
INSPECTION PROCEDURE 71151

PERFORMANCE INDICATOR VERIFICATION

PROGRAM APPLICABILITY: 2515

CORNERSTONES: All

71151-01 INSPECTION OBJECTIVE

01.01 To perform a periodic review of performance indicator (PI) data to determine its accuracy and completeness.

71151-02 INSPECTION REQUIREMENTS

02.01 Annual Inspections

Each performance indicator for every unit will be verified once a year. The performance indicator verifications will be planned inspections during which either the resident or regional inspector will review a sample of plant records and data against the reported performance indicators. In addition to the review of various plant records, the inspector may also, where applicable and as needed, observe the plant activity that generates a PI data input. These observations are performed as part of the various inspectable areas within the cornerstone inspection procedures.

Performance indicators for the Initiating Events, Mitigating Systems, and Barrier Integrity Cornerstones will be verified by the resident inspectors. The resident inspectors should verify 2 or 3 indicators per unit each calendar quarter, such that every indicator is reviewed annually. Review of licensee self assessments shall not be substituted for independent inspector verification of indicators.

Performance indicators for the Emergency Preparedness, Occupational Radiation Safety, Public Radiation Safety, and Security Cornerstones will be verified once annually, usually during a site visit by the regional specialist inspector, but may be any calendar quarter and will be planned during the annual planning meeting.

Verify PIs using the following instructions:

- a. Review data reported to the NRC since the last verification inspection was performed. Annual inspection intervals should not exceed 15 months. Review latest approved frequently asked questions (FAQs) on the web for guidance clarification.
- b. Select a sample of plant records and data to review and compare to the reported data. Use Table 1 as guidance on data sources for each PI.
- c. When conducting the first PI verification inspection at a site, for a new PI, using this procedure, the inspector shall verify the accuracy of all reported data that is used to calculate the value of each PI. Subsequent inspections only require verifying additional data reported since the last PI verification inspection was performed. Credit may be given for completion of a temporary instruction (TI), as appropriate.
- d. Review the licensee's corrective action program records to determine if any problems with the collection of PI data have occurred and if resolution was satisfactory. Determine if PI data was corrected or updated as a result of any data collection problems.
- e. As necessary and when possible, observe the plant activity that generates the PI data input using the most applicable inspectable area procedure.
- f. When conducting PI verifications, be alert to situations whereby the licensee takes action to simply avoid a PI count.

02.02 PI Verifications During Plant Tours

Resident inspectors, because they are required to be in the plant on a daily basis, will with minimum effort periodically verify certain aspects of the Occupational Exposure Control Effectiveness and the RETS/ODCM Radiological Effluent Occurrence indicators during their plant tours.

- a. During plant tours, resident inspectors should periodically determine if high radiation (>1R/hr) areas are properly secured. Determine if any noted deficiencies with control of high radiation (>1R/hr) areas provide an input to the Occupational Exposure Control Effectiveness performance indicator. Ensure the licensee enters any deficiencies into the corrective action program and appropriately documents the occurrence of a PI data input.
- b. During plant tours, note any potentially unmonitored release pathways. Determine if they affect the RETS/ODCM Radiological Effluent Occurrence performance indicator. Ensure the licensee enters any deficiencies into the corrective action program and appropriately documents the occurrence of a PI data input.
- c. When assessing PIs under 02.02a and 02.02b, if the inspector identifies an error that, upon correction by the licensee, resulted in the licensee crossing a PI

threshold, the issue needs to be documented in accordance with Inspection Manual Chapter (IMC) 0612 "Power Reactor Inspection Reports."

02.03 Inspection Results and Documentation

- a. If no discrepancies with the performance indicator are found, the inspector should document the PI verification inspection results in the inspection report. The inspector should include which PI was verified, the time period involved, the records reviewed, and state that no problems with the PI accuracy or completeness were found.
- b. If minor discrepancies with the performance indicator are found, the inspector should discuss the results with the licensee, verify that the licensee submits a correction to the reported PI data if necessary, and verify that the licensee enters the discrepancies into the corrective action program.
- c. When a discrepancy (minor or major) results in a difference in interpretation of the PI guidance, NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," between the licensee and the inspector, an ROP feedback form shall be filled out and sent to IPAB (e-mail-PIPBCAL). If the staff and licensee disagree after guidance is provided on the feedback form, the inspector should request the licensee submit a frequently asked question to the ROP Working Group for guidance clarification.
- d. If major discrepancies with the performance indicator are found, the inspector should verify that the PI has been updated and the problem has been entered into the corrective action program, and document the finding in the inspection report in accordance with IMC 0612. These findings should be discussed with the licensee. If the major discrepancy has not been addressed or if the PI data has not been corrected by the licensee, the inspector should review IP 71150, "Discrepant or Unreported Performance Indicator Data" to check if entry conditions have been met. PI discrepancies are major when they may affect NRC response in accordance with the Action Matrix because correction of the discrepancy results in a PI performance threshold being exceeded.
- e. When assessing PIs, if the inspector identifies an error that, upon correction by the licensee, resulted in the licensee crossing a PI threshold, the issue needs to be documented in accordance with Inspection Manual Chapter (IMC) 0612 "Power Reactor Inspection Reports."
- f. If no new performance indicator data have been collected since the last verification inspection (e.g., no new siren tests) the inspector should verify that none was required, and document the lack of new data in the inspection report.
- g. Examples of unintended consequences shall be documented on an ROP feedback form. An example is provided in Section 03.01f. It should also be captured in the inspection report using the guidelines of IMC 0612, only if the occurrence could cause a PI to cross a threshold.

General Guidance

The general approach to PI verification is to confirm the accuracy and completeness of performance indicator data by comparison to confirmatory plant records and data available in plant operating logs, etc. Inspectors should refer to NEI 99-02 for more in-depth definitions and descriptions of PI inputs. Table 1 lists the data elements to be reported for each performance indicator and provides guidance to the inspector on possible sources of plant records and data to review.

Inspectors should use judgment regarding the selection of the data sample to review. PI verification is intended to be selective sampling in order to verify the accuracy and completeness of the reported data. Inspectors should not attempt to verify all indicator inputs.

For some performance indicators, it may be appropriate to observe the collection of performance indicator data during the inspection, to ensure that data collection techniques will produce accurate results and therefore accurate PI data. These observations are performed in conjunction with other inspectable area procedures. Listed below are several examples of using the inspectable area procedures in conjunction with the PI verification.

- During the verification inspection of the Mitigating Systems Performance Index (MSPI), the inspector may also use the maintenance work prioritization and control inspectable area to assess the hours that the monitored trains were unavailable due to planned or unplanned maintenance. For assessing unavailability of the cooling water support system, the inspector should be familiar with how the licensee's probabilistic risk assessment (PRA) models the risk-important functions. The way the plant PRA models these functions will aid in the determination of train functionality and availability. Further guidance may be found in NEI 99-02, "Performance Indicator Guidelines," Appendices F and G.
- During the planned verification inspection of RCS specific activity, the inspector may observe chemistry sampling and analysis using the surveillance testing inspectable area.
- During the planned verification inspection of ANS reliability, the inspector may observe siren testing under the alert and notification system availability inspectable area.

Additionally, resident inspectors will perform minimal effort, periodic PI verification inspections of the Occupational Exposure Control Effectiveness and the RETS/ODCM Radiological Effluent Occurrence indicators during Plant Status Reviews.

If the inspector finds that a performance indicator threshold has been exceeded, the inspector should notify regional management to determine if further action is required. Refer to guidance on the Plant Performance Assessment Process for possible actions to

be taken if a performance indicator threshold is exceeded or if the performance indicator verification identifies major discrepancies with the reported indicator.

Specific Guidance

03.01 Annual Inspections.

- a. NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," instructs licensee's that data or reporting errors need only be corrected if the errors affect the current computed value of any reported indicator.

Each indicator is listed below with a brief definition from NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," and guidance on the verification of the data. Additional clarification of the PI definitions and examples are provided in the NEI 99-02. Table 1 provides additional verification guidance by listing the reported elements of each PI and suggesting records for the inspector to review.

1. Unplanned Scrams per 7000 Critical Hours

Definition: The number of unplanned scrams during the previous four quarters, both manual and automatic, while critical per 7000 hours of critical operation.

Verification: Review licensee event reports to determine the number of scrams that occurred. Compare the number of scrams reported in LERs to the number reported as a performance indicator. Use the Performance Indicator definitions provided in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline." As necessary, review monthly operating reports or operating logs to determine the accuracy of the number of critical hours if the accuracy could affect the indicator value with respect to a threshold.

Inspection of operator and equipment performance in response to a scram is covered by Event Follow-up and Nonroutine Plant Evolutions and is not covered by this procedure.

2. Unplanned Scrams With Complications

Definition: The number of unplanned scrams while critical, both manual and automatic, during the previous 4 quarters that require additional operator actions as determined by the flow chart in NEI 99-02.

Verification: Perform verification at the same time as the Unplanned Scrams per 7000 Critical Hours. Review licensee's basis for including or excluding each scram in the Unplanned Scrams With Complications PI.

Inspection of operator and equipment performance in response to a scram is covered by Event Follow-up and Nonroutine Plant Evolutions and is not covered by this procedure.

3. Unplanned Transients per 7000 Critical Hours

Definition: The number of unplanned changes and fluctuations in reactor power of greater than 20 percent per 7000 hours of critical operation.

Verification: Review operating logs, corrective action program records, and monthly operating reports to determine the accuracy and completeness of reported transients.

4. Mitigating Systems Performance Index (MSPI)

Definition: MSPI reflects the composite averaged performance of important components and trains within a monitored system over a rolling 12-quarter period. Licensees report an unavailability index (UAI) number and an unreliability index (URI) for each of the five monitored systems. These inputs are combined to arrive at a total MSPI index value for the system. The value is expressed in terms of core damage frequency CDF_{index} and uses risk-based performance thresholds of $1E-6$, $1E-5$, and $1E-4 CDF_{index}$.

The PI is calculated separately for each of the following five systems for each reactor type:

Pressurized Water Reactors

- high pressure safety injection system
- auxiliary feedwater system
- emergency AC power system
- residual heat removal system
- support cooling water system

Boiling Water Reactors

- high pressure coolant injection systems (high pressure coolant injection, high pressure core spray, feedwater coolant injection)
- heat removal system (reactor core isolation cooling, isolation condenser)
- emergency AC power system
- residual heat removal system
- support cooling water system

Verification: Once per year, review all the MSPI systems. The inspector should review train/system unavailability data, Consolidated Data Entry MSPI Derivation Reports for UAI and URI, monitored component demands, and demand failure data. The inspector should also review any MSPI component risk coefficient (i.e., Fussell-Vesely or Birnbaum value) that has changed since the last review by more than 25 percent of its value. NEI 99-02 requires licensees to report any change to these coefficients and note the change in

the PI data comment field with their quarterly PI data submittal. Additionally, if estimates were used, an update to the estimated component demands in the MSPI basis document is required if a change to the basis for the estimated demands results in a greater than 25 percent change for the component of concern. The inspector should ensure that the licensee notified the NRC in accordance with the guidance contained in NEI 99-02, by placing a comment in the PI data comment field upon submittal of the quarterly PI data.

The inspector shall review out-of-service logs, operating logs, and the maintenance rule database to determine the accuracy and completeness of the reported unavailability data. In addition to review of records, the inspector should, in conjunction with inspections in other inspectable areas, verify planned and unplanned unavailable hours for the system under review. Related inspectable areas under which inspectors can review unavailability determinations include equipment alignment, emergent work, maintenance rule implementation, and maintenance work prioritization and control. Note that unavailability data and demand failures are accounted for in the MSPI Derivation Reports. If the unavailability and failure data are not captured in these reports, then it did not get reflected into MSPI. Also, a maintenance rule preventable functional failure does not necessarily mean the monitored train was unavailable for MSPI. The guidance for functional failures under the maintenance rule and MSPI are different. Inspectors should be familiar with the MSPI meaning of a start demand and a demand failure as described in NEI 99-02 Section F. Invalid demands do not have to be included or counted in MSPI. Additionally, failures that occur independent of the post maintenance test (PMT) need to be counted in URI. Independent, for purposes of the indicator, mean the failure occurs outside of the scope of the maintenance being performed.

For the selected systems, based on a review of related maintenance and test history, the inspector will confirm the accuracy of the demand failure data (demand failures, run/load failure, and failures to meet the risk-significant mission time, as applicable) for the identified active components for the most recent 12 quarters. The inspector will confirm that valid demands and valid failures on demand for monitored at-power functions that occurred while the reactor was shutdown are included in MSPI.

The inspector should review instances where degrading equipment was taken out of service. The equipment should have been capable of performing its function for the required mission time up to the point when it was removed from service. If not, the unavailability time, after the point of discovery and for the repair of the component, should be logged as unplanned unavailability. In addition, the licensee shall record a failure and assess whether additional unavailability time is warranted. The failure should be one of the types listed in NEI 99-02 Appendix F, Section F 2.2.2. There are some guidance issues regarding when to take fault exposure hours versus unplanned unavailability; these issues hinge on when the licensee discovered the condition, which may be significantly different from when the

operability assessment was performed. These concerns are being resolved through the FAQ process. In the interim, Inspection Procedure 71111.15, "Operability Evaluations" may provide some guidance, or contact the regional or headquarters MSPI or PI representative.

The inspector should review any changes to the success criteria or risk-significant function for any monitored component to ensure that the change was appropriate. Any findings or concerns should be coordinated with a senior risk analyst.

5. Safety System Functional Failures (SSFF)

Definition: The number of events or conditions in the previous four quarters that have been reported in licensee event reports, maintenance rule records, and maintenance work orders that prevented, or could have prevented, the fulfillment of a safety function. The following functions are monitored:

Reactor and Primary Coolant Integrity
Emergency Core Cooling
High Pressure Heat Removal
Residual Heat Removal
Emergency Boration
Primary System Safety and Relief
Main Steam Isolation
Containment Integrity
Reactor Protection
Accident Monitoring
Emergency AC and DC Power
Equipment Cooling
Essential Compressed Gas
Control Room Emergency Ventilation
Spent Fuel

Verification: Review licensee event reports and determine if any SSFFs occurred. Compare to number of SSFFs reported in that period by the performance indicator. Guidance on reporting of safety system functional failures is located in:

- NUREG-1022, "Event Reporting Guidelines 10 CFR 50.72 and 50.73."

Guidance to aid in determination of when systems are operable can be found in:

- Inspection Procedure 71111.15 "Operability Determinations,"
- NRC Regulatory Issue Summary 2005-20, "Revision to Guidance Formerly Contained in NRC Generic Letter 91-18, 'Information to Licensees Regarding Two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and on Operability,'" and
- Inspection Manual Part 9900, "Operable/Operability - Ensuring the Function Capability of a System or Component"

6. RCS Specific Activity

Definition: The maximum RCS activity in microCuries per gram dose equivalent iodine-131 per the technical specifications, and expressed as a percentage of the technical specification limit.

Verification: Review RCS chemistry sample analyses for maximum dose equivalent Iodine-131 and verify that the percent of TS limit is the same or lower than the maximum value reported by the licensee for the applicable month. In addition to record reviews, in accordance with the surveillance testing inspectable area, observe a chemistry technician obtain and analyze an RCS sample.

7. RCS Leak Rate

Definition: The maximum RCS identified leakage in gallons per minute each month per the technical specifications and expressed as a percentage of the technical specification limit.

Verification: Review operating logs or other licensee records of daily measurements of RCS identified leakage and compare to the data reported by the performance indicator. In addition to record reviews, observe the surveillance activity that determines RCS identified leakage rate in conjunction with the Surveillance Testing inspectable area.

8. Emergency Response Organization Drill/Exercise Performance (DEP)

Definition: The percentage of all drill and exercise opportunities that were performed timely and accurately during the previous 8 quarters.

Verification: Review the reported PI data. Review actual emergency plan implementation events and evaluated exercise scenarios and a sample of drill and training evolution scenarios to verify the number of opportunities to classify, notify and develop protective action recommendations (PARs). Review licensee critiques for identification of failure to classify, notify or develop PARs in a timely and accurate manner. Review a sample of documentation forms for classification, notification, and PAR activities to verify accuracy. If the sample verifies accuracy accept critique findings for the bulk of the PI data. It may be noted that, the resident and regional inspectors will periodically observe exercises, drills, and training evolutions under the Drill and Exercise inspectable area to verify licensee identification of timely and accurate performance. Inspection reports documenting these observations should also discuss the PI verification aspects of the inspection.

9. Emergency Response Organization Readiness (ERO)

Definition: The percentage of key ERO members that have participated in a drill, exercise, or actual event during the previous eight quarters, as measured on the last calendar day of the quarter.

Verification: Review the reported PI data. Verify that all members of the ERO in the key positions identified have been counted. Determine the licensee basis for reporting the percent of members who have participated. Review drill attendance records and verify a sampling of those reported as participating.

10. Alert and Notification System Reliability (ANS)

Definition: The percentage of ANS sirens that are capable of performing their function, as measured by periodic siren testing in the previous 12 months.

Verification: Review siren test records for the previous reporting period. Review the number of failures documented against the reported PI value. Observe siren testing in accordance with the Alert and Notification System Reliability inspectable area.

11. Occupational Exposure Control Effectiveness

Definition: The performance indicator is the sum of the following occurrences during the previous 4 quarters:

Technical specification high radiation area occurrences
Very high radiation area occurrences
Unintended exposure occurrences

Verification: Review corrective action program records for high radiation area, very high radiation area, and unplanned exposure occurrences for the past 4 quarters. Ensure ≥ 1 R/hr HRA Technical Specification or 10CFR20 non-conformances were properly classified as PIs. During plant status reviews, verify that locked and very high radiation areas are maintained locked.

Review radiologically controlled area (RCA) exit transactions with exposures greater than 100 mrem and investigate a sample (10 or more) to determine whether they were within RWP. Verify that those greater than 100 mrem unplanned exposure were entered in the corrective action program and listed as a PI.

12. RETS/ODCM Radiological Effluent Occurrences

Definition: Radiological effluent release occurrences per reactor unit that exceed the values listed below. The total number of process effluent radiological occurrences in the previous 4 quarters.

Liquid Effluents	Whole Body	1.5 mrem/qtr
	Organ	5.0 mrem/qtr
Gaseous Effluents	Gamma Dose	5.0 mrads/qtr
	Beta Dose	10.0 mrads/qtr
	Organ Doses	7.5 mrads/qtr

Verification: Review licensee's corrective action program records for liquid or gaseous effluent releases that were reported to the NRC. Licensee Event Reports and annual release reports may also be used. For the past four quarters, ensure that all were counted as PIs. During plant status reviews, screen plant incidents involving leaking pipes involving radioactive liquids or gases that are not bounded by plant collection systems and could be a potential unmonitored release path. Inspections in the gaseous and liquid effluent treatment systems inspectable area will be used to observe the calibration of equipment used in this program.

13. Security Performance Indicators

The objective of the Security Cornerstone is to provide assurance that a licensee's security system and material control and accounting program use a defense-in-depth approach and can protect against (1) the design basis threat of radiological sabotage from external and internal threats, and (2) the theft or loss of radiological materials.

Although the NRC is actively overseeing the Security Cornerstone, the Commission has decided that the related performance indicator, inspection, and assessment information will not be publically available to ensure that potentially useful information is not provided to a possible adversary.

- b. It is expected that licensees will make reasonable, good faith efforts to comply with the guidance in NEI 99-02. This includes taking appropriate and timely action to identify and report performance issues captured by the indicators. It may be necessary for inspectors to exercise some judgement on the adequacy of licensee actions to make a reasonable, good faith effort to comply with the guidance.
- c. No guidance.
- d. No guidance.
- e. No guidance.

- f. Be alert to instances whereby the licensee changes normal or routine practices or behavior in an effort to avoid a PI count. An example is when the licensee delays performing a power reduction for 72 hours, the period between discovery of an off-normal condition and the corresponding change in power level, to avoid the count against the unplanned power change per 7,000 critical hours PI. Inspect and document per guidance in 02.01f and 02.03g.

03.02 PI Verification During Plant Tours

- a. No guidance.
- b. No guidance.
- c. No guidance.

03.03 Inspection Results and Documentation

- a. No guidance.
- b. Minor discrepancies are problems with accuracy or completeness that would have affected the reported PI data but would not have resulted in increased agency attention (i.e., correction does not result in the indicator crossing a threshold). Minor discrepancies should not be documented; however, if not corrected, the cumulative effect of these discrepancies could potentially lead to crossing a threshold - it should be documented.
- c. No guidance.
- d. Major discrepancies are problems with accuracy or completeness that may have affected agency response because a performance indicator threshold would have been exceeded. NRC will take actions in accordance with IMC 0305, "Operating Reactor Assessment Program" and the NRC Action Matrix.
- e. No guidance.
- f. No guidance.
- g. No guidance.

71151-04 LEVEL OF EFFORT AND RESOURCE ESTIMATE

This procedure is to be implemented annually. The effort to complete all annual PI verifications is estimated to be:

Units per Site	One	Two	Three
Hours per Year	40 to 55	60 to 75	65 to 75

71151-05 PROCEDURE COMPLETION

Inspection of the minimum sample size will constitute completion of this procedure in the Reactor Programs System (RPS). That minimum sample size consists of the samples defined as follows for single-, dual-, and triple-unit sites, respectively:

<u>Performance Indicator</u>	<u>Number of Samples</u>		
	<u>single-unit</u>	<u>dual-unit</u>	<u>triple-unit</u>
Initiating Events PI			
Unplanned Scrams	1	2	3
Unplanned Scrams with Complications	1	2	3
Unplanned Power Changes	1	2	3
Mitigating Systems PI			
AC Power System	1	2	3
HPIS	1	2	3
HR System	1	2	3
RHR System	1	2	3
Support Cooling System	1	2	3
SSFF	1	2	3
Barrier Integrity PI			
RCS Specific Activity	1	2	3
RCS Leakage	1	2	3
Emergency Planning PI			
Drill/Exercise Performance	1	1	1
ERO Drill Participation	1	1	1
Alert and Notification System	1	1	1
Occupational Rad Protection PI			
Occupational Exp Control Effectiveness	1	1	1
Public Rad Protection PI			
RETS/ODCM Rad Effluent	1	1	1
Security	See the Reactor Programs System (RPS) for specific security sample size information.		

71151-06 REFERENCES

Web-site for FAQs: <http://nrr10.nrc.gov/rop-digital-city/index.html>

Web site for NEI 99-02, "Regulatory Assessment Performance Guideline" latest revision, as well as another link to FAQs: <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html>

NUREG-1022, "Event Reporting Guidelines 10 CFR 50.72 and 50.73,"
<http://nrr10.nrc.gov/rop-digital-city/index.html>

Inspection Procedure 71111.15 "Operability Determinations," <http://nrr10.nrc.gov/rop-digital-city/index.html>

NRC Regulatory Issue Summary 2005-20, "Revision to Guidance Formerly Contained in NRC Generic Letter 91-18, 'Information to Licensees Regarding Two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and on Operability,'"

Inspection Manual Part 9900, "Operable/Operability - Ensuring the Function Capability of a System or Component," <http://nrr10.nrc.gov/rop-digital-city/index.html>

END

Attachments: Table 1: Performance Indicator Verification Inspection Guidance
Table 2: Revision History

Table 1

Performance Indicator Verification Inspection Guidance

PERFORMANCE INDICATOR	DATA ELEMENTS TO BE VERIFIED	RECORDS TO REVIEW/ RELATED INSPECTIONS
Unplanned scrams/7000 critical hours	number of scrams	licensee event reports, monthly operating reports, operating logs, inspection reports
Unplanned Scrams with Complications	number of unplanned scrams with complications number of critical hours	licensee event reports, monthly operating reports, operating logs, inspection reports
Unplanned Power Changes/7000 critical hours	number of unplanned power changes number of critical hours	monthly operating reports operating logs corrective action program documents, maintenance rule records, inspection reports

PERFORMANCE INDICATOR	DATA ELEMENTS TO BE VERIFIED	RECORDS TO REVIEW/ RELATED INSPECTIONS
Mitigating Systems Performance Index	planned unavailable hours unplanned unavailable hours valid demands valid demand failures (start, run, run/load) hours system required to be available monitored component risk coefficients if a change greater than 25% occurred (be alert to risk coefficient changes that could impact list of components within the system boundary that were exempted from monitoring). number of trains or segments	MSPI basis document, operating logs, corrective action program documents, maintenance rule records, maintenance work orders, operability determinations, inspection reports inspections in the following IAs: equipment alignment emergent work maintenance rule implementation maintenance work prioritization and control post-maintenance testing MSPI Derivation Reports
Safety System Functional Failures (SSFF)	number of SSFFs	licensee event reports, operability assessments, control room logs, maintenance rule records, maintenance work orders
Reactor Coolant System Specific (RCS) Activity	maximum monthly I-131 RCS specific activity TS limiting value	chemistry sample record TS requirements inspection in the surveillance test inspectable area

PERFORMANCE INDICATOR	DATA ELEMENTS TO BE VERIFIED	RECORDS TO REVIEW/ RELATED INSPECTIONS
Reactor Coolant System (RCS) Leakage	maximum monthly RCS identified leakage TS limiting values	surveillance records plant instruments TS requirements inspection in the surveillance testing inspectable area
Alert and Notification System (ANS) Reliability	number of siren tests number of successful siren tests	periodic test records, data sheet summing, individual tests, maintenance work orders inspection in the Alert and Notification System Availability inspectable area
Drill/Exercise Performance (DEP)	number of opportunities for classification, notification, and PAR development number of opportunities performed in a timely and accurate manner	formal assessments of actual events, evaluated exercises, and drills and simulator training evolutions Exercise Evaluation and Drill Evaluation Inspection inspectable areas
Emergency Response Organization (ERO) Drill Participation	number of key ERO members number of key ERO members who have participated in a drill/exercise in last 8 quarters	drill attendance records drill, exercise, training evolution scenarios emergency response organization rosters

PERFORMANCE INDICATOR	DATA ELEMENTS TO BE VERIFIED	RECORDS TO REVIEW/ RELATED INSPECTIONS
Occupational Radiological Occurrences	<p>high radiation area non-conformances</p> <p>very high radiation (>1R/hr) area non-conformances</p> <p>unintended exposure occurrences</p>	<p>high radiation area radiological occurrences</p> <p>radiologically controlled area exit transactions greater than 100 mrem ,</p> <p>plant status review of locked high radiation area doors.</p> <p>Inspection in the Gaseous and Liquid Effluent Treatment Systems inspectable area</p>
RETS/ODCM Radiological Effluent Occurrences	number of process effluent radiological occurrences in the previous 4 quarters	<p>corrective action program records</p> <p>licensee event reports</p> <p>annual release report</p> <p>plant status review of potential unmonitored release pathways</p>
Security Performance Indicators	Although the NRC is actively overseeing the Security Cornerstone, the Commission has decided that the related performance indicator information will not be publically available to ensure that potentially useful information is not provided to a possible adversary.	

Table 2
Revision History for IP 71151

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	04/16/02	Added clarification for PI verification inspections at multi-unit sites and guidance for SSU when the time of the failure is unknown. CN 02-017			
N/A	12/16/03	Clarified that each performance indicator for all units will be verified once a year. CN 03-041			
N/A	10/06/04	Deleted security-related information from the procedure; procedure completion section to document the minimum sample size. CN 04-025.			
N/A	01/04/07	Researched commitments back four years - none found as of 12/20/06. Added guidance for verification of MSPI and removed references to safety system unavailability indicators. CN 07-001	Y	Training was provided 04/2006 for MSPI.	ML063510006
N/A	06/28/07 CN 07-021	Added guidance for verification of USwC and removed references to Scrams with Loss of Heat Removal and other minor edits.	Y	Regions informed on 6/14/07 that Web-based USwC training was available.	ML071550335