Comment 1:

SCENARIO

An older nuclear power plant cuurently uses licensing basis source terms based on TID-14844 of March 23, 1962. The plant has not submitted for NRC approval alternative source term (AST) calculations/results pursuant to 10CFR50.67. Use of the less restrictive (but unapproved by NRC) AST source terms will allow control room (CR) in-leakage greater than the amount assumed in the current licensing basis radiological analyses. This may make all the difference between "pass" and "failure" as far as CR envelope in-leakage testing is concerned, which is planned for the near future.

QUESTIONS

1- Can the plant apply AST source terms/methods to demonstrate interim control room habitability without obtaining prior NRC approval or bringing this interim use of AST to the NRC's attention?

2- Per RIS Section C.14, at what point must a license amendment involving a change to the licensing basis, i.e, replacement of TID methods and assumptions with AST methods and assumptions, be submitted to the NRC? Can this be done after the interim use of AST assumptions/methods?

3- Plant officials may conclude that use of AST assumptions/methods for interim operability determination does not amount to or require a change in the current licensing basis and therefore no license amendment is required. Is this acceptable?

4- Has OGC already reviewed and concurred with the draft RIS?

Comment 2:

Section 5 comments:

The 'timing' discussions, in Sections 5.2 and 5.3, are open ended, in that, the immediate/prompt determinations have no comprehensive 'timing windows' specified. In addition, Section 5.3 alludes to the fact that every immediate determination MUST have a follow-on prompt determination. In many cases, a prompt determination is not necessary. Section 5.3 should allow for this reality. I have various comments and recommended rewording for Section 5 paragraphs, are as follows:

1) Section 5.0; 1st sentence- This sentence is a bit unclear, in that it says an operability determination should be made whenever operability is called into question. Consistent with Section 1.0, this sentence should read.. "Operability determinations are appropriate whenever a review, TS surveillance, or other activity identifies the existence of a degraded or nonconforming condition, calling into question an SSC's ability to perform it's specified safety function".

2) Section 5.2; 1st sentence (also Section 4.1; next to last sentence and Section 1.0; 6th paragraph; 1st sentence)- Delete the word 'potential'/ 'possible'. Consistent with the intent of this RIS (See Section 1.0, 2nd para.), 'operability' is to be considered for identified degraded /non-conforming conditions NOT potentially/possibly degraded / nonconforming conditions.

3) Section 5.2; 2nd sentence- Reword to read...."In cases where a 'degraded' condition is discovered, where the level of degradation is immediately quantifiable (e.g., loss of motive power, etc.), it is expected that the decision can be made immediately. In other cases, such as the discovery of a non conforming condition, where the impact on 'operability' is not as obvious, other groups, such as Engineering or Licensing may be required to provide input into the immediate determination. In these cases, it is expected that the decision can usually be made within 24 hours."

4) Section 5.2; 2nd sentence- Delete the word 'complete' from this sentence. 'Complete information' is undefined and, as discussed in Section 5.4, not required to be obtained at any point in the operability determination process.

5) Section 5.2, Last sentence- What relevance does the last sentence have since, within 24 hours, the licensee is already into the Section 5.3 'Prompt Determination' process? In other words, why revise the initial Immediate Determination once your into the next step of the process (i.e., Prompt determination), unless the concept discussed in comment #6, below is adopted? Then, revisiting an immediate determination would be appropriate.

6) Section 5.2- somewhere in this section, Section 5.8 should be referenced so as to provide the expectations for documentation of this immediate determination.

7) Section 5.3; 1st sentence- Reword to read, "Subsequent to the immediate determination, a prompt determination may also be required to be made by licensed operators. The need for a prompt determination is predicated on the licensed operators confidence that the immediate determination provides the information and rationale necessary to support the reasonable expectation that the SSC is operable. If, after the immediate determination has been completed, additional research or investigation is required, a prompt determination is expected to be completed."

8) Section 5.3; 3rd sentence- Reword to read " For SSCs associated with TS, the completion times, contained in the TS, provide reasonable expectations for the completion times of the prompt determination. For SSCs not associated with TS, the timing, for completion of the prompt determination, should be based on the confidence the licensee has that the immediate determination provides a reasonable expectation of operability/functionality and that the prompt determination process, when completed, will further support this immediate determination.

9) Section 5.3; 5th sentence;- the sentence discussing.. The safety significance of the SSC may be used "as part of a reasonable safety justification" to extend the completion time- It is not clear what is meant by the phrase...'as part of a reasonable safety justification'. This sentence alludes to a licensee not only having to document his prompt operability determination but also documenting the basis for the time he allotted himself for completing the operability determination.

It is recommended that this sentence be deleted. The comment #7 (above) should be adopted as it provides clear and concise language and expectations on timing.

10) Section 5.4; 1st sentence- Should be reworded to read- " When a licensee discovers a degraded or non-conforming condition, where operability of an SSC is questioned....". This rewording reflects the fact that, within the context of this RIS, SSC operability is only questioned when a D/NC condition is first discovered. The current wording alludes to other situations where operability may be called into question, even outside of the corrective action process.

11) Section 5.4; 1st sentence- should be reworded to read ".....,the operability determination process (i.e., Section 5.0) must be predicated..." This rewording reflects the fact that the Section 5.4 discussion, of 'reasonable expectation', applies to both the Immediate and Prompt Determinations.

12) Sections 5.5; 1st and 2nd bullet- conditional language (i.e.,..where performance/qualification of equipment is called into question) should be deleted. This phrase is not relevant in determining if an item is degraded or non-conforming. Seeing that Degraded and Nonconforming are defined, I don't believe it is the NRC's intent to create new criteria (i.e., does the degraded/non-conforming condition affect operability) to determine if the condition itself is a degraded /nonconforming condition.

13) Section 5.5, 3rd,4th and 5th bullets- These are examples of D/NC conditions (bullets 1 and 2). They should be presented as such and not as conditions other than or in addition to bullets 1 and 2.

14) Section 5.6; Various places, in this paragraph, reference is made to this Section (5.6) as only applying to the 'prompt' determination process. The concepts and considerations of 'operability', as discussed in Section 5.6, apply to both the 'immediate' and 'prompt' determination processes. The concepts and considerations are the same, the only difference would in level of documentation and review rigor. Please reword this paragraph to reflect this fact.

15) Section 5.6; 1st sentence- Change the end of this sentence to read"...consistent with its 10CFR50.2 design bases AS described in the UFSAR". This sentence needs to recognize that each plant's 50.2 Design Basis Information is AS reflected in it's UFSAR and that this information may or may not conform to NEI 97-04/Reg. Guide 1.186. The current wording appears to be differentiating between 50.2 design bases information and information in a licensee's UFSAR. Until Reg. Guide 1.186/NEI 97-04 came into existence, the only place 50.2 Design Bases information resided was in the licensee's UFSAR. With the issuance of Reg. Guide 1.186/NEI 97-04, situations can arise where NRC questions a licensee's UFSAR Design Bases information as not meeting the NEI 97-04 definition thereby concluding that the licensee's UFSAR does not contain the Design Basis information necessary to meet 50.2.

16) Section 5.6- last bullet- should read.." The operability or functionality of necessary support systems...."

17) Section 5.6; 8th bullet - While the term 'Compensatory Measure' is NOT specifically used here ,this bullet, I believe, alludes to Compensatory Measures. The language ..."any additional actions or measures" should be changed to simply 'Compensatory Measures ', for consistency within the document.

18) Section 5.6; 8th bullet- A reference is made to IEN 91-78. I don't believe IEN 91-78 applies here. I believe NRC means to reference IEN 97-78. Regardless, IEN 97-78 (the applicable parts) have been incorporated into Section C.5. Referencing IEN 97-78 here is confusing and misleading. Most of IEN 97-98 is no longer applicable, as it was written around the previous 50.59 rule. Instead, a reference to Section 7.3 and/or Appendix C.5 should be made here, in Section 5.6 , for further details on Compensatory Measures. IEN 97-98 contains antiquated language (especially 50.59 related language) and should NOT be referred to in this document.

19) Section 5.8, 2nd para.- Since the expectation here is that the 'Prompt Determination' should be available for inspection, does this mean that the 'Immediate Determination' DOES NOT need to be available for inspection ?

20) Section 5.8, 3rd para.- Delete the word 'Qualification'. Qualification, in this document, implies 'full qualification/ fu fully qualified (Section 4.4) and should be discussed as such , not within the context of the documentation of an operability determination. The term' Qualification' in the context of the 'use of engineering judgment' is ambiguous.

21) Section 5.8; 3rd para. Delete the term 'safety significance' as it has no relevance to the 'documented operability determination or use of engineering judgment, being discussed in this section. The concept of 'safety significance' is discussed in Section 5.3, dealing with the timing of when prompt operability determinations need to be completed. The term does not relate to the documented operability determination itself.

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Section 7 Comments:

1) Section 7.2,; 1st para. 2nd sentence- NRC appears to be establishing, in this sentence, specific intermediate expectations of the corrective action process, in that, an 'extent of condition' review is expected to be completed for all 'Conditions adverse to Quality' (undefined term in the RIS and lacks context within the RIS). 'Condition adverse toQuality' (CAQ) is a term specified in 10CFR50,Appendix B, Criteria XVI, however, this term is not defined or used in any other place in RIS 2004-xxx.It is not clear what NRC expectations are being conveyed here. Completing an 'extent of condition' review, if warranted by the significance of the degraded/nonconforming condition, is typically part and parcel of the identifying and completing corrective actions in a timely manner. What purpose is there to pick an arbitrary intermediate point within the corrective action process, to state 'the obvious', unless there is another, less obvious, message being broadcast with this sentence. In any case, NRC should NOT be establishing specific 'intermediate' expectations of the corrective action process (i.e., complete an 'extent of condition' review) within this RIS. The entire process of.. 'completing corrective actions is a timely manner commensurate with the safety significance of the issue'.., should be the yardstick used to judge timeliness. It is recommended that this 2nd sentence be deleted as it adds no specific value to the message being conveyed in the paragraph and, more importantly, to avoid future confusion and misinterpretations.

2) Section 7.2- 2nd para. Last sentence- What is meant by this last sentence?? What compensatory measures are being discussed here ??? What's the definition of a 'defacto design change' ??? Compensatory measures are discussed in Section 7.4 and Appendix C.5. In Section 7.4, 50.59 is applied to the compensatory measures that involve a temporary procedure or facility change'. In essence, Section 7.4 and Appendix C.5 has already established that certain 'compensatory measures are facility changes''. It is unclear what message is being sent to the inspector here, with this sentence. Please clarify.

3) Section 7.2; 2nd and 3rd para.- 'Timeliness' of corrective action, per 10CFR50,Appendix B, is SUPPOSE to be commensurate with the SAFETY SIGNIFICANCE of the issue, however through out these two paragraphs, these is minimal mention, discussion or written NRC expectations on how/what 'safety significance' factors should be applied to determine the timeliness of corrective actions. In these two paragraphs the NRC is 'dictating' prescriptive corrective action timing expectations, based mainly on NRC expectations and NOT on 'safety

significance' of the specific D/NC condition. 'Safety significance needs to be factored into the NRC expectations to be consistent with 10CFR50,Appendix B.

4) Section 7.2; 3rd para.- The NRC, in this section, has 'raised the bar' on their expectations, as compared to the current revision of G/L 91-18. In particular, the NRC expectations, dealing with the documentation 'expected' to be produced by the licensee, when delaying completion of corrective actions past the next refueling outage, is onerous and time consuming with little, if any, added value. The current version of 91-18, rev.1; Section 4.3 simply states "The NRC expects time frames longer than the next refueling outage to be explicitly justified by the licensee as part of the deficiency tracking documentation." This has been replaced with a prescriptive and detailed 'laundry list' of specific items to be addressed and management views to be conducted of said 'extension' documentation. In this prescriptive and detailed list of items to be addressed, conditional language (i.e., 'all', 'thorough', 'detailed', 'appropriate') that is vague and ripe for various interpretations and future misunderstanding between the licensee and the regulator, is used. It is recommended that this entire paragraph be DELETED in its entirety and replaced with the language from 91-18, rev.0, Section 5.6 and 91-18,rev.1 Section 4.3.

5) Section 7.2, 2nd para., 1st sentence- The NRC has revised this sentence from the current version of 91-18. In this revision, the NRC seems to be establishing new criteria to be addressed, dealing with the timeliness of corrective actions. In particular, The term 'safety significance', in the current version of 91-18, embodied 'effects on operability' and 'significance of degradation'. In the proposed version, 'safety significance' is presented as a separate item from 'effects on operability' and 'significance of degradation'. Please clarify this 'changing' NRC expectation.

6) Section 7.2, 2nd para.; 2nd sentence- The proposed language implies that the NRC MAY (or may not) accept a licensee's justification for additional time to implement corrective actions, because of time required for design, review, approval, procurement, etc., with no additional discussions provided on what factors NRC would use to judge the acceptability of said justifications. This type of 'conditional language' should be avoided as it is vague and ripe for various interpretations and future mis-understanding between the licensee and the regulator. Recommended re-wording is as follows: " Factors to be considered, when implementing corrective actions, are the amount of time..."

7) Section 7.2, 2nd para.3rd and 4th sentences- The NRC expects corrective actions to be completed ..'at the next on-line maintenance window or outage of sufficient duration to adequately plan and implement the proposed corrective action.' The NRC also expects that, if corrective actions are 'extensive', the corrective actions are to be completed at the next refueling outage. These NRC expectation have been raised, from those in the current version of 91-18. What's implied, with these two NRC expectations, is that the 'next' on-line maintenance window (of sufficient duration) or the 'next' outage (of sufficient duration) will occur BEFORE the next refueling outage. This may or may NOT be the case, depending on when the D/NC condition was identified in the fuel cycle, the length of time it takes to identify corrective actions, etc. In many cases, the 'next' maintenance window of sufficient duration or 'next' outage of sufficient duration maybe a number of refueling outages away. It is recommended that the 3rd sentence be the NRC 'new' expectation and the 4th sentence be deleted, so as to eliminate future confusion and misinterpretations by licensees and inspectors.

8)Section 7.2;3rd paragraph - The NRC expectation..'that corrective actions be completed no later prior to the next refueling outage, hasn't changed from the current version of 91-18,

however, in the 1st sentence of the 3rd paragraph, NRC appears to create a new, and more onerous expectation that, it should be an 'unlikely' situation where licensees go beyond the next refueling outage to complete corrective actions. This is an unreasonable expectation. While it is appropriate for NRC to have a general expectation on when a licensee should complete corrective action, to suggest/imply how 'likely' or 'unlikely' it is, for a licensee to meet this NRC expectation, is not reasonable, as the range and variation of D/NC conditions is vast in a nuclear power plant. This language should be deleted.

9) Section 7.2, 2nd Para.; 4th sentence- the term 'extensive' is undefined. This conditional language' should be avoided, as it leaves it up to the inspector to define what 'extensive' is.

10) Section 7.3(General)- This discussion of 'Compensatory Measures' is located in the Corrective Actions' section ,however the compensatory measures discussed are measures to be taken, as part of the operability determination process(i.e., Section 5.6; 8th bullet). There should be NO compensatory measures associated with the corrective actions to resolve a D/NC condition. This entire discussion is out of place in Section 7.0. It should be moved to Appendix C.5, in it's entirety.

11) Section 7.3; 1st paragraph; 1st sentence- Should be reworded to read..." Any time, during the operability determination process associated with a D/NC condition, a licensee may decide to implement a compensatory measure..." This rewording clarifies the current wording "When evaluating the impact.." and puts this 'impact evaluation' into the context of 'actions to be taken' as part of the operability determination process.

12) Section 7.3; 1st paragraph; last sentence- Reword to read "....or to establish or restore SSCs to operable status". The terminology in this sentence and the 1st sentence of the 3rd paragraph NEED to be identical so that it is clear that there are only TWO types of compensatory measures addressed in this section. With the current wording "...or as an interim step when restoring SSCs to operable status" in this paragraph, it appears that there are three types of compensatory measures being discussed ,not two.

13) Section 7.3; 2nd paragraph; last sentence- Delete this sentence as it is a restatement of the previous Section (7.2) and adds no specific value within the context of this paragraph.

14) Section 7.3; 2nd para.; 1st sentence. Reword as follows: "...usually implemented to restore plant operating margins (see Section 4.4) or reduce or eliminate operator work-arounds (e.g., remove hanging alarms)." This rewording recognizes the fact that, in addition to restoring plant operating margins, many compensatory measures are taken in response to Operations requests to remove/reduce 'work-arounds', caused by the degraded condition.

15) Section 7.3; 3rd paragraph; 2nd sentence- Delete this sentence. The criteria and guidance for acceptable compensatory measures ,and in particular, involving use of operators is already contained in this Section and Appendix C.5. Using conditional' terms such as 'relatively simple' and 'minimal operator or plant impact' are not quantifiable and can be easily cause differences of opinion between an inspector and a licensee.

16) Section 7.3; 3rd paragraph; last sentence-Reword to read "....Criteria and guidance, for the use of manual actions in place of automatic actions is, provided in Appendix C.5. This rewording provides a more definitive discussion on the use of the information in Appendix C.5. The current wording is passive, in that, the wording is not definitive as to how, and for what, Appendix C.5 is to be used.

17) Section 7.3, 4th para.- "The impact of comp. measures on the plant should be considered." The NRC is mixing apples and oranges here. The technical evaluation of 'impact to the plant' should be made in accordance with the criteria/guidance in Section C.5. This Section (7.3) discusses how to apply 50.59 to ONLY THOSE compensatory measures rising to the level of requiring a temporary procedure or facility change, AFTER the technical 'impact' evaluation, per Section C.5 , is completed. This section needs to be reworded to 'put the technical 'impact ' evaluation before the '50.59 review' and also recognize that not ALL compensatory measures are reviewed under 50.59, only those compensatory measures involving a temporary procedure or facility change are required to be reviewed under 50.59. Many compensatory measures do not rise to the level of requiring a temporary procedure or facility change. This distinction needs to be made in this Section.

18) Section 7.3, last para., last sentence - This end of this sentence should be re-worded as follows: "...or have other effects that should be reviewed". Using the term 'evaluated' in the same sentence with 50.59 alludes to requiring a "50.59 Evaluation". This is NOT what is meant here. The existing language has the potential to be misunderstood and should be revised as suggested.

19) Section 7.4; the sentence " At this point, the licensee plans to make a change to the facility or procedures as described in the UFSAR"..is incorrect. This statement implies that any time the resolution of a degraded/nonconforming condition was anything other that full restoration to it's original design, that a 50.59 Evaluation is required because the change is a change to the facility or procedures as described in the UFSAR. This is obviously not the intent of this statement. A 50.59 screening, of the proposed change, determines if the change is a change to the facility or procedures as described in the UFSAR, thus requiring a 50.59 Evaluation to be performed. It is recommended that this sentence be deleted as it conveys the wrong intent of applying 50.59.

20) Section 7.4; 1st para.- Delete the phrase.. (with NRC approval, if required). This statement has no specific relevance to item #(2) in the context of this statement and is presented out of context. The determination of whether NRC approval is required or not is presented in the subsequent paragraphs of this section, where the application of 50.59 is discussed in detail.

21) Section 7.4.1- The discussion and example provided are NOT in the context of the 'first situation discussed in Section 7.4 (i.e., Item (3) discussed in the 1st para of 7.4). Section 7.4.1 discusses, I believe, permanently leaving the degraded/nonconforming condition as-is and propose some other changes to the facility /procedures to permanently compensate for the as-is degraded /nonconforming condition. This entire section is convoluted logic and doesn't address the issue at hand (i.e., making a change in lieu of full restoration.). This section requires rework to properly address correcting a D/NC condition with a 'change' in lieu of full restoration.

Proposed changes to resolve issue: 1st sentence- Reword to read... "In the first situation, the licensee's proposed final resolution of the D/NC condition is to make facility / procedure changes to resolve the D/NC condition, in lieu of full restoration." 2nd Sentence- Delete this entire sentence. 3rd Sentence- reword to read...In this case the licensee must apply the 50.59 process to the proposed facility / procedure changes.

22) Section 7.4.2- 1st sentence- reword to read- ' In the second situation the licensee proposes to 'accept as-is' the degraded or nonconforming condition". Deleting the phrase ' change to the CLB' is appropriate as 'accept as-is' dispositions of D/NC conditions does not always result in a change to the CLB. Also, The term 'degraded ' needs to be added to this sentence as 'accepting

as-is' is just as appropriate to resolve degraded conditions as it is to resolve nonconforming conditions.

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General RIS document comment:

1) The terms 'equipment' or 'systems/ components' are used through out this document. I believe the term System,Structure,Component (SSC) is more appropriate and encompassing and should be used instead.

Specific Comments:

1) Section 2.0- items (i) & (iii) - 10CFR50.49 is listed as one of the conditions of item (iii). In the context of (iii), the SSCs applicable to (iii) are those that are EQ. In this same Section (2.0), the SSCs applicable to Item (i) are the same EQ SSCs, as the definition provided in item (i) is the definition contained in the 50.49 rule itself. Why are both items (i) and (iii) applicable to 50.49 SSCs ? What is the difference between item (i) and (iii) as they relate to EQ SSCs? It is recommended that the reference to 10CFR50.49, in Item (iii), be deleted if a quantifiable distinction between EQ SSCs, as they relate to item (i) and item(iii), cannot be determined/provided.

2) Section 3.2 - 1st sentence- Should be re-worded to read...."Design Basis information, defined by 10CFR50.2, AS documented in the most recent UFSAR." This sentence need to recognize that each plant's 50.2 Design Basis Information is AS reflected in it's UFSAR and that this information may or may not conform to NEI 97-04/Reg. Guide 1.186. The current wording appears to be differentiating between 50.2 design bases information and information in a licensee's UFSAR. Until Reg. Guide 1.186/NEI 97-04 came into existence, the only place 50.2 Design Bases information resided was in the licensee's UFSAR. With the issuance of Reg. Guide 1.186/NEI 97-04, situations can arise where NRC questions a licensee's UFSAR Design Bases information as not meeting the NEI 97-04 definition thereby concluding that the licensee's UFSAR does not contain the Design Basis information necessary to meet 50.2.

3) Section 3.3; 2nd para., last sentence- The term 'safety function' is used. 'Specified safety function' should be used consistently throughout this document. Other Sections experiencing this nomenclature issue are :

Section 3.4; The term 'designed function(s)' should be changed to 'specified safety function'.

Section 3.4;: next to last sentence, specified function is used. This should read 'specified safety functions'.

Section 3.5; 2nd para in various places, specified function is used. This should read 'specified safety function(s)'.

Section 4.4; Table- The term 'function' is used. This should read 'specified safety function(s)'..

Section 5.6, 1st sentence- The term 'specified function' should read 'specified safety function(s)'.

Section 5.6; 2nd bullet- the term 'safety function' should read 'specified safety function(s)'.

Section A.2; 1st para. the term 'safety functions' should read 'specified safety functions' .

4) Sections 4.2 and 4.3- conditional language (i.e., .."potentially affecting operability or functionality") should be removed. This phrase is not relevant in determining if an item is degraded or non-conforming. Seeing that these are definitions, I don't believe it is the NRC's intent to create new criteria (i.e., does the degraded/non-conforming condition affect operability) to determine if the condition itself is a degraded /nonconforming condition.

5) Section 4.3; 2nd bullet- Revise to read... "CLB requirements" instead of "UFSAR requirements". Te definition of CLB is larger than the UFSAR description. This bullet, albeit an example, should reflect the broad scope of what is a non-conforming item.

6) Section 6.2 -For example-.... This is NOT a good example of 'operable but nonconforming'. Only EQ Guys would understand the relevance of this example. A better, more universally relevant, example is needed here that will be relevant to the masses.

7)Section 6.2.1; 2nd para,last sentence- A licensee's corrective action program has three actions it can take to resolve a degraded or nonconforming condition (See Section 7.4). This sentence implies that 'restoration to full qualification' is the only option available to the corrective action program to resolve the issue. This is not correct.

8) Section 6.3- last 2 paras- Delete the reference to EQ JCOs and the use of NRC Generic Letter 88-07. See comment #17 below for the rationale.

9) Section A.2- 1st sentence- reword to read- " Many systems are designed to perform both normal operation (i.e,., specified functions) and specified safety functions". Consistently utilizing terms from Section 3.5 helps provide clarity within the document.

10) Section B.1; Last para., last sentence - The various plant modes, defining the term 'power operation', should be provided here, for clarity. Modes 1, 2 and 3, as defined in NUMARC 93-01, Section 11.3.2 (50.65 NRC endorsed guidance), as 'power operation'. These modes should be used/identified to clarify the intent/context of this paragraph as it relates to 50.59.

11) Section B.2; 2nd para.- NRC should reference their guidance document (i.e., NRC Inspection Manual; Part 9900- Technical Guidance; entitled "Maintenance- Voluntary Entry into Limiting Conditions for Operation Action Statements to perform Preventive Maintenance, currently dated 1/17/02)) here.

12) Section B.2, 2nd para. The term 'loss of function' should be defined / elaborated on so as to provide clarity and specific meaning to the term. An example of a 'loss of function', in context, would also be helpful.

13) Section/Appendix B-(Maintenance)- This Appendix needs to address RIS 2001-09 (Hazard Barrier removal) as this RIS is specific to dealing with and evaluating maintenance related temporary facility/procedure alterations. In fact, this Appendix needs to address the general subject of maintenance related temporary facility/procedure alterations and how these alterations need to be technically evaluated and risk assessed prior to installation.

14) Section/Appendix C- NRC should, in this Appendix, address crediting/not crediting non-safety related SSCs (i.e., SSCs that have no specified safety function) to support operability

determinations of SSCs covered by this RIS (i.e., Section 1.0). There have been a number of licensees who have credited NSR equipment to support operability that the NRC has challenged. It is a subject worthy of a specific discussion.

15) Section C.4 - Another condition, where an analytical method may be used to support operability, needs to be presented . The situation where no existing method of evaluation/analytical method is currently used / within the licensee's CLB, however due to a D/NC condition, a new method is found that's applicable to the situation and can be shown to be applicable to the situation. This new method should be permissible, as part of the operability determination.

16) Section C.4- The 'analyses of interest', discussed in Section C.4 should be only those analyses that meet the NEI 96-07, Rev.1 definition/description of 'Methods of Evaluation'. Other analytical methods, that do not meet this threshold should into be subjected to the conditions specified in this section. This section should be revised to reflect this criteria.

17) Section C.7- There are two major issue associated with EQ Deficiencies, namely:

A) The requirement to write a JCO, as if it's something other than/more than the prompt operability determination. The text in section C.7, identifies THREE distinct things needed for EQ deficiencies: 1) Prompt determination of operability. This 1st Action is NOT specific to EQ deficiencies. Section 5.0 discusses, at length, how to go about performing and documenting a prompt operability determination. Why is it necessary to repeat 'the obvious' in Section C.7 ? 2) A plan with a reasonable schedule for corrective action. This 2nd Action is NOT specific to EQ deficiencies either. Section 7.0 discusses, at length, how to go about implementing corrective actions within a reasonable schedule. Why is it necessary to repeat 'the obvious' in Section C.7 ? 3)Write a JCO. This 3rd action in actually a combination of actions 1 and 2 above, however it is presented, in this section, as something different than/more than actions 1 and 2. What's the purpose of this 3rd action, other than creating confusion? Isn't performing actions 1 and 2 above, for ANY deficiency, including EQ, sufficient? This type of confusing language causes major licensee headaches and misunderstandings during NRC inspections when inspectors ask to see documents such as JCOs. The Licensee shows them their 'prompt operability determination' and 'plan to correct the deficiency'. The inspector then asks to see the EQ JCO, as if there is some other document the licensee must produce. As you can see, leaving language about 'writing a JCO' in this document will cause unnecessary confusion and licensee work in the future. This is why references to continued use of G/L 88-07 needs to be removed.

B) The other major issue is the language in Section C.7 that says .."The licensee should also show that subsequent failure of the equipment will not result in significant degradation of any specified safety function or give misleading information to the operator"

This language is misleading and again confusing, as it relates to 'operability' as we know it post G/L 91-18. This language is requiring a licensee to assume failure of the EQ equipment that the licensee just determined was operable, by completing an operability determination for. How convoluted is this logic?

Section 5.0 doesn't require or discuss 'assuming such a failure' for other types of deficiencies. If the prompt determination process concludes that the equipment is operable, then the equipment is operable. End of story. Why does EQ have additional requirements to meet?

If the licensee completed an operability determination, this means the licensee has high confidence that the EQ equipment will able to perform its specified safety function, with the EQ deficiency. This should be the end of the story.

Why is the licensee then asked to assume the 'operable' EQ equipment subsequently fails and determine if any safety function is degraded! If the licensee has to assume this failure, of course safety functions will be degraded. This is why the licensee performed the operability determination in the first place.

This is 'dated' language that pre-dates 91-18 guidance. In today's post-91-18 world, this antiquated language again is fodder for inspectors to ask for documentation that 'make no sense' today. I'm sure this language had a place and purpose back in 1988, but it only serves to confuse and prompt additional unnecessary licensee work today. Again, please remove it. If nothing else, allow the licensee the option of using either G/L88-07 or RIS 2004-xxx, which ever he chooses, for dealing with EQ Deficiencies.

18) Section C.9; 5th para, dealing with RIS 2001-09.- This RIS discussion is out of place here. Since the RIS deals with maintenance related barrier removal and control, this discussion needs to be relocated to Appendix B and expanded (see comment #13 above).

19) Section C.14-(addressing the use of AST in operability evals.) It would be helpful for the NRC, in Section C.14, to specifically explain how they applied the general criteria (i.e., (1), (2) or (3)), from Section C.4 to Section C.14, arriving at the conclusion that AST can be used for operability determinations.

Comment 3:

	Section	Comment	Discussion/recommendation
1	Various	The draft contains some good useful information, like the use of AST and other available information in support of Operability	Observation
2	1.0 5.0	These sections indicate that licensed operators should make the operability determinations, although assistance from other groups is allowed. It is not clear what this means: is it that licensed operators should have the final approval or is it more involved (as in a complex engineering or design basis issue). I.e. What constitutes “making” the determination?	

	Section	Comment	Discussion/recommendation
3	4.1	The example given at the very end indicates an operability assessment is required for a satisfactory surveillance, but with a "degrading trend". Many things could be considered a trend, and if it is in the non-conservative direction it could be a degrading trend. There needs to be some threshold.	Perhaps the example could add "…that indicates that the acceptance criteria could be exceeded prior to the next required surveillance performance."
4	4.4	The table needs to address "specified safety functions" and "specified functions other than specified safety functions"	In the last two rows, change "function" to "specified safety function." Add two rows similar to the last two rows in the current table. In the two new rows, replace "function" with "specified function other than specified safety function." In the row with "able to perform specified function other than specified safety function," the SSCs in TS are "Operable and Functional but degraded" and the SSCs not in TS are "Functional but degraded." In the row with "not able to perform specified function other than specified safety function," the SSCs in TS are "Operable but Not Functional" and the SSCs not in TS are "Not Functional."
5	5.0	In the first sentence, the SSCs should be noted as the ones in TS, for consistency with the scope of operability vs functional. Some sections (e.g. 5.3) do note "SSCs in TS". All sections should be consistent.	Start the first sentence with, "For SSCs in TS, . . ." Examine text of RIS to ensure the use of SSC is clear in all cases.
6	5.4	The wording "the SSC should be more likely than not operable." Is confusing	Suggested: "the SSC should be more likely to be Operable than inoperable."
7	5.6	IN 91-78 is "STATUS INDICATION OF CONTROL POWER FOR CIRCUIT BREAKERS USED IN SAFETY-RELATED APPLICATIONS.? Is this the correct reference?	The correct reference is probably IN 97-78, "CREDITING OF OPERATOR ACTIONS IN PLACE OF AUTOMATIC ACTIONS AND MODIFICATIONS OF OPERATOR ACTIONS, INCLUDING RESPONSE TIMES."

	Section	Comment	Discussion/recommendation
8	5.6	In the last bullet, because many support systems are not included in TS, they should be referred to as functional rather than operable, to be consistent with the rest of the document.	Change “operability” to “functionality.”
9	5.7	It appears that the information presented for presumption of operability being appropriate (item 1), 2), and 3)) is actually one example of a situations where this could be used.. and not the ONLY set of conditions for this. The second paragraph refers to “the previously stated verifications…”. It is not clear is this is relating back to the previous paragraph or something else.	Start the third sentence as follows: “For example, the presumption of operability . . . .” Replace “… the previously stated verifications …” with “ the previous verifications of operability (e.g., surveillance or operability determinations) ….”
10	5.7	Last sentence refers to STS SR 3.0.4 containing provision for missed surveillance under a risk evaluation. This is actually only for those licensees that have adopted TSTF 358, as incorporated in Rev 3 of STS. See A.3	Change the beginning of the sentence to read, “For those licensees who have adopted STS SR 3.0.4 and traveler TSTF 358 (as incoporated in Revision 3 of STS), ….”
11	6.2	In the second paragraph, a word is missing.	Add the word “are” between “SSCs that” and “determined.”
12	6.2.1	Incorrect word used in first sentence of second paragraph.	Change “degraded and nonconforming” to “degraded or nonconforming.”

	Section	Comment	Discussion/recommendation
13	7.2	The words, "If the corrective actions were not taken at the first available opportunity, then the inspector should consider the compensatory measures as defacto design changes to the facility." are unacceptable.	This appears to be reintroducing something similar to the old defacto USQ concept that we got rid of in the supplement 1 version of the GL. This statement is a step backward and should not acceptable. The current version of supplement 1 in section 4.3 states " If the licensee does not resolve the degraded or nonconforming condition at the first available opportunity or does not appropriately justify a longer completion schedule, the staff would conclude that corrective action has not been timely and would consider taking enforcement action." This would be a 10CFR50 App B corrective action violation and would be appropriate. However, the defacto design changes concept, although it states it applies to the comp measures which have already had a 50.59 review, it could potentially get you a 10CFR50.59 violation if this statement is taken to apply to the degraded / non-conforming condition as well. The worse case is if they say it applies to the combination of the degraded condition and the comp measures AND they collectively would not pass a 50.59 evaluation, then the plant would already be in a condition that requires prior NRC approval.
14	7.2	The third paragraph contains new requirements and is excessive.	In the first sentence replace “specific information” with “a detailed reason” and delete the rest of the paragraph.

	Section	Comment	Discussion/recommendation
15	C.4	The second sentence is a little confusing.	Clarify to read as follows: "The use of these alternative and normally more recent methods or codes may raise complex plant specific issues ; however they may be acceptable and useful in operability determinations."
16	C.4	Use of alternative analysis: category (2) and (3) do not seem to be radically different: one is FSAR only (not regulation or license condition), the other is "not specified in a regulation or license condition.." but must be compared to the current licensing basis. If it was not in the current licensing basis , it would not have to be addressed in operability.	Delete category (2) and change category (3) to read as follows: "(3) If the specific analytic method originally used is not specified in a regulation or license condition, the licensee is permitted to use an alternative method, even if the alternative method differs from the analytic method described in the current licensing basis. The licensee should evaluate the effects of the use of a new method and ensure its use is consistent with the application and the applicable acceptance criteria as contained in the current licensing basis. Simply accepting a new method because it has been approved for use at a similar facility does not alone constitute adequate justification. "
17	C.5	From the title of this section, it is not clear that the scope is temporary manual actions to support the operability of SSCs in TS.	Change the title of the section to: "C.5 <u>Use of Temporary Manual Action in Place of Automatic Action in Support of Operability</u>"
18	C.5	The scope of the second paragraph is unclear. The statements are general in nature.	Use the first two sentences of the second paragraph to create a new opening paragraph for the section.

	Section	Comment	Discussion/recommendation
19	C.5	First paragraph addresses LSSS. The last sentence in the second paragraph addresses "Credit for manual initiation to mitigate the consequences of design basis accidents…" It is not clear, but it seems like the second paragraph is still referring to LSSS only, since the next paragraph is "For any other situation…" If the intent of this sentence goes beyond LSSS, the sentence as written is too broad. The words "… to mitigate the consequences of design basis accidents …" can be interpreted to cover activities that are not needed for hours and even days after the accident. The use of manual actions for such activities should be allowed.	Delete or rewrite this sentence. A potential rewrite is as follows: "The reactor trip and certain safety actions (e.g., emergency core cooling actuation, containment isolation, or depressurization) are designed to be performed automatically during the initial stages of an accident and credit for manual initiation of such actions should have been established as part of the licensing review of a plant." If this new sentence is used, it should be added at the end of the new first paragraph (see comment above).
20	C.11	The last part of the first paragraph indicates that a through-wall flaw causes the **system** containing the flaw to be inoperable (also stated in the last paragraph). This is inconsistent with the treatment of other system components. For instance if a valve is inoperable, the system may or may not be inoperable depending on the location, safety function and specifics causing the valve inoperability. In the last workshop, under discussion of operational leakage, Mr Chan seemed to agree to declare the component (i.e. the pipe) inoperable, which in some cases causes the train to be inoperable. Note in C.12 discussion of pressure boundary leakage (through wall flaw) the component is declared inoperable.	In the last two sentences of the first paragraph, replace the word "system" with the word "component."
21	C.12	Third paragraph states " The Operational Leakage LCO must be promptly entered when it is more likely than not that pressure boundary leakage is occurring." It is not clear how indirect evidence, without positive confirmation of a through-wall, pressure boundary leak, how one could tell "more likely"	Observation only. No recommendation.

	Section	Comment	Discussion/recommendation
22	C.12	Much of this section duplicates section C.11 on flaw evaluation. As noted in previous comment , the through-wall or pressure boundary leakage is inconsistent. It should declare the component inoperable. RCS Operational Leakage deals with the Reactor Coolant Pressure Boundary. Most is class 1, and some class 2 piping within this scope. There is no need to address class 3, all the more reason to put this over in C.11	Combine into C.11 and just cover TS Operational Leakage in this section.
23	C.13	The TS for Structural Integrity and the old 4.0.5 were removed in ITS. As such, the first paragraph, regarding surveillances and inspections in accordance with TS requirements, does not apply. Further, since they are not explicitly in TS, degradation and non-conforming conditions should be addressed as "functional". Since some of the Category 1 Structures are Support systems to TS systems, they should be addressed as such.	Add at the end of the first paragraph: "(This paragraph does not apply to those ITS plants that removed surveillances and inspections for structures and supports from the TS.)"

Comment 4:

Specific Comments:

1. On page 2 (viii) states "any SSC's within the scope of the maintenance rule". Many low risk maintenance rule SSC's are only scoped as a potential trip initiator. Consider limiting this scope statement to high risk maintenance rule SSC's.

2. On page 10, paragraph 5.6, the scope of the operability determination is discussed. One bullet requires the licensee to, "determine by what means and when as the nonconforming equipment first discovered." This seems to be related to reportabilityy not operability. Also for consistency, we should replace "equipment" with "SSC".

3. Page 11,paragraphh 6.1 discusses the term "Not operable". I think the industry uses the term Inoperable more frequently.

4. Page 13, 4th paragraph of section 7.1 requires a 50.65 risk assessment for degraded non-conforming conditions. It seems, since the licensee has shown that the SSC will perform its specified safety function and is still operable, a risk assessment is not required. The exception would be in cases were a compensatory action has been implemented to maintain operability, the risk associated with the compensatory action should be evaluated.

5. Page 27, 3rd paragraph of section C.5, requires the licensee to have written procedures and training accomplished before substituting any manual action for the loss of an automatic action. Other sections require the 50.59 to be completed before implementing a compensatory action. This is not practical in situations were the degraded or non-conformance impacts both trains, the compensatory action or procedure change may be made to enhance the ability of the SSC to perform its function when the exact impact of the degraded or non-conformance cannot be fully determined in a short period of time. By the above requirement, the licensee would be required to enter LCO 3.0.3 and shutdown until all changes could be formally completed and trained. A more practical approach is to allow these changes to be implemented initially by unit log entry and crew briefings until expeditious 50.59, procedure changes and training are completed. The philosophy should be that operability is maintained unless, at some point in the process, it appears that the comp action is not practical or the impact on other SSC would require prior NRC approval (50.59).

Comment 5:

At the top of page 33, of the proposed GL 91-18 draft, the second sentence of the first paragraph states: "If a leak is discovered in a Class 1, 2, or 3 component in the conduct of inservice inspections, maintenance activities, or during plant operation, IWA-5250 of Section XI corrective measures may require repair/replacement activities be taken based on repair or replacement in accordance with IWA-4000 of Section XI." This has long been a position stated by the NRC and one that is directly disputed by the ASME Section XI Code Committee's Working Group on Pressure Testing, who wrote the IWA-5250 passages. The requirements of IWA-5250 were not intended to be applied until you discover leakage during the conduct of a system pressure test that was scheduled and performed in accordance with the requirements of various subsections of Section XI. This is so stated in the wording of IWA-5250(a) and is how it is intended (in the eyes of the ASME Section XI code Committee) that the requirements of the Code are to be applied. The specific words in the statement sentence that we suggest are incorrect are: "maintenance activities, or during plant operation,." It is our understanding that indication of leakage discovered, during these periods (i.e., at times other than when ASME Section XI inservice system pressure tests are being conducted), are governed by the requirements of the individual plant/unit's technical specifications.

Comment 6:

There seems to be some inconsistencies between the draft guidance and ANSI 18.7. How will these inconsistencies be resolved, and which document will the inspectors be utilizing ?

ANSI 18.7 is committed to in the Station Quality Assurance Plan.

Comment 7:

Inspection Manual Part 9900, in reference to Prompt Operability Determinations, states that 24 hours is usually a reasonable time frame for completing the prompt operability determination. In our view 24 hours is insufficient to assure that a quality operability determination document can be prepared which provides a strong basis to support operability.

Considering the performance standard established in Section 5.6 and the caution against inadequately documented engineering judgment in Section 5.8, this is a function that should be performed using personnel most familiar with the equipment involved and provide for adequate levels of review and approval.

It must be recognized that discovery could occur at any time of day or night, and that Engineering and Licensing resources are not staffed around the clock. Considering that equipment manufacturer support may be needed, and extent of condition evaluations may be required, significantly more that 24 hours may be needed.

A standard that we have applied very successfully for operability determinations is completion within 72 hours. This of course assumes that reasonable expectation of operability has been established during the Immediate Operability Determination.

Comment 8:

What type of risk assessment is expected for non Tech Spec SSCs that are Functional but may be considered degraded? Typically, the risk assessment looks at whether the SSC is available or not. Additionally, data may not exist that could be used to estimate the failure probability for degraded equipment. I think we would attempt to determine if the SSC could perform its risk significant functions. If it can, then we would make no change to the risk profile. If it can not meet its risk significant functions, we would considered unavailable and analyze it accordingly.

Comment 9:

See the attached 2002 letter from the NRC TS branch entitled "APPLICATION OF GENERIC LETTER 80-30 GUIDANCE TO AN INOPERABLE NON-TECHNICAL SPECIFICATION SUPPORT SUBSYSTEM" *[ADAMS Accession Number ML020950074]*, which addresses several issues which are already addressed in the GL 91-18 draft, but just aren't pulled together in this manner to address real-life situations. I will call you and provide more info on why this should be addressed in GL 91-18. This deals with "What do you do when you take one division of a 'non-TS support system' out of service which provides support for multiple divisions of TS systems - how do you deal with the single failure criterion and operability of the supported systems? The attached NRC response letter very clearly spelled out how to deal with this using the Maintenance Rule requirements. As I understand it, one of your goals with this draft of GL 91-18 is to provide revised guidance that reflects the existence of the Maintenance Rule and how it interfaces with OPERABILITY. This is a prime example of such a discussion. It could fit in several different places in the draft (Support Systems, Single Failure, or Maintenance Rule Use). I'm sure you could find the "best" spot, and then just refer to it in the other sections.

This NRC letter was so well written that we were able to incorporate its guidance into our TS Bases with only minor clarifications to make it work. In addition to providing the above copy of the letter, the following provides the words we put into our LCO 3.0.6 Bases. Even though the letter guidance talks about support systems that do NOT have LCOs in the Tech Specs, and LCO 3.0.6 deals with support systems that DO have LCOs in the TS, we made it fit, as you can see below. "LCO 3.0.6 addresses support systems that have an LCO specified in the TS. For support systems that do not have an LCO specified in the TS, the following guidance applies:

"In most cases, the non-TS support system has two subsystems, each supporting just one TS division of safety equipment. The duration of a maintenance activity on such a non-TS support system is limited by the Required Action Completion Times of the supported TS system(s). In this case, because the outage time of the non-TS support system is limited by the supported system TSs, the plant is temporarily allowed to depart from the single-failure design criterion, but the licensee may not rely solely on the TS limitations. The licensee must still assess and manage risk in accordance with 10 CFR 50.65(a)(4).

"In some cases, the non-TS support system has two redundant 100 percent capacity subsystems, each capable of supporting both TS divisions, e.g., M23/24, M28, M32, and P47. Loss of one support subsystem does not result in a loss of support for either division of TS equipment. Both TS divisions remain operable, despite a loss of support function redundancy, because the TS definition of operability does not require a TS subsystem's necessary support function to meet the single-failure design criterion. Thus, no TS limits the duration of the non-TS support subsystem outage, even though the single-failure design requirement of the supported TS systems is not met. However, by assessing and managing risk in accordance with 10 CFR 50.65(a)(4), the licensee can determine an appropriate duration for the maintenance activity. Use of administrative controls to implement such a risk-informed limitation is an acceptable basis for also allowing a temporary departure from the design-basis configuration during such maintenance. Although not expected, were a licensee to determine that its risk assessment would permit the support subsystem to be inoperable for more than 90 days, then the licensee would have to evaluate the maintenance configuration as a change to the facility under 10 CFR 50.59, including consideration of the single-failure design criterion.

"For the unusual non-TS support system design configuration described, the preceding is a clarification of the previous staff position (GL 80-30) regarding when a temporary departure from the single-failure design criterion is allowed. This allowance would be permitted regardless of whether the maintenance is corrective or preventive.

"When a non-TS support subsystem is unexpectedly found to be in a degraded or non-conforming condition, the licensee must make a prompt determination of operability (functionality), as discussed in Generic Letter 91-18. If the non-TS support subsystem is determined to be inoperable (non-functional), then the licensee must determine whether the subsystem's support function is actually needed to support OPERABILITY of the TS supported systems. If the support function is required, then the risk-management strategies of the TS and 10 CFR 50.65(a)(4), as described above for planned maintenance, will determine the appropriate actions and time limits to return the non-TS subsystem to operable (functional) status.

If the non-TS support function cannot be maintained, then enter the LCO(s) of the TS supported system(s)."