

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

Objectives:

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

Transition Plan Discussion:

The overall approach for transitioning Watts Bar Nuclear (WBN) Unit 2 to the ROP will be in accordance with the guidance contained in Inspection Manual Chapter (IMC) 2517, "Watts Bar 2 Inspection Program." Construction inspection, assessment, and enforcement under IMC 2517 will apply to Watts Bar 2 throughout the implementation of the IMC 2512 (Construction), IMC 2513 (Preoperational Testing), and IMC 2514 (Startup Testing) inspection programs. The successful completion of these inspection programs will provide reasonable assurance that each cornerstone of safety is ready to be monitorable under the ROP. Oversight under IMC 2517 will extend until commercial operation begins. A graphical representation of the ROP transition 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 operating license 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 operating license (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. 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 be a phased approach on an individual cornerstone basis. Prior to the transition, Region II and NRR will meet to discuss any relevant open items or issues to ensure that each cornerstone is ready to be monitorable by the ROP. It is

expected that the Emergency Preparedness, Security, Occupational Radiation Protection, and Public Radiation Protection cornerstones will be transitioned to the ROP at the time the operating license is issued. Region II will transmit a letter to TVA to inform the licensee 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, enforcement, and assessment. These four cornerstones (Emergency Preparedness, Security, Occupational Radiation Protection, and Public Radiation Protection) involve site-wide functions and responsibilities that are already in place on Unit 1. With four of seven cornerstones transitioned to the ROP, a period of limited ROP oversight will exist between the time that a license is issued and when IMC 2514 is complete. Limited Oversight of the ROP is defined in IMC 2517 as the condition when some, but not all, of the cornerstones are being assessed by baseline inspections and Performance Indicators (PIs) or augmented inspections above the baseline in accordance with IMC 2515, "Light-Water Reactor Inspection Program – Operations Phase."

Once a cornerstone is being monitored using the ROP, IMC 0609, "Significance Determination Process (SDP)," will be utilized to characterize the significance of findings resulting from the routine inspection effort of IMC 2515 for that particular cornerstone. The regulatory response for findings resulting from such inspections for any of the transitioned cornerstones will be determined by Region II management. Typically the regulatory response will consist of a supplemental inspection at a level corresponding to the color of the finding. The ROP Action Matrix will not be utilized until ALL cornerstones have been transitioned to the ROP. Likewise IMC 0305, Operating Reactor Assessment Program, will not be used to assess Unit 2 performance until ALL cornerstones have been transitioned to the ROP. The PI data for these four cornerstones 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 the transition of the cornerstones and will be evaluated in accordance with IMC 0608, "Performance Indicator Program."

As discussed above, it is expected that four of seven cornerstones will be transitioned to the ROP at the time the operating license is issued. In addition, the IMC 2515 inspection program is implemented when an operating license is issued for a facility. Portions of the light-water reactor inspection program for the startup phase (IMC 2514) will be continuing in parallel. The light-water reactor inspection program for the preoperational testing and operational preparedness phase (IMC 2513) will have been completed when the operating license is issued. Upon receiving an operating license, Watts Bar will receive the full set of baseline inspections required for a two-unit site. Inspection findings identified during the course of IMC 2515 inspections may be characterized for significance using the SDP as described in IMC 0609, even for the cornerstones that have not been transitioned to the ROP. The regulatory response to safety-significant inspection findings or PIs would be determined by Region II management and may model responses contained in the ROP Action Matrix (i.e. Supplemental Inspection). The full implementation of regulatory actions contained in the ROP Action Matrix does not become effective until all cornerstones have been transitioned to the ROP.

The transition of the remaining three cornerstones, Mitigating Systems (MS), Barrier Integrity (BI), and Initiating Events (IE), will occur following completion of the IMC 2514 inspection program which corresponds to the completion of power ascension testing. This is the timeframe which TVA has described Unit 2 as entering commercial operation. Prior to the transition of the remaining three cornerstones, Region II and NRR will meet to discuss any

relevant open items or issues to ensure that each cornerstone is ready to be monitorable by the ROP. At this point, WBN will be transferred into full oversight of the ROP. Full oversight of the ROP is defined as the condition when all cornerstones are monitored by baseline inspection and either performance indicators (PIs) or augmented inspections above the baseline in accordance with IMC 2515. The regulatory response for findings resulting from such inspections will be in accordance with the Action Matrix in IMC 0305. Region II will transmit a letter to TVA to document the NRC's 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. The letter will also discuss the lack of PI data for specific cornerstones and the NRC's plan to perform augmented inspection as discussed below.

The transfer to full oversight of the ROP will occur while recognizing that all PIs will not be immediately valid at the time of transition and thus cannot provide a measurable indicator of plant performance. PI IE01 (Unplanned Scrams per 7,000 Critical Hours) and IE03 (Unplanned Power Changes per 7,000 Critical Hours) measure the rate of initiating events over a period of time. It was determined that these indicators will become valid after ~~2,400 critical hours~~ two full quarters of operation. For example, if WBN Unit 2 starts power operations halfway through a quarter, the PI will become valid after that half-quarter and the following two quarters are completed. Similarly, 12 months of operational data is needed to calculate meaningful results from the Mitigating Systems Performance Index (MSPI) PIs. Enclosure 2, "Performance Indicator Validity Summary Table," provides a summary for each PI. Data for the remaining PIs under these three cornerstones 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 the transition of the cornerstones.

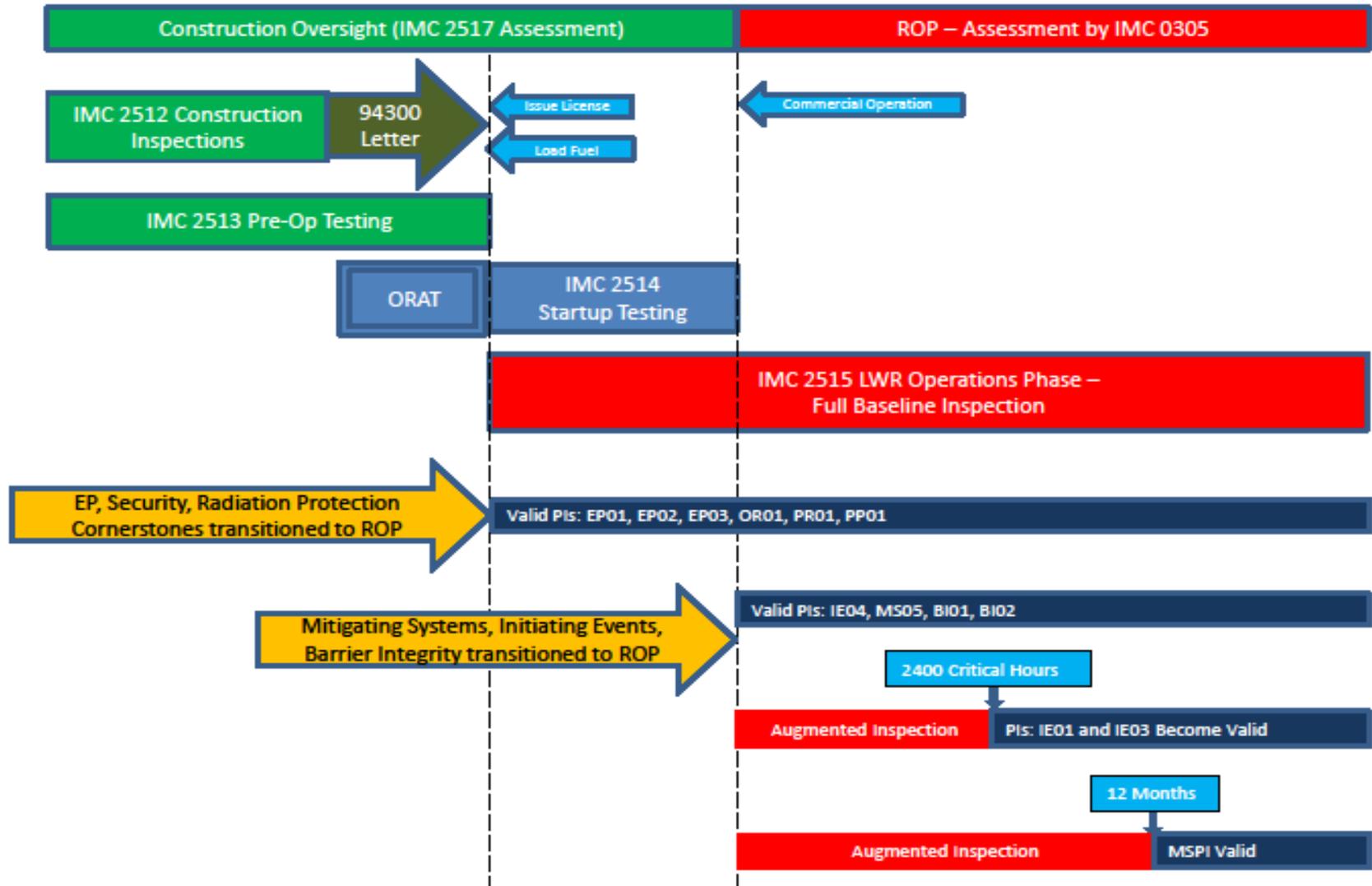
Due to the lack of valid historical WBN2 specific PI data for the IE and MS cornerstones, focused ROP baseline inspections will be necessary specifically for WBN2. These augmented inspections will be performed in accordance with the normal ROP baseline inspection procedures, in order to compensate for the lack of valid PI data for the IE and MS cornerstones until the PI becomes valid. Enclosure 3, "Augmented Inspection Plan," outlines the augmented inspection plan. Focused ROP baseline inspections of this nature are only meant as an interim substitute for the applicable PIs. They will be conducted, as necessary, until the NRC has determined that sufficient accurate PI data exists to enable NRC to determine objective conclusions about the performance of WBN Unit 2 in accordance with IMC 0305. In the meantime, even with these augmented inspections, it is expected that the applicant submit PI data for the two WBN Unit 2 cornerstones (IE and MS) in accordance with industry guidance.

Once WBN Unit 2 is transferred into full oversight of the ROP, all cornerstones described in IMC 2515 will utilize IMC 0609 to characterize the significance of findings resulting from the routine baseline inspection effort of IMC 2515. Likewise, IMC 0608 will be utilized to evaluate and process the PI data submitted for Watts Bar for the applicable cornerstones. Additionally, enforcement for any findings from NRC inspections should be administered in accordance with IMC 0609 and the Commission's current Enforcement Policy.

Enclosures:

1. Transition to ROP
2. Performance Indicator Validity Summary Table
3. Performance Indicator Augmented Inspection Plan for Watts Bar Nuclear Plant Unit 2

Transition to ROP



Performance Indicator Validity Summary Table

Performance Indicator (PI)	When PI becomes Valid*	Comments	Augmented Inspection
IE01: Unplanned Scrams per 7,000 Critical Hours	The indicator after two full quarters of operation once the initiating events cornerstone has been transitioned to the ROP.	<p>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.</p> <p>For new plants, the indicator should become valid after two full quarters of operation once the initiating events cornerstone has been transitioned to the ROP. 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.</p>	<p>71111.12 – 1 additional sample per quarter</p> <p>71111.13 – 1 additional sample per quarter</p> <p>71111.18 – 1 additional sample per quarter</p> <p>71152 – 1 additional sample per quarter</p>
IE03: Unplanned Power Changes per 7,000 Critical Hours	The indicator becomes valid after two full quarters of operation once the initiating events cornerstone has been transitioned to the ROP.	<p>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.</p> <p>For new plants, the indicator should become valid after two full quarters of operation once the initiating events cornerstone has been transitioned to the ROP. 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.</p>	Yes. See additional inspections listed for IE01 above that apply to the initiating events cornerstone.
IE04: Unplanned Scrams with Complications	The PI will be valid the quarter in which the reactor becomes critical after the initiating events 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 initiating events cornerstone has been transitioned to the ROP.	No

MS05: Safety System Functional Failures	<p>The PI will be valid the first quarter in which 10 CFR 50.73, "Licensee Event Report System," becomes applicable after the mitigating systems cornerstone has been transitioned to the ROP.</p>	<p>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 mitigating systems cornerstone has been transitioned to the ROP.</p>	<p>No</p>
MS06, MS07, MS08, MS09, MS10: Mitigating Systems Performance Index (MSPI)	<p>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 operation.. NRR staff is supportive of this position.</p> <p>MSPI will remain grayed out until 12 months of operation have accumulated after the mitigating systems cornerstone has been transitioned to the ROP.</p>	<p>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 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.</p>	<p>71111.04Q – 1 additional sample per quarter</p> <p>71111.04S – 1 additional sample every 6 months</p> <p>71111.12 – 1 additional sample per quarter</p> <p>71111.13 – 1 additional sample per quarter</p> <p>71111.19 – 1 additional sample per quarter</p> <p>71111.22– 1 additional sample per quarter</p> <p>71152 – 1 additional sample per quarter</p>
BI01: Reactor Coolant System (RCS) Specific Activity	<p>For a new plant for which this PI is applicable, the PI becomes valid when the barrier integrity cornerstone has been transitioned to the ROP and the applicable modes for the RCS specific activity TS requirements are entered</p>	<p>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.</p>	<p>No</p>
BI02: Reactor Coolant System Leakage	<p>For a new plant for which this PI will be applicable, the PI becomes valid when the barrier integrity</p>	<p>This indicator monitors the maximum monthly RCS leakage in accordance with Technical Specifications (TS)</p>	<p>No</p>

	<p>cornerstone has been transitioned to the ROP and the applicable modes for the RCS leakage TS requirements are entered</p>	<p>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.</p>	
<p>EP01: Drill/Exercise Performance</p>	<p>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.</p>	<p>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 opportunities to perform these actions during the previous eight quarters.</p> <p>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).</p>	<p>No</p>
<p>EP02: Emergency Response Organization (ERO) Drill Participation</p>	<p>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.</p>	<p>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.</p> <p>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</p>	<p>No</p>

		(i.e., the site has one emergency response organization (ERO) for all units).	
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.	<p>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.</p> <p>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).</p>	No
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	No

		<p>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.</p>	
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* 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)

DRAFT

PERFORMANCE INDICATOR AUGMENTED INSPECTION PLAN
FOR WATTS BAR NUCLEAR PLANT, UNIT 2

Inspection Objectives

The objective of this inspection is to obtain sufficient insights on licensee performance in the absence of meaningful Performance Indicator (PI) data once Unit 2 has been transferred to full oversight by the Reactor Oversight Program (ROP). Additional IMC 2515 inspections will be required to supplement the planned baseline inspections in order to compensate for the lack of valid PI data. This ROP Augmented Inspection Plan only addresses the three performance indicators that will not be immediately valid when their respective cornerstones are transferred to ROP oversight.

Inspection Dates

TBD

Exit Meetings

Results will be discussed during resident inspector routine exit meetings following the completion of each inspection period.

Applicable Inspection Procedures

Inspection procedures are listed in attached plan.

INSPECTION PLAN DETAILS

I. Inspectors

Watts Bar Unit 1 and 2 resident inspectors and regional assistance as needed.

II. Inspection Objectives

The objective of this inspection is to conduct additional ROP baseline inspection samples to compensate for the lack of performance indicators that are not valid while transitioning to operation yet were intended to provide independent oversight of licensee effectiveness, and early warning of potential performance issues that could result in crossing thresholds in the action matrix.

III. Inspection Plan

The augmented inspection samples and hours implemented for each inspection period are described below. These inspection samples are in addition to the minimum ROP baseline inspection program for a two-unit site.

A. Initiating Events (IE) Cornerstone

This cornerstone has the following PIs:

- Unplanned Scrams per 7000 Critical Hours
- Unplanned Power Changes per 7000 Critical Hours
- Unplanned Scrams with Complications

According to IMC 2515, "Light-Water Reactor Inspection Program-Operations Phase," Appendix A, "Risk-Informed Baseline Inspection Program," Attachment 2, "Cornerstone Charts," the key attributes that impact these PIs are Design (modifications); Human Performance (human error); Procedure Quality (maintenance, testing and operations); and, Equipment Performance (availability and reliability). Until meaningful data is obtained for each of the associated IE PIs, the following additional inspection activities will be performed:

- Maintenance Effectiveness (71111.12): **One sample per quarter**, of those systems, structures and components (SSCs) problems that significantly impacted the overall plant level performance criteria (i.e., Unplanned Scrams, Unplanned Capability Loss, and Unplanned Reportable Safety System Actuations).
- Plant Modifications (71111.18): **One sample per quarter as available**, to evaluate on-line temporary and/or permanent modifications that could affect overall unit reliability.
- Maintenance Risk and Emergent Work(71111.13): **One sample per quarter** of a critical evolution or generation risk activity.
- Problem Identification and Resolution (71152): **One sample per quarter**, of a significant human performance and/or procedure quality event/issue that directly impacted unit reliability, or constituted a near miss.

B. Mitigating System (MS) Cornerstone

This cornerstone is comprised of the Safety System Functional Failures (SSFF) PI, and the Mitigating Systems Performance Index (MSPI) PIs for the following systems:

- Emergency AC Power System - Emergency Diesel Generator (EDG)
- High Pressure Injection System - High Pressure Injection (HPI)
- Heat Removal System – Auxiliary Feedwater (AFW)
- Residual Heat Removal System - Residual Heat Removal (RHR)
- Cooling Water System – Emergency Raw Cooling Water (ERCW) and Component Cooling Water (CCS)

Key attributes that impact these performance indicators are Human Performance (pre-event); Procedure Quality (maintenance and testing); Configuration Control at power (equipment lineup); and Equipment Performance (availability). Until meaningful data is obtained for the SSFF PI and each of the MSPI PIs, the following additional inspection activities will be performed:

- Equipment Alignment (71111.04S): **One detailed equipment walkdown sample every six months** of an MSPI system.
- Equipment Alignment (71111.04Q): **One simple equipment walkdown every quarter of at least one subsystem or train of each MSPI system**. This would effectively amount to as many as **five additional samples** per quarter.
- Problem Identification and Resolution (71152): **One sample per quarter as available**, of a significant human performance error that affected configuration control and/or availability of the MSPI systems.
- Surveillance Testing (71111.22): **One sample per quarter** of a surveillance test associated with one of the MSPI systems.
- Post Maintenance Testing (71111.19): **One sample per quarter as available** of a PMT associated with one of the MSPI systems.
- Maintenance Effectiveness (71111.12): **One sample per quarter** of a safety system maintenance rule functional failure.
- Maintenance Risk and Emergent Work (71111.13): **One sample per quarter** of online maintenance or emergent work that involves an MSPI system.

IV. Issues and Findings

Issues will be evaluated using the Significance Determination Process (SDP), as outlined in IMC 0609. Inspectors will screen all findings using IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening". Green findings will be documented in the inspection report. Any finding which cannot be determined to be Green will require a Significance Enforcement Review Panel (SERP). Findings that appear to be "greater than green" will be immediately discussed with the Branch Chief, the licensee and the senior reactor analyst, to ensure that WBN PRA information is correctly considered. Enforcement action for green or non-SDP issues will be handled in accordance with the current revision of the Enforcement Policy, Enforcement Manual, and any applicable Enforcement Guidance Memoranda. Minor violations, as defined by the enforcement policy, do not need to be reviewed using the SDP process.

V. Documentation

All findings and observations which meet the IMC 0612 criteria for inclusion in the integrated inspection report will be documented accordingly, and will be used to assess licensee performance in accordance with IMC 0305, "Operating Reactor Assessment Program," in lieu of PIs.

IV. Summary

The increase in samples and inspection hours per quarter, above and beyond what the ROP baseline inspection program requires, is as follows:

- Two Maintenance Effectiveness samples at approximately 12 inspection hours per sample, for about 24 hours per quarter.
- Two Problem Identification and Resolution samples at approximately 14 inspection hours per sample, for about 28 hours per quarter.
- One Equipment Alignment [full system] sample every six months at approximately 12 inspection hours per sample, for about six hours per quarter.
- Five Equipment Alignment [partial] samples at approximately four hours per sample, for about 20 hours per quarter.
- One Surveillance Testing sample at approximately five inspection hours per sample, for about five hours per quarter.
- One Post Maintenance Testing samples at approximately four inspection hours per sample, for about four hours per quarter.
- Two online Maintenance Risk Assessment samples at approximately four hours sample, for about eight hours per quarter.
- One Temporary and/or Permanent Plant Modification sample as available, at approximately six hours sample, for about six hours per quarter.

Based upon the breakdown listed above, it would take about 115 additional inspection hours per quarter to effectively implement the aforementioned augmented inspection plan. Considering the associated baseline inspection preparation and documentation that would be required, total additional inspector hours would amount to about 180 hours per quarter assuming no significant findings are identified.