FAQ 17-00

Watts Bar Unit 2 MSPI Effectiveness Date

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

Date of Event: 3/23/2017 (Condenser Failure)
Submittal Date: 11/26/2017
Engineer/Licensee Contact: Clinton Woolson/Beth Wetzel Tel/email: (423) 365-8848/(423)751-2403
NRC Contact: Jared Nadel Tel/email: (423) 365-1776

Performance Indicator:
MS06 WBNU2 Mitigating System Performance Index (Emergency AC Power System)
MS07 WBNU2 Mitigating System Performance Index (High Pressure Injection System)
MS08 WBNU2 Mitigating System Performance Index (Auxiliary Feedwater System)
MS10 WBNU2 Mitigating System Performance Index (Cooling Water Systems)

Site-Specific FAQ (Appendix D)? Yes

FAQ requested to become effective when approved.

Question Section:

TVA requests the effective date of Watts Bar Unit 2 MSPI indicators to be extended until sufficient data is available to provide an accurate assessment value. This date has been determined to be the second quarter of 2018. The extension gives WBN Unit 2 four quarters of data and allows enough information to develop a trend.

The NRC documented the full transition of WBN Unit 2 to the Reactor Oversight Process (ROP) and the effective dates of the ROP indicators. The NRC also approved using the FAQ process if the information shows that the ROP indicators do not provide an accurate assessment value (Reference NRC Letters to TVA dated November 21, 2016 and October 22, 2015). This scheduled the indicators to be effective four quarters after the cornerstone is transitioned to the ROP. These MSPI indicators become effective the first quarter of 2018.

NEI 99-02 Guidance needing interpretation :
Items:

1. FAQ 14-02
2. NRC Letters to TVA dated November 21, 2016 and October 22, 2015.

Event or circumstances requiring guidance interpretation:

During March 2017, during the first operating cycle Watts Bar U2, the Condenser failed and required extensive repair to return to service. The reactor was shut down while the work on the secondary side was performed. This resulted in a loss of 3100 critical hours. The cause of the failure was inadequate vendor design (1970's) of the condenser wall support structure leading to support and wall failure. In addition, a 35-day refueling outage is planned for fourth Quarter of 2017 with an additional loss of 840 critical hours.

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

The NRC Watts Bar Site Resident Inspector was informed of this FAQ. No feedback was provided by the resident.

Potentially relevant existing FAQ numbers:
FAQ 14-02, "Simulation of MSPI Indicator Reaction to Plant in Long Shutdown and Initial Startup." Fort Calhoun

Response Section:
Proposed Resolution of FAQ:

Extend the effective date of the Watts Bar Unit 2 MSPI indicators to April 1, 2018 due to the loss of a significant number of critical hours. This loss of critical hours would significantly affect the accuracy of the assessment value.

The basis of Fort Calhoun FAQ 14-02 was a simulation that concluded the indicator was accurate after four quarters of critical hours. The WBN Unit 2 condenser failure and refueling outage loss of critical hours makes the indicators a three quarter assessment at the present effective date. The forecasted value of critical hours for Watts Bar U2 on December 31, 2017 is 6378 hours (including condenser failure and outage) compared to the four quarter maximum value of 8760.

Recommend the new effective date for Watts Bar U2 indicators MS06, 07, 08, and 10 be set at April 1, 2018. The NRC will continue to gray out the affected Watts Bar U2 indicators on NRC web site for the first quarter of 2018.

If appropriate, provide proposed rewording of guidance for inclusion in next revision:
None

PRA update required to implement this FAQ? No
MSPI Basis Document update required to implement this FAQ? No