

# ROP PERFORMANCE METRICS

October 12, 2000

## PERFORMANCE INDICATORS

### O. OBJECTIVE

#### OP1 The PI Values Obtained by Different Users Are the Same, Given the Same Conditions. Measured by:

- a. Independent verification of PI using IP 71151, "PI Verification." Count the number of significant deficiencies that cross thresholds

**How:** Regions conduct PI verification. If regions find a discrepancy that crosses threshold, regions record in IR and PIM. Regions report quarterly to IIPB – across all PIs.

**Success:** Expect low numbers, stable or decreasing trend. First year of data used to benchmark for future comparison and to establish acceptable range of variability.

**Lead:** IIPB

**Graphic Display:** Quarterly national rolling sum histogram; x axis - quarterly timeline, y axis - number of discrepancies.

- b. Count the number of discrepancies in reporting plus the number of questions regarding interpretations (internal and external FAQs) — metric is sum of discrepancies + FAQs

**How:** Utility submits change reports to Web page. IIPB collects number of change reports submitted quarterly. IIPB counts the number of internal and external FAQs quarterly.

**Success:** Expect low numbers (but not as low as OP1a), stable or decreasing trend. First year of data used to benchmark for future comparison.

**Lead:** IIPB

**Graphic Display:** Quarterly national rolling sum histogram; x axis - quarterly timeline, y axis - sum of discrepancies and questions.

### R. RISK-INFORMED

RP None

### U. UNDERSTANDABLE

#### UP1 They Have a Well-defined, Consistent Basis - See OP1

- a. See OP1a

## Performance Indicators

- b. See OP1.b

### P. PREDICTABLE

**PP1 The PI Values Obtained by Different Users Are the Same, Given the Same Data Inputs - See OP1. Measured by:**

- a. See OP1.a
- b. See OP1.b

**PP2 PIs Stable Over Time. Measured by:**

- a. Count the number of changes that complete/exit the flow path of the change process

**How:** IIPB tracks number of NRC Regulatory Issues Summaries issued quarterly.

**Success:** Expect low numbers, stable or decreasing trend. First year of data used to benchmark for future comparison.

**Lead:** IIPB

**Graphic Display:** Annual national histogram; x axis - annual timeline, y axis - number of changes.

### M. MAINTAINS SAFETY

**MP1 Provide Timely Indication of Declining Safety Performance. Measured by:**

- a. Track/trend PIs that cross multiple thresholds (i.e., green to yellow or red) , evaluate and characterize (why, should it?) to allow timely interaction

**How:** Regions report quarterly on numbers of multiple crossed thresholds.

**Success:** Expect low numbers (near zero), stable or decreasing trend. First year of data used to benchmark for future comparison.

**Lead:** IIPB

**Graphic Display:** Annual national histogram; x axis - annual timeline, y axis - number of times multiple thresholds crossed.

**MP2 Provide an Incentive for Licensees to Make Prudent Decisions, and Minimize Incentives for Licensees to Take Actions That Have the Potential to Adversely Impact Plant Safety. Measured by:**

## Performance Indicators

- a. Reports of unintended consequences of PIs from feedback forms and surveys

**How:** Regional/resident inspectors send feedback forms describing unintended consequences to IIPB (IIPB may direct use of feedback forms when receive phone inquiry). IIPB tracks annually.

**Success:** Expect low numbers, stable or decreasing trend. First year of data used to benchmark for future comparison.

**Lead:** IIPB

**Graphic Display:** Annual national histogram; x axis - annual timeline, y axis - number of reports of unintended consequences from feedback forms and surveys.

- b. Survey licensees regarding PIs driving undesirable decisions

**How:** Add question to overall survey administered to licensees

**Success:** Expect low numbers of unintended consequences reported, stable or decreasing trend. First year of data used to benchmark for future comparison.

**Lead:** IIPB

**Graphic Display:** Annual national histogram; x axis - annual timeline, y axis - number of reports of PIs driving undesirable decisions from surveys.

## E. EFFICIENT, EFFECTIVE, AND REALISTIC

### EP1 Reported Accurately - See OP1

- a. See OP1.a  
b. See OP1.b

### EP2 Information Is Provided in a Timely Manner. Measured by:

- a. Track late PI postings on NRC's external web site

**How:** IIPB counts number of late PI postings on NRC's external web site.

**Success:** PIs posted on external web site within 5 weeks of end of each quarter.

**Lead:** IIPB

**Graphic Display:** National histogram by quarter; x axis - timeline, y axis - number of late submissions; number of late postings to web site.

## Performance Indicators

### EP3 Process Stable over Time - See PP2

- a. See PP2.a

### EP4 Strategic Plan Safety Objectives Are Met - See MP1

- a. See MP1.a

### EP5 Provide Timely Indication of Declining Safety Performance - See MP2

- a. See MP2.a & MP2.b

### EP6 Provide an Incentive for Licensees to Make Prudent Decisions, and Minimize Incentives for Licensees to Take Actions That Have the Potential to Adversely Impact Plant Safety - See MP3

- a. See MP3.a
- b. See MP3.b

## C. ENHANCES PUBLIC CONFIDENCE

### CP If all criteria of the attributes are met

#### CP1 Accurate, Understandable Information Is Provided in a Timely Manner

- a. See OP1.a
- b. See OP1.b
- c. See EP2.a

## B. REDUCES UNNECESSARY REGULATORY BURDEN

### BP1 Licensees Perceive Appropriate Overlap of Inspection Program and PIs. Measured by:

- a. Survey stakeholders perceptions of overlap between PIs and inspection

**How:** Add question to overall internal and external surveys administered to licensees and inspectors

**Success:** Low number of negative comments, declining/stable trends in numbers of negative comments received.

**Lead:** IIPB

**Graphic Display:** Annual national histogram; x axis - annual timeline, y axis - number of negative comments from surveys.

## Performance Indicators

### **BP2 Reporting Conflicts Are Reduced. Measured by:**

- a. Survey licensee regarding perceived overlap between reporting requirements, such as INPO, WANO, and Maintenance Rule

**How:** Add question to overall survey administered to licensees

**Success:** Low number of negative comments, declining/stable trends in numbers of negative comments received.

**Lead:** IIPB

**Graphic Display:** Annual national histogram; x axis - annual timeline, y axis - number of negative comments.

## INSPECTION PROGRAM

### O. OBJECTIVE

#### OI1 Findings and Conclusions in Inspection Reports Are Based on Facts Documented in the Reports.

- a. Number of inspection reports that document findings in accordance with program guidance.

**How:** Audit inspection reports to program requirements for documenting Green, greater than Green, and no color findings (IP's, 0610\*, 2515), count the number of reports that contain findings not meeting the program requirements.

**Success:** Trend in number of reports meeting criteria steady or increasing; use first year to establish benchmark for comparison

**Lead:** IIPB

**Graphic Display:** Program assessment: Pie chart, percentage of acceptable inspection reports to total reports reviewed.

Regional assessment: Bar chart, percentage of acceptable inspection reports to total reports reviewed. Ordinate: calendar quarter. Abscissa: percentage, by region.

### R. RISK INFORMED

#### RI1 Inspection Findings are Related to Risk

- a. See OS1.b  
b. See OI1.a  
c. See ES5.a  
d. See ES5.b

#### RI2 Inspection Program Uses Risk Insights

- a. Number of changes to inspection program documents relating to improving risk informed aspects

**How:** Review all changes to baseline inspection program and count the number of changes that relate to risk-informing the inspection.

**Success:** Relatively few significant changes, trend stable or declining

**Lead:** IIPB

**Graphic Display:** Bar chart, number of program documents changed. Ordinate: calendar quarter. Abscissa: number of documents changed.

## Inspection Program

b. Number of “no color” findings in IR’s IAW program guidance.

**How:** Audit inspection reports to verify proper classification of no color issues in accordance with program requirements for documenting inspection findings, counting the number of reports that properly characterize no color green findings.

**Success:** Trend of percentage of reports meeting criteria steady, use first year to establish benchmark for comparison

**Lead:** IIPB

**Graphic Display:** Program assessment: Pie chart showing percentage of IR’s with no color findings that meet requirements for documenting below green findings.

Regional assessment: Bar chart, percentage of inspection reports that properly document “no color” findings to number of reports with “no color findings.” [Note: regions to document all items that don’t fit framework as “no color” findings.] Ordinate: calendar quarter. Abscissa: percentage by region.

### RI3 Inspection Areas Looked at (The Scope and Frequency of the Inspectable Areas Are Appropriate—inspectable Areas Are Risk-significant, Nothing Is Missing, and There Is Nothing Extraneous)

a. Number of changes to baseline inspection program documents that affect scope or frequency of inspections.

**How:** Review all issued changes to baseline inspection procedures and count those documents that have their scope or frequency of inspection changed, and count new inspectable areas that relate to risk-informing the inspection.

**Success:** Relatively few significant changes, trend stable or declining

**Lead:** IIPB

**Graphic Display:** Bar chart, number of documents changed and added to program. Ordinate: calendar quarter. Abscissa: number of documents.

## U. UNDERSTANDABLE

Measured by overall ROP metrics

## P. PREDICTABLE

### PI1 The Inspection Program Is Implemented as Defined—Inspections Are Pre-defined and Implemented as Planned.



## Inspection Program

- a. Rates of completion of baseline inspections across regions

**How:** Analyze RPS data on completion of baseline inspection procedures. Percentage of completed IP's to scheduled IP's for that quarter. Also assess cumulative completed vs. scheduled IPs.

**Success:** Track initial year, then set goals for % completion rates; 100% completed at end of inspection cycle.

**Lead:** Regions

**Graphic Display:** Program assessment: bar chart, cumulative percentage of IP's completed by calendar quarter. Ordinate: calendar quarter. Abscissa: percentage nationally

Regional assessment: bar chart, cumulative percentage of IP's completed by calendar quarter. Ordinate: calendar quarter. Abscissa: percentage by region.

- b. Proportion of inspection schedule changes and justifications for the changes

**How:** Collect number of activities, number of changes, and reasons for such changes.

**Success:** Track and trend changes. For larger inspections (SSDI, Fire, PI&R), any change in time should be captured. For smaller inspections, changes of >2 weeks should be captured. Categorize by reasons for changes such as needs of NRC (e.g., qualified inspectors not available, etc.), conflict with INPO, or request by plant to have key employees available.

**Lead:** Regions

**Graphic Display:** Program assessment: bar chart, percentage of scheduled activities changed for reasons other than reg impact. Ordinate: calendar quarter. Abscissa: percentage nationally. Bar chart showing number of changes by reason for change. Ordinate: reason. Abscissa: number nationally.

Regional assessment: bar chart, percentage of scheduled activities changed for reasons other than reg impact. Ordinate: calendar quarter. Abscissa: percentage by region. Bar chart showing number of changes by reason for change. Ordinate: reason. Abscissa: number by region.

### PI2 Scope of Inspection Program as Implemented Is Consistent Across Regions.

- a. Comparison of frequencies of baseline inspections, sample sizes, and Direct Inspection Effort (DIE) hours to program requirements by inspector type (DRS, resident)

## Inspection Program

**How:** Collect and analyze RPS data (number of samples, regular hours, overtime hours) for each inspection procedure. Collect preparation/documentation time.

**Success:** No significant deviations (explore reasons for such deviations)  
(1) Track and trend OT for baseline inspection program and reasons for OT, first year data to establish baseline  
(2) Track and trend prep, doc, travel to establish baseline, effects on budgeted resources.

**Lead:** IIPB

**Graphic Display:** Regional assessment: Bar charts showing deviations of regional averages from program estimates (or national averages) for samples, DIE. Discussion of significant outliers.

**b.** Number and justifications for approved deviations from the baseline inspection program

**How:** Collect number of requests from regions to change frequency or sampling, number of approvals, and reasons for such requests.

**Success:** Track and trend. Expect steady or declining number of requests, infrequent—use first year to develop base.

**Lead:** IIPB, Regions

**Graphic Display:** Bar chart, total number of approved requests

## M. MAINTAINS SAFETY

**MI1 Inspection Areas Looked at (The Scope and Frequency of the Inspectable Areas Are Appropriate—Inspectable Areas Are Risk-significant, Nothing Is Missing, and There Is Nothing Extraneous).**

**a.** See RI3.a

## E. EFFICIENT, EFFECTIVE, AND REALISTIC

**EI1 Inspection Resources Are Consistently Applied Within Program Guidelines.**

**a.** See PI2.a

**EI2 Resources Available Are Adequate to Conduct the Inspection Program (Equals Sufficient Number of Properly Trained Inspectors to Complete the Baseline Inspection Program).**

**a.** Compare actual FTE used to implement baseline inspection program to estimated FTE to complete baseline inspection program.

## Inspection Program

**How:** Analyze RPS data, calculate number of FTE used to implement baseline inspection program to estimated FTE to complete baseline inspection program.

**Success:** First year of implementation will be used to refine the estimated number of FTE necessary to implement the baseline inspection program.

**Lead:** IIPB

**Graphic Display:** Program assessment: bar chart displaying total estimated FTE compared to actual FTE.

Regional assessment: bar chart displaying regional total estimated FTE to regional actual FTE.

b. Track and trend contracted inspection support

**How:** Track and trend contractor support dollars by discipline/IP/region

**Success:** Track and trend

**Lead:** IIPB

**Graphic Display:** Program assessment: Bar chart, total contractor support dollars by IP for each calendar quarter. Ordinate: calendar quarter. Abscissa: dollars by each IP.

Regional assessment: Bar chart, total contractor support dollars by IP for each calendar quarter. Ordinate: calendar quarter. Abscissa: dollars by each IP by region.

c. Changes to inspection schedules and reasons for the changes by discipline

**How:** Collect number of activities, number of changes, and reasons for such changes. Count the number of changes because qualified inspectors were unavailable.

**Success:** Small number, declining trend in changes because of lack of qualifications

**Lead:** Regions

**Graphic Display:** Program assessment: Bar chart, number of changes. Ordinate: calendar quarter, region, or 1245 category. Abscissa: number of schedule changes for lack of qualified inspectors.

Regional assessment: Bar chart, number of changes. Ordinate: calendar quarter, region, or 1245 category. Abscissa: number of schedule changes for lack of qualified inspectors by region.

## Inspection Program

### EI3 The Inspection Program Is Timely (Applies to Inspection Reports, Inspections, TI's).

#### a. Number of IR's issued within program goals

**How:** Obtain RPS data on number of reports issued and number issued within timeliness goals.

**Success:** Number/percent of reports issued within program goals steady or increasing

**Lead:** IIPB

**Graphic Display:** Program assessment: bar chart, number (or percentage) of reports issued in time, by quarter. Ordinate: calendar quarter. Abscissa: percentage of reports.

Regional assessment: bar chart, number (or percentage) of reports issued in time, by quarter. Ordinate: calendar quarter. Abscissa: percentage of reports by region.

#### b. Number of TI's completed by TI completion date.

**How:** audit time to complete TI's by region. Compare completion status in RPS to TI requirements. Regions to report closure of TI's within time goals.

**Success:** Number/percent of TI's completed within TI requirements steady or increasing

**Lead:** IIPB, Regions

**Graphic Display:** Bar chart, number of TI's completed in time by region. Ordinate: region. Abscissa: number of TI's

### EI4 The Inspection Program Is Stable

#### a. Number of change notices for significant program changes

**How:** Track and trend number of C/Ns for IMC 2515 program affecting scope, schedules, training, resources.

**Success:** Track and trend. Expect steady or declining trend.

**Lead:** IIPB

**Graphic Display:** Bar chart, number of significant changes to inspection program by calendar quarter. Ordinate: calendar quarter. Abscissa: number of change notices.

## Inspection Program

### C. ENHANCES PUBLIC CONFIDENCE

#### CI1 All Other Metrics and Criteria Have Been Essentially Met

#### CI2 Public Communication Is Timely and Accurate

- a. Timeliness of posting inspection results on the web and availability via ADAMS.

**How:** IIPB post inspection reports to external web within timeliness goals using electronic version of letters entered into ADAMS by the regions. IIPB post PIM entries to external web using data entered into RPS by the regions. IIPB record number of inspection reports not available in ADAMS and number of PIM entries not updated in RPS. Also record number of inspection reports and PIMs not posted to the external web within goals.

**Success:** IIPB posts inspection reports that were issued in previous quarter using electronic version in ADAMS, and their PIM entries from RPS, to the external web within 5 weeks after the end of each quarter. IIPB posts additional inspection reports and PIMs issued after the end of the quarter but prior to the quarterly review within 7 weeks after the end of each quarter.

**Lead:** IIPB

**Graphic Display:** Bar chart of percentage of timely updates by calendar quarter. Ordinate: calendar quarter. Abscissa: percentage of timely updates by region.

- b. Number of inaccuracies (PIMs, IR's, PI's) on Web site

**How:** Periodically sample information on Web site, collect number of times and reasons for regions changing PIMs or IR's (accuracy, new information).

**Success:** Track and trend

**Lead:** IIPB, Regions

**Graphic Display:** Bar chart of number of changes due to errors in reports or Web page. Ordinate: calendar quarter. Abscissa: number of error corrections by region.

### B. REDUCES UNNECESSARY BURDEN

#### B1 Industry perspectives:

- a. Measured by overall ROP metrics.

## **Inspection Program**

### **INSPECTION PROGRAM ASSESSMENT ACTIVITIES**

Audit inspection reports

Collect feedback from inspectors, regions, licensees, public

Track changes to inspection program and reasons for changes

Analyze RITS data (regular, OT, DIE, other activities), site visits for outliers

Analyze RPS data (number of samples)

Collect changes to inspection schedules and reasons for changes

Analyze requests for deviations to program

Analyze inspector skill sets compared to program scope

Analyze contracted inspection support

Track timeliness of program documents (IR's, TI's, CN's, Web posting)

Surveys (FRNs, others)

### **REGIONAL DATA NEEDS**

Number of times and reasons for changing inspection schedules

Number of requests from licensees to change schedule and how many accommodated

Transmitting licensee feedback

Number of times and justifications for deviating from baseline program

Keeping track of licensee challenges to compliance with program

Keeping track of comments on accuracy of IR's and PIM's posted on WEB

Reporting IR and TI timeliness

## SIGNIFICANCE DETERMINATION PROCESS (SDP)

### O. OBJECTIVE

#### OS1 SDP outcomes are tied to clear standards as measured by:

- a. Number of SDP packages that are returned to the region by SDP panel due to not meeting established standards

**How:** Can be accomplished by adding a block to SDP panel form indicating rejection due to not meeting established standards (which may include lack of technical basis of fact in documentation provided).

**Success:** Low percentage overall w/ steady or declining trend. First year of data used to benchmark for future comparison. Will define "low" after first data set collected.

**Lead:** IIPB

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = number of rejections. Expect low numbers, however, could divide into cornerstone or by region if significant contribution seen during analysis.

**Other Areas:** Understandable, Effective & Efficient

- b. Independent Audit of green findings agrees that the selected findings meet established standards.

**How:** NOTE: Design a single audit process to include elements noted in all subsequent metrics (i.e., see US1a, PS1a, MS1a, ES2a). Independent reviewer given inspection reports containing a representative (cross-regional) selection of green findings. Sample size selected for 95% confidence (for all audit samples).

**Success:** 95% confidence factor - Yes in all cases. Must explain why if not.

**Lead:** DSSA/SPSB (reactor); DIPM/IOLB(non-reactor)

**Graphic Display:** None

**Other Areas:** Understandable, Effective & Efficient

### R. RISK-INFORMED:

The SDP will be considered to be risk-informed by design, however, some metrics may provide insights. See US1.a, US1.b, MS1, ES5.a and ES5.b.

## Significance Determination Process

### U. UNDERSTANDABLE (SCRUTABLE):

#### US1 All Information Needed to Reach a Conclusion, Including the Basis for Any Deviations, Is Available. Measured By:

- a. The degree to which an auditor can trace through the available documentation and reach the same result

**How:** Independent reviewer given inspection reports & transmittal documents (for green findings) [See OS1b re 95% confidence factor for sample size] and SDP panel packages (for >green) [100% sample size] (Same as PS1a)

**Success:** Yes in all cases - must explain why if not.

**Lead:** RES for >green  
DSSA/SPSB(reactor); DIPM/IOLB(non-reactor) for green

**Graphic Display:** None

**Other Areas:** Predictable (also primary), Risk Informed, Effective & Efficient

- b. Stakeholder feedback indicating ability/inability to reconstruct SDP outcomes

**How:** Federal Register Notice, NRC sponsored survey (OMB clearance required), NEI blind survey of industry. Develop specific quantitative survey question.

**Success:** Trend of stable or increasing perception of issue over time

**Lead:** IIPB

**Graphic Display:** Two graphs to present entire picture (2 could be superimposed over 1).

1) Histogram: x-axis - time line by year; y-axis - numbers of respondents (Alternate: y-axis % respondents). One block would indicate # of positive responses, second would indicate # of negative responses. Could include survey used during pilot testing.

2) Trend line: x-axis - time line by year; y-axis survey scale (Lickert scale of 1 -5). One trend line would indicate average response, second would indicate median.

**Other Areas:** Predictable (also primary), Risk Informed, Effective & Efficient

#### US2 Inspection Staff Is Comfortable/proficient Using the SDP Tool and Find Value in Using it. Measured by:

- a. Trending inspector and SRA feedback over time



## Significance Determination Process

**How:** Internal Survey. Develop specific quantitative survey questions focused on 1) comfortable and 2) finding value.

**Success:** Positive trend

**Lead:** IIPB/Regions

**Graphic Display:** Two graphs to present entire picture (2 could be superimposed over 1).  
1) Histogram: x-axis - time line by year; y-axis - numbers of respondents (Alternate: y-axis % respondents). One block would indicate # of positive responses, second would indicate # of negative responses.  
2) Trend line: x-axis - time line by year; y-axis survey scale (Lickert scale of 1 -5). One trend line would indicate average response, second would indicate median.

**Other Areas:** Effective & Efficient (also primary)

## P. PREDICTABLE

**PS1 SDP Results Can Be Reproduced, Given the Same Information. Measured by:**

a. Same as US1.a

**PS2 Standards and Processes Remain Stable over Time. Measured by:**

a. The number of substantive change notices issued on program guidance, tables, or worksheets.

**How:** Change notice shall have block noting "How many a) editorial, b) due to errors in worksheets or not reflecting plant design or operating practices (see C3a), or c) substantive (defined as anything other than a, b, or for purposes of clarification)

**Success:** Trend number of changes vs threshold. Collect data 1<sup>st</sup> year to establish threshold.

**Lead:** IIPB

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = number of significant changes (c). Trend line superimposed. Expect low numbers, however, could divide into cornerstone.

**Other Areas:** Understandable, Maintain Safety, Effective & Efficient

**PS3 The Reactor SDP Tools Reflect Current Plant Design and Licensee Operating Practices. Measured by:**

## Significance Determination Process

- a. Tracking the number of worksheet changes due to errors in the worksheets as a result of not reflecting plant design and operating practices.

**How:** SDP worksheet change notice originator will be required to identify reason for change: i.e, change due to recent modifications/other significant issue or change due to not reflecting current operating practice or editorial change, etc. [Collected in conjunction with PS2.a (number of changes)]  
- includes pre-screening worksheet

**Success:** Trend vs threshold. Collect data 1<sup>st</sup> year to establish threshold.

**Lead:** IIPB

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = number of changes. Trend line superimposed. Expect low numbers, however, could divide into peer groups or by region.

**Other Areas:** Understandable, Maintain Safety, Effective & Efficient

### PS4 SDP Results of the Same Color are Perceived to Translate to the Same Level of Concern for All Cornerstones. Measured By:

- a. Observing trends in survey

**How:** NRC sponsored survey (OMB clearance required), NRC internal survey, NEI blind survey of industry. Quantitative survey question also asking for examples of where translation does not occur.

**Success:** Trend of stable or increasing perception of issue over time

**Lead:** IIPB

**Graphic Display:** Two graphs to present entire picture (2 could be superimposed over 1).  
1) Histogram: x-axis - time line by year; y-axis - numbers of respondents (Alternate: y-axis % respondents). One block would indicate # of positive responses, second would indicate # of negative responses.  
2) Trend line: x-axis - time line by year; y-axis survey scale (Lickert scale of 1 -5). One trend line would indicate average response, second would indicate median.

**Other Areas:** Effective & Efficient

## Significance Determination Process

### M. MAINTAINS SAFETY:

The SDP will be considered to maintain safety if all other goals are met and if:

#### **MS1 The SDP Focuses NRC and Licensee Attention on Safety-significant Issues. Measured by:**

- a. Tracking the numbers of over-conservative and non-conservative SDP results.

**How:** Over-conservative: See question OS1a - panel form should indicate over-conservative result.  
Non-conservative: Audit by DSSA/DIPM of a representative sample of green findings (See OS1b). Quarterly report.

**Success:** Over-conservative: Steady or decreasing trend - will track 1<sup>st</sup> year for possible threshold setting.  
Non-conservative: Target Goal = zero from sample. Any identified will require adjustment of process. After 1<sup>st</sup> year expect a steady decrease.

**Lead:** Over-conservative - IIPB  
Non-conservative - DSSA/SPSB(reactor); DIPM/IOLB(non-reactor)

**Graphic Display:** Over-conservative: Histogram: x-axis is time line by quarter; y-axis = number of over-conservative results (by color). Trend line superimposed. Expect low numbers, however, could divide into cornerstone or by region.  
Non-conservative: None - report by exception.

**Other Areas:** Effective & Efficient (also primary), Risk Informed, Enhance Public Confidence

### E. EFFICIENT, EFFECTIVE, AND REALISTIC

#### **ES1 The Resources (Direct Charges and Support Activities) Expended Are Appropriate to the Benefit (Significance of Issues Identified). Measured by:**

- a. Tracking the number of times the NRC must interact with the licensee to produce the desired result

**How:** 1) Count number of docketed submittals per finding and 2) Count number of regulatory conferences per non-green finding

**Success:** 1) Track and trend (steady or declining) and 2) Track and trend; goal for regulatory conferences: one/finding (may be greater for red)

**Lead:** Regions (quarterly report)

## Significance Determination Process

**Graphic Display:** 1) Histogram: x-axis is time line by quarter; y-axis = number of docketed submittals per finding (nationally and by region). Trend line and median superimposed.  
2) Histogram: x-axis is time line by quarter; y-axis = number of regulatory conferences per non-green finding (nationally and by region). Trend line and median superimposed.

**Other Areas:** Enhance Public Confidence, Unnecessary Regulatory Burden

b. Stakeholder feedback on appropriateness of resource expenditure

**How:** Tailored survey question

**Success:** Track and trend, stable or increasingly positive perception.

**Lead:** IIPB

**Graphic Display:** Two graphs to present entire picture (2 could be superimposed over 1).  
1) Histogram: x-axis - time line by year; y-axis - numbers of respondents (Alternate: y-axis % respondents). One block would indicate # of positive responses, second would indicate # of negative responses.  
2) Trend line: x-axis - time line by year; y-axis survey scale (Lickert scale of 1 -5). One trend line would indicate average response, second would indicate median.

**Other Areas:** Enhance Public Confidence, Unnecessary regulatory Burden (also primary)

**ES2 The SDP Results Are Accurate and Complete. Measured By:**

a. Same as MS1.a

**ES3 The SDP Results Are Timely. Measured by:**

a. Determining whether timeliness goals were met

**How:** Regions report percent not meeting timeliness goals and how many days late each was. (Should capture all goals here, including OE goal of ID to panel.)

**Success:** Track 1<sup>st</sup> year for baseline then steady or decreasing trend.

**Lead:** Regions

**Graphic Display:** Two graphs for completeness

## Significance Determination Process

- 1) Histogram: x-axis is time line by quarter; y-axis = percent not meeting goals - plotted by region/national by goal with median and average trend line superimposed.
- 2) Trend line: x-axis is time line by quarter; y-axis = number of days late per late finding. Plot average and median by region and nationally.

**Other Areas:** Predictable, Enhance Public Confidence (also primary)

**ES4** Same as US2.a

**ES5 Licensees Accept SDP Results. Measured By:**

a. Tracking the total number of appeals

**How:** Regions report: track total and by region

**Success:** Track 1<sup>st</sup> year to establish baseline  
Steady or decreasing trend

**Lead:** Regions

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = number of appeals(national & by region). Trend line superimposed. Expect low numbers, however, could also divide by cornerstone or strategic performance area.

**Other Areas:** Risk Informed, Enhance Public Confidence, Unnecessary Regulatory Burden

b. Tracking the proportion of appeals that are successful

**How:** Regions report

**Success:** Goal of Zero. If any, steady or decreasing trend.  
Any will be considered for process adjustment  
Annual report of any resultant adjustments

**Lead:** Regions

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = percent of appeals successful(national & by region - may not have enough data). Trend line superimposed.

**Other Areas:** Risk Informed, Enhance Public Confidence, Unnecessary Regulatory Burden

## C. ENHANCES PUBLIC CONFIDENCE

## Significance Determination Process

### **CS1 Results Are Communicated in a Way That Demonstrates That the NRC Understands the Plant's Performance. Measured By:**

- a. Verifying the accuracy of facts NRC communicated (color of findings is accurately reported)

**How:** IIPB annual audit of website

**Success:** Low number of inaccuracies; steady or declining trend - Must address all inaccuracies

**Lead:** IIPB

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = number of inaccuracies (national and by region - may not have enough data). Trend line superimposed.

**Other Areas:** Understandable

## **B. REDUCES UNNECESSARY REGULATORY BURDEN**

### **BS1 The Use of the SDP Results in the Licensee Resource Expenditures Consistent with the Significance of Inspection Findings. Measured by:**

- a. Same as ES1.b

## ASSESSMENT PROGRAM

### O. OBJECTIVE

**OA1 Subjective Judgment Is Minimized and Is Not a Central Feature of the Process. Actions Are Determined by Quantifiable Assessment Inputs (Examine PIs, SDP, Cross-Cutting Issues). Measured by:**

- b. Number and type/scope of deviations from the action matrix, including whether level of management is appropriate.

**How:** IIPB audit of assessment-related letters

**Success:** Few deviations, declining trend

**Lead:** IIPB

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = number of deviations. Expect very low numbers.

- b. Percent successful, number and type/scope of documented challenges of assessment outcomes.

**How:** Data collection using data collection forms-quarterly summary in operating plans. Regions record number and type of challenges to assessment and assessment follow up letters, basis for appeal and justification of final resolution.

**Success:** Few successful challenges; steady or declining trend from first year benchmark.

**Lead:** Regions

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = both number of challenges and percent of successful challenges. Show trend lines for each. Expect low numbers, however, could divide into cornerstone or by region if significant contribution seen during analysis.

**OA2 The Program Is Well-defined Enough to Be Consistently Implemented. Measured By:**

- a. Track number of significant departures from requirements in IMC 0305.

**How:** IIPB audit of assessment letters and review of feedback forms and lessons learned regarding assessment program and IMC 0305. Significant departures could include not sending our required letters or missing deadlines

**Success:** Few departures, steady or declining trend.

**Lead:** IIPB

## Assessment Program

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = number of departures. Expect low numbers, however, could divide into cornerstone or by region if significant contribution seen during analysis.

### R. RISK-INFORMED

#### RA1 **Actions Taken Are Commensurate with the Risk of the Issue and Overall Plant Risk. Measured By:**

- a. Actions or lack of actions taken on plants is at the appropriate level for the significance of the issues, based on inputs from PIs and inspection findings.

**How:** IIPB review of actions taken for other than green findings and compare to Action Matrix

**Success:** Few departures, steady or declining trend.

**Lead:** IIPB

**Graphic Display:** Histogram: x-axis is 4 regions; y-axis = number of issues identified. Expect low numbers.

- b. See OA1.b

### U. UNDERSTANDABLE

See Overall ROP Program Metrics

### P. PREDICTABLE

#### PA1 **Results Are Repeatable. Measured By:**

- a. Regions arrive at same Action Matrix column and take similar actions with similar inputs (especially cross cutting issues).

**How:** Audit of assessment-related letters. Track number/type of issues.

**Success:** Few disagreements, with a steady or declining trend.

**Lead:** IIPB

**Graphic Display:** Histogram: x-axis is annual count by region; y-axis = number of issues. Expect low numbers.

#### PA2 **The Program Is Implemented as Defined. Measured By:**



## Assessment Program

- a. See OA1.a
- b. See OA1.b
- c. Resources expended are appropriate and consistent across regions (region data collection).

**How:** Extract data from RITS and track the resources expended on assessment activities under the ASM code (i.e. resources spent preparing for and participating in quarterly, mid-cycle, and end-of-cycle meetings; staffing assessment and assessment follow up letters; and conducting public meetings).

**Success:** Resources expended are not significantly different between regional offices and not significantly different from allocated hours.

**Lead:** IIPB

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = number of hours/site.

- d. Number and type/scope of actions recommended by the Agency Action Review (AAR) meeting beyond the actions already taken per the ROP program.

**How:** IIPB audit of assessment-related letters

**Success:** Few additional actions are recommended by AAR meeting; steady or declining trend from first year benchmark.

**Lead:** IIPB

**Graphic Display:** Histogram: x-axis is year; y-axis = number of actions overturned. Expect very low numbers.

### PA3 Information (Process Outputs and Documents) Is Readily Available in a Timely Manner. Measured By:

- a. Track the number of instances in which timeliness goals established in IMC 0305 were not met.

**How:** Regions collect timeliness data for quarterly reviews (within 5 weeks after end of quarter); Mid-cycle, and End-of-Cycle reviews (within 6 weeks after end of quarter; issuance of assessment letters (within 2 weeks after quarterly review, 3 weeks after mid-cycle review, and 1 week after Agency Action Review); assessment follow up letters (within 2 weeks after letter providing SDP results); and public meetings (within 16 weeks of end of assessment period).

**Success:** Few instances in which timeliness goals were not met; steady or declining trend from first year benchmark.

**Lead:** Regions; IIPB use data from Region Operating Plans where possible

## Assessment Program

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = number and % of letters, meetings, etc not held within requirements.

- b. See CA4.a
- c. Stakeholder feedback to determine acceptability of timeliness goals and information distribution methods.

**How:** Survey question

**Success:** Steady or improved perception of timeliness goals and information distribution methods as compared to the first year benchmark.

**Lead:** IIPB

**Graphic Display:** None. Analysis and discussion only

### **PA4 Process Documents Are Stable Enough to Be Perceived as Predictable. Measured By:**

- a. Number and type/scope of revisions to IMC 0305 beyond those already planned.

**How:** Count the number of unplanned substantive revisions. Substantive revisions do not include those revisions that are for editorial or clarification purposes only.

**Success:** Few revisions; steady or declining trend from first year benchmark.

**Lead:** IIPB

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = numbers of changes and issues driving changes. Expect low numbers.

## **M. MAINTAINS SAFETY**

### **MA1 Appropriate Actions Are Taken to Address Performance That Is Not in the Licensee Response Column, and to Prevent Recurrence. Measured by:**

- a. Feedback on appropriateness of actions.

**How:** Survey question to both internal and external stakeholders - examine trends of negative comments on appropriateness of actions

**Success:** Steady or improved perception of appropriateness of actions as compared to the first year benchmark.

**Lead:** IIPB

## Assessment Program

**Graphic Display:** Histogram: x-axis is year; y-axis = number of negative comments. Possibly divide into cornerstone or by region if significant contribution seen during analysis.

b. See PA2.d

### MA2 NRC Actions Are Timely. Measured By:

a. Lag time between issuance of an assessment letter discussing an other than very low safety significance issue and completion of the supplemental inspection.

**How:** Count the number of days between the issuance of the assessment letter vs. the completion of the supplemental inspection (not issuance of the inspection report).

**Success:** Tracking first year to establish thresholds.

**Lead:** Regions

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = average and median times; record number of issues below graph. IIPB will generate summary graphs by region.

## E. EFFICIENT, EFFECTIVE, AND REALISTIC

### EA1 Achieves the Desired Outcomes (I.e., Maintains Safety)

a. Effectiveness is achieved if measures in Maintains Safety are met.

### EA2 Resources Expended Are Appropriate to Plant Performance. Measured By:

a. Stakeholder feedback on appropriateness of resources expended (survey).

**How:** Survey question

**Success:** Steady or improved perception of appropriateness of expended agency resources as compared to the first year benchmark.

**Lead:** IIPB

**Graphic Display:** None. Analysis and discussion only.

b. Count deviations between the job level of people involved in NRC actions vs the job levels specified in the Action Matrix.

**How:** Regions collect data on the job level of the people who conduct and attend assessment meetings

## Assessment Program

**Success:** Steady or declining deviations as compared to the first year benchmark.

**Lead:** Regions

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = number of deviations from the Action Matrix.

**EA3 The Agency Action Review Confirms Decisions Made Throughout the Assessment Cycle. Measured By:**

a. See PA2.d

**EA4 NRC Actions Are Timely and the Process Provides Timely Indications of Declining Safety Performance. Measured by:**

a. See MA2.a

b. See PA3.a and CA4.a

c. See PA3.c

**EA5 The Process Is Stable. Measured by:**

a. See PA4.a

### C. ENHANCES PUBLIC CONFIDENCE

**CA1 All Other Self-assessment Goals and Attributes Are Essentially Met.**

**CA2 Actions Taken Are Consistent with the Action Matrix. Measured by:**

a. See PA2.a

**CA3 Information Is Relevant, Useful and Meaningful. Measured By:**

a. Reports are written in plain language.

**How:** Survey; external stakeholder feedback collected by OPA.

**Success:** Steady or improved perception as compared to the first year benchmark.

**Lead:** IIPB

**Graphic Display:** None. Analysis and discussion only.

b. Specific feedback from stakeholders.

**How:** Survey question

## Assessment Program

**Success:** Steady or improved perception as compared to the first year benchmark.

**Lead:** IIPB

**Graphic Display:** None. Analysis and discussion only.

### CA4 Information Is Readily Available in a Timely Manner. Measured by:

- a. Timeliness of web posting and availability via ADAMS for assessment letters (HQ data collection).

**How:** IIPB post letters to external web within timeliness goals using electronic version of letters entered into ADAMS by the regions. IIPB record number of letters not available in ADAMS and number of letters not posted to web within goals.

**Success:** IIPB posts assessment letters to external web using electronic version in ADAMS within 10 weeks after end of mid-cycle and end-of-cycle assessment periods, 8 weeks after end of intervening quarters.

**Lead:** IIPB

**Graphic Display:** Histogram: x-axis is time line by quarter; y-axis = number of letters not available in ADAMS and not posted on web within goals.

### CA5 Information Is Accurate. Measured by:

- a. Assessment and assessment follow up letters are consistent with inspection reports.

**How:** IIPB audit to assess the number of instances in which the assessment results of risk significant findings (other than green) do not correlate with the description as described in the inspection report.

**Success:** Very few instances, steady or declining trend as compared to first year benchmark.

**Lead:** IIPB

**Graphic Display:** None. Analysis and discussion only.

## B. REDUCES UNNECESSARY REGULATORY BURDEN

### BA1 It focuses licensee resources on areas of greatest significance and minimizes rework or duplication. Measured by:

- a. Feedback from licensees.

**How:** Survey question

## **Assessment Program**

**Success:** Steady or improved perception as compared to the first year benchmark.

**Lead:** IIPB

**Graphic Display:** None. Analysis and discussion only.

### **BA2 It Minimizes Inconsistencies Between Regions and Inspectors. Measured by:**

- a. Program office review of assessment letters for consistency and compliance against IMC 0305.

**How:** IIPB review of assessment letters for consistency and compliance against IMC 0305.

**Success:** Few discrepancies; steady or declining trend from first year benchmark.

**Lead:** IIPB

**Graphic Display:** None. Analysis and discussion only.

- b. See EA2.c