> <p>TS 3.6.11, where this sentence was applied (in P24/L31&amp;32) is not addressed in the NEI letter.</p>   |
| 93          | P26/L13, L14, and L35    | <p>Delete: “...from Mode 5...”</p>  | <p>The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&amp;W and CE).</p> |
| 94          | P26/L39, L40 and L41     | <p>Revise:</p> <p>“Recirculation of containment air from upper containment to lower containment compartment to assist cooling the containment atmosphere and limiting post accident pressure in containment. Containment air cooling for a LOCA is</p>  | <p>Clarifications, and editorial changes to improve understanding.</p>  |

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|             |                          | <p>still required for operation in Mode 4.”</p> <p>To:<br/>                     “Recirculation of containment air from the upper containment to lower containment compartment assists in cooling the containment atmosphere and limiting post accident pressure in containment. Containment air cooling for a LOCA or SLB is still required in Mode 4.”</p>  |   |
| 95          | P26/L42 and L43          | <p>Revise:<br/>                     “The CS system will still be operational to provide cooling in the upper containment compartment. The energy released into containment from a LOCA while in Mode 4...”</p> <p>To:<br/>                     The CS system will still be available to provide cooling in the upper containment compartment. The energy released into containment from a LOCA or SLB while in Mode 4...”</p>  | Clarifications, and editorial changes to improve understanding.   |
| 96          | P26/L46                  | Add the word “to” before the word “within”   | Editorial   |
| 97          | P27/L3-L5 and L7 – L11   | <p>Delete the following:<br/>                     L3-L5<br/>                     “The ECCSs are designed in accordance with 10CFR50, Appendix A, GDC 35, 36, “Inspection of emergency core cooling system,” and 37, “Testing of emergency core cooling system.””</p> <p>L7-L11<br/>                     “Criteria 36 and 37 address system inspection and testing. Criterion 35 states:<br/>                     A system to provide abundant emergency core cooling shall be provided. The system safety function shall be to transfer heat from the reactor core following any loss of reactor coolant at a rate such that (1) fuel and clad damage that could interfere with continued effective core cooling is prevented and (2) clad metal-water reaction is limited to negligible amounts.”</p> | The reference to the ECCS GDCs are correct, however, the system design criteria are not relevant to the proposed changes in WCAP-16294. In addition the discussion on P27 pertains to the ARS not the ECCS. |

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| 98          | P27/L3                   | Revise: "...or manual actuation." to "...or by manual actuation."  | Editorial   |
| 99          | P27/L13                  | Revise: "With one train of containment air return inoperable..."<br>To: "With one train of ARS inoperable..."  | Consistent terminology for the system.  |
| 100         | P27/L14-L28              | Delete the following:<br>LCO 3.6.14 requires "[t]wo ARS [air return systems] trains shall be OPERABLE." With two trains inoperable there will not be any forced ventilation to provide air mixing to prevent hydrogen accumulation. According to 10 CFR 50.36(c)(2) <i>Limiting conditions for operation</i> , (i) "Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met." NUREG-1431, Standard Technical Specifications Westinghouse Plants, LCO 3.0.3, states "[w]hen an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Action shall be initiated within 1 hour to place the unit, as applicable, in:<br>a. MODE 3 within 7 hours,<br>b. MODE 4 within 13 hours, and<br>c. MODE 5 within 37 hours." | The discussion of two trains inoperable and the requirements of LCO 3.0.3 is correct, however, it is not relevant to the changes proposed in WCAP-16294, which is not applicable to LCO 3.0.3.  |
| 101         | P27/L30                  | Delete: "The proposed changes to the TS bases were also reviewed."   | This sentence is applicable to the TS and Bases revised consistent with the changes included in NEI Letter dated 9/20/09 but actually transmitted by email dated 11/20/09 from B. Bradley (NEI) to T. M. Mensah (NRC).<br>TS 3.6.14, where this sentence was applied (in P27/L30) is not addressed in the NEI letter. |

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| 102         | P27/L33 and L35          | L33 Revise: "...CS systems..."<br>To: "...CS system..."<br>L35 Revise: "...REQUIRED ACTION..."<br>To "...Required Action..."  | Consistent terminology.  |
| 103         | P27/L35                  | Delete: "...from Mode 5..."   | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include "from MODE 5". The change (deletion of "from Mode 5" from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 104         | P27/L34                  | Revise:<br>"...in the event of a LOCA..."<br>To:<br>"...in the event of a LOCA or SLB..."   | To be complete. The system is designed for both DBAs.  |
| 105         | P28/L9                   | Delete: "...from Mode 5."   | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include "from MODE 5". The change (deletion of "from Mode 5" from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 106         | P28/L13-15               | Revise:<br>"Action A states that if one ice condenser floor drain is inoperable, the licensee has one hour to restore the ice condenser floor drain to OPERABLE status."<br>To:<br>For Condition A, one ice condenser floor drain inoperable, one hour is allowed to restore the ice condenser floor drain to OPERABLE status." | Correct terminology and for consistency.   |
| 107         | P28/L15-24               | Delete the following:<br>"If more than one drain is inoperable LCO  | The discussion of two drains inoperable and the requirements of LCO 3.0.3 are correct but  |

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|             |                          | <p>3.0.3, states “[w]hen an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Action shall be initiated within 1 hour to place the unit, as applicable, in:</p> <ul style="list-style-type: none"> <li>a. MODE 3 within 7 hours,</li> <li>b. MODE 4 within 13 hours, and</li> <li>c. MODE 5 within 37 hours.”</li> </ul> <p>Since there is no Action for more than one floor drain inoperable LCO 3.0.3 is applicable.”</p> | <p>it is not relevant to the changes proposed in WCAP-16294, which is not applicable to LCO 3.0.3.</p>   |
| 108         | P28/L30                  | <p>Revise:<br/>“...in the event of a LOCA...”<br/>To:<br/>“...in the event of a LOCA or SLB...”</p>  | <p>To be complete. The system is designed for both DBAs.</p>   |
| 109         | P28/L36-L39              | <p>Revise:<br/>“Action A states that if one ice condenser floor drain is inoperable, the licensee has one hour to restore ice condenser floor drain to OPERABLE status. Action B states if one refueling canal drain is inoperable there is a one hour limit to restore refueling canal drain to OPERABLE status.”<br/>To:<br/>“For Condition A, one ice condenser floor drain inoperable, one hour is allowed to restore the ice condenser floor drain to OPERABLE status. For Condition B, one refueling canal drain inoperable, one hour is allowed to restore the refueling canal drain to OPERABLE status.”</p> | <p>Correct terminology and for consistency.</p>  |
| 110         | P28/L39-L48              | <p>Delete the following:<br/>“If more than one drain is inoperable LCO 3.0.3, states “[w]hen an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Action shall be initiated</p>   | <p>The discussion of two drains inoperable and the requirements of LCO 3.0.3 are correct but it is not relevant to the changes proposed in WCAP-16294, which is not applicable to LCO 3.0.3.</p> |

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|             |                          | <p>within 1 hour to place the unit, as applicable, in:</p> <ul style="list-style-type: none"> <li>a. MODE 3 within 7 hours,</li> <li>b. MODE 4 within 13 hours, and</li> <li>c. MODE 5 within 37 hours.”</li> </ul> <p>Since there is no Action for more than one floor drain inoperable LCO 3.0.3 is applicable.”</p>   |   |
| 111         | P29/L1                   | <p>Revise:<br/>                     “In the event of a LOCA...”<br/>                     To:<br/>                     “In the event of a LOCA or SLB...”</p>   | To be complete. The system is designed for both DBAs.   |
| 112         | P29/L6                   | <p>Delete:<br/>                     “The proposed changes to the TS bases were also reviewed as input to the TS change.”</p>   | <p>This sentence is applicable to the TS and Bases revised consistent with the changes included in NEI Letter dated 9/20/09 but actually transmitted by email dated 11/20/09 from B. Bradley (NEI) to T. M. Mensah (NRC).</p> <p>TS 3.6.14, where this sentence was applied (in P27/L30) is not addressed in the NEI letter.</p>  |
| 113         | P29/L8 and L9            | <p>Revise:<br/>                     “Based on the above assessment, with LCO 3.0.4.a not applicable for entry into Mode 4 from Mode 5, of the ability to provide a reasonable assurance that there will be adequate water...”<br/>                     To:<br/>                     “Based on the above assessment, with LCO 3.0.4.a not applicable for entry into Mode 4, the ability to provide reasonable assurance that there will be adequate water...”</p> | <p>Editorial changes and:<br/>                     The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&amp;W and CE).</p> |
| 114         | P29/L13-L23              | <p>Delete the following:<br/>                     “3.1.21 Mode 4 Secondary Side Steam Pressure<br/>                     TR WCAP-16294-NP, Revision 0, indicated that secondary side steam pressure would be at normal operating pressure. The NRC staff requested that the TR applicant verify the secondary side steam pressure taking into consideration</p>   | <p>This SE Section does not involve the approval of a TS change. The Section addresses a change to the TR which is a statement of fact regarding the design and operation of typical Westinghouse PWRs that will be incorporated into the approved version of the TR.</p>   |

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|             |                          | <p>the reduced reactor cooling system average temperature in Mode 4. The TR applicant revised the statement in TR WCAP-16294-NP, Revision 0, to indicate that while in Mode 4, the secondary side steam pressure will be less than normal operating pressure. The TR applicant determined that there will be sufficient pressure available for most plants to operate the turbine driven auxiliary feedwater pumps. This will assure the defense-in-depth will remain available while remaining in Mode 4. The NRC staff finds the revision acceptable.”</p> <p>Note: The Deletion of this Section requires re-numbering subsequent Sections.</p> |  |
| 115         | P29/L45                  | Delete: “...from Mode 5.”   | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar NOTES used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 116         | P30/L2                   | Revise:<br>“...associated with Mode 4...”<br>To:<br>“...associated with a cooldown to Mode 4...”  | Consistency with WCAP-16294.   |
| 117         | P30/L8,L28, and L35      | Delete:<br>“...from Mode 5.”  | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |

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| COMMENT NO. | DRAFT SE PAGE & LINE NO.  | COMMENT  | JUSTIFICATION  |
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| 118         | P30/L9 and L36            | Revise: the word “amendment” to “change”   | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 119         | P30/L12                   | Revise: “The SWS...” to “A typical SWS...”   | The plant specific design of the SWS can vary somewhat from the typical design described in NUREG-1431.  |
| 120         | P30/L30                   | Add the word “the” before the word “shutdown”  | Editorial  |
| 121         | P31/L10 and L11           | L10 - Add the word “of” before the word “Condition”<br>L11 – Add the word “Condition” in before the letter “A” | Editorial  |
| 122         | P31/L12, L13, L22 and L44 | Delete: “...from Mode 5.”  | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar NOTES used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 123         | P31/L20                   | Revise: “...during the shutdown mode.”<br>To: “...in Mode 4.”  | Mode 4 is the applicable shutdown Mode being discussed in this case.   |
| 124         | P31/L23                   | Revise: the word “amendment” to “change”   | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 125         | P31/L42                   | Add the word “of” before the word “Condition”  | Editorial  |
| 126         | P32/L3                    | Delete the word “both”   | Editorial  |
| 127         | P32/L5, L18, L25 and L26  | Delete: “...from Mode 5.”  | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar NOTES used in the other NSSS Vendors TSTFs (e.g.,              |

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|             |                          |   | B&W and CE).   |
| 128         | P32/L6 and L27           | Revise: the word “amendment” to “change”  | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 129         | P33L9/                   | Delete: “...of Condition A...”  | The shutdown Required Actions of Condition C (being discussed in the affected text) are applicable to both Conditions A and B. Therefore, to be accurate, both Conditions A and B should be included in the discussion or simply delete Condition A.   |
| 130         | P33/L11 and L19          | Delete “...from Mode 5.”  | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 131         | P33/L15 and Line17       | Revise references to “shutdown modes” to “Mode 4”   | Mode 4 is the applicable shutdown Mode being discussed in this case.   |
| 132         | P33/L20                  | Revise the word “amendment” to “change”   | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 133         | P34/L2, L8, L32, and L38 | Delete: “...from Mode 5.”   | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 134         | P34/L5 and L7            | L5<br>Revise: “...Condition E...”<br>To: “...Required Action E.1...”<br>L7<br>Revise: “...form Mode 5...” | Compliance with the Required Action is what makes the probability of a fuel handling accident lower.<br><br>Editorial  |

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|             |                          | To: "...from Mode 5..."  |  |
| 135         | P34/L9 and L39           | Revise the word "amendment" to "change"  | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 136         | P34/L36                  | Revise: "...shutdown modes."<br>To: "...Mode 4"                                      | Mode 4 is the applicable shutdown Mode being discussed in this case.   |
| 137         | P35/L33 and L35          | Revise: "shutdown modes"<br>To: "Mode 4"   | Mode 4 is the applicable shutdown Mode being discussed in this case.   |
| 138         | P35/L37                  | Delete: "...from Mode 5."  | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include "from MODE 5". The change (deletion of "from Mode 5" from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 139         | P35/L38                  | Revise the word "amendment" to "change"  | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 140         | P36/L23 and L32          | Delete: "...from Mode 5."  | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include "from MODE 5". The change (deletion of "from Mode 5" from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 141         | P36/L24                  | Revise: "Quantitative risk evaluation..."<br>To: "A quantitative risk evaluation..." | Editorial  |
| 142         | P36/L25                  | Revise "Results are summarized below."<br>To: "The results are summarized below."    | Editorial  |
| 143         | P36/L25                  | Revise: "The analysis show..."<br>To: "The evaluation shows..."                      | A quantitative risk evaluation is being discussed, not an analysis.  |
| 144         | P36/L28 and              | Revise the references to "shutdown   | Mode 4 is the applicable shutdown Mode   |

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|             | L30                      | modes” to: “Mode 4”  | being discussed in this case.  |
| 145         | P36/L33                  | Revise the word “amendment” to “change”  | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 146         | P37/L4, L12, and L40     | Delete: “...from Mode 5.”  | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change (deletion of “from Mode 5” from the Note) was made to conform to the similar NOTES used in the other NSSS Vendors TSTFs (e.g., B&W and CE). |
| 147         | P37/L8, L9, and L10      | Revise the references to “shutdown modes” to: “Mode 4”   | Mode 4 is the applicable shutdown Mode being discussed in this case.   |
| 148         | P37/L13                  | Revise the word “amendment” to “change”  | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 149         | P37/L29 and L30          | Revise: “...Table B on TS page 3.8.9-1.”<br>To: “Table B 3.8.9-1.”   | This is a Bases Table. The Table is labeled B 3.8.9-1  |
| 150         | P37/L36                  | Add the word “to” before the word “be”   | Editorial  |
| 151         | P38/L1-L5                | Delete the following:<br>“If the inoperable distribution subsystem cannot be restored to operable status within the required CT, the unit must be brought to a MODE in which the LCO does not apply. The proposed allowed CTs are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging plant systems.” | This statement is no longer applicable. See the proposed Required Actions on P37/L37-L40. The unit is not brought to a Mode in which the LCO does not apply. The unit can remain in Mode 4 with the proposed change.   |
| 152         | P38/L6 and L8            | Revise the references to “shutdown modes” to: “Mode 4”   | Mode 4 is the applicable shutdown Mode being discussed in this case.   |
| 153         | P38/L10                  | Delete: “...from Mode 5.”  | The description of the Note being added to the affected Action Conditions is inconsistent with the TS and Bases markups transmitted to the NRC in NEI letter dated 9/20/09 (but actually sent by email to the NRC on 11/20/09 from B. Bradley (NEI) to T. Mensah (NRC)). The text of the Note does not include “from MODE 5”. The change   |

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|             |                          |   | (deletion of “from Mode 5” from the Note) was made to conform to the similar Notes used in the other NSSS Vendors TSTFs (e.g., B&W and CE).  |
| 154         | P38/L11                  | Revise the word “amendment” to “change”   | In this case the word amendment is not applicable. NUREG-1431 is a generic document.   |
| 155         | P38/L11                  | Revise “Required Action B.2” to “Required Action D.2”   | To be consistent with the Required Actions discussed on P37/L37-L40  |
| 156         | P39/L19, L20 and L21     | <p>L19 – Revise: “Plant shutdowns due to exceeding TS CTs are infrequent events.”<br/>To: “Plant shutdowns due to not meeting the TS Required Action and associated CTs are infrequent events.”</p> <p>L20 - Delete “...and complete repairs...”</p> <p>L21 - Delete “...and conducting repairs in Mode 5,...”</p>                    | <p>L19 – Reflects correct TS terminology and usage.</p> <p>L20&amp;L21 - This change improves the accuracy of statements referring to the assessments performed in WCAP-16294. Other than discussing the Mode change required by the TS, WCAP-16294 does not address specific reasons for the Mode change.</p>   |
| 157         | P40/L2, L7, L8, L16,     | <p>L-2 - Revise “...subject to...” to “...based on...”</p> <p>L7 – Revise “...the shutdown mode under consideration...” to “...Mode 4...”</p> <p>L-7 – Delete “...a short interval with”</p> <p>L8 – Delete “...of that entry being...”</p> <p>L16 - add “the” before “shutdown modes”</p> <p>L16 – Delete “...short duration...”</p> | <p>L-2 - Editorial</p> <p>L-7 - Mode 4 is the applicable shutdown Mode being discussed in this case.</p> <p>L7 - It should be noted that, currently, plants can remain in Mode 5 indefinitely since the TS do not limit the time a plant can stay in Mode 5. A sensitivity study that is discussed in WCAP-16294 (Section 6.5.1, “POS 4 Time Sensitivity”) demonstrates that even when the time spent in Mode 4 is twice the time in Mode 5, the risk of being in Mode 4 is still less than being in Mode 5. Therefore, to state that a plant can only stay in Mode 4 for a short time is not consistent with the assessments discussed in WCAP-16294 and limiting the time in Mode 4 could force a plant to transition to Mode 5 and introduce more plant risk than if the plant remained in Mode 4. The time a plant spends in Mode 4 will depend on the time it takes to resolve the issue that caused the plant to enter Mode 4 and should not be otherwise limited by statements to the effect that only a short time in Mode 4 is acceptable. It should also be noted that plants would not remain in Mode 4 longer than necessary to resolve the issue(s) that caused entry into Mode 4 due to commercial considerations.</p> |

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|             |                          |   | L8 – Editorial due to deletion of “short interval” in L7.<br>L16 – Editorial<br>L16 – Deletion of “short interval.” See second L7 comment above for the justification.  |
| 158         | P42/L9                   | Revise: the word “probability” to “probabilities”   | Editorial   |
| 159         | P42/ L27 and L28         | Delete the following:<br>“...during equipment repairs...”   | This change improves the accuracy of statements referring to the assessments performed in WCAP-16294. Other than discussing the Mode change required by the TS, WCAP-16294 does not address specific reasons for the Mode change. |
| 160         | P42/L38                  | Revise: “...(Table 6-5).”<br>To: “...(Tables 6-4 and 6-5).”   | More consistent with WCAP-16294   |
| 161         | P43/L2                   | Delete the following:<br>“...after equipment repairs...”  | This change improves the accuracy of statements referring to the assessments performed in WCAP-16294. Other than discussing the Mode change required by the TS, WCAP-16294 does not address specific reasons for the Mode change. |
| 162         | P43/L23                  | Revise: “ECCS is not available...”<br>To: “ECCS is not required to be available...”<br>Delete: the word “as”  | Improve the accuracy of the statement and consistent with a similar statement on SE P44/L15.<br>Editorial   |
| 163         | P45/L16 and L17          | Delete:<br>“...during equipment repairs....”  | This change improves the accuracy of statements referring to the assessments performed in WCAP-16294. Other than discussing the Mode change required by the TS, WCAP-16294 does not address specific reasons for the Mode change. |
| 164         | P47/L39 and L40          | Revise: “In order to employ the models of the two end states including transition between Modes 4 and 5, the expected time spent in each mode must be determined.”<br><br>To: “In order to employ the models of the two end states including transition between Modes 4 and 5, the estimated time anticipated to be in each mode must be determined.” | Edited to be consistent with WCAP-16294, Section 6.3.1.2, “Time in Each Plant Operating State.”   |
| 165         | P48/L3-L5                | Revise:” The NRC staff reviewed the   | Edited to be consistent with WCAP-16294,  |

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|             |                          | <p>assumptions and bases for the times spent in Mode 4 and for a transition to Mode 5 and return to Mode 4 after completion of repairs and finds them to be reasonable and appropriate for this application.”</p> <p>To: “The NRC staff reviewed the assumptions and bases for the times anticipated to be in Mode 4 and for a transition to Mode 5 and return to Mode 4, following a forced non-refueling outage and finds them to be reasonable and appropriate for this application.”</p> | <p>Section 6.3.1.2, “Time in Each Plant Operating State.”</p>  |
| 166         | P53/L9 and L10           | <p>Revise:<br/>                     “This will be addressed by revising the bases of each TS action to which a revised end state is applied.”</p> <p>To:<br/>                     “This will be addressed by revising the Bases of TS 3.7.5, “AFW System,” to identify this Tier 2 requirement.”.</p>  | <p>This change makes the SE text consistent with the TS markups submitted with WCAP-16294.</p>   |
| 167         | P53/L37                  | <p>Revise: “...the shutdown mode under consideration...”</p> <p>To: “...Mode 4...”</p> <p>Delete: “...a short interval with...”</p>  | <p>Mode 4 is the applicable shutdown Mode being discussed in this case.</p> <p>It should be noted that, currently, plants can remain in Mode 5 indefinitely since the TS do not limit the time a plant can stay in Mode 5. A sensitivity study that is discussed in WCAP-16294 (Section 6.5.1, “POS 4 Time Sensitivity”) demonstrates that even when the time spent in Mode 4 is twice the time in Mode 5, the risk of being in Mode 4 is still less than being in Mode 5. Therefore, to state that a plant can only stay in Mode 4 for a short time is not consistent with the assessments discussed in WCAP-16294 and limiting the time in Mode 4 could force a plant to transition to Mode 5 and introduce more plant risk than if the plant remained in Mode 4. The time a plant spends in Mode 4 will depend on the time it takes to resolve the issue that caused the plant to enter Mode 4 and should not be otherwise limited by statements to the effect that only a short time in Mode 4 is acceptable. It should also be noted that plants would not remain in Mode 4 longer than necessary to resolve the issue(s)</p> |

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|             |                          |   | that caused entry into Mode 4 due to commercial considerations.  |
| 168         | P54/L23                  | Revise:<br>“The proposed TS AOT or end state change...”<br>To:<br>“The proposed TS end state and CT change...”  | More accurately reflects the changes proposed in WCAP-16294.   |
| 169         | P54/L32-L34              | Revise:<br>“Licensees requesting the TS changes to operate their plants in accordance with TR WCAP-16294-NP must commit to the following requirements in the TSs or its associated bases. These commitments assure that the implementation of this TR will be consistent with the NRC staff’s evaluation:<br>To:<br>“Licensees requesting the TS changes justified in TR WCAP-16294-NP must commit to the following requirements in the TS Bases. This commitment assures that the implementation of this TR will be consistent with the NRC staff’s evaluation.” | This statement is revised to be consistent with the changes made to the list of commitments that follow the statement.   |
| 170         | P54/L36-L39              | Delete the following:<br>“Entry into the shutdown modes approved in this SE shall be for the primary purpose of accomplishing <u>short time</u> repairs to restore inoperable equipment. Appropriate procedures and exemptions should be secured from the NRC if the plants are likely to stay more than the duration stipulated by the amended TS duration.”   | A sensitivity study that is discussed in WCAP-16294 (Section 6.5.1, “POS 4 Time Sensitivity”) demonstrates that even when the time spent in Mode 4 is twice the time in Mode 5, the risk of being in Mode 4 is still less than being in Mode 5. Therefore, to state that a plant can only stay in Mode 4 for a short time is not consistent with the assessments discussed in WCAP-16294 and limiting the time in Mode 4 could force a plant to transition to Mode 5 and introduce more plant risk than if the plant remained in Mode 4. The time a plant spends in Mode 4 will depend on the time it takes to resolve the issue that caused the plant to enter Mode 4 and should not be otherwise limited by statements to the effect that only a short time in Mode 4 is acceptable. It should also be noted that plants would not remain in Mode 4 longer than necessary to resolve the issue(s) that caused entry into Mode 4 due to |

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|             |                          |   | <p>commercial considerations.</p> <p>The NRC does not issue procedures to licensees. There are no exceptions required to any regulations. No limitation on remaining in Mode 4 is specified.</p>   |
| 171         | P54/L40-L43              | <p>Delete:</p> <p>“The requested end state changes do not prohibit licensee from entering cold shutdown if they wish to do so for operational reasons or maintenance requirements. In such cases, the specific requirements associated with the requested end state changes do not apply.”</p>                        | <p>This is not a commitment that needs to be made, and the TS do not prohibit going to a mode that is lower than the endstate required by the TS. The current TS allowance to enter lower Modes is not impacted by this change.</p>  |
| 172         | P55/L1 and L2            | <p>Delete:</p> <p>“Appropriate plant procedures and administrative controls shall be used when the plant is operated in the proposed end state.”</p>  | <p>The only requirement to remain in the Mode is that the TDAFW pump be available, which is addressed by an L&amp;C in comment 174 below.</p>  |
| 173         | P55/L3-L5                | <p>Delete:</p> <p>“Entry in to the proposed end states shall be in accordance with the requirements of 10 CFR 50.65. The licensee should assess and manage the increase in risk that may result from the proposed maintenance activities.”</p>  | <p>10CFR50.65 is applicable during all conditions of plant operation, including normal shutdown operations.</p> <p>10CFR50.65(a)(4) requires licensees to assess and manage the increase in risk that may result from proposed maintenance activities. Compliance with this regulation ensures that risk will be assessed and managed during the proposed endstate, and no commitment is required to comply with 10CFR50.65.</p> |
| 174         | P55/L6 and L7            | <p>Revise:</p> <p>“The availability of the TDAFW pump must be assured while the plant is operating in Mode 4 in accordance with the assumptions of the TR.”</p> <p>To:</p> <p>“The availability of the TDAFW pump must be assured while the plant remains in Mode 4 in accordance with the assumption of the TR.”</p> | <p>Editorial</p>   |
| 175         | P55/L10-L13              | <p>Delete:</p> <p>“Any plant-specific license amendment request (LAR) which deviates from the NRC-approved TR, will require additional NRC review. The licensee should document its basis for deviating from the</p>  | <p>This is not a commitment, and is more appropriate to be included in CLIIP Notice of Availability for these proposed changes.</p>  |

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|             |                          | approved TR in its LAR to support a detailed review by the NRC technical branches involved in the TR review.”  |  |
| 176         | P55/L17                  | Revise:<br>“The NRC staff’s evaluation approves only the operation as described in References 5 and 6.”<br>To:<br>The NRC staff’s evaluation approves only the endstate changes described in Section 3.1 of this SE.   | This is a more accurate statement of the changes approved in the SE.   |
| 177         | P55/L21-L29              | Revise:<br>“The NRC staff’s review was based, in part, on the assumption that while remaining at Mode 4, that plants would be at the lower end of RCS pressure range so that it will reduce the potential for LOCA and will limit coolant inventory loss in the event of a LOCA, as described further in Sections 3.1.4 and 3.1.5 of this SE. For mitigation of several events during potential high risk plant configuration in Mode 4, there should be heightened awareness among plant operators that some protection features are not fully operational. In addition, during potential high risk configuration in Mode 4 where Safety Injection is not available, the plant should be closely monitored using appropriate administrative controls, guidance, appropriate plant procedures, and proper staff training.”<br>To:<br>“The NRC staff’s review was based, in part, on the assumption that while remaining in Mode 4, the TDAFW pump would be available.” | Except for providing information regarding the range of RCS pressures in Mode 4, WCAP-16294 does not include any guidance, requirements, or assumptions regarding what RCS pressure should be maintained while a plant is in Mode 4. The risk evaluations performed in WCAP-16294 did not include requirements for heightened operator awareness, additional equipment monitoring, additional administrative controls (except for the TDAFW AFW pump), new or different procedures or training. Mode 4 operation is not new or different because of the changes proposed in WCAP-16294. Appropriate procedures and operator training currently exist for Mode 4 operation. |
| 178         | P55/L31                  | Revise:<br>“...changes to the NUREG-1431...”<br>To:<br>“...changes to NUREG-1431...”   | Editorial  |
| 179         | P55/L34                  | Delete the word “industry”   | The TSTF does not need to be identified as the industry TSTF.  |
| 180         | P55/L36 and              | Delete:  | It has not been determined whether these   |

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|             | L37                      | "...for incorporating the TS and Bases changes in the next revision of NUREG-1431." | changes will be included in Rev. 4 of NUREG-1431. |