UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

November 28, 2017

MEMORANDUM TO: Shaun Anderson, Chief
Reactor Inspection Branch
Office of Nuclear Reactor Regulation

FROM: Alan Blamey, Chief ***/RA/***
Reactor Projects Branch 6
Division of Reactor Projects

SUBJECT: APPROVAL FOR EXCEEDANCE OF THE WATTS BAR MAXIMUM BASELINE INSPECTION SAMPLES

The purpose of this Memorandum is to request concurrence to exceed the baseline inspection maximum sample size listed in the Reactor Oversight Program in accordance with MC 2515, "Light-Water Reactor Inspection Program – Operations Phase", Section 2515-09, Integrated Inspection Plans for Watts Bar Units 1 and 2. The basis for exceeding the maximum sample size is discussed in the Reactor Oversight Process Transition Plan for Watts Bar Nuclear Plant, Unit 2, dated April 23, 2015 (ADAMS Accession No. MLII15096A204).

The Reactor Oversight Process (ROP) Transition Plan anticipated that this type of exceedance may happen as a result of augmented inspections for invalid Performance Indicators (PI) on Unit 2. The ROP Transition Plan specifically directed additional baseline inspection, as needed, to compensate for the invalid performance indicators. Currently, we project exceeding the maximum baseline inspection samples in Inspection Procedures (IP) 71111.04Q, "Partial System Walkdowns" and IP 71111.22, "Surveillance Tests."

Region II predicts that the number of samples for partial system walkdowns (71111.04Q) will exceed the maximum sample size stated in the Inspection Procedure, which is 16. The current plan is to complete 20 samples by the end of the fourth quarter. Region II does not anticipate exceeding the maximum samples on complete system walkdowns (71111.04S). The residents also anticipate exceeding the maximum sample size for surveillance tests (71111.22), which is 22 samples. The current plan is to complete 28 samples by the end of the fourth quarter. Note that the final number of samples for each of the above IPs may vary slightly from current projections based on a number of factors. Region II does not anticipate exceeding the maximum sample size in any other baseline inspection procedure.

CONTACT: Alan Blamey, RII/DRP
404-997-4415

If you need more information about the content of samples or invalid PIs supported by the additional samples, please contact Alan Blamey at 404-997-4415. In accordance with MC 2515-09 please provide your concurrence.

CONCURRENCE: ***/RA/*** Date: 11/28/2017

Shaun Anderson, Chief
Reactor Inspection Branch
Office of Nuclear Reactor Regulation

Enclosures:
1. MC 2515-09
2. ROP Transition Plan Memorandum

SUBJECT: APPROVAL FOR EXCEEDANCE OF THE WATTS BAR MAXIMUM BASELINE INSPECTION SAMPLES
November 28, 2017

ADAMS Accession No. **ML17332A201**

OFFICE	RII/DRP	RII/DRP			
NAME	ABlamey	JMunday			
DATE	9/27/2017	10/23/2017			

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Any such feedback and recommendations should be submitted to IRIB through the associated regional office using the ROP feedback process (IMC 0801).

2515-09 INTEGRATED INSPECTION PLANS

Regional offices must develop annual site-specific inspection plans consistent with the inspection planning module of the Reactor Program System (RPS) to help manage inspection resources and monitor the inspection programs. Under circumstances where the operation of multiple units at a site is not comparable (e.g., Salem/Hope Creek), the inspection plan should be specific for each unit. The regional integrated inspection plan (i.e., the integration of individual site or unit plans) should project the planned inspection activities and available resources for all sites as outlined in IMC 0305. The integrated plan should also provide for a summary of the fraction of regional resources allocated to each of the individual program elements discussed in section 2515-06 of this manual chapter for each site.

The Chief of the Reactor Inspection Branch (IRIB) shall concur on significant alterations to the baseline inspection program for a plant's annual inspection plan to accommodate the plant's particular situation. Significant alterations include treating a multi-unit site as separate single unit sites, or increasing or decreasing the frequency of inspections or sample sizes from those stated in the baseline inspection procedures. The factors to consider when planning alterations to the baseline inspection program at a plant site include (1) known plant activities (or lack thereof), (2) the plant's size, design, and age, and (3) complexity of the licensee's programs.

The results of the end-of-cycle and mid-cycle performance reviews, conducted in accordance with IMC 0305, shall be used to schedule baseline inspections and to determine the amount and focus of any supplemental or special/infrequent inspections at each site (as defined in Appendix B and C of this manual chapter). The basis for the allocation or significant reallocation of resources among the sites will be documented. It is expected that the integrated plans will be living documents and be reviewed periodically, adjusted, and reissued to reflect shifts in plant performance and safety concerns. Individual site plans and the regional integrated inspection plan should be reviewed by regional management and updated at least semiannually as part of the assessment process that is discussed in IMC 0305.

2515-10 INDEPENDENT INSPECTION

As a general rule, inspections should be conducted in accordance with inspection procedures. However, it is not possible to anticipate all the unique circumstances that might be encountered during the course of a particular inspection and, therefore, individual inspectors are expected to exercise initiative in conducting inspections, based on their expertise, experience, and risk insights, as needed to assure that all the inspection objectives are met.

2515-11 INSPECTOR POLICY

11.01 Resident Inspector Policy. The resident inspectors provide the major onsite NRC presence for direct observation and verification of licensees' ongoing activities. Appendix D

April 23, 2015

MEMORANDUM TO: William B. Jones, Director
Division of Construction Projects
Region II

FROM: Scott A. Morris, Director */RA/*
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

SUBJECT: REACTOR OVERSIGHT PROCESS TRANSITION PLAN FOR WATTS BAR NUCLEAR PLANT, UNIT 2

The Division of Inspection and Regional Support staff, with support from your staff, developed a plan for the transition of Watts Bar 2 from the Construction Oversight Process to the Reactor Oversight Process. The transition plan is enclosed.

Enclosures:
3. Transition to Reactor Oversight Process
4. Performance Indicator Validity Summary Table

CONTACT: Gabriel M. Levasseur, NRR/DIRS
301-415-1487

DISTRIBUTION:
GLevasseur
CRegan
NSanfilippo
JQuichocho
SMorris
JBeardsley
RPowell
AStone
AMasters
GMiller
RHaag
WJones
JMunday

ADAMS Accession No.: ML15096A204

OFFICE	NRR/DIRS/IRIB	NRR/DIRS/IRIB	NRR/DIRS/IPAB	NRR/DORL	NRR/DIRS
NAME	GLevasseur	CRegan	NSanfilippo	JQuichocho	SMorris
DATE	04/06/2015	04/07/2015	04/07/2015	04/09/2015	04/23/2015

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REACTOR OVERSIGHT PROCESS TRANSITION PLAN FOR WATTS BAR NUCLEAR PLANT, UNIT 2

Background:

The Tennessee Valley Authority (TVA) is the U.S. Nuclear Regulatory Commission (NRC) regulated applicant for the Watts Bar Nuclear (WBN) Unit 2 Plant located in southeastern Tennessee. WBN site has two Westinghouse-designed pressurized-water reactors. TVA received construction permits for the two units in 1973 under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50. Construction on both units was halted in 1985 due to NRC concerns with TVA's Quality Assurance program. The NRC continued to review theoperating license (OL) application for WBN, Unit 1, which received its OL in 1996, but construction and licensing for WBN, Unit 2, remained halted. In 2007, TVA requested approval from the NRC to resume both its construction activities and the OL application for WBN, Unit 2. The Commission issued SRM-SECY-07-0096, "Possible Reactivation of Construction and Licensing for the Watts Bar Nuclear Plant, Unit 2," directing the staff to resume its review of the WBN, Unit 2, OL application. On November 21, 2013, The NRC issued an Order extending the expiration date of the construction permit for Unit 2 to September 30, 2016. TVA is nearing completion of construction and intends to transition Unit 2 to full commercial operation in 2015. It is expected that the transition period to commercial operation, after issuance of the OL, will last approximately six months based on information provided by TVA.

Inspection Manual Chapter (IMC) 2517, "Watts Bar 2 Inspection Program," establishes the staff's policy for the conduct of the WBN Unit 2 inspection program covering WBN Unit 2's construction and startup process under IMCs 2512 (Construction), 2513 (Preoperational Testing), and 2514 (Startup Testing). Key aspects of the WBN Unit 2 construction project will be inspected in accordance with the Region II inspection plan and IMC 2517. Region II will manage all elements of the WBN Unit 2 inspections, e.g., reviews, assessment of applicant corrective actions, evaluation of findings, tracking open items, and transition to the Reactor Oversight Process (ROP). The transition of WBN Unit 2 to the ROP is described below.

Objectives:

The WBN Unit 2 transition plan has several objectives. Satisfying these regulatory objectives will provide for the efficient transitioning of the WBN Unit 2 from construction to the ROP.

1. Provide a basis for determining why ROP the cornerstones are ready to be "monitorable."
2. Specify the required inspection procedures to be performed when one or several ROP cornerstones are ready to be monitored.
3. Produce a timeline of activities and determine when each cornerstone will be transitioned to the ROP.
4. Establish the assessment program that applies during the transition period.
5. Establish the inspection program(s) applicable during the transition period.
6. Determine the validity of performance indicators (PIs) upon transition and provide an augmented inspection plan for PIs that will not be immediately valid.

Transition Plan Discussion:

The overall approach for transitioning WBN Unit 2 to the ROP will be in accordance with the guidance contained in IMC 2517. Construction inspection, assessment, and enforcement under IMC 2517 will apply to WBN Unit 2 throughout the implementation of the IMC 2512, IMC 2513, and IMC 2514 inspection programs. The successful completion of these inspection programs will provide reasonable assurance that each cornerstone of safety is ready to be monitored under the ROP. Oversight under IMC 2517 will continue to be used until the completion of IMC 2514. A graphical representation of the transition to the ROP is presented in Enclosure 1, "Transition to ROP."

Rather than develop a transition matrix for each cornerstone, as discussed in IMC 2517, the basis for determining cornerstone readiness will be ensured by the successful completion of several parts of WBN Unit 2 inspection program. By the time an OL decision is made, the staff will have performed thousands of hours of construction-related inspections. One objective of the IMC 2512 inspection program is to determine licensee effectiveness in identifying conditions that may adversely affect operational safety and in achieving compliance with NRC requirements and licensee commitments. As stated in IMC 2512, this determination should provide sufficient information to establish a basis for making recommendations relative to the issuance of an OL. In addition, the completion of the IMC 2513 inspection program provides verification that: (1) Systems and components important to the safety of the plant are fully tested to demonstrate that they satisfy their design requirements, and (2) management controls and procedures, including quality assurance programs, necessary for operation of the facility have been documented and implemented. Lastly, the completion of the IMC 2514 inspection program provides verification that the licensee is meeting the requirements and conditions of the facility license for precritical tests, initial fuel loading, initial criticality, low-power testing, and power ascension tests.

The transition of Unit 2 to the ROP will use a phased approach on an individual cornerstone basis. Region II and the Office of Nuclear Reactor Regulation (NRR) staff will meet to discuss any relevant open issues to ensure that each cornerstone is ready to be monitored by the ROP prior to final transition (i.e., PIs and Inspections).

Inspection

Upon issuance of the OL, WBN Unit 2 will receive the applicable inspections for all cornerstones as required by the baseline inspection program for a dual unit site. Inspectors are expected to choose and conduct inspection samples that are risk-informed and/or are of safety significance. If a sample prescribed by the baseline program would have little risk or safety impact because the site is of new construction (e.g., heat sink sample), it is expected that the inspector would not choose to perform the sample until such a time when it would be applicable. In such a case the sample should be entered into the Reactor Program System as "Complete – full sample not available" in accordance with IMC 0306, "Information Technology Support for the Reactor Oversight Process," Section 05.02.d.2.(e). The staff recognizes that the inspection programs of IMC 2515 and IMC 2514 will overlap between the period of OL issuance and completion of IMC 2514.

Cornerstone Transition

Upon issuance of the OL, the Emergency Preparedness, Security, Occupational Radiation Protection, and Public Radiation Protection cornerstones will be transitioned to the ROP. These cornerstones will be inspected and assessed via established ROP processes and the PIs will be fully valid. Region II will transmit a letter to TVA to inform the lincensee of the partial ROP cornerstone transition. The letter will document the basis for transitioning each cornerstone and inform the licensee of the NRC's planned level of inspection, assessment, and enforcement.

The transition of the remaining three cornerstones, i.e., Mitigating Systems (MS), Barrier Integrity (BI), and Initiating Events (IE), to the ROP will occur following completion of the IMC 2514 inspection program, which corresponds to the completion of power ascension testing. Prior to the transition of these remaining three cornerstones, Region II will conduct an assessment of WBN Unit 2 performance to date, including a review of any relevant open issues to ensure that each cornerstone is ready to be monitored by the ROP and to determine the proper initial Action Matrix column placement for the licensee as outlined later in this plan.

Based on the results of this assessment, Region II will transmit a letter to TVA to document the completion of the IMC 2514 inspection program, the decision to transfer Unit 2 to the full regulatory oversight provided by the ROP for all safety cornerstones (as delineated by IMC 2515 and IMC 0305), and the Action Matrix column in effect upon issuance of the letter. The letter will also discuss any PIs that will remain invalid and the NRC's plan to perform augmented inspections as discussed below.

Assessment

Licensee performance assessment will be conducted in accordance with IMC 2517 for all cornerstones until the completion of IMC 2514. After the completion of IMC 2514, assessment will be conducted in accordance with IMC 0305, using the ROP Action Matrix for all cornerstones.

Performance Indicators

The transfer to full ROP oversight will occur while recognizing that not all PIs will be immediately valid at the time of transition and thus would likely not provide an accurate indicator of plant performance. Data for PIs is expected to be submitted in accordance with the industry guidance provided in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," following transition to the ROP. PIs that are not yet valid will have their assessment values (color) on the public NRC website grayed out (as invalid) for assessment purposes and will not be considered as inputs into the Action Matrix. The data will be made available on the public website.

PIs will be declared valid once sufficient time has passed to accumulate enough representative data to provide a reasonable assessment result. This period of time differs depending on the PI. Specific descriptions and bases for each PI are included in Enclosure 2.

PIs for Emergency Preparedness, Security, Occupational Radiation Protection, and Public Radiation Protection cornerstones will become valid upon issuance of the OL. The PI data for these four cornerstones is expected to be submitted in accordance with NEI 99-02 and will be evaluated in accordance with IMC 0608, "Performance Indicator Program." The regulatory

response for a valid PI crossing a significance threshold after the issuance of the OL will be as specified by IMC 0305. Data for these PIs will be made available on the NRC public website with their assessment values (color) grayed out until use of the Action Matrix begins upon completion of IMC 2514.

Some PIs for IE, MS, and BI will become valid after the completion of IMC 2514 and transition of the cornerstones to the ROP. However, IE01 (Unplanned Scrams per 7,000 Critical Hours), IE03 (Unplanned Power Changes per 7,000 Critical Hours), and MS Performance Indicators (MSPI) related to Unit 2 specific equipment will not become valid until at least four (4) quarters after the cornerstone has been transitioned to the ROP. IE01 and IE03 measure the rate of IE over the total number of critical hours in the previous four quarters. In order to establish the necessary baseline of critical hours to prevent falsely inflating the data, these indicators will become valid after four full calendar quarters have passed following transition of the cornerstone. For example, if it is determined that the IE cornerstone for WBN Unit 2 is monitored in December 2015, the data for IE01 and IE03 in the subsequent four quarters of will be collected and reported, but the first quarter it will be used as an active input into the Action Matrix for assessment purposes would be 4th Quarter 2016 (data submitted in January 2017). Similarly, at least four quarters of data is needed to calculate meaningful results from the MSPI (MS06, MS07, MS08, MS09, and MS10). As such, the data for MSPI indicators that are not shared with WBN Unit 1 will not begin to be considered as valid inputs into the Action Matrix until a minimum of four quarters of information have been provided. Enclosure 2, "Performance Indicator Validity Summary Table," provides a summary for each PI. If, as the licensee approaches four quarters after either the IE or MS cornerstones become monitored, new information shows that a PI may still not provide accurate assessment value, the Frequently Asked Questions process will be utilized in accordance with NEI 99-02 to reach a conclusion on how to proceed.

Augmented Inspection for PIs

Due to the lack of valid historical WBN Unit 2 specific PI data for the IE01, IE03, and MSPI indicators, additional focused ROP baseline inspection samples will be necessary for these "invalid" PIs. Augmented inspections will be performed in accordance with the normal ROP baseline inspection procedures in order to compensate for the lack of valid PI data (until the PIs become valid). Inspections will also be conducted in the event of an Unplanned Scram, Unplanned Power Change, or equipment malfunction that affects MSPI data for Unit 2, if warranted. The total number of samples completed for an inspection procedure may exceed the maximum specified as a result of inspecting these occurrences. The purpose of these inspections is to provide a surrogate for the invalid PI data.

Disposition of Findings and Violations

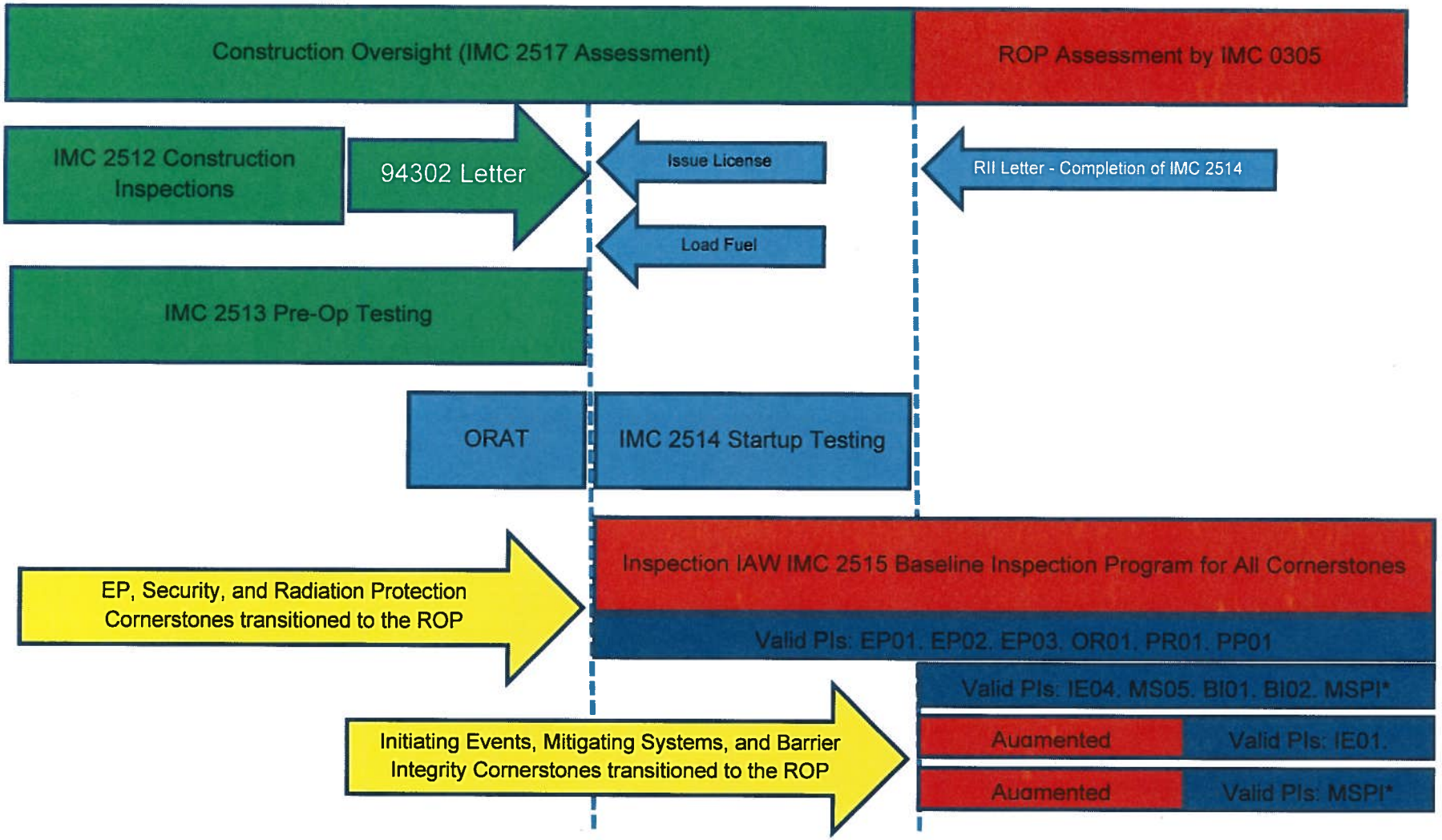
Once all cornerstones have transitioned to the ROP, the staff will fully implement IMC 0305 assessment process and place the licensee in the Action Matrix. Until then, disposition of findings will use the following scheme:

- For cornerstones that have transitioned to the ROP prior to full ROP implementation, the staff will use the IMC 0609 Significance Determination Process (SDP) to determine the significance of inspection findings. The significance determination will use the NRC's risk-informed decision-making process and consider any unique risk profile issues given the operational status and configuration of the plant. NRC staff will perform the appropriate

supplemental inspection based on that significance determination. If the supplemental inspection is conducted and the staff "closes" the finding, that issue will also be considered closed for future assessment purposes under the Action Matrix. However, if the supplemental inspection is not yet conducted or completed to close the issue, that issue will be considered as an Action Matrix input when transition to IMC 0305 occurs. For example, if there is a White inspection finding in the Radiation Protection cornerstone and the supplemental inspection has not been completed prior to full ROP implementation under IMC 0305, the WBN Unit 2 may enter the Action Matrix in the Regulatory Response column vice the Licensee Response column.

- For cornerstones that have not yet transitioned to the ROP, the staff will use traditional enforcement to disposition inspection findings and use IMC 0609 SDP to inform the severity level of the violation to the extent appropriate given the applicability of the SDP to the specific plant conditions. These traditional enforcement actions will not contribute to Action Matrix assessment following full transition to IMC 0305.

In all cases, the effective date of inspection findings and associated violations will proceed in a manner consistent with the existing approach outlined in IMC 0305, which is the last day of the scheduled on-site inspection period in which the issue was identified. The staff recognizes that some findings that may have occurred and were exited during the period prior to full transition to the ROP may not be documented until following full transition. These findings and violations will be treated using the assessment process outlined herein that was in effect at the time of inspection exit.



*MSPI for common or Unit 1 specific components will become effective immediately after IMC 2514 is completed. MSPI for Unit 2 specific components will become active after 4 Quarters

Performance Indicator Validity Summary Table

Performance Indicator	When PI becomes Valid*	Comments	Augmented Inspection
IE01: Unplanned Scrams per 7,000 Critical Hours	Four quarters after the cornerstone has been transitioned to the ROP.	This indicator measures the rate of unplanned scrams over the previous four quarters. The indicator value is the number of unplanned scrams while critical in the previous four quarters times the ratio of 7,000 hours to the total number of hours critical in the previous four quarters. For new plants, the indicator should become valid after four quarters once the IE cornerstone has been transitioned to the ROP.	Yes
IE03: Unplanned Power Changes per 7,000 Critical Hours	Four quarters after the cornerstone has been transitioned to the ROP.	This indicator measures the rate of unplanned power changes over the previous four quarters. The indicator value is the number of unplanned power changes in the previous four quarters times the ratio of 7,000 hours to the total number of hours critical in the previous four quarters. For new plants, the indicator should become valid after four quarters once the IE cornerstone has been transitioned to the ROP.	Yes.
IE04: Unplanned Scrams with Complications	The PI will be valid the quarter in which the reactor becomes critical after the IE cornerstone has been transitioned to the ROP.	This indicator measures the number of unplanned scrams with complications while the reactor was critical during the past four quarters. The indicator value is not dependent on the number of hours the reactor has been critical. For new plant start-ups, the PI should be valid the quarter in which the reactor becomes critical after the IE cornerstone has been transitioned to the ROP.	No
MS05: Safety System Functional Failures	The PI will be valid the first quarter in which 10 CFR 50.73, "Licensee Event Report System," becomes applicable after the MS cornerstone has been transitioned to the ROP.	This indicator monitors the number of events or conditions that prevented or could have prevented the fulfillment of the safety function of structures or systems in the previous four quarters. For a new plant, the PI should become valid the first quarter in which 10 CFR 50.73, "Licensee Event Report System," becomes applicable after the MS cornerstone has been transitioned to the ROP.	No
MS06, MS07, MS08, MS09, MS10: Mitigating Systems Performance Index (MSPI)	The sensitivity study performed by NEI and industry representatives shows that MSPI is very reactive when critical hours are low. NEI and industry representatives concluded that the indicator produces relatively normal values after 12 months of	The MSPI is the sum of the changes in a simplified core damage frequency evaluation resulting from differences in unavailability and unreliability relative to industry standard baseline values. The MSPI is supplemented with system component performance limits. An	Yes

Performance Indicator	When PI becomes Valid*	Comments	Augmented Inspection
	operation, however, site specific details may extend the amount of time needed to generate appropriate values. NRR staff is supportive of this position. MSPI will remain grayed out for a minimum of four quarters after the cornerstone has been transitioned to the ROP. The NRC and TVA will reach a decision on the exact number of quarters for each MSPI indicator via the PI Frequently Asked Questions (FAQ) process during ROP public meetings.	unavailability index (UAI), unreliability index (URI), and a determination as to whether a system exceeded its component performance limits are reported data elements. MSPI is a 12 quarter rolling index for currently operating plants. Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," currently does not provide guidance for determining MSPI validity during extended shutdowns, start-ups from extended shutdowns, or for new plant restarts. The UAI is dependent on the number of critical hours over a 12-quarter period. Both the UAI and URI consider the past 12 quarters of data.	
BI01: Reactor Coolant System (RCS) Specific Activity	For a new plant for which this PI is applicable, the PI becomes valid when the BI cornerstone has been transitioned to the ROP and the applicable modes for the RCS specific activity TS requirements are entered	This indicator monitors the maximum monthly RCS activity in accordance with Technical Specifications (TS) and is expressed as a percentage of the TS limit. The indicator is determined by multiplying 100 by the ratio of the maximum monthly value of calculated activity to the TS limit. The indicator is not dependent on the number of critical hours. A plant's TS specify the modes in which the specific activity shall be within limits.	No
BI02: Reactor Coolant System Leakage	For a new plant for which this PI will be applicable, the PI becomes valid when the BI cornerstone has been transitioned to the ROP and the applicable modes for the RCS leakage TS requirements are entered	This indicator monitors the maximum monthly RCS leakage in accordance with Technical Specifications (TS) and is expressed as a percentage of the TS limit. The indicator is determined by multiplying 100 by the ratio of the maximum monthly value of identified (or total) leakage to the TS limit. The indicator is not dependent on the number of critical hours. A plant's TS specify the modes in which the leakage shall be within limits.	No
EP01: Drill/Exercise Performance	For a new plant (for which the indicator will be applicable) at an existing site, the indicator will be valid the first quarter after the emergency preparedness cornerstone has been transitioned if the site has one emergency response organization (ERO) for all units.	This indicator monitors timely and accurate licensee performance in emergency preparedness (EP) drills, exercises, and actual events when presented with opportunities for classification of emergencies, notification of offsite authorities, and development of protective action recommendations (PARs). The indicator is calculated as a ratio (expressed as a percent) of the number of timely and accurate classifications, notifications, and PARs during the previous eight quarters to the total number of	No

Performance Indicator	When PI becomes Valid*	Comments	Augmented Inspection
		opportunities to perform these actions during the previous eight quarters. For a new plant at an existing site, the indicator should be valid the first quarter after the emergency preparedness cornerstone has been transitioned to the ROP without any grace period if the indicator is reported as a site-wide value rather than calculated separately per unit (i.e., the site has one emergency response organization (ERO) for all units).	
EP02: Emergency Response Organization (ERO) Drill Participation	For a new plant (for which the indicator will be applicable) at an existing site, the indicator will be valid the first quarter after the emergency preparedness cornerstone has been transitioned to the ROP if the site has one ERO for all units.	This indicator monitors the participation of ERO members assigned to fill key positions in EP performance-enhancing experiences. The indicator is calculated as a ratio (expressed as a percent) of the number of ERO members assigned to key positions that have participated in drills, exercises, or actual events during the previous eight quarters to the total number of key positions assigned to ERO members. For a new plant at an existing site, the indicator should be valid the first quarter after the emergency preparedness cornerstone has been transitioned to the ROP without any grace period if the indicator is reported as a site-wide value rather than calculated separately per unit (i.e., the site has one emergency response organization (ERO) for all units).	No
EP03: Alert and Notification System (ANS) Reliability	For a new plant (for which the indicator will be applicable) at an existing site, the indicator will be valid the first quarter after the emergency preparedness cornerstone has been transitioned to the ROP. The licensee should still report the data elements minus the overall indicator value beginning the first quarter after the emergency preparedness cornerstone has been transitioned for that unit and start reporting the overall indicator value for the fourth full ROP quarter.	This indicator monitors the reliability of the offsite ANS and is a percentage of the sirens that are capable of performing their safety function. The indicator is calculated as the ratio (expressed as a percentage) of the number of successful siren-tests in the previous four quarters to the total number of siren-tests in the previous four quarters. For a new plant at an existing site, the indicator should be valid the first quarter after the emergency preparedness cornerstone has been transitioned to the ROP without any grace period if the indicator is	No

Performance Indicator	When PI becomes Valid*	Comments	Augmented Inspection
		reported as a site-wide value rather than calculated separately per unit (i.e., the site has one emergency response organization (ERO) for all units).	
OR01: Occupational Exposure Control Effectiveness	For a new plant for which this PI will be applicable, this PI becomes valid the quarter that the occupational radiation safety cornerstone is transitioned to the ROP.	This indicator does not depend on the operational status of the plant (e.g., critical hours) and is intended to be valid during extended shutdowns and subsequent start-ups. For start-ups after extended shutdowns and for new plant start-ups, a total of four quarters after start-up would not need to elapse in order for the data to be valid; data can be valid prior to completing four quarters after start-up.	No
PR01: RETS/ODCM Radiological Effluent Occurrence	For a new plant for which this PI will be applicable, this PI becomes valid the quarter that the public radiation safety cornerstone is transitioned to the ROP.	This indicator calculates the number of RETS/ODCM radiological effluent occurrences (dose rates from liquid and gaseous effluents that exceed rates listed in NEI 99-02) per site in the previous four quarters. This indicator is independent of the operational status of the plant (e.g., critical hours) and is intended to be valid during extended shutdowns and subsequent start-ups. For new plant start-ups, a total of four quarters after start-up would not need to elapse in order for the data to be valid; data can be valid prior to completing four quarters after start-up.	No
PP01: Protected Area (PA) Security Equipment Performance Index	For a new plant for which this PI will be applicable, this PI becomes valid the quarter that the security cornerstone is transitioned to the ROP.	This indicator monitors the availability of security equipment. The PI value is the sum of two indices divided by two. The two indices are the number of compensatory hours (the hours a guard needs to be posted because of the unavailability of security equipment) in the previous four quarters divided by the product of a normalization factor and 8760 hours. This indicator is independent of the operating mode of the plant and is intended to be valid during extended shutdowns and subsequent start-ups. For new plant start-ups, a total of four quarters after start-up would not need to elapse in order for the data to be valid; data can be valid prior to completing four quarters after start-up.	No

* Source information for PI validity extracted from Draft document, "NRC Staff White Paper on Performance Indicator Validity during Extended Shutdown and Start-up Conditions," from Meeting Summary Handouts of the January 19, 2012 ROP Public Meeting, Enclosure 3. (ADAMS Accession No. ML12030A133).