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Date:

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Subject:

NEI Comments on NRC Guidance for Operability Determinations

October 1, 2004

Chief, Rules and Directives Branch

Division of Administrative Services

Office of Administration (Mail Stop T6-D59)

U.S. Nuclear Regulatory Commission

Washington, DC 20555-0001

SUBJECT: NEI Comments on NRC Guidance for Operability Determinations

Reference: 69 FR 46599, Proposed Generic Communication; Draft Revision to NRC Inspection Manual Chapter 9900, "Technical Guidance, Operability Determinations and Resolution of Nonconformances of Structures, Systems, and Components" (Regulatory Issue Summary 2004-XX), August 3, 2004

NEI appreciates this opportunity to comment on proposed guidance for two important processes that are central to the effective, day-to-day operation and regulation of commercial nuclear power plants. They are the process for making operability determinations and the process for resolving degraded or nonconforming conditions.

NEI recommends that NRC continue the public dialogue on the draft RIS to ensure that the terminology, interpretations, and expectations in the final RIS are as clear as possible. In the long run, this will save resources and better serve the interests of the public, the NRC staff, and commercial reactor licensees. NEI is prepared to sponsor a workshop in calendar year 2005 to facilitate NRC/industry dialogue.

James W. Davis

Director, Operations

Nuclear Energy Institute

202-739-8105

10/4/04

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Enclosure

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James W. Davis DIRECTOR, OPERATIONS NUCLEAR GENERATION DIVISION

October 1, 2004

Chief, Rules and Directives Branch Division of Administrative Services Office of Administration (Mail Stop T6-D59) U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

Dear Sir:

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NEI comments on the draft RIS are enclosed. The following points highlight our main concerns.

• The consolidation into one document of "operability guidance" and "functionality guidance" has generated a number of concerns among industry reviewers. It is important to resolve these concerns to standardize the implementation of final guidance.

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- The scope of the guidance is broader than just "operability." It includes other processes such as the maintenance rule, reactor oversight, performance indicators, and risk-informed decision-making. The final RIS should be clear about how different processes relate to one another.
- The final RIS should be organized to separate operability from functionality, especially for structures, systems, and components (SSCs) that are not in Technical Specifications.
- Additional items to consider during follow-up NRC/industry dialogue:
 - > The definition of key terms, with references back to basis documents.
 - > The personal and organizational attributes of individuals authorized to make operability determinations.
 - > Differentiating the concept of Technical Specification "OPERABILITY" from the concept of "corrective action."
 - > The degree of prescription warranted in a guidance document.
 - > The content and usage of the Assistance Navigator that NRC has developed as a companion to the guidance document.
 - > Steps to preclude the final RIS from being treated as more than guidance to inspectors.

An NEI staff will contact the Chief of the Reactor Operations Branch in the NRR Division of Inspection Program Management during the first week of October to discuss scheduling a public meeting to identify NRC and NEI follow-up actions. Please contact Michael Schoppman at (202) 739-8022; mas@nei.org for any additional information.

Sincerely,

James W. Davis

Jana W Down

Enclosure

c. Mr. Bruce A. Boger, NRC

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SECTION	COMMENTS

GENERAL COMMENTS	1. The draft guidance document mixes discussions of "functionality," i.e., of non Technical Specification (TS) structures, systems, and components (SSCs) with discussions of "operability." The evaluation of TS compliance based on an operability determination should be discussed separately from the evaluation of functionality for non-TS SSCs. We recommend reorganizing the document to separate these issues.
	2. Although the guidance document is sometimes clear that actions associated with an "operability determination" are distinct from action associated with a "corrective action program," it usually mixes the two concepts together.
	3. In some places (for example Sections 3.4, 3.5, and 5.8) the document mixes "operator determinations of TS operability", which are made continually during plant operation by licensed operators, with "operability determinations," which are associated with degraded/nonconforming conditions. This is a natural result of combining two Inspection Manual chapters, one on operability and the other on degraded/nonconforming conditions, into one chapter. Followup dialogue with licensees is needed to separate and clarify the guidance on these two concepts.
	4. The phrase "enter the LCO" (and variations of that phrase) is not correct. An "LCO" is simply the statement of the lowest functional capability required by a TS to support continued operation, as defined by 10CFR50.36. Better phrases, which are sometimes used in the guidance document and which are consistent with the Standard Technical Specifications (STS), are either "declared inoperable" (which coveys intent) or "follow the applicable actions."
	5. The document should be reviewed and revised throughout to ensure that the terms OPERABLE/OPERABILITY, inoperable, functional/functionality, and "not functional" are used consistently and in the proper context.
	6. We note that the scoping references in the document include 10CFR50.65 (performance indicators) and the corrective action program (inferring 10CFR50 Appendix B), but do not include 10CFR50.36.
	7. We believe the primary purpose of the document should be to discuss degraded/nonconforming conditions and how to disposition them. In fact, the document's title could be changed to "Resolution of Degraded or Nonconforming Conditions (DNC) Affecting SSCs." Operability determinations are only one of many elements associated with the DNC resolution process.
	8. The terms "equipment" and "systems/components" are used through out the document. The term "systems, structures, and components" (SSC) should be used.
COMMENTS ON THE REGULATORY ISSUE SUMMARY	1. Page 2, 1st paragraph – The draft RIS states "The NRC requirements for operability of SSCs, as stated in technical specifications, and for resolving degraded and nonconforming conditions affecting the SSCs may collectively be viewed as a process for licensees to stay in conformance with their TS requirements, and to develop a basis for continued operation or place the facility in a safe condition and take prompt corrective action when conditions warrant." We recommend this statement be deleted. Inoperable equipment does not create a nonconformance with TS requirements. Inoperable equipment does not in most cases prevent continued operation. TS Actions, not corrective actions required by Appendix B Criterion XVI, are used to establish required plant operational restrictions for inoperable equipment. TS, not the "corrective action program," provide the basis for continued operation. As stated in the General Comments above, operability determinations are separate from the problem identification and corrective action process.

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SECTION	COMMENTS

COMMENTS ON THE INSPECTION MANUAL CHAPTER	
1.0 INTENT (new)	1. It is not clear whether the purpose of the "Intent" section is (1) to describe the purpose of the guidance document or (2) to provide a high-level discussion of the purpose of operability determinations and the resolution of degraded/nonconforming conditions. If the former, all but paragraphs 5 and 6 could be deleted. If the latter, paragraphs 5 and 6 should be at the beginning of the section, and, more importantly, reworded to maximize consistency with the rest of the document.
	2. This section states "The intent of operability determinations is for licensed operators to make timely determinations concerning whether SSCs can perform their specified function(s) upon discovery of degraded or nonconforming conditions." This sentence may not recognize that the focus of operability is the capability to ensure that specified safety functions (i.e., the functions required for operability) can be performed. The inability to perform a non-safety-related specified function not included in the plant TS should not require an operability determination. Rather, this type of condition should be addressed by the licensee's problem identification and resolution program in a manner consistent with the safety significance.
	3. During the public workshop on August 25, 2004, NRC often repeated that the guidance document represents inspector guidance and licensees are not required to follow it. However, the natural tendency of licensees will be to use the document extensively to inform their own procedures and practices. It is very important to have further dialogue on this and future revisions of the document to minimize potential misunderstandings of key terms and definitions.
	4. The 1st sentence of the 1st paragraph states, "The Code of Federal Regulations and a plant's operating license, including its technical specifications, provide requirements for safety related structures, systems, and components (SSCs) to ensure that plant operation does not pose an undue risk to public health and safety." We recommend the term "safety related" be deleted. The Operating License, TS, and 10 CFR apply to more than safety-related SSCs.
	5. The 3 rd paragraph states that licensed operators should make operability determinations. We note that "making an operability determination" is not the same as "preparing the basis for an operability determination." Many individuals on the plant staff, such as the Shift Technical Advisor (STA) or staff in departments other than Operations (e.g., Engineering, Radiological Control, Licensing, etc.), often prepare the basis for an operability determination to address whether SSCs can perform specified safety functions. A licensed operator then uses the preparer's documentation to make the final declaration of "operable" or "inoperable," i.e., whether a TS LCO is or is not satisfied.
	6. We recommend putting the 5 th paragraph first to highlight the primary purpose of the guidance document, which is to provide guidance to NRC inspectors (emphasis added to underscore NEI's concern that the document could be read by NRC inspectors, NRC reviewers, and licensee personnel as representing more than guidance).

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2.0 SCOPE / APPLICABILITY (revised)	1. With respect to Item (i), the definition of safety related SSCs is not in 10CFR50.49(b)(1). This definition only applies to equipment qualification of electrical equipment. The correct reference is 10CFR50.2. The description of design basis events is from 10CFR50.49, but this definition was developed for equipment qualification, and it is not clear if it is applicable to other uses.
	2. Item (i) refers to "potential offsite exposures comparable to the 10CFR100 guidelines." We recommend reviewing this statement in light of changes to 10CFR100 made in 1996. Although the statement in Item (i) remains applicable for most operating plants using Part 100 Subpart A, new sites and designs must meet Subpart B. For plants using Subpart B, the offsite exposure limits are in 10CFR50.34 not Part 100, and the limits in Subpart B are requirements, not guidelines.
	3. The purpose and regulatory basis for Item (iii) should be described (i.e., is it a regulation, a Regulatory Guide, or something else).
	4. We recommend revising Item (iii) to read "analyses and evaluations submitted to support approved license amendment requests, approved exemption requests, or approved relief requests"
	5. The scope of one set of SSCs is defined by Section 2.0. Another set is defined by Section 3.4, Functionality. Section 3.4 states "The term functionality is used when referring to SSCs not explicitly included in plant TS. It refers to the ability of these SSCs to perform their designed functions. The designed function is not limited to either the function described in the UFSAR or 10CFR50.2. Although this guidance is worded to reflect assessment of SSCs in plant TS, the principles in this guidance for timely assessment of whether SSCs can perform their specified functions are also applicable to the SSCs that are not in plant TS. This assessment and the resolution of degraded or nonconforming conditions are part of an effective licensee problem identification and corrective action program."

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3.0 DEFINITIONS	1. The definitions in the guidance document are very important. To avoid misinterpretation, each key term should have a documented connection with a regulation, and the definition should be cited directly from the source document. Any key term that is used only for this guidance document must be clearly identified.
	2. The following terms are used in the draft Inspection Manual chapter: Specified Safety Function Safety Function Specified Function Designed Function Support Function Function Functional Capability
	It is recommended that the number of "function" terms be limited and that the relationship among remaining terms be clearly identified in the document.
3.1 Current Licensing Basis	1. The definition of current licensing basis (CLB) appears to be the definition from 10CFR54.3 for license renewal. Is it appropriate to apply the definition from Part 54 to this technical guidance? The guidance document applies to all licensees, but not all licensees have completed license renewal.
3.2 Design Basis (revised)	1. We recommend the 1st sentence be reworded to say "Design Basis information, defined by 10CFR50.2, as documented in the most recent UFSAR." This sentence needs to recognize that each plant's 50.2 Design Basis information is reflected in its UFSAR and that this information may or may not conform to NEI 97-04 and Regulatory Guide 1.186. The current wording appears to differentiate between 50.2 design bases information and information in a licensee's UFSAR. We want to preclude situations where NRC concludes that a licensee's design basis information does not satisfy 10CFR50.2 simply because it does not satisfy the NEI guideline or the Regulatory Guide.
3.3 Operability (revised)	1. We recommend combining Section 3.3 with Section 3.7. Section 3.7 affects how Section 3.3 is used, but the two sections are several pages apart.
	2. We recommend addressing "mission time" in a stand-alone definition, not part of the definition of operability. The concept of mission time applies to more than just operability.
	3. In addition, the mission time discussed in this section should relate to the mission time discussed in Appendix C.7 (EQ). Timing is also an important factor in Section 6.2. EQ-based mission times often differ from explicit accident sequence mission times. This disconnect is often the source of debate during operability determinations.

SECTION	COMMENTS
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	 The 2nd paragraph states "In addition, the SSCs technical specification operability requirement requires the SSC to meet all its surveillance requirements, which are related to its underlying safety mission for accident mitigation purposes. An SSC that does not meet a surveillance requirement shall be declared inoperable." We note that not all Surveillances are required at all times. The last sentence states "For the purposes of operability determinations, the mission time is the duration of SSC operation, following an accident, that the UFSAR accident analysis credits an SSC in performing its safety function." To be consistent with the definition of operability, this should state "in performing its specified safety function."
3.4 Functionality (new)	1. With respect to taking corrective actions for SSCs found to be degraded or non-conforming, the document provides much needed clarification to licensees and inspectors. It properly describes TS SSCs as being subject to OPERABILITY determinations and non-TS SSCs being subject to functionality considerations . We recommend further dialogue on this important topic, to maximize the benefits of the new wording.
	2. The overall definition is too broad. It states that functionality applies to any non-TS SSC and to any function that the SSC performs, whether or not the function is related to plant safety. If the term "functionality" is to be used, additional discussion is needed to elaborate on the necessary safety functions performed by non-TS systems.
	3. We recommend the document be reorganized to preclude mixing the discussion of operability with the discussion of functionality. In particular, the discussions of functionality need to be clarified. For example, the document is not clear regarding (1) the relationship between "functionality of support systems" compared to "functionality of TS supported systems," (2) the use of the corrective action program to address functionality issues, and (3) whether systems in the Technical Requirements Manual (or equivalent document) must have "functionality." The introduction of the term "functionality" is a substantial regulatory change that could significantly affect licensee programs.
	4. This section introduces the term "designated functions" for SSCs not explicitly included in plant TS. What is the difference between "designated functions" and "specified functions?" Can designated functions be safety- and non-safety related? Also, there is no guidance on the timeliness of "functionality determinations" versus "operability determinations."
	5. We recommend removing the sentence "The designed function is not limited to either the function described in the UFSAR or 10CFR50.2" on page 4 of the guidance document. The statement is too broad as written. Many plant components have design functions not related to supporting a safety function. They should not be subject to this guidance document.
	6. This section can be read to imply that non-TS SSCs be handled by the operability determination process, not the corrective action process, whether they are functional or not. We do not believe this is the intent of the section and recommend additional wording to clarify the point.

SECTION	COMMENTS
3.5 Specified Safety Function(s) and Specified Function(s)	 We cannot determine the meaning of the 1st sentence of the 2nd paragraph and believe it should be deleted. The 1st sentence of the 3rd paragraph should be revised. It states "An SSC meets its specified function when it can perform as designed, tested, and maintained." It is not completely correct to say that an SSC meets its specified function when it performs as designed, because systems are often over-designed with excess margin between design capabilities and those capabilities necessary to perform a required function. For example a pump may be designed to provide a flowrate of 1000 gpm, but be relied upon for a flowrate of only 500 gpm. If the pump can provide 700 gpm, it can still perform its specified function even though it does not meet the design. The 2nd sentence of the 3rd paragraph states "When SSC capability or reliability is degraded to a point where there is no longer reasonable assurance it can perform its specified functions, the SSC should be judged inoperable or not functional, even if at this instantaneous point in time the system could provide the specified function." This is another example of the guidance document mixing operability with functionality. Equipment reliability is monitored by the Maintenance Rule and corrective actions are specified when equipment is unreliable.
	It is inconsistent with the definition of operability to say that a system capable of performing its function is inoperable due to degraded reliability. While there are cases where degraded reliability could lead to an operability determination, and potentially a declaration of "inoperable," we strongly disagree with the generalized, subjective wording in the draft guidance. 4. Based on the previous two comments, the 3 rd paragraph of Section 3.5 should be deleted. 5. The document should use terms consistently and avoid using them interchangeably. Section 3.5 definitions make it clear that some specified functions are not specified safety functions, yet the document still requires that an SSC that cannot perform its specified functions be declared inoperable. If a function is a specified safety function, the inability to perform it means the SSC is degraded. For specified functions that are not also specified safety functions, there would have to be a regulatory requirement for the function before operability could be affected.
	We recommend limiting terminology to "specified safety function" (as used in the definition of operability) and to make it clear that references to functions throughout the document only refer to the specified safety functions. We recommend further discussion in followup public meetings to establish consistency throughout the guidance document.
3.6 Support Systems & Operability (revised)	 There are examples of docketed correspondence in which NRC discusses the relationship between support systems and supported system operability. The NRC staff should search the ADAMS database for precedent on this subject and incorporate it in the guidance document. The word "only" should be deleted from the 1st sentence of the 1st paragraph. As discussed later, compensatory actions and manual actions can be used to justify system operability when not all necessary support systems are capable of performing their related support functions.

SECTION	COMMENTS
	3. This section could be improved by integrating STS LCO 3.0.6. The last two sentences of the 1st paragraph should be revised as shown below so that the discussion is applicable to both STS and non-STS plants: When a support system that is not explicitly addressed in TS is determined to be incapable of performing its necessary support function(s), all specified systems that require the support system to function in order to be operable are must immediately be declared inoperable and the TS-LCOs for those systems must immediately be entered. The licensee must take the appropriate remedial measures specified in by the supported system TS LCO required actions to satisfy the requirements of 10CFR50.36.
3.7 Variations of Operability Definitions in Plant-Specific TS	 Section 3.7 states "Word differences that exist are not viewed by the NRC to imply any significant overall difference in application of the plant specific TS." We recommend this statement be deleted. There are technical differences between the STS definition of operability and the non-STS definitions. The section is correct in stating, "In all cases, a licensee's plant-specific definition is governing." See comments on Section 3.3.

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SECTION	COMMENTS

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4.0 IDENTIFICATION OF DEGRADED OR NON- CONFORMING CONDITIONS	
4.1 Review Activities (revised)	1. The 1st paragraph states: "The process of reviewing the performance of SSCs and ensuring their operability is continuous." Since the guidance applies to both TS SSCs and non-TS SSCs, it is recommended that the sentence read "The process of reviewing the performance of SSCs and ensuring their operability or functionality is continuous."
	2. A subsequent paragraph states that performance of the surveillance requirement is usually considered to be sufficient to demonstrate operability.
	The TS presume that SSCs are OPERABLE (or continues to be OPERABLE) once declared OPERABLE absent indications or information to the contrary. The TS also do not require surveillance requirements to be conducted on inoperable SSCs. Section 5.7 of the draft guidance discusses the presumption of operability. It is recommended that the guidance document reflect that surveillance requirements do not verify or demonstrate operability; they confirm operability. It is recommended that the word "demonstrate" in Section 4.1 be changed to "confirm."
	This same comment applies to the 4 th bullet in Section 5.5 in which the word "verify" should be changed to "confirm" and the word "determined" should be changed to "confirmed." Also, in the 3 rd paragraph in Section A.2, the word "verify" should be replaced with the word "confirm."
	3. This section also states "When any processes indicate a potential degraded or nonconforming condition, the plant must assess the operability of any affected SSCs." This statement is not correct for SSCs that do not fall within the scope of operability. For example, it is not necessary to perform an operability determination for non-safety, non-risk significant SSCs that do not comply with all aspects of the CLB. If licensees were required to enter the operability process for such cases, it would unnecessarily cause licensed operators to shift their immediate and primary attention from the safety of the plant to matters that could be handled without operator involvement in accordance with the plant's corrective action program. To do so would not be consistent with the intent of the guidance as stated in Section 1.0.
	4. The example given at the very end of this section implies that an operability assessment is required for a satisfactory surveillance that shows a "degrading trend." Many things are factored into the trending of operating experience, and if a trend is in the non-conservative direction it would likely be classified as a degrading trend. However, a threshold criterion or some additional clarification is needed. Perhaps the example could add "that indicates that the acceptance criteria could be exceeded prior to the next required surveillance performance."

SECTION	COMMENTS
4.2 Degraded Condition (revised)	1. We recommend that the definition for "degraded condition" be modified to eliminate the use of conditional language and achieve consistency with the important paragraph that follows the table in Section 4.4.
'4.3 Nonconforming Condition (revised)	 We recommend that conditional language (i.e., "potentially affecting operability or functionality") be removed. This phrase is not relevant to determining whether an item is degraded or nonconforming. We recommend the 2nd bullet be revised to read "CLB requirements" instead of "UFSAR requirements." The scope of the CLB is larger than the scope of the UFSAR description. This bullet, albeit an example, should reflect the broader scope of what can become a nonconforming item. The definition should relate to the important paragraph that follows the table in Section 4.4. The discussion of the application of this definition in situations where SSCs remain fully qualified should be as clear as possible. Although it is not discussed, the nonconforming condition example related to operating experience properly notes that the nonconformance starts when the licensee determines that it has a design inadequacy, not necessarily when it receives industry information suggesting an inadequacy may exist. The operating experience program should take responsibility for expediting the analysis to determine whether the design inadequacy (nonconforming condition) actually exists.
4.4 Fully Qualified	1. Please explain the purpose of the Table in Section 4.4. The connection to the regimes described in the paragraph immediately below the table is not immediately apparent. Specifically, the treatment within the regimes above and below Full Qualification should be explained. The definitions for Degraded Condition and Nonconforming Condition should be consistent within the table. If the exclusion of nonconforming conditions from the current table is intentional, then that logic should flow from the definitions in Sections 4.2 and 4.3. Likewise, the use of the defined terms "Specified Function", "Specified Safety Function", and "Functionality" should be more consistent. Operability of "Technical Specification SSCs" should only refer to the ability to perform a "Specified Safety Function," not the broader term "Specified Function."

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SECTION	COMMENTS

5.0 OPERABILITY DETERMINATIONS	1. We recommend rearranging the subsections in Section 5. Reasonable expectations should be first; then scope, circumstances, and timing; then intermediate and prompt determination (including documentation); and finally presumption of operability.
	2. We recommend the 2 nd sentence of the 1 st paragraph be deleted. Immediate threats to public health and safety are not factors in an operability determination and should be addressed in other guidance.
	3. We believe the 2 nd paragraph is overly prescriptive. We recommend deleting the 2 nd and 3 nd sentences so only the 1 st sentence remains. Plant staff knowledgeable in the subject matter and possessing appropriate knowledge of plant operations are capable of making operability determinations for the facility.
	4. During the public NRC workshop on August 24, 2004, the NRC staff acknowledged that some potential degraded/nonconforming conditions (DNCs) may require analysis to verify that they are actual DNCs, and that non-licensed personnel are permitted to conduct such verifications. In these circumstances a reasonable period of time is needed to verify the DNC before an operability determination can be made. This distinction should be made in the guidance document.
5.1 Timing of Operability Determinations (revised)	1. In light of Section 5.3, footnote 2 of Section 5.1 could lead one to conclude incorrectly that, if time is taken to make a prompt operability determination and the SSC is determined to be inoperable, then the Completion Time begins when the degraded condition was originally identified. The Completion Time begins when a licensed operator determines a LCO is not met and the appropriate Condition is entered. Section 1.3 of the STS states, "It is referenced to the time of discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO." Footnote 2 only contains part of the definition of Completion Time and does not include the important provision of "that requires entering an ACTIONS Condition." Footnote 2 should be revised to include the entire definition in STS Section 1.3.
	2. The term "allowed outage time" is not defined at plants that have not adopted the STS. We recommend ending the footnote after the parenthetical phrase "(e.g not within limit.)"
5.2 Immediate Determination (revised)	1. Section 5.2 states "An immediate determination concluding that the SSC is operable must be predicated on the licensee's reasonable expectation that the SSC is operable, and that the prompt determination will support that expectation." Without further clarification, this could lead to subjective application for cases in which new or additional information shows that the SSC determined to be operable by the immediate determination was, in fact, inoperable. Section 5.2 should be clarified consistent with Section 5.7, Presumption of Operability. Without information to the contrary, once a component or system is established to be operable it is reasonable to assume that the component or system will remain operable.
	2. We recommend deleting the word "potential" from the 1st sentence. Operability is an issue for identified degraded/nonconforming conditions, not potential degraded/nonconforming conditions.

SECTION	COMMENTS
	 We recommend rewording the 2nd sentence to read "In cases where a 'degraded' condition is discovered, and 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 nonconforming condition where the impact on operability is not as obvious, other departments such as Engineering or Licensing may provide input into the immediate determination. We recommend deleting the word "complete" from the 2nd sentence. "Complete information" is undefined and, as discussed in Section 5.4, is not required at any point in the operability determination process. We recommend removing the last sentence, because the licensec is already in the Section 5.3 (Prompt Determination) process. We recommend either referencing Section 5.8 in Section 5.2, or incorporating Section 5.8 into Section 5.2. The burden of performing a functionality determination for SSCs that are not explicitly or implicitly subject to the TS through the definition of operability should not be the same as the burden of performing an operability determination. The guidance document should be consistent with the objective of reducing unnecessary regulatory burden. The draft documentation is not clear on the expectations for a functionality determination. With respect to the operability determination process, the terms "immediate" and "prompt" have similar meanings. We recommend the following changes throughout the guidance document: (1) change "immediate determination" to "operability assessment." (2) change "prompt determination" to "operability evaluation."
	This change would facilitate resolution of other comments. For example, non-licensed personnel could contribute to an operability evaluation, and a licensed operator could use the evaluation to make an operability assessment.
5.3 – Prompt Determination (revised)	1. The 1st sentence states "Subsequent to the immediate operability determination, a prompt operability determination should be made by licensed operators." Once an immediate determination is made there may be no need to perform a prompt determination. For example, there would be no need to perform a prompt determination if the SSC is declared inoperable. Furthermore, a prompt determination should not be required if an immediate determination is based on verifiable information that provides an adequate basis for an operability determination. Once a component or system is established as operable, it is reasonable to assume that the component or system will remain operable. We recommend rewording the sentence to read, "Subsequent to the immediate determination, a prompt determination may also be necessary. The need for a prompt determination is based on the confidence that the immediate determination supports the reasonable expectation that the SSC is operable. If further investigation is needed after the immediate determination, a prompt determination should be performed."

SECTION	COMMENTS
	2. We recommend rewording the 3 rd sentence to say "For SSCs associated with TS, the completion times in the TS are reasonable expectations for the completion times of an 'operability evaluation.' For SSCs not associated with TS, the timing for completing an 'operability evaluation' should be based on a reasonable expectation of operability/functionality and that the 'operability evaluation,' when completed, will support an 'operability assessment'."
	3. The 5th sentence states "The safety significance of the SSC may be used as part of a reasonable safety justification to extend the completion time. Please expand on the intent of the phrase " as part of a reasonable safety justification" This sentence alludes to a licensee not only having to document a prompt operability determination but also the basis for the time allotted for its completion. We recommend deletion of this sentence (see Comment 3 on Section 5.2 for alternative language on timing expectations.
	4. Strict time requirements on prompt operability determinations limit a licensee's ability to thoroughly address relevant issues and perform confirmatory analysis. For example, assume a support system does not satisfy accident analysis input assumptions. Then assume that knowledgeable personnel determine within 24 hours that, even though the situation is unlikely to affect the results of the accident analysis, it would be advisable to reanalyze certain scenarios. Vendor support to perform and review a reanalysis normally takes two weeks or longer. Is this considered "analysis proceeding towards a final resolution?" Strict adherence to the draft guidance would lead a licensee to complete a prompt determination without completing this reanalysis.
	5. We recommend either referencing Section 5.8 in Section 5.2, or incorporating Section 5.8 into Section 5.2.
5.4 Reasonable Expectation (new)	1. We recommend revising the 1st sentence of the 1st paragraph to state, "When a licensee has cause to question the operability of an SSC, and the SSC is not immediately declared inoperable, the determination process must be predicated on the licensee's reasonable expectation that the SSC is operable"
	2. Words seem to be missing from the 2 nd sentence. We believe it should state "In this case, reasonable expectation does not mean absolute assurance that the SSC is operable; however, the SSC should be more likely to be operable than not operable."
5.5 Circumstances Requiring Operability Determinations	1. The "circumstances requiring operability determinations" are very broad. This emphasizes the need to treat operability and corrective action separately. Without adequate separation, licensed operators will be asked to make operability determinations for issues that have little or no safety significance. This will distract from their safety focus.
(revised)	2. An operability determination should not be necessary upon discovery of an error in a design calculation or upon discovery of other nonconforming conditions that do not affect the ability of a SSC to perform specified safety functions. Such conditions should be addressed by the licensee's corrective action program in a manner consistent with the safety significance. We recommend adding language to clearly indicate when further review, per Section 5, is warranted.

operability or functionality. The reference to such conditions adds "where performance or qualification is called into question," which implies that not all situations that meet the degraded/nonconforming definition require an operability determination. The recommended changes to the first two bullets of Section 5.5 are (1) "Discovery of degraded conditions that affect operability or functionality of equipment where	SECTION	COMMENTS
4. The remaining bulleted items in this section can be cited as examples of degraded/nonconforming conditions. As noted previously, this section should also make it clear that only those degraded/nonconforming conditions that affect an SSC's operability or functionality require a documented determination. 5. We recommend that the last bullet be revised to either incorporate Administrative Letter 98-10 more clearly, or to separate it from other considerations. We recommend the following wording: "Discovery of an improper or inadequate TS value or required action. Guidance related to nonconservative TS is provided in Administrative Letter 98-10, "Dispositioning of Technical Specifications that are Insufficient to Assure Plant Safety'." 5.6 Scope of Determination / Comparison to Current Licensing Basis (revised) 1. We recommend changing the end of the 1st sentence to read "consistent with its 10CFR50.2 design bases as described in the UFSAR." This sentence needs to recognize that each plant's 10CFR50.2 Design Basis information is as reflected in it's UFSAR and that this information or may not conform to NEI 97-04 or Regulatory Guide 1.186. The current wording appears to differentiate between 50.2 design bases information and UFSAR information. For example, in the 4th bullet, it is not necessary may delay the completion of the prompt operability determination. For example, in the 4th bullet, it is not necessary to "Determine the circumstances of the degraded on nonconforming condition, including the possible failure mechanism." In the 5th bullet, is it not necessary to ask "why the requirement or commitment may not be met," to determine operability. And in the 6th bullet, it is not necessary to "Determine by what means and when the nonconforming equipment was first discovered," to determine operability. We recommend these bullets be deleted or modified. 3. In the 7th bullet, it is not clear why "Determine safest plant configuration including the effect of transitional action" should be considered as	5.6 Scope of Determination / Comparison to Current Licensing	 We recommend simplifying this section by limiting the need for an operability determination to degraded/nonconforming conditions that affect operability or functionality. The reference to such conditions adds "where performance or qualification is called into question," which implies that not all situations that meet the degraded/nonconforming definition require an operability determination. The recommended changes to the first two bullets of Section 5.5 are (1) "Discovery of nonconforming conditions that affect operability or functionality ef-equipment-where performance-is called-into-question," and (2) "Discovery of nonconforming conditions that affect operability or functionality where-the qualification of equipment (such as conformance-to-codes and standards) is called into-question." The remaining bulleted items in this section can be cited as examples of degraded/nonconforming conditions. As noted previously, this section should also make it clear that only those degraded/nonconforming conditions that affect an SSC's operability or functionality require a documented determination. We recommend that the last bullet be revised to either incorporate Administrative Letter 98-10 more clearly, or to separate it from other considerations. We recommend the following wording: "Discovery of an improper or inadequate TS value or required action. Guidance related to nonconservative TS is provided in Administrative Letter 98-10, 'Dispositioning of Technical Specifications that are Insufficient to Assure Plant Safety." We recommend changing the end of the 1st sentence to read "consistent with its 10CFR50.2 design bases ag described in the UFSAR." This sentence needs to recognize that each plant's 10CFR50.2 Design Basis information is ag reflected in it's UFSAR and that this information may or may not conform to NEI 97-04 or Regulatory Guide 1.186. The current wording appears to differentiate between 50.2 design bases information and UFSAR information. Not
		4. 8th bullet – Although the term "compensatory measure" is not specifically used, we interpret this section as referring to compensatory measures. We recommend consistently changing "any additional actions or measures" to "compensatory measures" throughout the guidance document.

SECTION	COMMENTS
5.7 Presumption of Operability (new)	5. The 8th bullet refers to Information Notice 91-78. Shouldn't the reference be IN 97-78? Regardless, the applicable parts of IN 97-78 have been incorporated into Section C.5. Referencing IN 97-78 in Section 5.6 is unnecessary because much of it is no longer applicable. It would be better to refer to Section C.5 for further details on compensatory measures associated with the use of manual actions. 6. With respect to the last bullet, many support systems are not included in TS; therefore they should be referred to as functional rather than operable. To be consistent with the rest of the document, the last bullet should read "the operability or functionality of necessary support systems" 7. We recommend removing the following bulleted item on page 10: "An SSC's operability requirements extend to its necessary support systems regardless of whether the TS explicitly specify operability requirements for those support systems." This is true in a general sense, but that does not necessarily mean that when a support system that has a TS LCO associated with it becomes inoperable, the supported system has to be declared inoperable. In fact, STS LCO 3.06 states explicitly that it does not, as long as the safety functional determination process (SFDP) verifies that a loss of function is not involved. 8. The bullet "Determine the safety function(s) performed by the equipment" is inconsistent with the broadening of scope beyond safety related elsewhere in the document. It should state "Determine the specified safety function(s)" 1. The example used in the 1st paragraph conflicts with STS SR 3.0.3. Also, we recommend the 3st paragraph be deleted. Attempting to provide a summary about missed surveillances introduces conflicts for some plants. We recommend thaving a sentence in Section 5.7 that points to Section A.3 to address missed surveillances and to avoid references to time periods or TS requirements. 2. The 1st paragraph of this section addresses presumption of operability and discusses potential means of c
	systems"
	verifies that a loss of function is not involved. 8. The bullet "Determine the safety function(s) performed by the equipment" is inconsistent with the broadening of scope beyond safety related
	cisewhere in the document. It should state. Determine the <u>specimen</u> salety function(s)
Presumption of	a summary about missed surveillances introduces conflicts for some plants. We recommend having a sentence in Section 5.7 that points to
	operability based on plant records. The paragraph contains the statement "If in such a case, the licensee has other methods to verify that the activity was in fact successfully accomplished (i.e., log entries) such a judgment might be appropriate." We recommend changing "i.e." to "e.g." because log entries might not be the only documentation source available to a licensee to reasonably conclude operability. The use of "i.e."
	provided in this section tend to obscure rather than clarify the concept rather. This could be remedied by followup public meetings to finalize
	4. The examples of when a presumption of operability is appropriate (items 1, 2, and 3) actually represent one example among many. Also, the 2 nd paragraph refers to "the previously stated verifications," but it is not clear if this is relating back to the previous paragraph or to something else. We recommend beginning the 3 rd 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)"

SECTION	COMMENTS
	5. The last sentence implies that STS SR 3.0.4 contains a provision for missed surveillance under a risk evaluation. This would apply only to licensees that have adopted TSTF-358, as incorporated in Revision 3 of the STS (see Section A.3). We recommend changing the beginning of the sentence to read, "For those licensees who have adopted STS SR 3.0.4 and traveler TSTF-358 (as incorporated in Revision 3 of STS)"
5.8 Documentation (new)	 We recommend deleting the word "Qualification" in the 3rd paragraph. Qualification, in this document, implies "full qualification" or "fully qualified" (Section 4.4) and should be discussed as such, not within the context of documenting an operability determination. The term "Qualification" in the context of "use of engineering judgment" is ambiguous. We recommend deleting the term "safety significance" from the 3rd paragraph because it has little relevance to the documented operability
	determination or use of engineering judgment discussed in this section. The concept of "safety significance" is discussed in Section 5.3, including the time within which prompt operability determinations need to be completed. The term does not relate to the documented operability determination itself.
	3. This section (and Sections 5.5 and 5.6) should make it clear that not all operability determinations require documentation. A determination that an SSC is inoperable should not require operability-related documentation. In some cases the immediate determination should be the final determination. When a component fails and is declared inoperable a documented operability determination should not be necessary. The guidance document should also make it clear that some operability determinations can be final based on the immediate determination. Some licensees may document some operability determinations in condition/problem-identification reports and reserve separate documentation only for operability determinations requiring extensive engineering or licensing input. The document should recognize that operability determinations take many forms with varying content (see General Comment 5).
	Since a specific condition rather than the fact that operability is called into question determines the extent of an operability determination, a licensee should not rely on operability determinations to establish the extent of a condition. Every SSC failure, degradation, or nonconformance could raise an extent-of-condition concern, but not all situations will need an operability determination. The corrective action program is the proper place to document extent-of-condition concerns. Licensees have the option to resolve such concerns in one operability determination or to use a separate process for other SSCs that may need evaluation.
	4. We recommend that the details of this section be placed in Sections 5.2 and 5.3, as appropriate.

SECTION

6.0 CONTINUING OPERATIONS WITH DEGRADED AND NON-CONFORMING CONDITIONS	
6.1 Operable But Degraded (revised)	 The 1st sentence states "If any SSCs in TS have been determined to be not operable, then the appropriate Action Statements in the TS should be entered." However, there are situations in which LCO 3.0 does not require the Actions of an LCO to be entered when a SSC is inoperable. A better statement would be "If any SSCs in TS have been determined to be not operable, then the actions specified in the TS should be followed." The 2nd sentence states, "[Similarly, if SSCs not in TS have been determined to be not functional, then the appropriate corrective actions should be taken.]" Does it need to be bracketed? More importantly, this statement is in a discussion on inoperable equipment. We recommend that discussions of operability not be mixed with discussions of functionality.
6.2 Operability & Corrective Actions to Restore Full Qualification are Separate Issues (revised)	 The Index title is different from the title in the body of the document. In the body, this section is entitled "Operable But Degraded or Nonconforming." Also, the body of the document has a Section 6.2.1 that is not listed in the Index. The 2nd sentence states, "[Similarly, SSCs not in TS that have been determined to be functional, although a degraded or nonconforming condition is present, are considered functional but degraded or nonconforming.]" Does it need to be bracketed? More importantly, this statement is in a discussion of inoperable equipment. We recommend that discussions of operability not be mixed with discussions of functionality. This section should contain a broader example of "operable but nonconforming." Only personnel familiar with equipment qualification would understand the relevance of the example in the 1st paragraph. We recommend deleting the 1st sentence of the 2nd paragraph, including footnote 3. The sentence states that if an SSC is operable, facility operation may continue. But Footnote 3 gives an exception to continued operation in the case of a facility that is experiencing significant performance problems that have led to issuance of a confirmatory action letter or order preventing that licensee from continuing to operate or resuming operation until approval is granted by the NRC. Footnote 3 involves a number of NRC management decisions that are beyond the scope of the guidance document.

SECTION	COMMENTS
	5. The 2 nd paragraph states, "SSCs that have been determined operable through an operability determination may be considered to remain operable as long as required surveillances continue to be met and information does not exist that would invalidate the reasonable expectation of operability established in the determination." We recommend the sentence be revised to say "SSCs that have been determined to be operable through an operability determination may be considered to remain operable as long as required surveillances continue to be met and information does not exist that would invalidate the reasonable expectation of operability established in the determination." Surveillance requirements need not be cited as a special case within the context of an operability determination.
	6. The 1st sentence of the 3rd paragraph states "The prompt operability determination for the degraded or nonconforming condition, as documented per Section 5.8, essentially constitutes a basis for continuing operations." We believe that TS Actions constitute the basis for continuing operations. Even if an SSC were determined to be inoperable, it may be acceptable for operation to continue in accordance with TS Actions.
	7. The 4 th paragraph discusses noncompliance with regulations when the noncompliance is not addressed by the operating license or TS. This discussion is not related to SSCs that are "operable but degraded." Operability is a term reserved for components in TS. We recommend this paragraph be deleted or moved to a more appropriate section.
6.2.1 Operability and Corrective Actions to	1. The guidance in this section is very important and should be given greater emphasis throughout the guidance document (see comments on Section 2.0).
Restore Full Qualification are Separate Issues	2. We recommend deleting the comma separated phrase "whether due to degraded and nonconforming conditions" from the 1st sentence of the 2nd paragraph.
[this section is not listed in the Index]	3. A licensee's corrective action program has three ways to resolve a degraded or nonconforming condition (see Section 7.4). However, the last sentence of the 2 nd paragraph of Section 6.2.1 implies that "restoration to full qualification" is the only option available to a corrective action program to resolve an issue. We recommend replacing this sentence with "Corrective actions must be taken to correct qualification concerns commensurate with the safety significance of the issues, as describe in Section 7, Corrective Actions." Also, delete "to restore full qualification" from the title of 6.2.1, delete "to restore full qualification" from the title of Section 6.2 in the Index, and delete "(i.e., restore full qualification)" from the end of the 1 st paragraph of Section 6.2.1.
6.3 Enforcement Discretion / Justification for Continued Operations	1. Delete the reference to EQ JCOs and the use of NRC Generic Letters 87-02 and 88-07 in the 2 nd and 3 rd paragraphs (see comments on Section C.7). We recommend changing the 2 nd paragraph to read "The term Justification for Continued Operations (JCO) has been used by NRC in past guidance; however, the NRC no longer uses the term JCO." This will allow deletion of the 3 rd paragraph.
(revised)	2. We expect the Nuclear Utility Group on Equipment Qualification (NUGEQ) to provide more detailed comments on this section.

	(co 11t 40000; published for comment of 11d gast 0; 2004)
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7.0 CORRECTIVE ACTION	
7.1 The Current Licensing Basis and 10CFR50, Appendix B (revised)	 It is not clear what value this section will have for an inspector, especially the 2nd and 3rd paragraphs. The purpose of the first paragraph seems inconsistent with the definitions in Section 3. The last sentence states that the CLB is "the basis for NRC approval of the plant design," which disagrees with the definition of Current Licensing Basis in Section 3.1. The 4th paragraph discusses the maintenance rule (10CFR50.65), which is the subject of Section B.1. We recommend moving this discussion to Section B.1. According to this section, a risk assessment equivalent to that performed in accordance with 10CFR50.65(a)(4) should be completed when a risk-significant SSC (as defined in the licensee's (a)(4) program) is degraded/nonconforming to determine the potential change in the plant's risk profile. While a risk assessment may be appropriate if the SSC is inoperable or non-functional, or if maintenance activities or compensatory measures to restore operable/functionality are involved, it is not clear what benefit a risk assessment would provide for SSCs that, although degraded/nonconforming, are operable/functional and do not involve maintenance activities or compensatory measures. Without a corresponding safety benefit, a risk assessment is an unnecessary burden.
7.2 Timing of Corrective Actions (new)	 We recommend rewording footnote 4 as follows " NRC expects licensees to address degraded and nonconforming conditions affecting SSCs identified in Section 2.0, in accordance with their corrective action programs" This rewording reflects a scope consistent with the rest of the guidance document and consistent with current GL 91-18 expectations. We interpret the 2nd sentence of the 1st paragraph to establish specific intermediate expectations of the corrective action process in that an "extent of condition" review is expected for all "conditions adverse to quality." CATQ (condition adverse to quality) is a term from Criterion XVI of 10CFR50 Appendix B, but is not defined or used in the draft guidance except in this one place. Corrective action programs should be judged on their ability to implement timely corrective action in a manner consistent with the safety significance of an issue. The guidance on resolution of degraded/nonconforming conditions "at the first available opportunity" indicates that safety significance should be considered. However, there is little discussion on the safety-significance factors that might be applied to determine the timeliness of corrective action. This section seems to turn "expectations" into "prescriptive guidance," rather than leaving it up to the licensee to evaluate safety significance. This is not the kind of evaluation that can be prescribed because there are factors other than safety significance to consider (e.g., compensatory actions).

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	 The 2nd sentence of the 2nd paragraph implies that the NRC may or may not accept a licensee's decision to extend the implementation of corrective action due to the need for more time to perform design, review, approval, and procurement activities, or other extenuating reasons. What factors will NRC use to judge a licensee's decision to extend a corrective action? As a general matter, we do not support the incorporation of conditional language into the draft guidance. Licensees know they will be held accountable for corrective action decisions, and only they have the detailed information about and knowledge of the plant to make such decisions. The term "extensive" is not defined in the 4th sentence of the 2nd paragraph. This is another example of conditional language open to individual interpretation. We strongly disagree with the sentence "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." This reintroduces the old "defacto unreviewed safety question" (USQ) concept that no longer applies. Furthermore, for most degraded/nonconforming conditions the timing of corrective action need not be a regulatory concern. The 2nd paragraph states " the NRC expects licensees to implement repair or replacement activities at the next on-line maintenance window or outage of sufficient duration to adequately plan and implement the proposed corrective action. If the proposed corrective actions are extensive, the NRC expects them to be performed at the next refueling outage. These expectations are higher than in revision 1 of Generic Letter 91-18. Given the wide range of conditions evaluated by licensees on an ongoing basis, we do not believe it is appropriate to establish fixed expectations about the timing of corrective action. We recommend further dialogue on this issue. The 3rd paragraph raises the bar on expectations co
7.3 Compensatory Measures (revised)	 We recommend this section be moved to Appendix C. We do not see the need to associate compensatory measures with corrective action to resolve a degraded/nonconforming condition. The guidance document should note that it is not intended to be used to justify actions that create degraded/nonconforming conditions except in limited circumstances. For example, it would be inappropriate to breach a controlled, safety-related ventilation boundary in support of maintenance by using compensatory measures to justify the breach unless it can be verified that the ventilation system will continue to perform its specified safety functions (i.e., remain operable) and satisfy applicable TS requirements (reference TIA 98-008 and related correspondence).

SECTION	COMMENTS
SECTION	3. The guidance document should be expanded to discuss the conditions/circumstances under which a licensee may intentionally cause a degraded/nonconforming condition. We believe that such "conditions/circumstance" would relate to the support of maintenance. The barrier breach discussed in RIS 2001-09 is an example. Its discussion of"verifying that the ventilation system will continue to perform its specified safety function(s)" with the barrier breached can be used only in maintenance-related situations. 10CFR50.65(a)(4) and NEI 96-07 revision 1 (Section 4.1.2) provide the regulatory bases. 4. The guidance document should recognize three compensatory measure classifications: (1) compensation to restore operability, (2) compensation to reduce safety significance, and (3) compensation to enhance safety or unit performance. Some licensees would prefer to use 10CFR50.65(a)(4) instead of 10CFR50.59 to review compensatory measures that rise to the level of temporary alterations. The requirement to apply 10CFR50.59 to such compensatory measures is a disincentive to licensees to implement compensatory measures that go beyond those needed to restore operability or to reduce safety significance of a degraded or nonconforming condition. As discussed at the public workshop on August 25, 2004, NRC should accept maintenance rule (a)(4) evaluations of compensatory measures in licen of 10CFR50.59 screening for temporary procedure changes in response to degraded or nonconforming conditions. Followup review is needed to ensure consistency between the guidance document and NEI 96-07. 5. The compensatory measures discussion implies that all compensatory measures are inferior to the as-licensed condition. But there are situations when a compensated configuration can be equal to or better than the as-licensed condition from a nuclear safety perspective. Contrary to the draft guidance, compensatory measures are inferior to the as-licensed condition. The regulator needs to ensure that licensees avoid using operability as a

SECTION	COMMENTS
	8. The language " to establish or restore SSCs to an operable status" in the 1st sentence of the 3rd paragraph leads to two comments:
	(A) By definition compensatory measures do not correct a degraded/nonconforming condition, so to say "restore SSCs to an operable status" incorrectly implies that the compensatory measures resolved the condition, which is not the case. We recommend rewording the sentence to say " to restore to an operable but degraded or nonconforming status."
·	(B) The language " to establish" is not consistent with similar language in the 1st paragraph. As stated in Section 5.4, there is no indeterminate state of operability. The language "to establish" implies that an indeterminate state of operability exists during the operability determination process and that the proposed compensatory measures would establish operability to an otherwise indeterminate situation. The language "to restore" and "when restoring" is better language because the licensee would be restoring operability to an inoperable SSC.
	9. We recommend deleting the 2 nd sentence of the 3 rd paragraph. Criteria and guidance for acceptable compensatory measures, in particular those involving use of operators, is already contained in Section C.5. Using conditional terms such as "relatively simple" and "minimal operator or plant impact" are subjective and can lead to differences of opinion between an inspector and a licensee.
	10. We recommend rewording the last sentence of the 3 rd paragraph to say "Criteria and guidance for the use of manual actions in place of automatic actions is provided in Section C.5." This rewording provides a more definitive discussion on the use of the information in Section C.5.
	11. The 4th paragraph states "The impact of the compensatory measures themselves on the plant should be considered by licensees." We believe that only those compensatory measures involving a temporary procedure or facility change need to be reviewed under 10CFR50.59. Many compensatory measures do not rise to the level of requiring a temporary procedure or facility change. This distinction needs to be made in Section 7.3.
	12. The methods of interest to the NRC should be limited to "methods of evaluation" defined in NEI 96-07 revision 1. The use of other methods of analysis or evaluation should be the licensee's decision without having to apply Section C.4 criteria.
	13. This section does not discuss the use of "alternative methods of evaluation" in an operability determination. The use of alternative methods as compensatory measures to address degraded/nonconforming conditions should be included in Sections 7.3, C.4, and C.14. We recommend followup meetings to discuss this issue.

SECTION	COMMENTS
7.4 Final Corrective Action (revised)	1. We recommend deleting the parenthetical phrase "(with NRC approval, if required)" in the 1st paragraph. The determination of whether NRC approval is required is presented later in this section where the application of 10CFR50.59 is discussed in detail.
	2. We recommend followup discussion to clarify the meaning of the 2 nd paragraph.
	3. Does the NRC staff intend the 3 rd sentence of the 2 nd paragraph to mean that a 10CFR50.59 evaluation is required any time the resolution of a degraded or nonconforming condition is less that full restoration (because the change is a change to the facility or procedures as described in the UFSAR)? A 10CFR50.59 screening determines if a proposed change is a change to the facility or procedures as described in the UFSAR that should receive a 10CFR50.59 evaluation.
	4. We recommend further discussion to modify the language associated with making a change in lieu of full restoration.
7.4.1 Change to Facility or Procedures in Lieu of Restoration (revised)	1. We recommend followup meetings to better understand the content and objectives of this section.
7.4.2 Change to the Current Licensing Basis (revised)	1. We recommend rewording the 1st sentence to read "In the second situation the licensee proposes to accept as-is the degraded or nonconforming condition." It is appropriate to replace "change to the CLB" with "accept as-is" because dispositioning a degraded or nonconforming condition does not always result in a change to the CLB. Also, "degraded or" should be added because accepting something "as-is" can resolve a degraded condition as well as a nonconforming condition.

	(00 1 to 40000; published for comments on magazine, 200-1)
SECTION	COMMENTS

Appendix A SURVEILLANCES	
A.1 Operability During TS Surveillances	1. The wording of this section is inconsistent with normal TS usage. The term "LCO action statements" is often misused. We suggest the following rewording:
	"If performance of TS surveillances requires that safety TS equipment be removed from service and rendered incapable of performing its specified safety function, the equipment is inoperable. The TS Actions shall be entered unless the TS explicitly direct otherwise. Upon completion of the surveillance, the licensee should verify restoration to operable status of at least those portions of the equipment or system features that were altered to accomplish the surveillance."
	"For example, TS allow licensees to perform surveillance testing during power operation, even though such testing may render TS equipment inoperable. TS permit use of Action statements to perform surveillance testing for a number of reasons. One reason is that the time needed to perform most surveillance tests is usually only a small fraction of the completion time associated with the Action statement. Another reason is that the benefits to safety (increased level of assurance of reliability and verification of operability) derived from meeting surveillance requirements is considered to more than compensate for the risk to safety from operating the facility in an Action statement for a small fraction of the completion time for the utilized required Actions."
A.2 Surveillance and Operability Testing in	1. We recommend rewording the 1st sentence to be consistent with Section 3.5: "Many systems are designed to perform both normal operation (i.e., specified functions) and specified safety functions."
the Safety Configuration	2. The sentence "Test failures should be examined to determine the root cause and" in the 3 rd paragraph should not be interpreted to mean that a root cause evaluation for a <u>significant condition adverse to quality</u> be performed for every system test failure.
A.3 Missed Technical Specification	1. Section A.3 gives the background of TS SR 3.0.1 and TS SR 3.0.3, but does not discuss any particular operability issue. We recommend the section be revised to discuss operability issues related to missed surveillances, or be deleted.
Surveillance (revised)	2. The last paragraph on Page 20 refers to TSTF-358 Revision 8. The correct reference is TSTF-358 Revision 6
	3. The reference to GL 87-02 in the 8 th paragraph should be to GL 87-09.

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SECTION	COMMENTS

Appendix B MAINTENANCE	
B.1 Assessment & Management of Risk	1. We recommend defining "power operation" (Modes 1, 2, and 3) in the last sentence of the last paragraph to be consistent with NUMARC 93-01, Section 11.3.2 (endorsed by 10CFR50.65). This would clarify the context of this paragraph as it relates to 10 CFR50.59.
During Maintenance (new)	2. The 2 nd paragraph states "However, the subsequent performance of the equipment, as monitored under the Maintenance Rule or as tracked for the Reactor Oversight Process (ROP) Performance Indicators (if applicable) should be trended and failure probabilities in the PRA adjusted accordingly in order to justify the expectation of improved safety from the performance of maintenance." We are concerned that this paragraph implies a regulatory expectation beyond the Maintenance Rule. Please clarify the intent of the paragraph.
B.2 Operability During Maintenance	1. The 3 rd sentence of the 1 st paragraph states " and any other action that may be required by the LCO" Better terminology would be " and any other action that may be required by the specification" An LCO is a statement of limiting conditions, but does not by itself specify action.
	2. What is the intent of the phrase " licensees should be sensitive to the principles embodied by the definition of operability and functionality and the effect upon the operability of TS equipment" in the last sentence of the 1st paragraph? How would it be used by an inspector? We do not see its relevance to operability during maintenance.
	3. We recommend revising the 1 st sentence of the 2 nd paragraph to state "Intentional entry into an action statement of an LCO-a specification is not a violation of the TS." The 2 nd sentence of the 2 nd paragraph should also be revised to state " LCO-a Actions may be entered for maintenance activities."
	4. Please expand on the discussion "operational convenience" in the 2 nd paragraph. The NRC has cited licensees for removing components from service for "operational convenience" but we know of no regulatory guidance on the definition of "operational convenience." Consistent with the STS, Generic Letter 87-09, NRC internal memoranda, and the Inspection Manual, the definition could be "an action that has operational benefit but without adequate regard to safety." It would help to have a definition and examples.
	5. Is the term "functionality" necessary in the last paragraph? Why is it necessary to reestablish "functionality" prior to exiting any TS LCO? It does not relate to operability. Also, the terminology "exiting any TS LCO" should be changed to "exiting an Action statement."
	6. The 2 nd paragraph should reference NRC Inspection Manual Part 9900 - Technical Guidance, "Maintenance - Voluntary Entry into Limiting Conditions for Operation Action Statements to perform Preventive Maintenance."
	7. The term "loss of function" should be defined in the 2 nd paragraph. An example would be helpful.

SECTION	COMMENTS
	 8. Appendix B should address RIS 2001-09 (hazard barrier removal) because it deals specifically with maintenance-related temporary alterations. It should also address the general subject of maintenance-related temporary alterations to procedures/facilities, including the technical evaluation and risk assessment of such alterations. 9. The 3rd paragraph, regarding maintenance that would render TS "nonconservative," is unclear and could lead to inconsistent application. We recommend that it be revised, and an example provided, to ensure its intent is clear and its application consistent.
B.3 Relationship Between Operable and Available with respect to the ROP Performance Indicators (PIs) (new)	
B.4 Aging Component Reliability and Connection to the Maintenance Rule (new)	 Please provide the regulatory basis for this section. It is currently outside the scope of 10CFR 50.65. If retained, we would view it as an example of the Inspection Manual being used to establish new requirements. Please clarify the objective of this section. It should explain the relevance of aging-component reliability to SSC operability and resolution of nonconformances. We recommend revising the 1st sentence of the 1st paragraph because a licensee is not required to have a basis for "continued operation," but to have a basis for "operability." Compliance with TS will determine whether continued operation is allowed when a component is inoperable.

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SECTION	COMMENTS

Appendix C SPECIFIC OPERABILITY ISSUES	
C.1 Relationship Between the General Design Criteria and the Technical Specifications (new)	 We recommend revising the last sentence of the last paragraph to say "The TS provides a limited completion time for operation of the same eystem with only an SSC that is not single failure proof a single-train based on an evaluation of the protection provided and the probability that the system will be needed during the completion time by using that system lineup for only the specified period." Please address the crediting or not crediting of non-safety related (NSR) SSCs, i.e., SSCs that have no specified safety function, to support operability determinations of SSCs covered by this guidance (i.e., Section 1.0). The NRC often challenges licensees if they credit NSR equipment to support operability. This section should note that design-basis accidents (DBAs) and regulations are connected to plant-specific TS operability requirements by means of the UFSAR. For example, GDC-19 requires that the Control Room Area Ventilation System (CRAVS) be designed to maintain the control room environment for 30 days of continuous occupancy after a DBA such that an individual in the control room will receive a radiological dose of less than 5 rem whole body. In some TS the 5 rem limit is a condition of CRAVS operability. Thus, in some cases a GDC can have a direct relationship to TS operability requirements.
C.2 Treatment of Single Failures in Operability Determinations	
C.3 Treatment of Consequential Failures in Operability Determinations	 We recommend revising the 1st sentence of the 2nd paragraph to begin "When an SSC is degraded or nonconforming" Otherwise the paragraph implies that operability determinations must be performed for consequential failures absent any degraded or nonconforming condition that might prompt such an evaluation.
C.4 Use of Alternative Analyses in Operability Determinations (new)	 This section is an excellent addition to the guidance. It discusses how operability determinations can be based on analysis, test, partial test, or experience with operating events, engineering judgment, or a combination of these factors, taking into consideration equipment operability requirements. The second sentence of paragraph (1) is inconsistent with the remainder of the section. For example, it implies that an Alternative Source Term (AST) cannot be used for an operability determination, whereas Section C.14 discusses how an AST might be used to address control room in-leakage.

SECTION	COMMENTS
3. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 4. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.	Another situation in which analytical methods can be used to support operability is the situation where a method outside the CLB is applicable to a degraded or nonconforming condition. The new method should be permitted as part of an operability determination. The "analyses of interest" in the context of Section C.4 should be those analyses encompassed by the NEI 96-07 revision 1 definition of "Methods of Evaluation." We recommend clarifying the 2 nd sentence to read "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." Paragraph (2) is not clear. Is it referring to new methods that are not described in the UFSAR? We recommend revising paragraph (3) to say "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 a new method to ensure its use is consistent with the application and the applicable acceptance criteria in the current licensing basis. Accepting a new method simply because it has been approved for use at a similar facility does not alone constitute adequate justification." This section should be revised to indicate that valid "best estimate" codes, methods, or techniques are acceptable. This section should note that compensatory actions should not be used as a means to justify actions which create degraded or nonconforming conditions. See similar comments on Sections 1.0 and 7.3. We recommend changing the section title to "Use of Temporary Manual Action in Place of Automatic Action in Support of Operability." The scope of the 2 nd paragraph is not clear. The statements are general in nature. We recommend using the first two sentences of the 2 nd paragraph to create a new opening paragraph for the section. Addi

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SECTION	COMMENTS

C.6 Use of Probabilistic Risk Assessment in		The 1st full sentence at the top of page 28 should be reworded to say "The inherent assumption is that the occurrence conditions or event occurs exists and that the safety function can be performed."
Operability Decisions		The statement "The inherent assumption is that the occurrence conditions or event exists and that the safety function can be performed" conflicts with accepted practices and examples in the draft guidance. For example, Section C.9 (Support System Operability) states " a ventilation system may not be required in the summer" and " the electrical power supply for heat tracing may not be required in the summer." In practice this concept could also apply to other weather-related events such as hurricanes, tornadoes, and flooding. The use of PRA should not be prohibited when making such decisions. A responsible licensee taking credit for the external temperature to support an operability determination will likely be able to calculate the external temperature at which operability is called into question. To avoid relying on operators to detect the unacceptable temperature condition and declare the support system inoperable, the licensee needs assurance that, during the anticipated degraded condition, the temperature will not reach the unacceptable temperature. Such analysis will very likely include probabilistic techniques.
	1	The use of PRA should be encouraged for operability decision-making. If component degradation increases the probability of an accident upon component failure, then quantifying the increased accident probability should be encouraged, not discouraged. A calculated result that would satisfy 10CFR50.59 criteria for increased accident frequency should be an acceptable use of engineering judgment supported by a calculation.
		The use of the broad term "decisions" rather than the narrower term "determinations" implies that it would be unacceptable for a licensed operator or unit management to ask or discuss a statistical issue when reviewing an operability determination.
	İ	Although the time limits for completing operability determinations often will not support detailed probabilistic-based analysis, having some link to probabilistic-based criteria can help support engineering judgment. For example, a 10CFR50.59 criterion considers a component change "less than minimal" if the increase in component failure likelihood is less than doubled. When evaluating reliability challenges in operability determinations, an engineering judgment about the increase in likelihood of failure should be permitted to refer to this criterion without the determination being challenged because it used a probability argument. For example, the conclusion could be that the increase in failure likelihood would be much less than doubled and could easily pass criteria for being left permanently at the higher failure rate.
C.7 Environmental	1.	The requirement to write a JCO implies it is different from a prompt operability determination. We believe they are the same thing.
Qualification (revised)	2.	Section C.7 addresses three aspects of EQ deficiencies:
		(1) <u>Prompt determination of operability</u> – This determination is not specific to EQ deficiencies. Section 5.0 discusses how to perform and document a prompt operability determination. There is no need to repeat it in Section C.7. (2) <u>A plan with a reasonable schedule for corrective action</u> – Making a plan is not unique to EQ deficiencies. Section 7.0 discusses how to implement corrective actions within a reasonable schedule. There is not need to repeat it in Section C.7. (3) <u>Write a JCO</u> – This action is a combination of (1) and (2). However, it is presented in this section as something different. We believe that performing (1) and (2) is sufficient for any deficiency, including EQ. The term JCO and references to GL 88-07 should be deleted from the guidance.

COMMENTS
3. We expect that the Nuclear Utility Group on EQ (NUGEQ) will provide more detailed comments on Section C.7.
1. The 1st sentence is not consistent with the remainder of the paragraph. Deleting the sentence and the word "However" in the 2nd sentence provides the desired guidance and eliminates the inconsistency.
2. The last sentence of the 1st paragraph states that the "applicable LCO shall be entered." LCOs are not entered or exited. LCOs are the statement of the lowest functional capability of the SSC. A better phrase would be "the system shall be declared inoperable."
1. The relationship between support systems and supported systems is discussed at length in the STS and the STS Bases. It is important that the NRC guidance be consistent with the STS. We do not believe that Section C.9 uses consistent terminology.
2. We recommend the 2 nd paragraph be revised to say "When a support system that is not explicitly addressed in TS is determined to be incapable of performing one of its necessary related support functions (i.e., non-functional), the licensee must immediately perform an operability determination for (a) declare inoperable each specified system whose own operability depends on that support function, and, if necessary, declare the supported system inoperable. (b) enter-the supported system's TS-LCO. In addition-If applicable"
3. We recommend that the 3 rd paragraph (referring to functionality) be deleted. Section C.9 should be limited to discussion of operability.
4. The 5th paragraph refers to RIS 2001-09, which is out of place in Section C.9. The RIS deals with maintenance-related barrier removal and control. This type of discussion should be in Appendix B.
5. The 7th paragraph (beginning with "Support systems explicitly expressed") is inconsistent with the STS. For plants with TS based on the STS, LCO 3.0.6 allows Conditions and Required Actions of the supported system to be not followed. Therefore, the more restrictive Completion Time does not have to be met. We recommend the paragraph be deleted.
6. The last paragraph states that the guidance in Section C.9 is consistent with STS LCO 3.0.6. As described above, we disagree.
7. The following statements are on page 30:
(1) " the specified completion time to restore a support system to operable status should be equal to or less than the restoration completion time for any system that requires the support system function for its own operability."
(2) "While such inconsistencies are being resolved, the more restrictive restoration time should be used."
The second statement should be clarified or deleted. The TS should be followed strictly unless there is confirmation of non-conservatism. The TS, particularly the STS, has received rigorous review by the utilities and the NRC. A suspected inconsistency should not be enough to force an informal modification of the TS.

SECTION	COMMENTS
	8. The 8 th paragraph provides inappropriate guidance leading to action beyond what is required by the TS. We recommend the paragraph be reworded to say "Therefore, upon declaring a support or supported system inoperable in one train, the required actions in the TS should be implemented."
C.10 Piping & Pipe Support Requirements	
C.11 Flaw Evaluation (revised)	1. This section states that discovery of a through-wall flaw results in system inoperability. Previous NRC guidance has been that the component with the through-wall flaw is inoperable. In most instances the result is the same, but it is possible that a component of a system could be inoperable and the system itself not be rendered inoperable by the inoperability of the component.
	2. Additional dialogue is needed to identify and define the key terminology in this section. We have several questions about the terminology that would be best explored in a public meeting.
	3. This section discusses the evaluation of flaws in moderate energy piping systems. In our opinion, in almost every instance of a through-wall flaw in a moderate energy system, the flaw characterization and subsequent flaw evaluation results in continued operation with the flaw present and a declaration of component/system operability. A requirement to immediately declare the system (or component) inoperable is too prescriptive. A reasonable period of time (e.g., 24 hours, consistent with the guidance document) should be allowed for the licensee to conduct a prompt determination of operability for the as-found condition, thereby precluding unnecessary shutdowns and a potential increase in risk.
	4. The requirement for an immediate declaration of inoperability seems inconsistent with Section 5.4 (Reasonable Expectation), Section 5.7 (Presumption of Operability), and in the Note in Section A.1 (Operability During TS Surveillances). These other sections say that "It is not the intent of surveillance testing or other similar program requirements to cause unwarranted plant shutdowns or to unnecessarily challenge other systems."
	5. This section states that any system under the jurisdiction of the ASME code is inoperable if it has a through-wall flaw. However, Section C.12 notes that Code Case N-513-1 describes an acceptable method for evaluating through-wall leakage in Class 2 or 3 moderate energy piping. Also, Section C.4 notes that alternate analyses may be used to justify operability. We recommend Section C.11 be updated and rewritten to clarify expectations. It would be an unnecessary burden to declare a system inoperable if facture mechanics (or other analysis methods approved by the NRC) could be used to demonstrate that a system containing a flaw can perform its specified functions under applicable accident analysis scenarios. The guidance should also note the importance of communicating with the NRC when such conditions arise and the need to promptly submit 10CFR50.55a relief requests when repairs must be deferred or other requirements cannot be met.

SECTION	COMMENTS
	 6. A system containing a through-wall flaw is not by default inoperable. This would be inconsistent with the treatment of other systems. For instance if a valve is inoperable, the system may or may not be inoperable depending on the location, safety function, and the specific cause of valve inoperability. 7. We recommend replacing the word "system" with the word "component" in the last two sentences of the 1st paragraph.
C.12 Operational Leakage (revised)	 The 2nd sentence of the 1st paragraph states that the "LCO shall be entered." LCOs are not entered or exited. LCOs are the statement of the lowest functional capability of the SSC. The correct phrase would be, "the applicable Action statements must be followed." Section C.12 discusses items that should be relocated to Section C.11 (Flaw Evaluation). For example, the 2nd paragraph discusses leakage from Class 1, 2, and 3 components. Only Class 1 component leakage would be Operational Leakage. From the 4th line of the 2nd paragraph through the end of Section C.12, the discussion does not apply to Operational Leakage (a term restricted to the Reactor Coolant System). The 3rd paragraph incorrectly implies that leakage from a Class 1 or 2 component pressure boundary renders the component inoperable. Pressure boundary leakage from a Class 1 component is treated under the Operational Leakage TS. Leakage from a Class 2 component is evaluated under the definition of operability. We recommend rewording the 2nd sentence of the 3rd paragraph to say "the LCO must be declared not met" or "the applicable TS Action Statements must be followed." The 3rd paragraph states "The Operational Leakage LCO must be promptly entered when it is more likely than not that pressure boundary leakage is occurring." How can one determine "more likely than not" without positive confirmation of a through wall, pressure boundary leak?
C.13 Structural Requirements	 We recommend rewording the 2nd sentence of the 1st paragraph to say "the LCO must be declared not met" or "the applicable TS Action Statements must be followed." The TS for Structural Integrity and the old specification 4.0.5 were relocated in the STS. 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, degraded and non-conforming conditions should be addressed in terms of "functionality." Licensees recognize that some Category 1 structures are support systems to TS systems.

SECTION	COMMENTS
C.14 Use of an Alternative Source Term in	1. The guidance in this section is an excellent addition to the guidance document. It is consistent with existing guidance which allows an operability determination to be based on analysis, test, partial test, or experience with operating events, engineering judgment, or a combination of these factors taking into consideration equipment operability requirements.
Operability Determinations (new)	2. The use of AST in operability determinations should not be limited to control room habitability. Followup meetings are needed to develop revised guidance on the general use of AST in operability determinations.