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October 1, 2004

U. S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Chief, Rules, and Directives Branch

SUBJECT: Calvert Cliffs Nuclear Power Plant; Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318
Nine Mile Point Nuclear Station; Unit Nos. 1 & 2; Docket Nos. 50-220 & 50-410
R. E. Ginna Nuclear Power Plant; Docket No. 50-244
Comments on 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)

REFERENCE: (a) Letter from Mr. J. W. Davis (NEI), dated September 30, 2004, 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)"

Constellation Generation Group, LLC, on behalf of its licensees Calvert Cliffs Nuclear Power Plant, Inc., Nine Mile Point Nuclear Station, and R. E. Ginna Nuclear Power Plant hereby submits its comments on the subject proposed generic communication.

We have reviewed the comments submitted by the Nuclear Energy Institute (NEI) (Reference a). We endorse, in general, NEI's comments to the proposed generic communication, in the areas NEI chose to comment. However, there are areas where we have additional comments. We believe that several areas in the Regulatory Issue Summary require further clarification. Our detailed section-by-section comments are provided in Attachment (1) to this letter.

Should you have questions regarding this matter, we will be pleased to discuss them with you.

Very truly yours,

John B. Hosmer

E-RIDS = ADM-03
Add = K. Kavanagh (KAK)
C. Petrone (CDP)

Template = ADM-013

Attachment: (1) Constellation Generation Group's Comments on the Proposed Generic Communication Regarding NRC Inspection Manual Chapter 9900, 69 FR 46599

cc: Document Control Desk, NRC
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ATTACHMENT (1)

CONSTELLATION GENERATION GROUP'S COMMENTS ON THE PROPOSED GENERIC COMMUNICATION REGARDING NRC INSPECTION MANUAL CHAPTER 9900, 69 FR 46599

Constellation Generation Group, LLC
October 1, 2004

ATTACHMENT (1)

CONSTELLATION GENERATION GROUP'S COMMENTS ON THE PROPOSED GENERIC COMMUNICATION REGARDING NRC INSPECTION MANUAL CHAPTER 9900, 69 FR 46599

Section 2.0, Scope/Applicability

Section 2.0 - items (i), (ii), and (iii) – 10 CFR 50.49 is listed as one of the conditions of item (iii). In the context of (iii), among the structure, system, and components (SSCs) applicable to (iii) are those that support environmental qualification under 10 CFR 50.49. These same SSCs are covered under items (i) and (ii) in connection with 10 CFR 50.49. What is the difference between items (i)/(ii) and (iii) as they relate to 50.49 SSCs? It is recommended that the reference to 10 CFR 50.49, in item (iii), be deleted if a quantifiable distinction between 50.49 SSCs, as they relate to items (i)/(ii) and item (iii), cannot be determined/provided.

Section 3.5, Specified Safety Function(s) and Specified Function(s)

The 10 CFR 50.59 guidance document, Nuclear Energy Institute (NEI) 96-07, Revision 1, defines a similar term to specified safety function, i.e., design function. The relationship of this 50.59 term design function, to specified safety function should be developed in this document to provide consistency and clarity among Nuclear Regulatory Commission (NRC) endorsed documents and NRC documents.

Sections 4.2/4.3, Degraded Condition/Nonconforming Condition

The conditional language (i.e., "potentially affecting operability or functionality") should be removed. This phrase is not relevant in determining if an item is degraded or nonconforming. This Regulatory Issue Summary (RIS) should not create new criteria (i.e., does the degraded/nonconforming condition affect operability) to determine if the condition itself is a degraded /nonconforming condition.

Nonconformance is discussed, in 10 CFR Part 50, Appendix B, Criteria XV, as a failure to conform to requirements. There is no mention of challenging operability in Criteria XV discussion. Title 10 CFR Part 50, Appendix B, Criteria XVI identifies both degraded (i.e., failures, malfunctions, deficiencies, deviations, defective material and equipment) and nonconforming (i.e., failure to conform to requirements) conditions as needing to be identified and corrected as part of a corrective action program. There is no mention of challenging operability in Criteria XVI.

Section 5.0, Operability Determinations

The operability/functionality determination guidance, provided in this document, should be limited to only those in-scope (i.e., Section 2.0) SSCs where the results from the operability/functionality determination process is utilized in making decisions on the continued operation of the facility. For example, only SSCs explicitly subject to Technical Specifications [Section 2.0; item (vi)], SSCs required to support Technical Specification SSCs [Section 2.0; item (vii)], and 10 CFR 50.65(a)(4) SSCs [Section 2.0; item (viii)], should be subject to this guidance. All other in-scope SSCs should be subject to only the corrective action portion of this guidance.

Nuclear Regulatory Commission expectations for performing functionality determinations on in-scope SSCs, where the results of the determination process are not utilized in any follow-on regulatory decision making for operating the plant, should be eliminated.

Section 5.2, Immediate Determination

1. The start time for inoperability should be defined, since it was a point of confusion at the August 25, 2004 NRC workshop. Inoperability starts when the licensed operator concludes an SSC is inoperable, regardless of when the degraded or non-conforming condition was first identified.

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

Section 5.3, Prompt Determination

Section 5.3 alludes to the fact that every immediate determination must have a follow-on prompt determination. In many cases, a prompt determination is not necessary. Sections 5.2 and 5.3 should allow for this condition. NOTE: The NRC, at the August 25, 2004 workshop, accepted the concept that the immediate determination may in some cases be the final determination.

Section 5.4, Reasonable Expectation

Section 5.4, 1st sentence should be reworded to read, "When a licensee discovers a degraded or nonconforming condition, where operability of an SSC is questioned ...." This rewording reflects the fact that, within the context of this RIS, SSC operability is only questioned when a degraded/nonconforming condition is identified. The current wording alludes to other situations where operability may be called into question, even outside of the corrective action process.

Section 5.4, 1st sentence should be reworded to read, "... the operability determination process (i.e., Section 5.0) must be predicated..." This rewording reflects the fact that the Section 5.4 discussion of reasonable expectation, applies to both the immediate and prompt determinations.

Section 5.5, Circumstances Requiring Operability Determinations

Section 5.5, 3rd, 4th, and 5th bullets - These are examples of degraded/nonconforming conditions for Bullets 1 and 2. They should be presented as such and not as conditions other than, or in addition to Bullets 1 and 2. In addition, we recommend revising this section to appropriately limit the need for an operability/functionality determination to only those situations where a degraded and nonconforming condition affects an SSC's operability or functionality. The recommended changes are:

Bullet 1- "Discovery of a degraded condition that affects operability or functionality."

Bullet 2 -"Discovery of a nonconforming condition that affects operability or functionality."

Section 5.6, Scope of Determinations/Comparison to Current Licensing Basis

At various places in this section reference is made applying only to the prompt determination process. The concepts and considerations of operability as discussed in Section 5.6 apply to both the immediate and prompt determination processes. The concepts and considerations are the same. The only difference would be in the level of documentation and review rigor. Please reword this paragraph to reflect this consideration.

Section 5.8, Documentation

In the 2nd paragraph, since the expectation here is that the prompt determination should be available for inspection, we assume this means that the immediate determination does not need to be available for inspection. If this is not the intent, then the paragraph should be reworded to reflect this.

Section 7.1, the Current Licensing Basis and 10 CFR Part 50, Appendix B

In the 4th paragraph, 2nd sentence, the statement, "... risk assessment equivalent to that performed in accordance with 50.65(a)(4) should be completed to determine potential changes in plant risk profile." needs more clarity. We believe this language means that degraded/nonconforming conditions, where SSCs are determined to be inoperable/non-functional, can impact the plant's probabilistic risk assessment (PRA) model used to assess the risk of performing maintenance activities under 50.65(a)(4). The 50.65(a)(4) Statement of Considerations states, in part "..NRC intends that the assessment process will examine the plant condition existing before commencement of the maintenance activity." Paramount to accurate risk assessments of maintenance activities is that the plant's PRA model accurately reflects the existing plant condition prior to the maintenance being performed. This expectation for an accurate existing plant condition PRA model requires the licensee to adjust the model to include certain inoperable SSCs due to a degraded or nonconforming condition. This adjustment is not considered a 50.65(a)(4) risk assessment, per se, however, this adjustment is necessary to ensure that the risk assessment of planned and emergent maintenance activities, including maintenance activities to resolve the degraded/nonconforming condition itself, is accurate and reflects the true plant risk.

We believe that this PRA model adjustment is the risk assessment equivalent discussed in the 4th paragraph of Section 7.1 of the draft RIS. If this is true, this section needs to be revised to more clearly discuss the above concept.

In addition, 10 CFR 50.65(a)(4) Statement of Considerations states that assessments should also be performed when an unexpected SSC failure initiates required maintenance activities or when changes to conditions affect a previously performed assessment. This rule language suggests that 50.65(a)(4) risk assessments be conducted when risk significant SSCs are deemed inoperable/non functional, due to a degraded/non-conforming condition. This guidance should reflect/discuss this fact.

Section 7.2, Timing of Corrective Actions

In the 3rd paragraph of Section 7.2,- The NRC appears to create a new expectation that it should be an unlikely situation where licensees go beyond the next refueling outage to complete corrective actions. While it is appropriate for NRC to have a general expectation on when a licensee should complete corrective action, to suggest how likely or unlikely it is for a licensee to meet this NRC expectation is not reasonable, and this language should be deleted.

Section 7.3, Compensatory Measures

1. We recommend that the 1st sentence in 1st paragraph be reworded to read, "Anytime, during the operability determination process a licensee may decide to implement a compensatory measure..." This rewording clarifies the current wording regarding the timing and puts it in the context of actions being taken as part of the operability determination process.

2. The quote from NEI 96-07 should be removed from this section. The concern is that NEI 96-07 defines "10 CFR 50.59 applies" as requiring at least a 10 CFR 50.59 screening. Only those facility and procedure changes that otherwise would need a 10 CFR 50.59 screening should need to have 10 CFR 50.59 apply.

3. The NRC guidance provided in the 4th paragraph is not consistent with NEI 96-07, Revision 1. The technical review of impact to the plant (i.e., is the compensatory measure safe and effective) should be completed prior to applying 10 CFR 50.59.

   Contrary to the guidance in NEI 96-07, Revision 1, Section 7.3 the 4th and 5th paragraphs of the RIS only discuss the application of 10 CFR 50.59 to those compensatory measures rising to the level of a temporary procedure or facility change. This section needs to be reworded to recognize that the technical impact evaluation (i.e., is the compensatory measure safe and effective) needs to be completed first, prior to the 10 CFR 50.59 review. This rewording is necessary for consistency with the guidance in NEI 96-07, Revision 1.

   In addition, Section 7.3 needs to discuss the fact that not all proposed compensatory measures are to be reviewed under 10 CFR 50.59. Only those compensatory measures rising to the level of requiring a temporary procedure or facility change are required to be reviewed under 10 CFR 50.59, per NEI 96-07, Revision 1. Many compensatory measures, typically taken by licensees, do not rise to this level. This distinction needs to be made in this Section.

4. We recommend rewording the end of the last sentence in the last paragraph of Section 7.3 as follows: "...or have other effects that should be reviewed." Using the term 'evaluated' alludes to requiring a 50.59 Evaluation. This is not what is meant here. The existing language has the potential to be misunderstood and should be revised as suggested.

5. No discussion of using alternate methods of evaluation in operability determinations is provided in this section. The 10 CFR 50.59 definition of "Facility as described in the UFSAR" contains methods of evaluation as part of the facility, therefore utilizing an alternate method of evaluation in an operability determination would be a compensatory measure. This section as well as Sections C.4 and C.14 should discuss using alternate methods to address degraded/nonconforming conditions as compensatory measures.

6. When methods of evaluation, defined in NEI 96-07, Revision 1, are changed as a compensatory measure to address a degraded/nonconforming condition, the NEI 96-07, Revision 1 guidance would have a licensee apply 10 CFR 50.59 to the alternate method to determine the impact on other aspects of the facility. Given the newly formulated Appendix C.4 acceptance criteria for alternate method use in response to a degraded/nonconforming condition, the application of 10 CFR 50.59 to such a compensatory measure should be waived. Meeting the Appendix C.4 acceptance criteria should make the application of 10 CFR 50.59 to this compensatory measure a redundant exercise and a moot point.

7. No discussion of using an alternate method evaluation where none currently exists is provided in this section. This situation, where a new analytical technique could be used in response to a

degraded/nonconforming condition, where only deterministic design principles were used in the past, should be allowed and guidance on its use should be in this section and Appendix C.4.

8. Nuclear Energy Institute 96-07, Revision 1, Section 4.3.2; Example #7 provides an example of a proposed activity, involving (permanently) substituting manual action for automatic action for performing Updated Final Safety Analysis Report (UFSAR)-described design functions. The NEI guidance states that this example would require prior NRC approval, as it would result in more than a minimum increase in the likelihood of occurrence of a malfunction of an SSC important to safety. In this same example, it is identified that ... "(Guidance for temporary substitution of manual action for automatic action, to compensate for a degraded/nonconforming condition, is provided in NRC Generic Letter 91-18, Revision. 1)".

   With the issuance of this proposed RIS, the NEI 96-07, Revision 1, Section 4.3.2 guidance has two issues:

   1) The reference to NRC Generic Letter 91-18, Revision 1 becomes invalid.
   2) The proposed 50.59 Evaluation guidance, in RIS 2004-xxx, Section 7.3, addressing the situation of substituting manual action for automatic actions for the performance of UFSAR described design functions, is vague. Additionally, the current 50.59 Evaluation guidance, in NRC Generic Letter 91-18, Revision 1 (i.e., Section 4.7), addressing the situation of substituting manual action for automatic actions for the performance of UFSAR described design functions, is similarly vague.

   NOTE: RIS 2004-xxx; Appendix C.5 provides the necessary criteria to determine if the proposed manual substitution is safe and effective (Figure 1 of NEI 96-07, Revision 1).

   Section 4.7 provides the only guidance on compensatory measures in Generic Letter 91-18, Revision 1. There is no 50.59 Evaluation guidance, similar to that contained in NEI 96-07, Revision 1, Section 4.3.2; Example 7, as to when a proposed manual action substitution for an automatic action as a compensatory measure, would require prior NRC approval.

   The language in NRC Generic Letter 91-18, Revision 1, Section 4.7 applies to 50.59 Screening (i.e., 50.59 review) only. Section 4.7 concludes that, if the compensatory action (i.e., temporary procedure change substituting a manual action for an automatic action) itself impacts (i.e., adversely affects) other aspects of the facility described in the UFSAR (other UFSAR described design functions), then the temporary procedure change would require a 50.59 Evaluation. However, there is no clear guidance on how should this manual action substitution be evaluated in using a 50.59 Evaluation.

   The question that presents itself is ... When would the NRC expect a licensee to request prior approval, under 50.59, for a temporary substitution of manual action for automatic action, to compensate for a degraded/nonconforming condition, in the performance of an UFSAR described design function? It is clear the a proposed permanent substitution would require prior NRC approval; however it is less clear for proposed temporary substitutions. Nuclear Regulatory Commission should clarify their expectations in this area.

Section 7.4, Final Corrective Action

The discussion and example provided are not in the context of the first situation discussed in Section 7.4 [i.e., Item (3) discussed in the 1st paragraph of Section 7.4]. Section 7.4.1 discusses permanently leaving the degraded/nonconforming condition as-is and proposing other changes to the facility/procedures to permanently compensate for the as-is degraded /nonconforming condition. This entire section does not address making a change in lieu of full restoration. We believe this section requires rework to properly address correcting a degraded/ nonconforming condition with a change in lieu of full restoration.

We recommend the following changes: Reword the 1st sentence to read, "In the first situation, the licensee's proposed final resolution of the degraded/nonconforming condition is to make facility/ procedure changes to resolve the degraded/nonconforming, in lieu of full restoration." Delete the entire 2nd sentence and reword the 3rd sentence to read, "In this case the licensee should apply the 10 CFR 50.59 process to the proposed facility/procedure changes."

Appendix C.4, Use of Alternative Analyses in Operability Determinations

1. No discussion of using alternate methods of evaluation as a compensatory measure in operability determinations is provided in this section. The 10 CFR 50.59 definition of "Facility as described in the UFSAR" contains methods of evaluation as part of the facility, therefore utilizing an alternate method of evaluation in an operability determination would be a compensatory measure. This section as well as Section C.14 should discuss using alternate methods to address degraded/ nonconforming conditions as compensatory measures.

2. No discussion of using an alternate method evaluation, where none currently exists, is provided in this section. This situation, where a new analytical technique could be used in response to a degraded/nonconforming condition, where only deterministic design principles were used in the past, should be allowed and guidance on its use should be in this section.

Appendix C.7, Environmental Qualification

This section uses language that is inconsistent with the rest of the RIS as follows:

a) Use of the term "potential deficiency" is inconsistent with definitions provided in Section 4.3. The correct terminology should be environmental qualification (EQ) nonconformance to be consistent with Section 4.3.

b) Use of the term "prompt determination" has specific meaning (Section 5.3) in this RIS. The existing Section C.7 text would imply that, for EQ nonconformance, an immediate determination (Section 5.2) is not required. We do not believe this is NRC's intent.

c) Use of the term "reasonable assurance" is not defined in this RIS and is inconsistent with the overall NRC expectation (Section 5.4). This term is also found in Sections 3.5 and 4.1

d) Another issue is the language in Section C.7 that says, "The licensee should also show that subsequent failure of the equipment will not result in significant degradation of any specified safety function or give misleading information to the operator." This language appears to require a licensee to assume failure of the EQ equipment during an accident that the licensee has determined to be operable/functional by completing an operability/functionality determination. This is confusing.

If the determination process concludes that the equipment is operable/functional, then the equipment is operable/functional for it's entire mission time. Section C.7 contains dated language that should be deleted.

Appendix C.8, Technical Specification Operability vs. ASME Code, Section XI, Operative Criteria

The last sentence of the first paragraph uses incorrect terminology. It states that the "applicable LCO shall be entered." Limiting Conditions for Operation (LCOs) are not entered or exited. Limiting Conditions for Operation are the statement of the lowest functional capability of the SSC. The correct phrase would be, "the system shall be declared inoperable."

Appendices C.11 and C.12

1. Both of these sections should clearly state that leakage from mechanical joints (gaskets, packing, threaded connections, compression fittings) are not considered Code leakage or flaws even though they still need to be evaluated for structural integrity and the effects of the leakage.

2. Appendix C.12; 2nd paragraph; 2nd sentence - As noted by the NRC, at the August 25, 2004 Workshop, delete the language "...IWA 5250 of Section XI."

Appendix C.14, Use of an Alternative Source Term in Operability Determinations

It would be extremely helpful for this section to specifically explain how the general criteria [i.e., (1), (2) or (3)], from Appendix C.4 was applied to the example in Appendix C.14 arriving at the conclusion that alternate source term can be used for operability determinations. This would help facilitate a broader industry understanding of how to apply the criteria in Section C.4 to any method change used for operability determinations.