

Enclosure 3

Reactor Oversight Process Task Force FAQ Log
September 21, 2016

Dated October 13, 2016

FAQ Log September 21, 2016 ROP Meeting

FAQ No.	PI	Topic	Status	Plant/Co.	Point of Contact
16-02	MS	WB2 Baseline Planned UA and CCF	Introduced on June 15, Made Tentative-Final on July 14, Finalized on September 21	Watts Bar Nuclear Plant, Unit 2	C. Woolson (TVA) P. Wilson (TVA) Z. Hollcraft (NRC)
16-03	MS	Tornado Missile Protection Potential Safety System Functional Failure	Introduced on September 21	Generic	J. Giddens (Southern) Z. Hollcraft (NRC)

For more information, contact: James Slider, (202) 739-8015, jes@nei.org

FAQ 16-02, Watts Bar 2 Baseline Planned UA and CCF (Tentative Final)

Plant: Watts Bar Nuclear Plant, Unit 2 (WBN 2)

Date of Event: TBD 2016 (Forecast Commercial Operation)

Submittal Date: Introduced via ROP WG Call 06/15/2016

Engineer/Licensee Contact: Clinton Woolson/Peter Wilson Tel/email: 423-365-8848/423-751-3275

NRC Contact: _____ Tel/email: _____

Performance Indicator:

MS06 WBN2 Mitigating System Performance Index (Emergency AC Power Systems)

MS07 WBN2 Mitigating System Performance Index (High Pressure Injection Systems)

MS08 WBN2 Mitigating System Performance Index (Heat Removal Systems)

MS09 WBN2 Mitigating System Performance Index (Residual Heat Removal Systems)

MS10 WBN2 Mitigating System Performance Index (Cooling Water Systems)

Site-Specific FAQ (Appendix D)? Yes

FAQ requested to become effective: when approved.

Question Section:

1. How should the Plant Specific Baseline Planned Unavailability be determined for Watts Bar Unit 2?
2. What should be the Generic Common Cause Factor (CCF) adjustment values for Watts Bar Unit 2?

NEI 99-02 Guidance needing interpretation (include page and line citation):

1. Section F 1.2.2, (Page F-9), Plant-Specific Baseline Planned Unavailability:
There is no guidance in this section to develop baseline unavailability for a new plant. Watts Bar Unit 2 has no operating history.
2. Appendix F, Table 7 (Page F-39 and 40), Generic CCF Adjustment Values:
Watts Bar Unit 2 is not included in this table since it was only recently licensed.

Event or circumstances requiring guidance interpretation: Startup of new plant.

If licensee and NRC resident/region do not agree on the facts and circumstances explain:

Not applicable.

Potentially relevant existing FAQ numbers: FAQ 10-04, which added the Browns Ferry U1 CCF Adjustment Values to Table 7 of NEI 99-02.

Response Section:

Proposed Resolution of FAQ:

Watts Bar Unit 2 design is a four-loop Westinghouse PWR with high head safety injection system and Ice Condenser Containment. The design is the same as Watts Bar Unit 1 (which went into commercial operation August 15, 1996). Units 1 and 2 share some common MSPI systems.

Question 1 (Plant-Specific Baseline Planned Unavailability) Resolution:

The guidance summarized in NEI-99-02 for Baseline Planned Unavailability is to develop the initial baseline based upon actual plant-specific data from the period 2002-2004 and adjust it based upon plant maintenance philosophy changes and evaluation of effects on PRA model. Because Unit 2 has not

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operated yet and does not have actual plant-specific values for the period 2002-2004, Watts Bar Unit 2 cannot use this method to develop initial baseline.

TVA proposes to develop a 12-quarter Baseline Planned Unavailability value for Unit 2 specific systems and include the results in the MSPI Basis Document. The common Emergency AC and portions of the cooling water indicator have baseline data from Unit 1 for 2002-2004 that will be used for Unit 2. These Unit 2-specific system values will be based upon Unit 1 history and Unit 2 forecast and evaluated against the test and maintenance parameters in the PRA model. This would generally follow the guidelines in NEI 99-02 and be documented in the basis document. This is justified by the fact that Unit 2 maintenance is being performed by the same organization, for the same equipment type, and with the same preventative maintenance basis as Unit 1. Also, the PRA data for test and maintenance parameters for Unit 2 was developed using Unit 1 data.

Item 2 (CCF Adjustment Values) Proposed Resolution:

In NEI 99-02, Table 7 lists generic CCF Adjustment Values for each US unit. Watts Bar Unit 2 is not listed. TVA recommends Unit 2 be added to the Unit 1 line since system design and components are same as Unit 1.

If appropriate, provide proposed rewording of guidance for inclusion in next revision:

Recommendation 1:

Add the following sentence on Page F-9, section F 1.2.2, starting after the period on line 42:

“For new plants, baseline values can be estimated based upon expected maintenance practice and documented in Basis Document.”

Recommendation 2:

The following is proposed to be added to Appendix F, Table 7:

	EDG	MDP Running or Alternating ⁺	MDP Standby	MDP Standby	TDP **	MDP Standby
Watts Bar 1 & 2	1.25	1.25	1.25	1.25	1	1.5

PRA update required to implement this FAQ? No

MSPI Basis Document update required to implement this FAQ? Yes, in the form of issuing the initial version of the Watts Bar Unit 2 MSPI Basis Document.

NRC Response

The NRC agrees with the licensee's recommendations. As for all plants, the licensee has the ability to adjust their baseline unavailability per the guidance in NEI 99-02 Appendix F should these assumptions turn out to not reflect actual unavailability.

FAQ 16-03, Tornado Missile Protection (TMP) Potential Safety System Functional Failure
(Proposed)

Plant: ALL

Date of Event: n/a

Submittal Date: 09/21/2016

Engineer/Licensee Contact: _____

Tel/email: _____

NRC Contact: _____

Tel/email: _____

Performance Indicator:

MS05 Safety System Functional Failures (SSFF)

Site-Specific FAQ (Appendix D)? No

FAQ requested to become effective: November 2016.

Question Section:

1. Do TMP nonconforming conditions rendering multiple trains of safety related equipment inoperable requiring a 10 CFR 50.73(a)(2)(v) report need to be reported for this SSFF indicator?
2. If so, must each identified deficiency be counted as a separate SSFF?

NEI 99-02 Guidance needing interpretation (include page and line citation): N/A

- "A single event or condition that affects several systems: counts as only one failure.
(Page 32, Line 9)

Event or circumstances requiring guidance interpretation: Licensees initiated structural design reviews and walkdowns evaluating the operating experience provided in RIS 2015-006 and are identifying very low risk significance examples of gaps in original design and plant construction for TMP affecting Technical Specification (TS) controlled systems. When a licensee completes an operability determination for TMP nonconforming conditions and concludes the nonconforming condition affects TS operability of a structure, system or component (SSC), NRC provided three to five years of enforcement discretion relaxing the shutdown requirements in TS and allowing appropriate time to resolve these low risk issues. In situations where the operability of multiple redundant trains of TS equipment is affected by TMP nonconforming conditions, those nonconforming conditions could represent a SSFF.

If licensee and NRC resident/region do not agree on the facts and circumstances explain: N/A

Potentially relevant existing FAQ numbers: N/A

Response Section:

Proposed Resolution of FAQ:

Background

Utilities are evaluating compliance with their licensing basis regarding tornado missile protection in response to Regulatory Issue Summary (RIS) 2015-06. Some plants are finding TS controlled safety-related SSCs affected by minor gaps in the original plant TMP design. As TMP

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(Proposed)

nonconforming conditions are identified, they are evaluated for operability impact. If operability is not affected, the item is resolved through the Corrective Action Program.

If it is determined that TMP nonconforming conditions render a TS-required SSC inoperable, the action specified in the TS must be taken. If it is determined that TMP nonconforming conditions render multiple trains of TS SSCs inoperable, the issue could represent a SSFF. Enforcement Guidance Memorandum (EGM) 15-002, "Enforcement Discretion for Tornado Missile Protection Noncompliance" can be applied by the licensee to relax the TS shutdown requirements if compensatory actions are taken to reduce impact of tornado missile(s) so that, while the plant may not be fully protected, the impact is reduced. Because of the low-risk nature of these TMP nonconforming conditions, the NRC has granted time to resolve these issues, either by fully protecting the equipment or by changing the plant licensing basis.

When TS operability is impacted, a number of plants are reporting these deficiencies under 10 CFR 50.72 and 10 CFR 50.73. In some cases, where the operability of redundant trains of TS equipment are affected, licensees are reporting the condition as a SSFF under 10 CFR 50.73(a)(2)(v).

The SSFF performance indicator guidance in NEI 99-02, Revision 7, page 32, Line 9 states:

"A single event or condition that affects several systems: counts as only one failure."

It is understood that:

- The "single event" could be considered the potential occurrence of a tornado and/or the "single condition" could be considered the engineering work performed many years ago that did not comprehensively incorporate the tornado missile protection concepts into the structural design;
- The issues being identified:
 - Are not representative of current facility performance;
 - Are part of a comprehensive industry-wide reevaluation of the original facility tornado missile protection design; and
 - Have very low safety significance.

In the case where multiple TMP nonconforming conditions are identified creating multiple SSFFs, only the first SSFF is reportable under the performance indicator.

As a point of clarification, NEI 99-02 page 30, lines 27-29 state:

"Engineering analyses: events in which the licensee declared a system inoperable but an engineering analysis later determined that the system was capable of performing its safety function are not counted, even if the system was removed from service to perform the analysis."

Nothing in this FAQ precludes a licensee performing such an analysis. If the licensee reports a nonconforming condition under 10 CFR 50.73(a)(2)(v) and subsequently performs an engineering analysis demonstrating that the system was capable of performing its safety

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function, that nonconforming condition reported under 10 CFR 50.73(a)(2)(v) does not need to be reported under the SSFF performance indicator.

Restatement of Question

1. Do TMP nonconforming conditions rendering multiple trains of safety related equipment inoperable requiring a 10 CFR 50.73(a)(2)(v) report need to be reported for this SSFF indicator?
2. If so, must each identified deficiency be counted as a separate SSFF?

Response

1. Yes, if the situation is reportable per 10 CFR 50.73(a)(2)(v), it should be counted under the SSFF indicator.
2. The first SSFF identified should be counted under the SSFF performance indicator. Additional items identified as part of the RIS 2015-06 evaluation would not need to be counted separately, as they would be treated as additional failures under NEI 99-02 because they were part of the “*single event or condition that affects several systems.*” As appropriate, additional failures identified as a result of the same evaluation need not be reported separately. Licensees should write in the comments that multiple failures related to Tornado Missile Protection, if they existed, are being reported under this one PI. Additional examples may be added through the LER supplement process, if discovered.

If appropriate, provide proposed rewording of guidance for inclusion in next revision: N/A

PRA update required to implement this FAQ? No

MSPI Basis Document update required to implement this FAQ? No