

Reactor Oversight Process
Significance Determination Process (SDP)

April–September 2001

Performance Metrics
Metrics Matrix

METRIC ¹		OBJECTIVE	RISK-INFORMED	UNDERSTAND-ABLE	PREDICTABLE	MAINTAINS SAFETY	EFFECTIVE, EFFICIENT, REALISTIC	ENHANCES PUBLIC CONFIDENCE	REDUCES UNNECESSARY REGULATORY BURDEN	DATA ² COLLECT	SURVEY ²
SDP-1	Document SDP findings IAW IMC 0610*	P						s		HQ	
SDP-2	Reconstructable SDP logic		P		s					HQ	
SDP-3	Focus regulatory attention		P			s				HQ	
SDP-4	Final SDP appeals	s	P							HQ RES	
SDP-5	Proficient staff			P			s			HQ REG	I
SDP-6	SDP notebook errors			P		s				HQ REG	
SDP-7	Significance across cornerstones	s		P						HQ	E
SDP-8	Effective use of resources						P		s	HQ REG	
SDP-9	Regulatory impact						s		P	HQ REG	
SDP-10	SDP timeliness						P	s		HQ REG	
SDP-11	Report timeliness						P	s		HQ REG	
SDP-12	Accurately communicate results to public			s				P		HQ	

¹ A shaded metric number (e.g., **SDP-1**) indicates a metric that did not meet its criteria. Crosshatched blocks indicate metrics not counted during this reporting period.

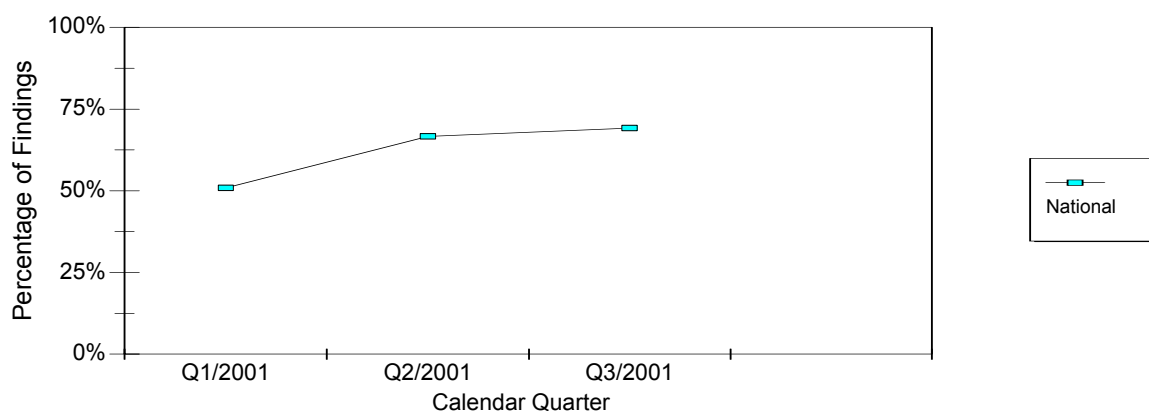
² REG = regions, HQ = Headquarters, RES = Office of Research, I = internal stakeholder survey, E = external stakeholder comments

SDP-1 SDP Inspection Findings Documented IAW Procedural Standards. (See IP-1)

Definition: Audit inspection reports in relation to program requirements (IMC 0610*) for documenting green findings, greater-than-green findings, and violations, and report the percentage of findings that meet the program requirements. Each year, audit all team reports, one resident/consolidated report from each plant, 25 percent of all other baseline reports, and all non-baseline inspection reports.

Criteria: Expect an improving trend in the percentage of findings documented in accordance with program requirements.

Lead: DIPM/IIPB(cross-disciplinary)



Analysis: For 2001, IIPB audited a total of 102 reports representing a total of 141 findings (128 green or greater and 13 no color). During the third quarter of 2001 (July–September), IIPB audited 50 inspection reports that documented a total of 65 findings (57 green or greater and 8 no color). The percentage of total findings that conformed to IMC 0610* requirements increased slightly in this quarter from 67 percent to 69 percent, indicating an improving trend. Documenting the bases for significance of findings is still the area that is most in need of improvement.

A newly revised version of the inspection reporting manual chapter (renumbered as IMC 0612) will be issued for use in 2002. The revision more clearly describes and illustrates how to properly document findings.

SDP-2 Docketed Findings Include Adequate Detail to Reach the Same Conclusion, Including the Basis for Any Deviations.

Definition: Docketed findings should contain adequate detail to enable an independent auditor to trace through the available documentation and reach the same significance color characterization. Auditors are given inspection reports and transmittal documents (green findings) and SDP panel packages (for greater than green findings).

NOTE: This audit excludes inspection findings that were not processed through the SDP or through traditional enforcement.

Criteria: All docketed SDP inspection findings sampled should include adequate inspection detail and should be scrutable.

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

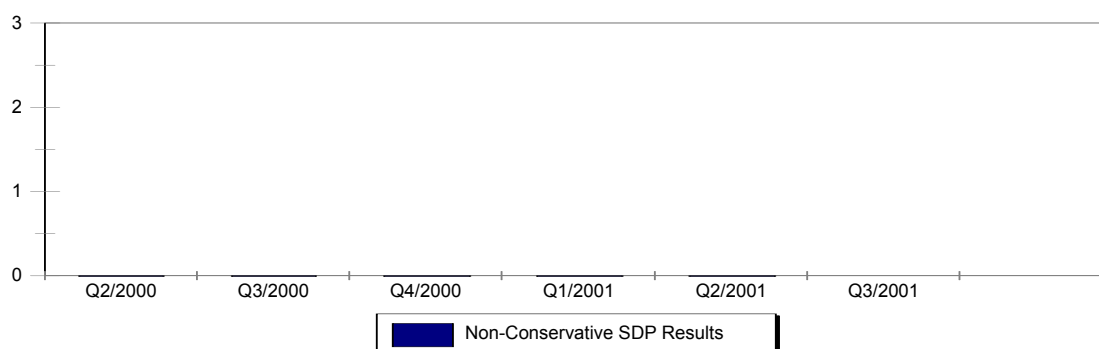
Analysis: Performance in this area continues meet established assessment criteria.

SDP-3 The SDP Focuses NRC and Licensee Attention on Significant Safety Issues.

Definition: Each quarter audit a representative sample of reported green inspection findings against the standard criteria set forth in IMC 0609.

Criteria: The target goal is zero instances of improper or inadequate reporting from the sample. Any inspection findings that are determined not to be conservatively characterized by the SDP will require reevaluation and adjustment of the SDP process.

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



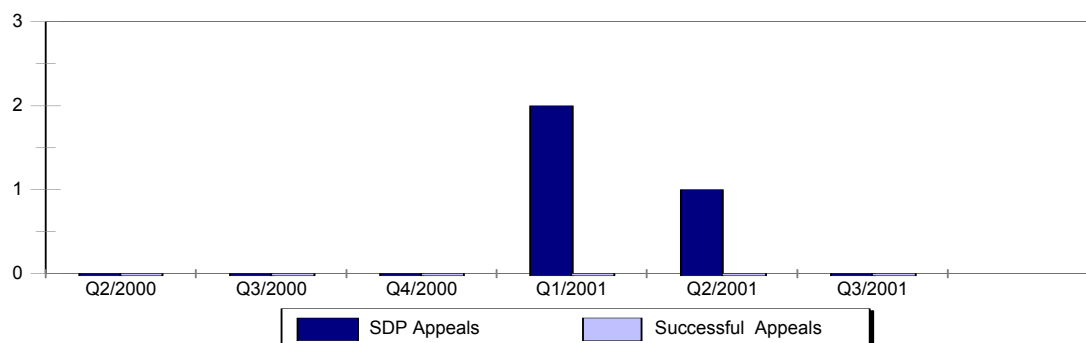
Analysis: Since ROP implementation, no examples of non-conservative inspection findings have been identified during the quarterly reviews of green inspection findings. Performance in this area continues meet established assessment criteria.

SDP-4 Licensees Accept SDP Results.

Definition: Track the total number of successful appeals of final SDP results reported quarterly by the regions.

Criteria: Expect zero appeals of SDP significance that result in a final determination being overturned across all regions.

Lead: Regions



Analysis: In the first two quarters of calendar year 2001, licensees submitted a total of three appeals of final SDP results. Two of the three appeals were submitted during Q1/2001 and involved three white emergency preparedness findings at Callaway and two green reactor safety findings at Comanche Peak. The most recent appeal, which was submitted by the licensee for Oyster Creek following final issuance of greater than green results in physical protection, is still ongoing.

SDP-5 Inspection Staff Is Proficient and Find Value in Using the SDP

Definition: Survey internal stakeholders over time using specific quantitative survey questions that focus on proficiency, effectiveness, and efficiency.

Criteria: Expect either a stable or increasingly positive perception of the SDP process over time.

Lead: IIPB

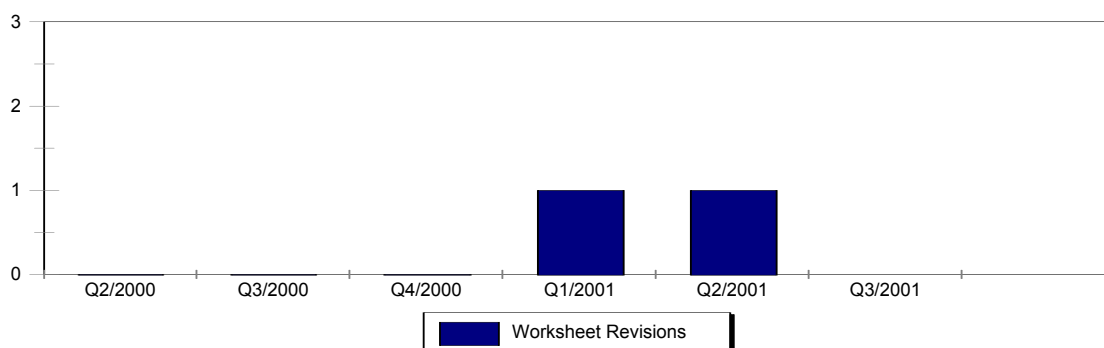
Comments: No survey of internal stakeholders was taken during the foreshortened 2001 ROP cycle.

SDP-6 SDP Tools for Evaluating Inspection Findings Reflect Current Plant Design and Licensee Operating Practices.

Definition: Monitor the number of substantive revisions made to the risk-informed inspection notebooks due to non-conservative technical flaws. To do so, track the number of phase 2 inspection notebooks that are issued for use and are subsequently withdrawn following onsite benchmarking activities conducted by SPSB, RES, or the regional staff.

Criteria: The target goal is zero notebook retractions because of non-conservative technical flaws following onsite benchmarking.

Lead: IIPB



Analysis: The risk-informed inspection notebooks for 12 reactor facilities have been validated by benchmarking, which included comparing the notebooks against licensee-developed risk models using similar assumptions. As a result, two original (revision 0) notebooks were retracted and returned to Brookhaven National Laboratories for immediate revision to limit potentially non-conservative outcomes. The retracted notebooks will be reissued once revisions are completed and verified. Performance in this area is not meeting the established assessment criteria standards.

SDP-7 **Results of the Same Color are Perceived by the Public to Translate to the Same Level of Significance for All Cornerstones.**

Definition: Publish a *Federal Register* notice to survey external stakeholders using specific questions asking for examples of where SDP-determined significance of findings does not appear to be consistent across ROP cornerstones.

Criteria: Expect stable or increasingly positive perception of the SDP over time.

Lead: IIPB

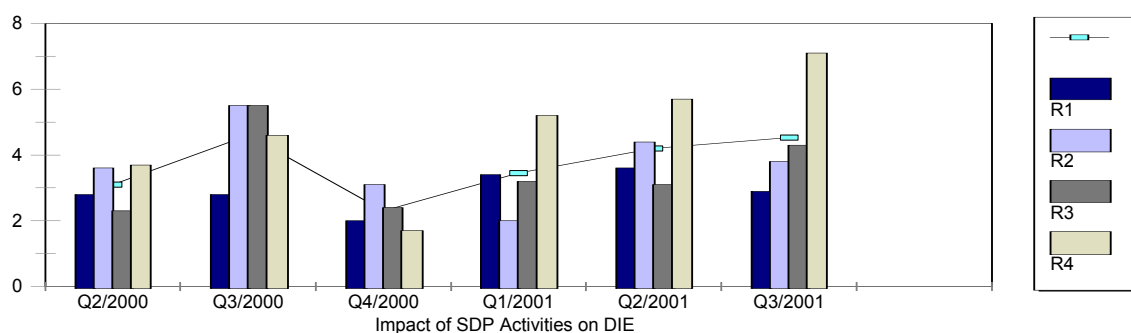
Comments: Comments from external stakeholders in response to a November 2001 *Federal Register* notice are discussed in the Commission paper regarding the 2001 ROP cycle.

SDP-8 The Resources (Direct Charges and Support Activities) Expended Are Appropriate to the Benefit (Significance of Issues Identified)

Definition: Track the percentage of total inspection resource expenditure attributed to SDP activities. Calculate the effort expended by region performing SDP risk evaluations as a percentage of the total regional direct inspection effort. Use RPS IPE codes for SDP processing activities.

Criteria: Total SDP expenditures should not exceed 10 percent of the total regional direct inspection effort (DIE), and should show a decreasing trend over time.

Lead: IIPB



Analysis: Although the reported regional expenditures associated with SDP evaluations remain below the target goal, the average SDP evaluation time has increased during the last three calendar quarters. Additional review is warranted to evaluate the causal factors and to ensure that current process improvement strategies include the necessary elements to correct this adverse trend.

SDP-9 Appropriateness of Regulatory Impact from the SDP

Definition: Monitor the trend of regulatory impact forms that are critical of the SDP and assessment processes.

Criteria: Stable or decreasing trend over time.

Lead: IIPB

Comment: This is a new metric developed for the upcoming assessment cycle. No data is available for the current assessment cycle.

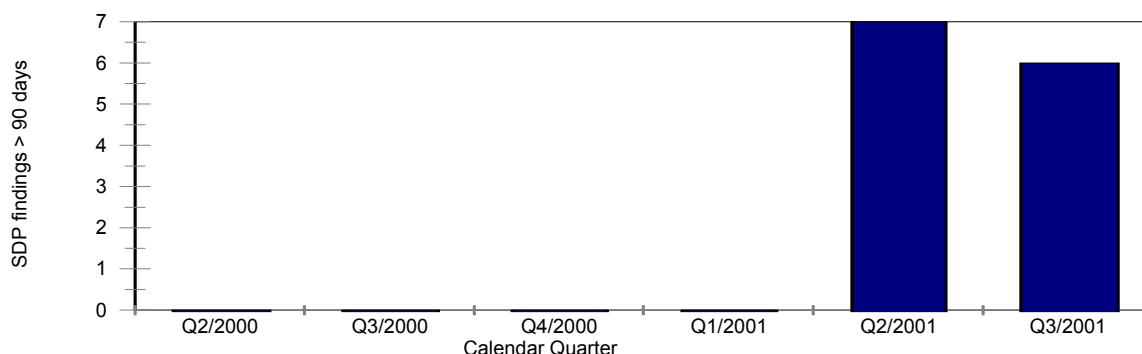
SDP-10 SDP Timeliness

Definition: For each quarter, count the number of inspection findings that are either:

- 1) in the SERP process, were open for any portion of that quarter, and are more than 90 days from the exit meeting date
- 2) received by an NRR technical branch for SDP assistance, and are more than 90 days from the exit meeting date or the date received by that branch, whichever is earlier
- 3) otherwise documented in an inspection report as an unresolved item, were not counted in either of the above categories, and are more than 90 days from the exit meeting date.

Criteria: All SDP results that are counted per the criteria above should be finalized within 90 days of the exit meeting.

Lead: IIPB



Analysis: In response to Commission direction, the staff adjusted the criteria for measuring SDP timeliness to monitor for final issuance of SDP findings within 90 days. This adjustment to the criteria is included in the SDP timeliness strategies that are currently under review by senior NRC management. During this assessment period three instances of late significance determinations were identified. Performance in this area is not meeting the established assessment criteria.

SDP-11 Inspection Reporting IAW Established IMC Timeliness Goals

Definition: Track the time (in days) between the last day of onsite inspection and issuance of the inspection report.

Criteria: Inspection reports should be issued no later than 30 calendar days after completion of the inspection (45 calendar days for integrated and major team inspection reports).

NOTE: For region-based inspection reports, inspection completion is normally defined as the last day on site. For resident inspector and integrated inspection reports, inspection completion is normally defined as the last day covered by the inspection report.

Lead: IIPB, Regions

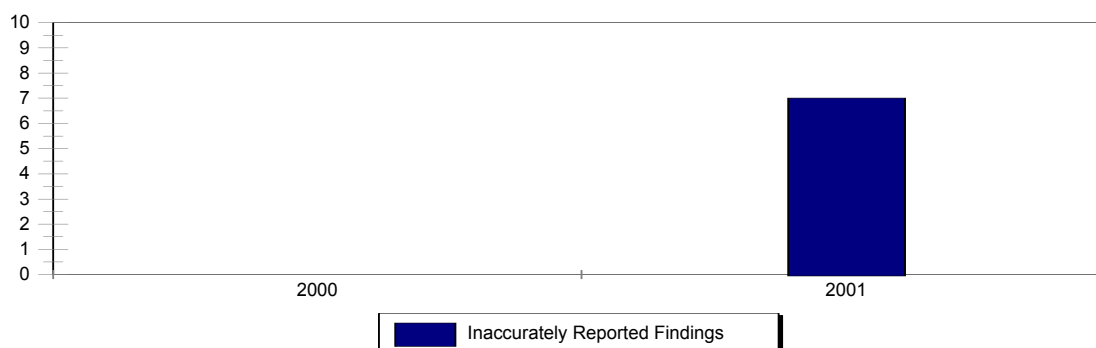
Comments: This a new metric developed for the upcoming assessment cycle. No data is available for the current assessment cycle.

SDP-12 SDP Results Are Communicated Accurately to the Public.

Definition: Each calendar quarter, track the number of inspection findings that are inaccurately communicated to the public (color of findings is inaccurately reported), by auditing the inspection findings summary information submitted by the regions in the RPS and included in the ROP Assessment Matrix. The detailed review will include item type, significance characterization, enforcement action status, and text descriptions of greater than green inspection findings prior to release to external stakeholders.

Criteria: The target goal is zero inaccuracies. All inaccuracies must be addressed.

Lead: IIPB



Analysis: During the first quarter of the current assessment cycle, seven instances were identified in which the status of documented inspection findings reported on the NRC's external web site was unclear (i.e., preliminary vs. final) when looking at Assessment Matrix information developed from the reported Plant Issues Matrix (PIM) data. About half of the inaccuracies were preliminarily significant issues that were incorrectly identified in their respective inspection reports by a significance color, which was then entered into the PIM portion of the RPS database and made available on the external web site. The other inaccuracies were the result of improperly updating the PIM entries after a final significance determination was made so the description still identified the issue as preliminarily significant. The regional offices immediately corrected these issues in the PIM to conform with the guidance of IMC 0610*, and the Assessment Matrix information was subsequently corrected for each facility. The frequency of review of Assessment Matrix information and PIM results has been increased from annually to quarterly. Performance in this area is not meeting the established assessment criteria standard.