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WCAP-15791-P, Rev 1 (Proprietary)  
Project No. 694

October 19, 2005

WOG-05-438

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

Subject: Comments on the WCAP-15791-P, Rev. 1, "Risk-Informed  
Evaluation of Extensions to Containment Isolation Valve Completion  
Times," Draft Safety Evaluation (MUHP-3010)

References:

1. Letter, Daniel S. Collins (NRC) to G. Bischoff (Westinghouse), "Draft Safety Evaluation for Westinghouse Owners Group (WOG) Topical Report WCAP-15791-P, 'Risk-Informed Evaluation of Extensions to Containment Isolation Valve Completion Times,' Revision 1 (TAC No. MB5751)" dated September 16, 2005.
2. "Transmittal of Reports: WCAP-15791-P, Rev. 0, (Proprietary) and WCAP-15791-NP, Rev. 0, (Non-Proprietary), Entitled 'Risk-Informed Evaluation of Extensions to Containment Isolation Valve Completion Times' (MUHP-3010)," OG-02-022, dated June 6, 2002.
3. "Response to Request for Additional Information - WCAP-15791-P (Proprietary), 'Risk-Informed Evaluation of Extensions to Containment Isolation Valve Completion Times,' TAC No. MB5751 (MUHP-3010)," WOG-04-077, dated February 13, 2004.
4. "Response to the NRC Request for Additional Information (RAI) Regarding Review of WCAP-15791-P, Rev. 1 (Proprietary), 'Risk-Informed Evaluation of Extensions to Containment Isolation Valve Completion Times,' (PA-LSC-0029) (MUHP-3010)," WOG-05-119, dated March 10, 2005
5. "Transmittal of Reports: WCAP-15791-P, Rev. 1, (Proprietary) and WCAP-15791-NP, Rev. 1, (Non-Proprietary), 'Risk-Informed Evaluation of Extensions to Containment Isolation Valve Completion Times' (PA-LSC-0029) (MUHP-3010)," WOG-04-234, dated May 6, 2004.

WCAP-15791-P, Rev. 0, "Risk-Informed Evaluation of Extensions to Containment Isolation Valve Completion Times," was submitted by the Westinghouse Owners Group (WOG) for NRC review and approval on June 6, 2002. The review of WCAP-15791, Rev. 0, was supplemented by responses to RAIs in References 3 and 4.

DO48

October 19, 2005

WCAP-15791, Revision 1, was submitted via Reference 5 on May 6, 2004. On September 16, 2005, the staff issued the draft Safety Evaluation (SE) for WCAP-15791, Rev. 1 via Reference 1.

The purpose of this letter is to transmit the WOG comments on the draft SE. These comments offer suggested editorial changes, provide recommended changes to ensure a clear interpretation of the safety evaluation, and provide corrections. The comments are collated into three groups based on comment type; general technical comments, specific technical comments, and editorial comments. In addition to these comments, the WOG requests that the NRC Staff participate in a telephone conference call and subsequent meeting to discuss these comments prior to issuing a final SE.

If you have any questions concerning these comments, please feel free to call Tom Laubham at 412-374-6788.

Sincerely yours,



Frederick P. "Ted" Schiffley, II, Chairman  
Westinghouse Owners Group

FPS:TJL:mjl

Attachments: Tables 1, 2 and 3.

cc:   Licensing Subcommittee  
      Steering Committee  
      Risk Management Subcommittee  
      R. A. Gramm, NRC  
      G. S. Shukla, NRC (via FedEx)  
      G. R. Andre  
      J. D. Andrachek  
      K. Vavrek  
      G. Ament  
      C. B. Brinkman  
      J. A. Gresham  
      PMO

**WOG Comments on the NRC's Draft Safety Evaluation for WCAP-15791-P, Rev. 1, "Risk-Informed Evaluation of Extensions to Containment Isolation Valve Completion Times"**

**Introduction to WOG Comments**

The WOG's comments on the Staff's draft Safety Evaluation (SE) are summarized on the following three tables as general technical comments (Table 1), specific technical comments (Table 2), and editorial comments (Table 3). The WOG comments are primarily directed at clarifications, but the WOG is concerned that the draft SE does not specifically address the acceptability of the application of the generic results to the Wolf Creek Generating Station (WCGS) and does not include a review and acceptance of the WCGS plant specific analysis in Section 10 of the WCAP. Two of the objectives of the WCAP were to:

- Apply the generic results in Section 8 of the WCAP to a specific plant (provided in Section 9) and to obtain the Staff's review and concurrence that this approach is acceptable.
- Provide a plant specific analysis using plant specific input parameters (provided in Section 10) and to obtain the Staff's review and concurrence that this approach is acceptable.

The draft SE does not specifically address these two applications. This is viewed by the WOG as a major shortcoming of the draft SE.

**References**

1. WCAP-15791-P, Rev. 1, "Risk-Informed Evaluation of Extensions to Containment Isolation Valve Completion Times", April 2004.
2. WOG-04-077, "Response to Request for Additional Information – WCAP-15791-P (Proprietary), 'Risk-Informed Evaluation of Extensions to Containment Isolation Valve Completion Times,' TAC No. MB5751 (MUHP-3010)", February 13, 2004.
3. NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants", July 2000, Rev. 3.
4. WOG-05-119, "Response to the NRC Request for Additional Information (RAI) Regarding Review of WCAP-15791-P, Rev. 1 (Proprietary), 'Risk-Informed Evaluation of Extensions to Containment Isolation Valve Completion Times,' (PA-LSC-0029) (MUHP-3010)", March 10, 2005.

Table 1: General Technical Comments		
No.	SE Reference	Comment
1	NA	The draft SE does not provide an assessment of the acceptability of the application of the generic results presented in Section 8 to the WCGS (provided in Section 9) or of the acceptability of the WCGS plant-specific analysis using plant-specific input parameters (provided in Section 10). Conditional acceptance, conditional on meeting the NRC's conditions for implementation, of these applications and the associated extended Completion Times (CTs) was expected by the WOG and would have provided appropriate guidance for other licensees interested in implementing these containment isolation valve (CIV) CT extensions via the approach presented in this WCAP. An extension of the SE to address this would be valuable to the WOG and the NRC Staff in future reviews of this application to other plants.

Table 2: Specific Technical Comments		
No.	SE Reference	Comment
1	Pg. 1, lines 11-23	The purpose of WOG letter WOG-05-119 dated March 10, 2005 is not stated in this paragraph. For completeness, the following addition at the end of this paragraph is suggested: "The WOG letter dated March 10, 2005, provided responses to the NRC staff's request for additional information."
2	Pg. 2, line 5	The draft SE states "The WOG states that the CIV review methodology...". It is suggested that "review" be changed to "CT extension".
3	Pg 2, lines 10-12	The draft SE states "Thus, plant-specific applications of the proposed methodology may not be found acceptable without reductions in the proposed CIV CTs and/or other compensatory actions." This may be misleading. From the wording it appears that a plant specific analysis is required. To apply the generic results, no plant specific analysis is necessary. It is suggested that this sentence be changed to "Thus, plant specific applications of the proposed generic results will lead to some CIV CTs less than 7 days."
4	Pg. 2, line 12	As a clarification it is suggested that the following be added as a separate paragraph after line 12. "Licensees can apply the generic results of the analysis to their plant(s) following the implementation procedure described and applied to the WCGS in Section 9 of the WCAP. As an alternative, if a licensee requires further CT extensions for some of the CIVs for which 7 days could not be justified by the generic analysis, a plant specific analysis following the approach used in Chapter 10 can be followed."
5	Pg. 3, lines 35-36	The statement that "if the basis for extending the CTs is acceptable, then 10 CFR 50.36 will be met." should be revised to "10 CFR 50.36 is met, since the remedial actions are retained in the Technical Specifications." 10 CFR 50.36 does not discuss CTs, nor the basis of CTs, i.e., deterministic or risk-informed.
6	Pg. 3, lines 37-38	The statement "based on risk" should be revised to "utilizing risk" since the CIV CTs are risk-informed, not risk based.
7	Pg. 5, lines 2-3	The statement "during maintenance scheduling over extended periods of plant operation." should be revised to "during both planned and unplanned maintenance activities." Tier 3 addresses both planned (preventive) and unplanned (corrective)

Table 2: Specific Technical Comments		
No.	SE Reference	Comment
		maintenance activities.
8	Pg. 5, lines 11-12	The statement "meet 10 CFR 50.36 and" should be deleted, and "therefore" should be deleted from "are therefore acceptable." 10 CFR 50.36 does not discuss CTs, nor the basis of CTs, i.e., deterministic or risk-informed.
9	Pg. 6, line 1	Replace "possibility of multiple simultaneous extended CIV CTs" with "CT of an inoperable CIV in more than one penetration flow path." This clarifies that the extended CIV CT still applies to an inoperable CIV in one penetration flow path.
10	Pg. 6, line 2	Add "in more than one or more penetration flowpaths as allowed by Note 2 to the Technical Specification 3.6.3 Actions table" at the end of the sentence.
11	Pg. 7, lines 13-18	The draft SE indicates that the impact of the CIV inoperability on other TS functions was not evaluated with respect to the affected systems in the WCAP. Please note that the WOG's response to RAI 3 of Reference 2 addressed this issue. The SE should be revised to reflect this information. It is recommended that the last two sentences of the second paragraph on page 7 (lines 13-18) be replaced with the following. "Systems used for accident mitigation that contain CIVs that also function as containment pressure boundaries were primarily evaluated with regard to the impact of the CT extension on loss of containment isolation. In response to a RAI, the WOG evaluated the potential impact of the CT extensions on the availability of other mitigative functions and the corresponding impact on risk. It was shown that this impact is very small."
12	Pg. 7, line 41	The statement "multiple LCO entries were considered in the TR," should be deleted and replaced with "and proposed Condition D of TSTF-446, Rev. 1 addresses an inoperable CIV in more than one penetration flow path." The TR did not consider an inoperable CIV in more than one penetration flow path.
13	Pg. 8, line 6	Add "for those penetration flow paths that do not result in a large early release (i.e., $\leq 2$ inches)" after "7-day CT." This clarifies that the CT for any CIV in a penetration flow path $\leq 2$ inches is 7 days, without performing any risk analysis.
14	Pg. 8, lines 15-16	The draft SE states "Plant-specific applications must show that these TR assumptions are applicable to their facility." It is recommended for clarity that this be replaced with "Plant-specific applications of the generic analysis in Chapter 8 must show that these TR assumptions are applicable to their facility. This is demonstrated for the WCGS in Chapter 9."
15	Pg. 9, lines 18-19	Insert "shorter of the" between "the CTs." Delete "require an evaluation with the shortest CT applied" and insert "would be applied." This will clarify that an evaluation is not necessary, and that the limiting (shorter) CT is applied.
16	Pg. 9, lines 39-40	Delete "that should be applicable to a number of their licensees." and insert "that are applicable to the licensees that confirm that the bounding assumptions are applicable to them." This clarifies that the methodology is applicable to all of the licensees that confirm that the bounding assumptions are applicable to them.
17	Pg. 10, line 10	As a clarification, suggest adding "(repair)" after the words "Before maintenance"
18	Pg. 10, lines 18-19	As a clarification it is recommended that "Plant specific analyses" be replaced by "Plant-specific applications of the generic analysis and, if used, plant specific analyses..."

Table 2: Specific Technical Comments		
No.	SE Reference	Comment
19	Pg. 11, line 7	Suggest adding the underlined words "Each utility will determine the applicability of the proposed CT for their plant <u>following the approach used in Section 9 of the TR.</u> " In addition, "CT" should be changed to "CTs."
20	Pg. 11, lines 26-28	The draft SE statement "..., the licensees' applications must verify that the potential for any cumulative risk impact of failed CIVs and multiple CIV LCO entries has been evaluated and is acceptable." should be deleted. An inoperable CIV in more than one penetration flow path is addressed by proposed Condition D of TSTF-446, Rev. 1, and the licensees' Tier 3 programs will be used to assess and manage the risk. It is not clear what the Staff expects by the phrase "has been evaluated and is acceptable". It should be noted that the requested CT changes do not impact the CTs when a CIV is inoperable in more than one penetration flow path, since current Note 2 to the Technical Specification 3.6.3 Actions table allows Separate Condition entry for each penetration flow path, and the current CT for Required Action A.1 is 4 hours.
21	Pg. 11, lines 28-32	The draft SE states "The licensee's Tier 3 risk management program ...will not exceed the RG 1.174 and RG 1.177 acceptance guidelines ...." The purpose of the Tier 3 program is to assess and manage risk. Plant specific Tier 3 programs are not tied into RG 1.174 and RG 1.177 acceptance criteria. This sentence should be deleted in the SE since 10CFR50.65 (a)(4) requires that the risk associated with multiple inoperable CIVs be assessed and managed.
22	Pg. 12, lines 27-28	The statement "over extended periods of plant operation." should be revised to "during both planned and unplanned maintenance activities." Tier 3 addresses both planned (preventive) and unplanned (corrective) maintenance activities.
23	Pg. 13, lines 3-5	The draft SE states "A plant-specific analysis must be performed to ensure the applicability of WCAP-15791 conclusions with respect to the risk impact of extending the CTs for inoperable CIVs." It is not clear what is meant by "a plant-specific analysis must be performed". Section 9 of the WCAP provides the implementation procedure that a utility needs to follow to implement the CT changes from the generic analysis. To demonstrate that the generic analysis is applicable on a plant specific basis only requires licensees to confirm the analysis input parameters are consistent with their corresponding plant specific parameters. This is given as Step 2 in Section 9.1 of the WCAP. It is suggested that the sentence noted above be deleted and the following one added in its place "The generic analysis must be demonstrated to be applicable to the licensee requesting the changes by confirmation of the input parameters as discussed in Step 2 of Section 9.1 of the WCAP."
24	Pg. 13, lines 6-7	The draft SE states "The licensee's analysis must be applied to the penetrations analyzed in WCAP-15791...". It is not clear why the NRC is stating this requirement. To implement the CT changes based on the generic analysis, it is only necessary to show that the generic analysis input parameters are conservative with regard to the corresponding plant specific parameters. To implement a plant specific analysis, it is only necessary to rerun the generic analysis with plant specific input parameters. For clarity, it is recommended that this sentence be revised as follows "The CT changes requested by a licensee need to correspond to those included in the TR and any penetration type not specifically included in the TR will require a plant specific analysis."

Table 2: Specific Technical Comments		
No.	SE Reference	Comment
25	Pg. 13, line 15 to Pg. 14, line 4	The draft SE states "To ensure the applicability of WCAP-15791 to a licensee's plant, additional information on the PRA quality will be required of each plant-specific application in the following areas:" To demonstrate the applicability of the generic results to a plant or to complete a plant specific analysis, much of the requested information is not necessary. Plant specific PRA models are not used to implement the generic results or to complete a plant-specific analysis. It is only necessary to ensure that the relevant plant-specific input parameters are representative of the as-built, as-operated plant. <u>If a plant specific analysis is completed, instead of only implementing the generic results, additional quality requirements need to be met, but these will depend on which analysis input parameters will be plant-specific and which will be generic bounding type. The statement noted above should be revised to read (changes/additions are underlined)</u> "To demonstrate the applicability of WCAP-15791 to a licensee's plant, additional information on the PRA quality <u>may</u> be required of each plant-specific application in the following areas. <u>The specific information required will depend on whether the generic results are implemented or if a plant specific analysis is completed to propose CTs beyond those justified by the generic analysis, and also on the extent of the plant specific analysis if this approach is followed. A licensee will need to provide the following information only to the extent necessary to support their implementation approach.</u> "
26	Pg. 14, lines 20-22	Since the WCAP also includes an application of the generic results to Wolf Creek in Section 9 the following change, as underlined, is recommended. "The intent of WCAP-15791 is to provide a generic analysis applicable to all WOG NSSS plants <u>and also to apply this generic analysis to Wolf Creek as shown in Section 9; however ...</u> ".
27	Pg. 14, lines 22-24	The draft SE states "A licensee that implements WCAP-15791 must demonstrate by plant-specific analyses the applicability of WCAP-15791 input parameter assumptions ...". Analyses are not necessary to demonstrate the applicability of WCAP-15791 input parameter assumptions. It is recommended that the words "by plant-specific analyses" be deleted.
28	Pg. 15, lines 11-16	Due to the conservative nature of the generic analysis, an uncertainty analysis is not required. The first sentence in this paragraph should be changed as follows (see the underlined words): "However, each plant-specific application, <u>using plant specific input parameters</u> , to modify CIV CTs,...".
29	Pg. 15, line 29	WCAP-15622 should be changed to WCAP-15791.
30	Pg 16, lines 12-13	It is not understood what is meant by "PRA risk assessment quality aspects of this program meet the quality needs of a risk-informed licensing action." Plant specific PRAs are currently being used to comply with 10 CFR 50.65 (a)(4), and are acceptable for performing Tier 3 evaluations.
31	Pg. 16, lines 15-19	It is not understood what is meant by the sentence: "Plant-specific applications referencing WCAP-15791..." Compliance with 10 CFR 50.65(a)(4) requires LERF to be addressed if applicable, as required by Regulatory Guide 1.182, which endorses Section 11 of NUMARC-93-01, Rev. 3. This requirement should be eliminated from the SE.
32	Pg. 16, lines 23-27	These lines specify using the LERF and ICLERP metrics to assess and manage risk. This needs to be revised to be consistent with Regulatory Guide 1.182, which endorses Section 11 of NUMARC 93-01, Rev. 3 (Reference 3) which specifies the

Table 2: Specific Technical Comments		
No.	SE Reference	Comment
		use of ILERP (incremental large early release probability) and the associated guidelines for risk management actions. The following text should be deleted "For the CIVs with extended CTs,... LERF and ICLERP would be addressed in these programs." The following text should be added in its place "For the CIVs with extended CTs, the program would need to assess and manage risk in terms of the ILERP metric consistent with the guidance in Regulatory Guide 1.182, which endorses Section 11 of NUMARC 93-01, Rev. 3." Additionally, Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process," to NRC Inspection Manual Chapter 0609, "Significance Determination Process," provides an inspection mechanism to ensure that ILERP is assessed and managed. Please see the response to RAI 1 in Reference 4.
33	Pg. 16, lines 40-42	The statement "the TR notes that the existing ..." should be replaced with "proposed Condition D of TSTF-446, Rev. 1 ensures that the extended CIV CT is limited to one inoperable CIV in one penetration flow path."
34	Pg. 17, lines 24-25	Delete "all but one inoperable CIV to be returned to operability or" and insert "to be" between "path isolated." Proposed Required Action D.1 only requires all but one penetration flow to be isolated, and does not require the CIV to be restored to operable status. If the subsequent inoperable CIV(s) were returned to operable status, Condition D would be exited.
35	Pg. 17, lines 29-30	Delete "be to return all but one CIV to operability, or isolate" and insert "require" prior to "all but one" and insert "to be isolated" after "flow path." If the subsequent inoperable CIV(s) were returned to operable status, Condition D would be exited.
36	Pg. 18, lines 15-16	The draft SE states "..., the management of risk in accordance with 10 CFR 50.65(a)(4) for these extended CIV CTs must assess LERF and ICLERP." The 10 CFR 50.65(a)(4) evaluations need to be done consistent with Regulatory Guide 1.182, which endorses Section 11 of NUMARC 93-01, Rev. 3 (Reference 3). The sentence should be revised to "..., the management of risk in accordance with 10 CFR 50.65(a)(4) for these extended CIV CTs must be done consistent with Regulatory Guide 1.182, which endorses Section 11 of NUMARC 93-01, Rev. 3, which addresses ILERP." Please see Comment 32.
37	Pg. 18, line 18	"LERF/ICLERP assessment" should be changed to "ILERP assessment consistent with Regulatory Guide 1.182, which endorses Section 11 of NUMARC 93-01, Rev. 3". Please see Comment 32.
38	Pg. 18, lines 18-23	Regulatory Guide 1.182, which endorses Section 11 of NUMARC 93-01, Rev. 3 requires that ILERP be included as part of the 10CFR50.65(a)(4) assessment, if applicable. The discussion regarding making a regulatory commitment should be revised to the "plant specific application must confirm that the licensee is committed to Regulatory Guide 1.182, which endorses Section 11 of NUMARC 93-01, Rev. 3 or the licensee must make a regulatory commitment to Regulatory Guide 1.182, which endorses Section 11 of NUMARC 93-01, Rev. 3.
39	Pg 18, line 41	The statement "but the TR does not preclude the practice." should be replaced with "however proposed Condition D of TSTF-446, Rev. 1 ensures that the extended CIV CT is limited to one inoperable CIV in one penetration flow path."
40	Pg. 18, line 41 to Pg. 19, line 2	The draft SE states "However, since the current ISTS allows separate condition entry for each penetration flow path, each plant-specific application must verify that the potential for any cumulative risk impact of failed CIVs and multiple CIV LCO



Table 2: Specific Technical Comments		
No.	SE Reference	Comment
		entries has been evaluated and is acceptable." Pre-evaluations of an inoperable CIV in more than one penetration flow path are not necessary. Proposed Condition D of TSTF-446, Rev. 1 ensures that the extended CIV CT is limited to one inoperable CIV in one penetration flow path. Note 2 to the Technical Specification 3.6.3 Actions table allows Separate Condition entry for each penetration flow path, and pre-evaluations are not currently required for an inoperable CIV in more than one penetration flow path. 10CFR50.65(a)(4) requires that the risk associated with an inoperable CIV in more than one penetration flow to be assessed and managed. An inoperable CIV in more than one penetration flow path will be addressed by Tier 3 following the implementation of the extended CIV CTs. This sentence should be deleted.
41	Pg. 19, lines 2-7	The draft SE states "The licensee must confirm that its Tier 3 risk management program in accordance with 10 CFR 50.65(a)(4) will address the possibility of simultaneous LCO entries of inoperable CIVs in separate penetrations such that this combination will not exceed the RG 1.174 and RG 1.177 acceptance guidelines ...". Tier 3 assessments in accordance with Regulatory Guide 1.182, which endorses Section 11 of NUMARC 93-01, Rev. 3, which is used to comply with 10 CFR 50.65 (a)(4), will ensure that the risk associated with an inoperable CIV in more than one penetration flow path will be assessed and managed. The RG 1.174 and RG 1.177 acceptance guidelines are not applicable to an inoperable CIV in more than one penetration flow path, since they were not included in the WCAP analysis. This sentence should be revised as "The licensee must confirm that its Tier 3 risk management program in accordance with 10 CFR 50.65(a)(4) addresses an inoperable CIV in more than one penetration flow path consistent with Regulatory Guide 1.182, which endorses Section 11 of NUMARC 93-01, Rev. 3."
42	Pg. 19, lines 9-10	Add "3.6.3" after "TSs" and delete the "s" from "TSs." Delete "existing and" since the current CT of 4 hours for Required Action A.1 of Tech Spec 3.6.3 is not risk-informed, and is not an extended CT. Delete "not allow multiple simultaneous extended CIV CTs to occur for more than" and replace it with "limit an inoperable CIV in more than one penetration flow path to."
43	Pg. 19, lines 18-21	The sentence "Also the plant-specific application..." should be deleted. The remaining CIVs in the affected penetration would be confirmed to be in the correct position by current SRs 3.6.3.3 and 3.6.3.4 of Tech Spec 3.6.3, and would also be operable, or the applicable Tech Spec 3.6.3 Condition for that plant specific condition would have been entered.
44	Pg. 20, line 6	"LERF/ICLERP assessment" should be changed to "ILERP assessment consistent with Regulatory Guide 1.182, which endorses Section 11 of NUMARC 93-01, Rev. 3".
45	Pg. 20, lines 7-8	It is not understood what is meant by "PRA quality is adequate as part of the basis of a risk-informed licensing action." Plant specific PRAs are currently being used to comply with 10 CFR 50.65 (a)(4), and are acceptable for performing Tier 3 evaluations.
46	Pg. 20, lines 10-16	The draft SE states "Verify that the plant-specific PRA quality is acceptable for this application in accordance with the guidelines given in RGs 1.174 and 1.177, which are identified in the 6 items listed in Section 3.3.1.1 of this SE." To demonstrate the applicability of the generic results to a plant or to complete a plant specific analysis, much of the requested information is not necessary. Plant specific PRA models are

Table 2: Specific Technical Comments		
No.	SE Reference	Comment
		not used to implement the generic results or to complete a plant-specific analysis. It is only necessary to ensure that the relevant plant-specific input parameters are representative of the as-built, as-operated plant. If a plant specific analysis is completed, instead of only implementing the generic results, additional quality requirements need to be met, but these will depend on which analysis input parameters will be plant specific and which will be generic bounding type. The following statement should be added after the above sentence. "The specific information required will depend on if the generic results are implemented or if a plant specific analysis is completed and also on the extent of the plant specific analysis if this approach is followed. A licensee will need to provide the following information only to the extent necessary to support their implementation approach."
47	Pg. 20, lines 29-32	"LERF/ICLERP assessment" should be changed to "ILERP assessment consistent with Regulatory Guide 1.182, which endorses Section 11 of NUMARC 93-01, Rev. 3". The words, "and methodology" should be deleted. Please see the discussion on ICLERP and the attributes of an ICLERP assessment in the response to RAI 1 in Reference 4.
48	Pg. 21, lines 1-2	The draft SE states "Licensees have confirmed that the generic WOG plant PRA values used for the Tier 1 evaluations in WCAP-15791 envelope the PRA values for their plants.". This is necessary if the generic results will be applied to the plant, as in Section 9 of WCAP-15791. If a plant specific analysis is used, then this step is not required, as discussed in Section 10 of WCAP-15791. This statement should be revised to read "Licensees <u>that implement the generic results</u> have confirmed that the generic WOG plant PRA values used for the Tier 1 evaluations in WCAP-15791 envelope the PRA values for their plants,".
49	Pg. 21, lines 3-4	The draft SE states "Licensees have confirmed that the equations used in WCAP-15791 to justify extended CIV CTs are applicable to their plants." WCAP-15791 provides a generic analysis based on calculating $\Delta$ LERF and ICLERP. The methods used to calculate these metrics were developed to be applicable to all plants; therefore, this requirement is met for all plants and does not need to be confirmed by each individual plant. It is recommended that this requirement be deleted.
50	Pg. 21, lines 5-7	The draft SE states "Licensees have confirmed that the assumptions listed in Section 3.2 in this SE are met at their plants, including the assumption that not more than one CIV is in maintenance and in an extended CT at a time." It is not necessary that all of the bulleted list of assumptions in Section 3.2 be met for the analysis and results to be applicable to a plant. Some of these assumptions were made to simplify the analysis and to provide a conservative assessment. The key assumptions with respect to plant operation to ensure applicability of the analysis are in the first and third bullets. It is recommended that this requirement be revised as follows: "Licensees have confirmed that the <u>first and third (bulleted)</u> assumptions listed in Section 3.2 in this SE are met at their plants, <u>including the assumption (bulleted item 6)</u> that not more than one CIV is in maintenance and in an extended CT at a time." Delete "including the assumption ...." Proposed Condition D of TSTF-446, Rev. 1 ensures that no more than one inoperable CIV is in an extended CT. Additionally, a plant-specific analysis that considers an inoperable CIV in more than one penetration flow path may be performed that removes this limitation as discussed in the Reviewer's Note in the Bases for proposed Condition D in TSTF-446, Rev. 1.
51	Pg. 21, line 12	At the end of this line "Tier 2" should be changed to "Tier 1".

Table 2: Specific Technical Comments		
No.	SE Reference	Comment
52	Pg. 21, line 23	Delete "because the CIV CTs based on WCAP-15791 would meet 10 CFR 50.36." 10 CFR 50.36 does not discuss CTs, nor the basis of CTs, i.e., deterministic or risk-informed.
53	Pg. 21, lines 33-35	It is not understood what "but a plant-specific analysis..." means. All that a licensee has to do with regard to Tier 2 is to ensure that the generic Tier 2 conclusion is applicable on a plant-specific basis, or if not, to identify any plant-specific Tier 2 limitations.
54	Pg. 22, lines 5-7	The draft SE states "Although Wolf Creek Generating Station plant-specific information was presented in Chapter 10 of the TR, the NRC staff did not review this data to draw any conclusion about the acceptability of the CIV CTs in WCAP-15791 for the Wolf Creek plant." Section 9 presents a plant-specific (Wolf Creek) application of the generic results provided in Section 8. Section 10 presents a plant specific analysis using plant specific input parameters for the analysis. A review of the results presented in Sections 9 and 10 were expected as an outcome of the Staff's review of this WCAP. It is not clear why this has not be done. Please address this in the SE.
55	Pg. A-1, line 41	Insert "to" prior to "determine" delete "smaller appropriate" and insert "shorter" and insert "less than 7 days" after "CT."
56	Pg. A-2, lines 13-14	Delete "and stated that this evaluation must also be performed by licensees adopting WCAP-15791." Insert "stated that" between "and the" and insert "generic" prior to "results."
57	Pg. A-2, lines 27-28	The draft SE states "This approach evaluated the risk impact of the CT on a generic basis and on a plant-specific bases using the Wolf Creek Generating Station as the lead plant." Since the generic results were also applied to Wolf Creek, the following change, for clarity, is suggested "This approach evaluated the risk impact of the CT on a generic basis, <u>applied the generic results to the Wolf Creek Generating Station, and provided a plant-specific analysis</u> using the Wolf Creek Generating Station as the lead plant."
58	Pg. A-3, line 25	Delete "Examples of the." The ICLERP and delta LERF calculations contained in Section 8.2 of the WCAP are actual generic calculations, not example calculations.

Table 3: Editorial Comments		
No.	SE Reference	Comment
1	Cover letter, first paragraph, two places	Letter WOG-04-234 was dated May 6, 2004 (not May 7, 2004).
2	Cover letter, first paragraph, second page, second line	Insert "a generic and plant-" between "and specific."
3	Cover letter, second paragraph, second page, first line	Replace "Nuclear Energy Institute" with "Technical Specification Task Force."
4	Pg. 1, line 24	Replace "completion times" with "CTs."
5	Pg. 2, line 7	Add "Rev. 1" after "Licensing Basis,"
6	Pg. 3, line 13	Insert "The" prior to "Maintenance."
7	Pg. 5, line 23	Change "changed" to "split."
8	Pg. 5, lines 28-36	Reverse the order of Conditions C and B.
9	Pg. 5, line 39	Delete "is to" and add an "s" to "limit."
10	Pg. 6, lines 22 and 36	Change "168 hours" to "7 days."
11	Pg. 7, line 1	Add "and Notes" after "conditions."
12	Pg. 7, line 10	Delete "a" and insert "one or more" prior to "penetration" and add "flow paths" after "penetration."
13	Pg. 7, line 17	Add "not associated with the containment isolation function" prior to "was not specifically..."
14	Pg. 9, line 12	Revise "installations" to "configurations."
15	Pg. 9, line 25	"metic" should be "metric"
16	Pg. 10, line 1	Insert "penetration" prior to "flow path."
17	Pg. 10, line 21	Insert "the" prior to "extend" and change "extend" to "extended."
18	Pg. 11, line 11	Replace "cannot be considered to have been" with "were not."
19	Pg. 12, line 30	Add "10 CFR" prior to "50.65."
20	Pg. 16, line 38	Add "the" between "justify extended."
21	Pg. 16, line 39	Add "that" between "assumes only."
22	Pg. 17, line 3	"CIVs" should be "CIV"
23	Pg. 21, line 20	Add "performed" between "calculations to."
24	Pg. 21, line 29	In the phrase "... calculations whereby shorter than 7-day CTs..." the word "then" should be "than".
25	Pg. A-2, line 18	Delete "s" in "meets."
26	Pg. A-2, line 24	Add "s" to "configuration."