ANALYSIS AND RESULTS:

NRC REACTOR OVERSIGHT PROCESS SURVEY

AND

TRAINING SECTION, REACTOR INSPECTOR OPINION SURVEY

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June 2001

Attachment 2

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CHAPTER 1

BACKGROUND AND OVERVIEW

The US Nuclear Regulatory Commission (NRC) has revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. This new oversight process sought to use more objective, timely, and safety-significant criteria in assessing performance while also seeking to more effectively and efficiently regulate the industry.

The NRC tested the new process at 13 reactors at 9 sites across the country on a pilot basis in 1999 to identify which things worked well and what improvements were called for before beginning initial implementation at all nuclear power plants. As part of the program evaluation process, a series of three surveys was conducted, and the results of these are at least partially included in this report.

- 1. The FY 1999 NRC Pilot Program Internal Stakeholder Feedback Survey summary statistics
- 2. The Reactor Oversight Process (ROP) Training (Section C) of the FY 2001 NRC Reactor Inspector Opinion Survey response data
- 3. The FY 2001 NRC Reactor Oversight Process Survey response data.

Each of these survey instruments, although often seeking to assess the same program attributes, used slightly to substantially different attribute descriptions, captured different demographic information and/or used different demographic categories, and/or employed significantly different response categories. Therefore, the response comparisons across these survey results are necessarily limited.

The focus of this report is on analysis of the FY2001 Reactor Oversight Process (ROP) Survey conducted in March, 2001. A total of 234 responses were received, which represents a 43% return rate. As detailed in Chapter 2, demographic data were gathered regarding Location, Position, Grade, and Length of Service. Statements, regarding which respondents were asked to indicate their level of agreement or disagreement, were grouped into five topic areas: overall program, inspection program, assessment process, performance indicators, and significance determination process. Comments on anything relevant to the ROP were also solicited.

Comments about anything relevant to the ROP were also solicited. For reasons detailed in Chapter 3, excerpted and categorized comments are presented in Appendix B whereas further assessment will be presented in a separate document focused on ROP program performance metrics. Last, because such assessments are beyond the purview of LANL personnel, also left for others and other documents are the evaluation, discussion, and future action plans, which are based on and/or derive from the analysis results reported here.

CHAPTER 2

METHODS

Overview

To ensure independence, data from Surveys 2 and 3 were transmitted to Los Alamos National Laboratory for analysis. The following actions were taken and analyses performed on these data:

- A dependent variable was constructed by assigning the values 1, 2, 3, and 4 to the responses Strongly Disagree, Disagree, Agree, Strongly Agree, respectively. (Note: this represented a reversal of the numerical scale originally employed in Survey 2).
- Explanatory indicator variables were constructed for each classification of the four demographic Categories (Position, Location, Grade, and Years of Service). These Categories and Variables are detailed in Table 3-A. Note that for "Region," the headquarters respondents are divided into Line Managers and Technical/Program Staff even though the survey form only provided for such a difference for Position.¹
- The dependent variable was regressed on the explanatory variables under the constraint that the demographic effects sum to 0. An F-test of the hypothesis of no effect at the 0.01 level of significance was computed for each of the demographics (Position, Location, Grade, and Years of Service).
- ♦ For those categories with evidence of an overall effect, 99% confidence intervals—that is, an interval which is 99% certain to "capture" the value of the variable within its bounds—for the individual classification effects were computed and plotted. These are presented in the Difference Determination paragraph for Survey Sections 2-13 and repeated in Appendix A where they are co-located with response histograms for each question.

When these confidence intervals (as shown by horizontal bars) do not overlap, there is evidence that the classification effects are different. Use of this conservative confidence level is considered appropriate given the nature of the data, the number of respondents, and the importance of derived conclusions/recommendations for ROP policy and practice. Less conservative confidence intervals (e.g., 95%, 90%) would yield more apparent differences (as indicated by shorter bars which, therefore, are less likely to overlap), but there is a greater likelihood that these differences would be due to chance and, so, the basis for making ROP policy/practice changes would be weakened.

Reading Confidence Interval Graphics

The length of any bar in any Confidence Interval (CI) graphic reflects the precision with which that effect is estimated. Long bars reflect low precision, and short bars reflect high precision. One important determinant of precision is the number of respondents who are represented by that bar. More respondents yield more precise estimates and therefore shorter bars.

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¹The "Headquarters Technical or Program Staff" and the "Headquarters Line Manager" classifications for Position were completely confounded with the "Headquarters/TTC" classification for Location. The simplest solution to this problem was to drop the indicator variable for the "Headquarters/TTC" classification and replace it with the "Headquarters Technical or Program Staff" and the "Headquarters Line Manager" classifications in both the Position analysis and the Location analysis.

For example, in Table 3-A it can be seen that there were 76 Region I respondents and 29 Region II respondents, and in Fig. 2-A, the bar representing Region I respondents is shorter than that representing those from Region II.

Fig. 2-A. Example Confidence Interval Results Graphic



11G: SDP: consistent results

Shorter bars are, course, less likely to overlap other bars, thereby make it more likely that the data will reveal differences, and this effect is what one would expect--in fact, seek--from increasing the number of respondents. Referring again to the 11G CI graphic, it can be seen that only the Region I and Region III bars do not overlap, indicating a difference in the 99% CIs for these two groups in their responses to Statement 11G. However, since the Region I and II bars overlap only slightly, had there been more respondents from Region II, and had their responses been similar to those who did respond, the Region II bar would have been shorter and then, perhaps, not overlapped with---and, therefore, been considered different from---that of Region I. Finally, note that in each of these graphics, the center number of scale presented at the bottom is the mean response for that Statement.

CHAPTER 3

NRC REACTOR OVERSIGHT PROCESS SURVEY DATA ANALYSIS

Overview

The number of respondents for each category and variable are detailed in Table 3-A. The results of the LANL analyses performed on the NRC-provided data from the NRC Reactor Oversight Process Survey are summarized in Table 3-B, and detailed survey-section by survey-section (2 through 13) throughout the remainder of this chapter. These details include the percentage of respondents who Strongly Disagreed, Disagreed, Agreed, or Strongly Agreed with each Statement and, for those Statements for which statistically significant differences were recorded between/among demographic categories, a graphic depiction of the 99% Confidence Interval.

"Additional Comments" Responses

Whereas the FY 1999 NRC Pilot Program Internal Stakeholder Feedback Survey provided extensive opportunities for open-ended comments regarding any aspect of the pilot program, the FY 2001 NRC Reactor Oversight Process Survey was designed primarily to focus attention on the critical performance aspects of the ROP program implementation (which, in part, were defined by responses to the earlier survey). Thus, the FY 2001 survey provided only a single, unlimited-size field in which respondents were asked to indicate any comments regarding the ROPs. As a consequence, the Comments received from the 97 individuals who chose to make such entries varied widely in length, style, and focus, and the frequent lack of direct correspondence between Comments and specific survey Statements made it difficult to tie individual comments to the analysis results in any certain and meaningful way. Because the Comments therefore provide more general explanatory information than in-depth diagnostic insights, LANL personnel only reviewed, excerpted key points, and categorized these to the extent possible according to the ROP performance metrics established for the program. The results of this effort are detailed in Appendix B. The categories employed—as derived from the agency's performance goals—were that the elements of the ROP be:

- Objective
- Risk-informed
- Understandable
- Predictable
- Maintain safety
- Increase public confidence
- Reduce regulatory burden
- Make NRC activities and decisions more effective, efficient, and realistic.

Additional assessment of all Comments is planned by the NRC and scheduled for presentation as part of the documentation for the ROP performance metrics effort.

Category	Variable	# Respondents
Position	Resident/Senior Resident Inspector	94
	Regional Inspector/Staff/SRA	72
	Regional Line Manager	33
	HQ Technical or Program Staff	19
	HQ Line Manager	9
	Other	7
Location	HQ/TTC	28
	Region I	76
	Region II	29
	Region III	62
	Region IV	37
Grade	13 or below	86
	14	91
	15	43
	SES/SLS	14
ears Service	. <5	44
	5-10	38
	> 10	151
		234

Table 3-A. Respondent Demographic Data Summary

NR	C REACTOR OVERSIGHT PROCESS SURVEY
Statement #	Differences Between 99% Confidence Intervals
2B	Region III < Region I
	Region III < HQ Technical/Program Staff
2D	Region III < Region I
2E	Region III < Region I
2H	Region III < Region I
	Region III < HQ Technical/Program Staff
3D	Region IV < Region I
	Region IV < HQ Technical/Program Staff
3G	Region III < Region I
	Region III < HQ Technical/Program Staff
4C	Region III < HQ Line Management
	Other Position < All Positions
5B	-5 Years of Service < 10+ Years of Service
5D	Region III < HQ Technical/Program Staff
6A	Region III < Region I
	Region II < Region I
6B	Region III < Region I
6F	Region III < Region I
7E	Region IV < Region I
9D	Region III < Region I
11G	Region III < Region I
12A	Region III < Region I
12C	Region III < Region I
	Region II < Region I
13B	Region III < Region IV
	Region III < Region I
	Region1 < HQ Technical/Program Staff
All Issues	Region III < Region I
	Region III < HQ Technical/Program Staff

Table 3-B. Summary of Differences in 99% Confidence Intervals

2A. Data Analysis Summary

The following table details the percentage of total responses represented by each of the possible responses (except UA, which is not included in the calculation).

	9	% Resp	# Responses			
Statement*	SD	D	Α	SA	Total	UA
2A: assures plants are operated safely	0.02	0.11	0.68	0.20	229	5
^2B: regulatory att'n to performance problems	0.03	0.23	0.56	0.18	224	10
2C: oversight objectivity	0.01	0.14	0.65	0.20	229	5
^2D: realistic approach to oversight	0.03	0.18	0.59	0.20	230	4
^2E: identification of declining safety performance	0.11	0.36	0.43	0.10	211	23
2F: risk-informed approach to oversight	0.02	0.16	0.62	0.20	226	8
2G: inspector - licensee communication	0.02	0.15	0.65	0.18	219	15
^2H: att'n to licensees in licensee response band	0.02	0.17	0.63	0.17	219	15
2I: plain language in official correspondence	0.06	0.20	0.60	0.14	223	11

Shaded items indicate that <u>at least 70%</u> of respondents concurred regarding the Statement. That is, either (Agree + Strongly Agree = .70) or (Disagree + Strongly Disagree = .70).

- SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree UA (Unable to Answer) responses are not included in calculations of either "% Responses" or "Total # Responses."
- Indicates a difference was recorded within at least one of the demographic groups. These are detailed in the graphic plot(s) following.

2B. Difference Determination

Following are graphic representations of all the variables within each category found to contain differences between/among the respondents. Note that graphics are presented only for statements for which significant differences were recorded (as indicated above by a " $^{"}$) and, within each graphic, only for categories that contain differences.

To interpret the following graphics, note that any pair of bars <u>within a given category</u> that do not overlap provide evidence of differential responses. A detailed explanation of the analyses from which these data/graphics are derived is presented in Chapter 2 of this report.



3A. Data Analysis Summary

The following table details the percentage of total responses represented by each of the possible responses (except UA, which is not included in the calculation).

	%	of Res	ponse	# Responses			
Statement *		SD	D	A	SA	Total	UA
3A: ROP increases: predictability		0.04	0.21	0.43	0.32	225	9
3B: ROP increases: consistency		0.01	0.14	0.56	0.28	225	9
3C: ROP increases: clarity	1	0.04	0.25	0.52	0.18	224	10
^3D: ROP increases: objectivity		0.02	0.20	0.55	0.24	225	9
3E: ROP increases: timeliness		0.04	0.18	0.53	0.25	223	11
3F: ROP increases: efficiency		0.04	0.21	0.53	0.22	221	13
^3G: ROP increases: effectiveness		0.08	0.35	0.44	0.13	214	20
3H: ROP increases: risk-inform	이 나라 가지?	0.00	0.04	0.53	0.43	227	7
31: ROP reduces admin burden		0.08	0.23	0.48	0.21	218	16

* Shaded items indicate that <u>at least 70%</u> of respondents concurred regarding the Statement. That is, either (Agree + Strongly Agree = .70) or (Disagree + Strongly Disagree = .70).

 Of (Disagree + Onongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree UA (Unable to Answer) responses are not included in calculations of either "% Responses" or "Total # Responses."

Indicates a difference was recorded within at least one of the demographic groups. These are detailed in the graphic plot(s) following.

3B. Difference Determination

Following are graphic representations of all the variables within each category found to contain differences between/among the respondents. Note that graphics are presented only for statements for which significant differences were recorded (as indicated above by a "^") and, within each graphic, only for categories that contain differences.

To interpret the following graphics, note that any pair of bars <u>within a given Category</u> that do not overlap provide evidence of differential responses. A detailed explanation of the analyses from which these data/graphics are derived is presented in Chapter 2 of this report.



4A. Data Analysis Summary

The following table details the percentage of total responses represented by each of the possible responses (except UA, which is not included in the calculation).

	%	of Res	# Responses			
Statement *	SD	D	Α	SA	Total	UA
4A: Web site info: timely	0.01	0.08	0.73	0.18	196	38
4B: Web site info: understandable	0.01	0.10	0.73	0.16	205	29
^4C: Web site info: accurate	0.01	0.08	0.74	0.16	194	40
4D: Web site info: inform intern. stakeholders	0.04	0.19	0.63	0.14	201	33
4E: Web site info: easily retrieved	0.03	0.10	0.70	0.16	208	26

 Shaded items indicate that <u>at least 70%</u> of respondents concurred regarding the Statement. That is, either (Agree + Strongly Agree = .70) or (Disagree + Strongly Disagree = .70).

- SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree UA (Unable to Answer) responses are not included in calculations of either "% Responses" or "Total # Responses."
- Indicates a difference was recorded within at least one of the demographic groups. These are detailed in the graphic plot(s) following.
- **4B. Difference Determination**

Following are graphic representations of all the variables within each category found to contain differences between/among the respondents. Note that graphics are presented only for statements for which significant differences were recorded (as indicated above by a " $^{"}$) and, within each graphic, only for categories that contain differences.

To interpret the following graphics, note that any pair of bars <u>within a given category</u> that do not overlap provide evidence of differential responses. A detailed explanation of the analyses from which these data/graphics are derived is presented in Chapter 2 of this report.



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4C: Web site info: accurate

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5A. Data Analysis Summary

The following table details the percentage of total responses represented by each of the possible responses (except UA, which is not included in the calculation).

	%	of Res	# Responses			
Statement *	SD	D	A	SA	Total	UA
5A: Rspns from HQ fback forms: timely	0.27	0.39	0.32	0.03	142	92
^5B : Rspns from HQ fback forms: understandable	0.08	0.25	0.64	0.03	132	102
5C: Rspns from HQ fback forms: accurate	0.08	0.27	0.62	0.03	115	119
^5D: Rspns from HQ fback forms: address issues	0.18	0.37	0.42	0.03	137	97

* Shaded items indicate that <u>at least 70%</u> of respondents concurred regarding the Statement. That is, either (Agree + Strongly Agree = .70) or (Disagree + Strongly Disagree = .70).

Indicates a difference was recorded within at least one of the demographic groups. These are detailed in the graphic plots following.

5B. Difference Determination

Following are graphic representations of all the variables within each category found to contain differences between/among the respondents. Note that graphics are presented only for statements for which significant differences were recorded (as indicated above by a "^") and, within each graphic, only for categories that contain differences.

To interpret the following graphics, note that any pair of bars <u>within a given category</u> that do not overlap provide evidence of differential responses. A detailed explanation of the analyses from which these data/graphics are derived is presented in Chapter 2 of this report.

SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree UA (Unable to Answer) responses are not included in calculations of either "% Responses" or "Total # Responses."

5B: Rspns from HQ f'back forms: understandable



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5D: Rspns from HQ f'back forms: address issue



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6A. Data Analysis Summary

The following table details the percentage of total responses represented by each of the possible responses (except UA, which is not included in the calculation).

	%	of Res	# Responses			
Statement *	SD	D	Α	SA	Total	UA
^6A : B'line insp prog: IDs significant issues	0.01	0.21	0.60	0.18	224	10
^6B : B'line insp prog: obj. findings/docum'nt signif	0.04	0.26	0.56	0.15	226	8
6C: B'line insp prog: LOE = estimated effort	0.07	0.46	0.43	0.04	212	22
6D: B'line insp prog: comm. timely fashion	0.00	0.05	0.70	0.25	226	8
6E: B'line insp prog: comm. accurate	0.04	0.07	0.68	0.21	218	16
^6F : B'line insp prog: covers safety activities/ops	0.08	0.29	0.50	0.13	224	10

* Shaded items indicate that <u>at least 70%</u> of respondents concurred regarding the Statement. That is, either (Agree + Strongly Agree = .70) or (Disagree + Strongly Disagree = .70).

 SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree UA (Unable to Answer) responses are not included in calculations of either "% Responses" or "Total # Responses."

Indicates a difference was recorded within at least one of the demographic groups. These are detailed in the graphic plot(s) following.

6B. Difference Determination

Following are graphic representations of all the variables within each category found to contain differences between/among the respondents. Note that graphics are presented only for statements for which significant differences were recorded (as indicated above by a "^") and, within each graphic, only for categories that contain differences.

To interpret the following graphics, note that any pair of bars <u>within a given category</u> that do not overlap provide evidence of differential responses. A detailed explanation of the analyses from which these data/graphics are derived is presented in Chapter 2 of this report.





6F: B'line insp prog: covers safety activ. / ops



6B: B'line insp prog: obj. findings/docum'nt signif



7A. Data Analysis Summary

The following table details the percentage of total responses represented by each of the possible responses (except UA, which is not included in the calculation).

	%	of Res	# Responses			
Statement *	SD	D	Α	SA	Total	UA
7A: B'line insp procedures: address c'stone attrib	0.03	0.16	0.70	0.11	220	14
7B: B'line insp procedures: clearly written	0.03	0.22	0.67	0.08	223	11
7C: B'line insp procedures: emphasize planning	0.03	0.16	0.72	0.10	218	16
7D: B'line insp procedures: sample risk aspects	0.02	0.22	0.66	0.10	217	17
^7E: B'line insp procedures: appropriate frequency	0.05	0.23	0.67	0.06	217	17

* Shaded items indicate that <u>at least 70%</u> of respondents concurred regarding the Statement. That is, either (Agree + Strongly Agree = .70) or (Disagree + Strongly Disagree = .70).

- SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree UA (Unable to Answer) responses are not included in calculations of either "% Responses" or "Total # Responses."
- Indicates a difference was recorded within at least one of the demographic groups. These are detailed in the graphic plot(s) following.

7B. Difference Determination

Following are graphic representations of all the variables within each category found to contain differences between/among the respondents. Note that graphics are presented only for statements for which significant differences were recorded (as indicated above by a "^") and, within each graphic, only for categories that contain differences.

To interpret the following graphics, note that any pair of bars <u>within a given category</u> that do not overlap provide evidence of differential responses. A detailed explanation of the analyses from which these data/graphics are derived is presented in Chapter 2 of this report.

7E: B'line insp procedures: appropriate freq



8A. Data Analysis Summary

The following table details the percentage of total responses represented by each of the possible responses (except UA, which is not included in the calculation).

	%	of Res	# Responses			
Statement *	SD	D	Α	SA	Total	UA
8A: Report communicates to: licensee	0.05	0.32	0.51	0.12	227	7
8B: Report communicates to: to public	0.08	0.32	0.52	0.08	225	9
8C: Report communicates to: internal stk'holders	0.08	0.37	0.46	0.10	226	8

* Shaded items indicate that <u>at least 70%</u> of respondents concurred regarding the Statement. That is, either (Agree + Strongly Agree = .70) or (Disagree + Strongly Disagree = .70).

 SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree UA (Unable to Answer) responses are not included in calculations of either "% Responses" or "Total # Responses."

8B. Difference Determination

No differences between/among respondents were recorded for Statements 8A-8C.

9A. Data Analysis Summary

The following table details the percentage of total responses represented by each of the possible responses (except UA, which is not included in the calculation).

	%	of Res	sponse	# Responses		
Statement *	SD	D	Α	SA	Total	UA
9A: Assessment Proc: range of action	0.01	0.16	0.68	0.14	222	12
9B: Assessment Proc: timely resolution	0.04	0.20	0.65	0.11	217	17
9C: Assessment Proc: enforcement actions	0.05	0.28	0.57	0.10	214	20
^9D: Assessment Proc: resources to safety signif areas	0.04	0.16	0.65	0.15	221	13
9E: Assessment Proc: minimize prep duplication	0.02	0.11	0.66	0.22	190	44
9F: Assessment Proc: objective assess levels	0.02	0.14	0.69	0.15	218	16
9G: Assessment Proc: understandable thresholds	0.03	0.23	0.60	0.14	226	8

* Shaded items indicate that <u>at least 70%</u> of respondents concurred regarding the Statement. That is, either (Agree + Strongly Agree = .70) or (Disagree + Strongly Disagree = .70).

- SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree UA (Unable to Answer) responses are not included in calculations of either "% Responses" or "Total # Responses."
- Indicates a difference was recorded within at least one of the demographic groups. These are detailed in the graphic plot(s) following.

9B. Difference Determination

Following are graphic representations of all the variables within each category found to contain differences between/among the respondents. Note that graphics are presented only for statements for which significant differences were recorded (as indicated above by a "^") and, within each graphic, only for categories that contain differences.

To interpret the following graphics, note that any pair of bars <u>within a given category</u> that do not overlap provide evidence of differential responses. A detailed explanation of the analyses from which these data/graphics are derived is presented in Chapter 2 of this report.

9D: Assessment Proc: resources to greatest signif



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10A. Data Analysis Summary

The following table details the percentage of total responses represented by each of the possible responses (except UA, which is not included in the calculation).

	%	of Res	# Responses			
Statement *	SD	D	Α	SA	Total	UA
10A: Pls: provide useful risk-significant info	0.03	0.18	0.66	0.13	222	12
10B: Pls: clearly defined	0.03	0.25	0.64	0.08	219	15
10C: Pls: understandable	0.03	0.20	0.69	0.09	220	14
10D: PIs: enhance public confidence	0.08	0.27	0.52	0.13	165	69
10E: Pls: overlap insp. finding	0.04	0.22	0.67	0.07	207	27
10F: PIs: help maintain safety	0.05	0.24	0.59	0.13	215	19
10G: Pls: indicate declining safety performance	0.11	0.36	0.48	0.05	204	30

* Shaded items indicate that <u>at least 70%</u> of respondents concurred regarding the Statement. That is, either (Agree + Strongly Agree = .70) or (Disagree + Strongly Disagree = .70).

 SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree UA (Unable to Answer) responses are not included in calculations of either "% Responses" or "Total # Responses."

10B. Difference Determination

No differences between/among respondents were recorded for Statements 10A-10G.

11A. Data Analysis Summary

The following table details the percentage of total responses represented by each of the possible responses (except UA, which is not included in the calculation).

	%	of Res	# Responses			
Statement *	SD	D	Α	SA	Total	UA
11A: Rx SDPs easy to use	0.11	0.49	0.38	0.01	209	25
11B: Non-Rx SDPs easy to use	0.19	0.45	0.33	0.04	107	127
11C: SDP: resource expenditures appropriate	0.06	0.33	0.58	0.02	186	48
11D: SDP: focus on safety significant issues	0.02	0.18	0.68	0.11	222	12
11E: SDP: basis for effective comm w/ licensee	0.03	0.20	0.67	0.10	217	17
11F: SDP: basis for effective comm w/ public	0.09	0.31	0.52	0.07	202	32
^11G: SDP: consistent results	0.06	0.22	0.63	0.09	210	24

* Shaded items indicate that <u>at least 70%</u> of respondents concurred regarding the Statement. That is, either (Agree + Strongly Agree = .70) or (Disagree + Strongly Disagree = .70).

- SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree UA (Unable to Answer) responses are not included in calculations of either "% Responses" or "Total # Responses."
- Indicates a difference was recorded within at least one of the demographic groups. These are detailed in the graphic plot(s) following.

11B. Difference Determination

Following are graphic representations of all the variables within each category found to contain differences between/among the respondents. Note that graphics are presented only for statements for which significant differences were recorded (as indicated above by a "^") and, within each graphic, only for categories that contain differences.

To interpret the following graphics, note that any pair of bars <u>within a given category</u> that do not overlap provide evidence of differential responses. A detailed explanation of the analyses from which these data/graphics are derived is presented in Chapter 2 of this report.

11G: SDP: consistent results



12A. Data Analysis Summary

The following table details the percentage of total responses represented by each of the possible responses (except UA, which is not included in the calculation).

	%	of Res	ponse	# Responses		
Statement *		D	Α	SA	Total	UA
^12A: SDP results: correct character. of risk signif	0.05	0.24	0.62	0.09	209	25
12B: SDP results: verifiable	0.02	0.14	0.72	0.12	213	21
^12C: SDP results: realistic	0.05	0.24	0.64	0.06	205	29
12D: SDP results: based on clear standards	0.06	0.42	0.49	0.04	208	26
12E: SDP results: accurate	0.05	0.30	0.60	0.05	192	42
12F: SDP results: complete	0.05	0.42	0.50	0.04	197	37

* Shaded items indicate that <u>at least 70%</u> of respondents concurred regarding the Statement. That is, either (Agree + Strongly Agree = .70) or (Disagree + Strongly Disagree = .70).

 SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree UA (Unable to Answer) responses are not included in calculations of either "% Responses" or "Total # Responses."

Indicates a difference was recorded within at least one of the demographic groups. These are detailed in the graphic plot(s) following.

12B. Difference Determination

Following are graphic representations of all the variables within each category found to contain differences between/among the respondents. Note that graphics are presented only for statements for which significant differences were recorded (as indicated above by a " $^{"}$) and, within each graphic, only for categories that contain differences.

To interpret the following graphics, note that any pair of bars <u>within a given category</u> that do not overlap provide evidence of differential responses. A detailed explanation of the analyses from which these data/graphics are derived is presented in Chapter 2 of this report.







13A. Data Analysis Summary

The following table details the percentage of total responses represented by each of the possible responses (except UA, which is not included in the calculation).

	%	of Res	ponse	# Responses		
Statement *		D	Α	SA	Total	UA
13A: informs public of oversight activities	0.05	0.20	0.61	0.13	202	32
^13B: oversight resources appropriate	0.04	0.36	0.54	0.07	215	19
13C: supplemental inspection info sufficient	0.03	0.19	0.69	0.08	146	88
13D: IMC 0305 time goals can be met	0.03	0.06	0.75	0.16	177	57
13E: ROP fosters licensee self improvement	0.12	0.32	0.49	0.07	179	55
13F: ROP reduced reg burden on stakeholders	0.02	0.19	0.57	0.22	200	34
13G: NCV/CAP adequate for low saf. sig. issues	0.05	0.15	0.54	0.26	226	8
13H: ROP provides integration/insights to Xcuts	0.22	0.48	0.26	0.04	211	23

* Shaded items indicate that <u>at least 70%</u> of respondents concurred regarding the Statement. That is, either (Agree + Strongly Agree = .70) or (Disagree + Strongly Disagree = .70).

- SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree UA (Unable to Answer) responses are not included in calculations of either "% Responses" or "Total # Responses."
- Indicates a difference was recorded within at least one of the demographic groups. These are detailed in the graphic plot(s) following.

13B. Difference Determination

Following are graphic representations of all the variables within each category found to contain differences between/among the respondents. Note that graphics are presented only for Statements for which significant differences were recorded (as indicated above by a "^") and, within each graphic, only for categories that contain differences.

To interpret the following graphics, note that any pair of bars <u>within a given category</u> that do not overlap provide evidence of differential responses. A detailed explanation of the analyses from which these data/graphics are derived is presented in Chapter 2 of this report.

13B: o'sight resource approp., mean = 2.6, NA n = 19



CHAPTER 4

REACTOR INSPECTOR OPINION SURVEY, SECTION C, ROP TRAINING DATA ANALYSIS

The number of respondents for each Category and Variable is detailed in Table 4-A.

Table 4-A. Training Survey Respondent Demographic Data Summary

Category	Variable	# Respondents
Position	Inspector	123
	Supervisor	24
Total Respondents		147

No differences were recorded between Inspectors and Supervisors. Other results are detailed in the following Data Analysis Summary table.

ROP Training Course G-200 Survey

Data Analysis Summary

The following table details the percentage of total responses represented by each of the possible responses (except UC which is not included in the calculation).

		% Resp	onses '	# Responses [®]		
Statement *	SD	D	Α	SA	Total	UC
C1: Explained why oversight program changed	0.03	0.12	0.79	0.06	136	2
C2: Explained role of resident inspectors	0.03	0.24	0.70	0.02	125	13
C3: Explained role of Regional inspectors	0.02	0.22	0.73	0.02	130	8
C4: Provided in timely fashion	0.06	0.17	0.69	0.07	134	4
C5: Provided skills/knowledge required for	0.13	0.49	0.36	0.01	135	3
Significance Determination Process			1 1 1			
C6: Provided skills/knowledge required for Baseline	0.05	0.26	0.66	0.02	136	2
Inspection		:				
C7: Provided skills/knowledge required for	0.16	0.54	0.29	0.01	136	2
inspection documentation						
C8: Provided skills/knowledge required for	0.05	0.37	0.56	0.02	131	7
Performance Indicators						
C9: Provided skills/knowledge required for	0.08	0.42	0.47	0.02	132	6
assessment						
C10: Provided skills/knowledge required for	0.18	0.54	0.27	0.01	135	3
enforcement				, , ,		
C11: Training support after course was adequate	0.19	0.45	0.35	0.01	113	25

* Shaded items indicate that <u>at least 70%</u> of respondents concurred regarding the Statement. That is, either (Agree + Strongly Agree = .70) or (Disagree + Strongly Disagree = .70).

 SD = Strongly Disagree; D = Disagree; A = Agree; SA = Strongly Agree UC (Unable to Comment) responses are not included in calculations of either "% Responses" or "Total # Responses."

[@] Sums do not include 9 respondents who answered "UC" to every Statement.

CHAPTER 5

RESPONSE COMPARISONS: ROP AND TRAINING SURVEYS VS PILOT PROGRAM SURVEY

The Pilot Program Survey conducted by NRC in FY 1999 garnered responses from 94 individuals from all regions. No demographic data (e.g., position, location, grade, years of service) were available for analysis.

Although many items in this survey were close analogs to those of the two FY 2000 surveys reported on above, the response choices differed in one significant aspect: the earlier survey included a "Neither Agree or Disagree" option. Although the different response options makes comparisons involving tests for significant differences infeasible,² Table 5-A offers a direct comparison of responses--by percentage of particular response—to similar/identical items on the FY 1999 Pilot Program survey versus the two FY 2000 surveys.

This provides the basis for some interesting and potentially useful "eyeball assessments." Consider FY 2000 survey item 2B (left column of table). Because the percentage of Strongly Disagree or Disagree comments is similar between 2B and its listed FY 1999 corollary (right column of table), one might reasonably surmise that most of the 32% of the respondents who originally indicated they "Neither Agree or Disagree" with the statement later came to Agree or Strongly Agree with it. On the other hand, the FY 2000 responses to item 3G (left column) were apparently much more equivocal by the 33% "Neither Agree or Disagree" responses to the FY 1999 corollary (right column). The impossibility of predicting how FY 1999's "Neither Agree or Disagree" respondents--as many as 45% of the survey respondents--would respond to FY 2000 response options is thereby highlighted.

FY 2000 survey items that have no corollary in the FY 1999 Pilot Program survey are shaded in Table 5-A. Only the following FY 1999 Pilot Program survey Statements have not been linked to one or more FY 2000 Survey Statements:

- The SDP process adequately screens risk-significant issues.
- The Action Matrix provides adequate incentives for the licensee to improve safety performance.
- The training was helpful to me in explaining the process to stakeholders (licensees, the public).
- The NRC should use the new process to prioritize allegations received from the public and licensee employees.

² Note that, despite this difficulty, eliminating this "neutral" response option was advisable. Especially when, as in this case, a "not familiar enough to answer" (or similar) option is available, the meaning of "neither agree or disagree" is particularly clouded. Worse, such answers provide little/no basis for action which, presumable, is one of the prime motivations for conducting the survey. Elimination of the "neutral" response option in the FY00 surveys yielded not one objection from among nearly 400 respondents.

TABLE 5-A FY 2000 ROP and Training Survey Responses vs

FY 1999 Pilot Program Survey Responses

	% Responses					
FY 2000 Statement	SD	D	Neither A or D	A	SA	FY 1999 Statement
2A: The ROP generally provides appropriate assurance that plants are being operated safely	0.02	0.11		0.68	0.20	
	0.03	0.16	0.33	0.43	0.06	The new oversight process provides adequate assurance that plants are being operated safely.
2B: The ROP generally provides appropriate regulatory attention to licensees with performance problems	0.03	0.23		0.56	0.18	
	0.07	0.20	0.32	0.36	0.05	The new program provides sufficient regulatory attention to licensees with performance problems
2C: The ROP generally provides objectivity to the oversight process	0.01	0.14	—	0.65	0.20	
	0.02	0.12	0.16	0.54	0.15	The new program provides objectivity to the oversight process
2D: The ROP generally provides a realistic approach to oversight	0.03	0.18	۲۳. افت	0.59	0.20	
2E: The ROP generally provides appropriate identification of declining safety performance before there's a significant reduction in safety margins	0.11	0.36	_	0.43	0.10	
	0.11	0.36	0.32	0.19	0.01	The new process allows for identification of declining safety performance before significant reduction in safety margins

	% Responses					
FY 2000 Statement	SD	D	Neither A or D	A	SA	FY 1999 Statement
2F: The ROP generally provides an effective risk- informed approach to oversight	0.02	0.16		0.62	0.20	· · · · · · · · · · · · · · · · · · ·
2G: The ROP generally provides appropriate inspect or and licensee communication	0.02	0.15		0.65	0.18	
2H: The ROP generally provides sufficient attention to licensees whose performance is in the licensee response band	0.02	0.17		0.63	0.17	
2I: The ROP generally provides appropriate communication effectiveness through use of plain language in official correspondence	0.06	0.20		0.60	0.14	
3A: Compared to the previous process, the new ROP generally ROP increases predictability	0.04	0.21		0.43	0.32	
3B: Compared to the previous process, the new ROP generally ROP increases consistency	0.01	0.14		0.56	0.28	
3C: Compared to the previous process, the new ROP generally ROP increases clarity	0.04	0.25	—	0.52	0.18	
3D: Compared to the previous process, the new ROP generally ROP increases objectivity	0.02	0.20		0.55	0.24	
	0.06	0.10	0.28	0.47	0.09	The new oversight process increases the predictability, consistency, clarity and objectivity of the NRC oversight process

	% Responses					
Statement	SD	D	Neither A or D	A	SA	FY 1999 Statement
3E: Compared to the previous process, the new ROP generally ROP increases timeliness	0.04	0.18		0.53	0.25	
3F: Compared to the previous process, the new ROP generally increases efficiency	0.04	0.21		0.53	0.22	
	0.03	0.14	0.33	0.38	0.02	The new oversight process improves the efficiency and effectiveness of the regulatory process, focusing agency resources on those issues with the most safety significance
	0.04	0.13	0.28	0.41	0.14	The overall effort (inspection, enforcement, assessment) was more efficient than the old process
3G: Compared to the previous process, the new ROP generally increases effectiveness	0.08	0.35		0.44	0.13	
	0.03	0.14	0.33	0.38	0.02	The new oversight process improves the efficiency and effectiveness of the regulatory process, focusing agency resources on those issues with the most safety significance
3H: Compared to the previous process, the new ROP generally is more risk-informed	0.00	0.04		0.53	0.43	
31: Compared to the previous process, the new ROP generally reduces unnecessary administrative burden on the NRC	0.08	0.23		0.48	0.21	
	0.03	0.14	0.32	0.35	0.08	The new oversight process reduces unnecessary administrative burden on the NRC
4A: Web site info: timely	0.01	0.08	August 100 Provide	0.73	0.18	
4B: Web site info: understandable	0.01	0.10	and a start of the second s	0.73	0.16	
4C: Web site info: accurate	0.01	0.08		0.74	0.16	
		%	Respons	ses		
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FY 2000 Statement	SD	D	Neither A or D	A	SA	FY 1999 Statement
4D: The information on plant performance (e.g., inspection reports, PI data, etc.) provided on the ROP Web site is adequate to keep NRC internal stakeholders informed	0.04	0.19		0.63	0.14	
	0.01	0.15	0.27	0.43	0.13	The information on the revised reactor oversight process available on the WEB page provided adequate information
4E: Web site info: easily retrieved	0.03	0.10		0.70	0.16	
5A: Rspns from HQ fback forms: timely	0.27	0.39		0.32	0.03	
5B: Rspns from HQ fback forms: understandable	0.08	0.25	(0.64	0.03	
5C: Rspns from HQ Fback forms: accurate	0.08	0.27	:	0.62	0.03	
5D: Rspns from HQ f back forms: address issues	0.18	0.37		0.42	0.03	
6A: The baseline inspection program appropriately identifies risk-significant issues	0.01	0.21	_	0.60	0.18	
	0.07	0.15	0.25	0.47	0.07	The baseline inspection program will appropriately identify risk-significant issues
6B: B'line insp prog: obj. findings/docum'nt signif	0.04	0.26		0.56	0.15	
6C: The baseline inspection program level of effort for conducting each inspection is consistent wit that estimated in the inspection procedure	0.07	0.46	—	0.43	0.04	
	0.13	0.42	0.15	0.26	0.04	The level of effort required for conducting each inspection was consistent with that in the inspection procedure.
6D: B'line insp prog: comm. timely fashion	0.00	0.05		0.70	0.25	
6E: B'line insp prog: comm. accurate	0.04	0.07		0.68	0.21	
6F: B'line insp prog: covers safety activities/ops	0.08	0.29		0.50	0.13	

		%	Respons	es		FY 1999 Statement
Statement	SD	D	Neither A or D	A	SA	
7A: The baseline inspection program procedures are adequate to address intended cornerstone attributes	0.03	0.16	—	0.70	0.11	
	0.05	0.20	0.21	0.49	0.06	The scope of the baseline inspection procedures are adequate to address intended cornerstone attributes
7B: The baseline inspection program procedures are clearly written	0.03	0.22		0.67	0.08	
	0.09	0.19	0.27	0.42	0.02	The new procedures were clearly written
7C: The baseline inspection program procedures place sufficient emphasis on planning	0.03	0.16	—	0.72	0.10	
	0.06	0.15	0.17	0.48	0.14	The new inspection procedures placed sufficient emphasis on planning
7D: B'line insp procedures: sample risk aspects	0.02	0.22		0.66	0.10	
7E: B'line insp procedures: appropriate frequency	0.05	0.23		0.67	0.06	
8A: The baseline inspection program report format adequately communicates relevant information to the licensee	0.05	0.32		0.51	0.12	
8B: The baseline inspection program report format adequately communicates relevant information to the public	0.08	0.32	—	0.52	0.08	
	0.17	0.31	0.19	0.30	0.03	The new inspection report format adequately communicates relevant information to the licensee and to the public
8C: Report communicates to: internal stk'holders	0.08	0:37		0.46	0.10	

		%	Respons	es		
FY 2000 Statement	SD	D	Neither A or D	A	SA	FY 1999 Statement
9A: The Assessment Process provides an appropriate range of actions for safety issues	0.01	0.16		0.68	0.14	
	0.05	0.10	0.33	0.41	0.10	Compared to the old process, the actions recommended by the Action matrix are appropriate for the significance level of safety issues
9B: The Assessment Process provides for timely resolution of issues commensurate with safety significance	0.04	0.20		0.65	0.11	
	0.01	0.14	0.44	0.31	0.10	Compared to the old process (SALP, PPR,etc.) the new assessment and enforcement approaches are more efficient and effective
9C: Assessment Proc: enforcement actions	0.05	0.28		0.57	0.10	
9D: A'mnt Proc: resources to safety signif areas	0.04	0.16	<u></u>	0.65	0.15	
9E: Assessment Proc: minimize prep duplication	0.02	0.11		0.66	0.22	
9F: Assessment Proc: objective assess levels	0.02	0.14		0.69	0.15	
9G: Assessment Proc: understandable thresholds	0.03	0.23		0.60	0.14	
10A: The Performance Indicators provide useful information on risk-significant areas	0.03	0.18		0.66	0.13	
0	0.08	0.55	0.27	0.07	0.03	The Performance Indicators provide information in areas which are risk-significant
10B: PIs: clearly defined	0.03	0.25		0.64	0.08	
10C: The Performance Indicators are understandable	0.03	0.20		0.69	0.09	
	0.01	0.15	0.22	0.57	0.06	The Performance Indicators are understandable
10D: PIs: enhance public confidence	0.08	0.27		0.52	0.13	
10E: Pls: overlap insp. finding	0.04	0.22	21,24	0.67	0.07	
10F: PIs: help maintain safety	0.05	0.24		0.59	0.13	

		%	Respons	es		
FY 2000 Statement	SD	D	Neither A or D	A	SA	FY 1999 Statement
10G: Performance Indicators provide an adequate indication of declining safety performance	0.11	0.36		0.48	0.05	
	0.08	0.28	0.40	0.24	0.0	For those areas covered by Performance Indicators, they are capable of providing an adequate indication of declining safety performance
11A: Rx SDPs easy to use	0.11	0.49		0.38	0.01	
11B: Non-Rx SDPs easy to use	0.19	0.45		0.33	0.04	
	0.11	0.39	0.26	0.20	0.03	The SDP process is easy to use
11C: SDP: resource expenditures appropriate	0.06	0.33		0.58	0.02	
11D: SDP: focus on safety significant issues	0.02	0.18		0.68	0.11	
11E: SDP: basis for effective comm w/ licensee	0.03	0.20		0.67	0.10	
11F: SDP: basis for effective comm w/ public	0.09	0.31		0.52	0.07	
11G: SDP: consistent results	0.06	0.22		0.63	0.09	
12A: SDP results correctly characterize the risk- significance of inspection findings	0.05	0.24	—	0.62	0.09	
	0.07	0.29	0.29	0.3	0.02	The risk-significance of inspection findings are correctly characterized using the SDP
12B: SDP results: verifiable	0.02	0.14		0.72	0.12	
12C: SDP results: realistic	0.05	0.24		0.64	0.06	
12D: SDP results: based on clear standards	0.06	0.42		0.49	0.04	
12E: SDP results: accurate	0.05	0.30		0.60	0.05	
12F: SDP results: complete	0.05	0.42		0.50	0.04	
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		%	Respons	es		FY 1999 Statement
FY 2000 Statement	SD	D	Neither A or D	A	SA	
13A: The information provided by the NRC appropriately keeps the public informed of the agency oversight activities related to the plants	0.05	0.20		0.61	0.13	
agency overlogin activities related to the president	0.10	0.27	0.23	0.37	0.04	The information provided by the NRC is appropriate to keeping the public informed of agency oversight activities related to the plants
13B: oversight resources appropriate	0.04	0.36		0.54	0.07	
13C: The supplemental inspection procedures provide sufficient information to confirm the adequacy of a licensee's root cause and corrective action effort	0.03	0.19		0.69	0.08	
	0.04	0.12	0.45	0.33	0.06	The supplemental inspection procedures are adequate to provide sufficient information to confirm the adequacy of a licensee's root cause and corrective action effort
13D: IMC 0305 time goals can be met	0.03	0.06		0.75	0.16	
13E: ROP fosters licensee self improvement	0.12	0.32		0.49	0.07	
13F: ROP reduced reg burden on stakeholders	0.02	0.19		0.57	0.22	
13G: Issuing NCVs and relying on licensee's corrective action program provides for an adequate approach to resolve issues of very low safety significance (i.e., green findings)	0.05	0.15		0.54	0.26	
bacty orbitalete (act, Breen man Bo)	0.02	0.09	0.16	0.55	0.18	NCVs and relying on licensee's corrective action program provides for an adequate approach to resolve issues of low safety significance
13H: ROP provides integration/insights to Xcuts	0.22	0.48	<u>20</u> 23.27	0.26	0.04	

		%	Respons	ses		
Statement	SD	D	Neither A or D	A	SA	FY 1999 Statement
C1: The ROP training (G-200) course adequately explained why the process was changed	0.03	0.12		0.79	0.06	
	0.00	0.11	0.14	0.63	012	The training adequately explained why the process was changed
C2: Explained role of resident inspectors	0.03	0.24		0.70	0.02	
C3: Explained role of Regional inspectors	0.02	0.22		0.73	0.02	
C4: Provided in timely fashion	0.06	0.17		0.69	0.07	
C5: The ROP training (G-200 course) provided the skill/knowledge needed to perform the activities related to the Significance Determination Process	0.13	0.49		0.36	0.01	
C6: The ROP training (G-200 course) provided the skill/knowledge needed to perform the activities related to the Baseline Inspection Program	0.05	0.26	_	0.66	0.02	
C7: The ROP training (G-200 course) provided the skill/knowledge needed to perform the activities related to inspection documentation	0.16	0.54		0.29	0.01	
C8: The ROP training (G-200 course) provided the skill/knowledge needed to perform the activities related to Performance Indicators	0.05	0.37	-	0.56	0.02	
C9: The ROP training (G-200 course) provided the skill/knowledge needed to perform the activities related to assessment	0.08	0.42	—	0.47	0.02	
C10: The ROP training (G-200 course) provided the skill/knowledge needed to perform the activities related to enforcement	0.18	0.54	—	0.27	0.01	
	0.00	0.12	0.15	0.62	0.11	The training adequately explained the roles of PIs and inspections
	0.06	0.21	0.12	0.61	0.00	The training received in the new process provided the necessary knowledge to carry out the pilot program

FY 2000 Statement		%	6 Response	es		FY 1999 Statement
	SD	D	Neither A or D	Α	SA	
C11: Training support after course was adequate	0.19	0.45		0.35	0.01	

APPENDIX A RESPONSE DATA HISTOGRAMS AND CONFIDENCE INTERVAL BAR CHARTS

For each survey statement, following are histogram depictions of the number (n) and percentage (%) of respondents who answered Strongly Disagree (SD), Disagree (D), Agree (A), or Strongly Agree (SA). The number of Unable to Answer responses (abbreviated as "NA" here) is indicated at the top of each histogram—but these are not included in the percentage calculation—as is the mean response value.

For each survey statement for which demographic differences were recorded, the Confidence Interval bar graphs originally presented in Chapter 3 are replicated here for convenience. See Chapter 2, "Reading Confidence Interval Graphics" for instructions.



2A: assure safety, mean = 3.1, NA n = 5



99% CI for demographic effects significant at 1% level



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99% Cl for demographic effects significant at 1% level











2F: risk-informed o'sight, mean = 3, NA n = 8



2G: inspect - lic comm, mean = 3, NA n = 15



2H: att'n in lic resp band, mean = 3, NA n = 15









2I: plain language , mean = 2.8, NA n = 11



3A: ROP increases: predict, mean = 3, NA n = 9

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3B: ROP increases: consistency, mean = 3.1, NA n = 9



3C: ROP increases: clarity, mean = 2.8, NA n = 10

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3D: ROP increases: objectivity, mean = 3, NA n = 9





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3E: ROP increases: timeliness, mean = 3, NA n = 11

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3F: ROP increases: efficiency, mean = 2.9, NA n = 13



3G: ROP increases: effectiveness, mean = 2.6, NA n = 20



99% Cl for demographic effects significant at 1% level



3H: ROP increases: risk-inform, mean = 3.4, NA n = 7



3I: ROP reduces admin burden, mean = 2.8, NA n = 16

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4A: Web site info: timely, mean = 3.1, NA n = 38



4B: Web site info: understandable, mean = 3, NA n = 29

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4D: Web site info: inform intern. stakeholders, mean = 2.9, NA n = 33



4E: Web site info: easily retreived, mean = 3, NA n = 26



5A: Rspns from HQ f'back forms: timely, mean = 2.1, NA n = 92











5C: Rspns from HQ f'back forms: accurate, mean = 2.6, NA n = 119

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6A: B'line insp prog: ID signif issues, mean = 2.9, NA n = 10



99% Cl for demographic effects significant at 1% level

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6B: B'line insp prog: obj. findings/docum'nt signif, mean = 2.8, NA n = 8







6C: B'line insp prog: LOE = estimated effort, mean = 2.4, NA n = 22



6D: B'line insp prog: comm. timely fashion, mean = 3.2, NA n = 8



6E: B'line insp prog: comm. accurate, mean = 3.1, NA n = 16

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7A: B'line insp procedures: address c'stone attrib, mean = 2.9, NA n = 14

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7B: B'line insp procedures: clearly written, mean = 2.8, NA n = 11



7C: B'line insp procedures: emphasize planning, mean = 2.9, NA n = 16

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7D: B'line insp procedures: sample risk aspects, mean = 2.8, NA n = 17



7E: B'line insp procedures: appropriate freq, mean = 2.7, NA n = 17



99% CI for demographic effects significant at 1% level



8A: Report communicates to: licensee, mean = 2.7, NA n = 7



8B: Report communicates to: to public, mean = 2.6, NA n = 9



8C: Report communicates to: NRC intern. stakeholder, mean = 2.6, NA n = 8



9A: Assessment Proc: range of action, mean = 3, NA n = 12



9B: Assessment Proc: timely resolution, mean = 2.8, NA n = 17



9C: Assessment Proc: enforcement actions, mean = 2.7, NA n = 20

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9D: Assessment Proc: resources to greatest signif, mean = 2.9, NA n = 13



99% CI for demographic effects significant at 1% level



9E: Assessment Proc: minimize prep duplication, mean = 3.1, NA n = 44

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9F: Assessment Proc: objective assess levels, mean = 3, NA n = 16



9G: Assessment Proc: understandable thresholds, mean = 2.8, NA n = 8



10A: Pls: useful risk-sig info, mean = 2.9, NA n = 12



10B: Pls: clearly defined, mean = 2.8, NA n = 15





10D: PIs: enhance public confidence, mean = 2.7, NA n = 69

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10E: Pls: overlap insp. finding, mean = 2.8, NA n = 27



10F: Pls: help maintain safety, mean = 2.8, NA n = 19



10G: Pls: indicate declining perf, mean = 2.5, NA n = 30



11A: Rx SDPs easy , mean = 2.3, NA n = 25



11B: Non-Rx SDPs easy , mean = 2.2, NA n = 127



11C: SDP: expenditures appro, mean = 2.6, NA n = 48



11D: SDP: focus on sig issues, mean = 2.9, NA n = 12



11E: SDP: effectiv comm w/ licensee, mean = 2.8, NA n = 17

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11F: SDP: effectiv comm w/ public, mean = 2.6, NA n = 32

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11G: SDP: consistent results, mean = 2.8, NA n = 24



99% CI for demographic effects significant at 1% level



12A: SDP results: correct risk signif, mean = 2.7, NA n = 25







12B: SDP results: verifiable, mean = 2.9, NA n = 21


12C: SDP results: realistic, mean = 2.7, NA n = 29

99% Cl for demographic effects significant at 1% level





12D: SDP results: clear stds, mean = 2.5, NA n = 26

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12E: SDP results: accurate, mean = 2.7, NA n = 42



12F: SDP results: complete, mean = 2.5, NA n = 37

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13A: informs public of o'sight, mean = 2.8, NA n = 32









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13C: supplmt insp info suffic'nt, mean = 2.8, NA n = 88



13D: IMC 0305 time goals, mean = 3, NA n = 57



13E: licensee self improv, mean = 2.5, NA n = 55



13F: reduced reg burden on s'holders, mean = 3, NA n = 34

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13G: NCV/CAP adequate for low signif, mean = 3, NA n = 8

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13H: integrat w/ Xcut area, mean = 2.1, NA n = 23

APPENDIX B EXCERPTED AND BINNED COMMENTS

Comments received from the 97 individuals who chose to make such entries were excerpted and edited for brevity and clarity by Los Alamos National Laboratory personnel. These were then categorized to the extent possible according to the following performance metrics established for the ROP program.

- Objective
- Risk-informed
- Understandable
- Predictable
- Maintain safety
- Increase public confidence
- Reduce regulatory burden
- Make NRC activities and decisions more effective, efficient, and realistic

Where a single comment, or portions of a single comment, appeared to apply to more than one of the above performance metrics, these comments/portions were replicated and included under each relevant metric on the following pages.

Excerpted Comments Related to the ROP Performance Metric OBJECTIVE

The inputs to the matrix, especially the SDP findings, are open to the same subjectivity that the old assessment/enforcement process had, only that subjectivity has shifted from the enforcement process to the assessment process.

The thresholds for green, white, yellow and red are numbers that have little meaning as all licensee PRA's were generated using different standards, assumptions and numbers yet the assessment process treats outputs like they are some accurately determined endpoint.

The Group 1 and 2 questions are too broad and provide too much wiggle room.

Subjectivity still exists in determining whether an issue is minor or not. This can lead to inconsistent inspection report content.

The way a person answers the Group 1 and Group 2 questions dictates how an issue will be documented. These questions leave a lot to interpretation. The program is not predictable on how these questions will be answered.

The ROP gives the appearance of being more objective because of spells out how a plant enters the condition of heightened NRC Senior Management review (degraded cornerstones), but is still no more objective with respect to Senior Management assessment of inspection findings as they relate to NRC action.

It seems like RROP program changes can be achieved whenever NEI raises concerns about the program, but the same is not seen when inspectors raise concerns.

If we truly want to eliminate subjectivity in the content of our inspection reports, we should consider the changing threshold for documentation to be greater than green (i.e., don't document green or minor issues).

Given the reliance on placing items in the licensee's corrective action system, the PI and R inspections have now become very important.

Ideally, trends recognized by resident review should be documented to aid the PI&R review.

Need standards/criteria to provide objective guidance on when a supplemental inspection is not successful in assuring licensee's adequate root cause evaluation.

Excerpted Comments Related to the ROP Performance Metric *RISK-INFORMED*

Need to better risk-inform the Action Matrix - e.g., what is the technical basis for 2 whites equaling 1 yellow?

The improvement is that we are now more focused on risk significant items (other than human performance).

If the program were truly 'Risk-Informed' then early model BWRs with known, active IGSCC in recirculation lines, and older PWRs with original Steam Generators with active degradation mechanisms would have a different frequency of inspection than newer reactors, or reactors that had replaced the recirc piping or the steam generators.

Wasted effort is being put into the program in areas of little potential safety significance. The continued over inspection of PI&R, Fire protection, Maintenance and engineering is criminal and being done not for safety but to keep the regions whole.

Barrier Integrity PIs provide no evaluative value for plant performance Inspection Reports.

One of the areas addressed [in]adequately in the ROP is oversight of shift operations performance. This used to be an area, at least in my Region, that had the highest priority.

Based on the original precept of the process, the annual corrective action inspection is overkill and should be reduced to semi-annual or 'for cause.'

The program is not truly risk-informed. Risk is probability X consequence. The ROP is overly skewed toward probability with inadequate regard for consequence.

The ROP focuses too many resources on some areas that are non-productive, have little likelihood of exposing safety issues, and have no good way to express findings in a risk informed manner.

The thresholds are so high that the poorest performers look outstanding. Even TMI-2 would have looked all green just prior to their 1979 accident.

Under the baseline program we no longer inspect risk significant maintenance. We've gone from a proactive review to a reactive review. The utility appreciated our insights in the maintenance area under the 'old' program.

Provide a means to continue to document significant cross cutting issues. Human Performance can increase the initiating event frequency and should be addressed in the new program.

Due to inconsistencies in the Non-reactor SDPs, no-nothing issues turn white (Callaway HP issues, the problems did not result in additional unnecessary dose to personnel).

We spend WAY too much time on the maintenance rule, which is an administrative program, and which takes me away from other activities in the plant.

The ROP focuses too many resources on some areas that are non-productive, have little likelihood of exposing safety issues, and have no good way to express findings in a risk informed manner.

Examples are inspecting implementation of the maintenance rule, flood protection, and licensed operator re-qualification simulator observations.

This program still has several elements that provide little safety benefit. For example, the 50.59 inspections should be stopped as few if any findings are identified. Similarly the PI&R inspections should be performed biannually.

When are we (the NRC) going to make the tough decisions and eliminate what we consider to be low risk significant regulations? The decisions should be reflected in our regulations not with the inspector in the field deciding to not review a system because it would never be a risk significant finding.

The SDP process is an effective tool for sorting out some kinds of findings according to risk significance. And the inspector's awareness of the SDP ranking scheme can be an effective inspection-focusing device relative to potential risk significant areas.

We need more accurate SDPs and better GEMS models so that we can have better risk information at the sites.

If an issue doesn't readily screen as green, it should go through the Level 3 process.

My 'unable to respond' answers for the SDP question are primarily founded in the uncertainties and inconsistencies that are associated with the IPE's from which they are derived.

Excerpted Comments Related to the ROP Performance Metric UNDERSTANDABLE

Report writing and the SDP process deserve the most attention as far as efforts to make the expectations clearer.

Inspectors that have received weeks of training, still have problems understanding and following the logic of some of our SDP procedures.

The inspection procedures still are not clearly written. The logic for dispositioning issues and findings is still not clear and easy to use.

We have received conflicting guidance on what constitutes a 'cross cutting' issue.

Some Pis are too complex - eg: unavailability SDPs; some count greens to get white - eg: safeguards and ALARA SDPs; some are too complicated - eg: fire protection.

Need standards/criteria to provide objective guidance on when a supplemental inspection is not successful in assuring licensee's adequate root cause evaluation.

The SDP process isn't easily decipherable by the general public.

Licensee management typically asks for more details at informal pre-exits and exits meetings since they are well aware that the inspection reports cannot contain such desired details on the bases of inspectors' conclusions.

"No significant findings were identified" communicates nothing to the licensee or the public.

The extremely abbreviated inspection reports definitely do not communicate to the licensee NRC's assessment of their performance. Exit meetings have now become an important setting for plant management to obtain some feedback on program performance. For NRC internal use, this information is non-existent.

The ROP should resolve how non-documentable issues should be communicated between the inspector, licensee and NRC management (licensees have requested that this non-doc level input be provided to them at exit meetings).

The inspection reports do not accurately communicate to the public, NRC or licensee the station's performance. If you talk to licensee's they will tell you they get a lot more insights into areas that need to be addressed from the inspectors exit/debrief then from the written reports.

Many licensees are also stating that the information provided in the inspection reports is no longer of value. Are we doing anything to make the reports more informative?

The reactor SDP Phase 2 should be abandoned completely and should be replaced with a simple chart which contains more information than the current Phase 2.

The lack of accurate and complete phase 2 worksheets have hindered the timeliness of issuing non-green findings.

Phase 2 SDP workbooks are not complete and available for all sites.

Need to enhance Group 1 questions in 0610.

Some managers remain too unfamiliar with the details of inspection procedures used by their staff, which leads to frustration and inefficiencies.

There is not "uniform" definition of "minor" between and within the Regions which also lends subjectivity. Several "minor" issues are getting documented in reports based on subjective opinions of inspectors.

The ROP guidance on inspection of plants with broad areas of weakness needs further development (opinion) to allow broader inspection coverage.

Fire Protection SDP difficult to use because degrees of degradation (moderately and highly) for defense in depth elements are not defined. It's not clear how problems with manually actuated fixed supressions should be treated (i.e., under manual fire fighting vs. automatic suppression/detection). It's not clear how much mitigation credit should be given for when using the remote shutdown panel.

SDP entry Questions, such as Group 1 questions could be clarified.

An agreement of standardized wording for the basic situations would be useful. NRC has no guidance for evaluating effectiveness of, or even ability to complete, manual actions in a post-fire operating environment.

The threshold for documenting findings in inspection report needs to be more clearly defined. This is a communications consistency issue.

We have received conflicting guidance on what constitutes a "cross cutting" issue.

I doubt most "public stakeholders" can decipher our coded messages. The Agency and the industry do a miserable job of communicating risk to the Public.

Report writing and the SDP deserve the most attention as far as efforts to make the expectations clearer.

The enforcement guidance for maintenance rule violations is extremely weak.

I do not believe that the SDP process is easily decipherable by the general public.

Procedures provide no guidance for inspectors who were generalists as of a year ago.

Maintenance rule and maintenance rule implementation procedures are confusing and hard to follow/complete.

The reports do not provide adequate information to the licensee. We have been required to substantially increase our level of 'unofficial' communication with them because of this.

Group 1 questions require clarification in order for a consistent approach to enforcement to be applied.

More training is needed on the use of supplemental procedures.

Supplemental Inspection program needs to provide guidance for what NRC next steps are if licensee has either not done a root cause or has done an inadequate one.

The PI's have so many loopholes that they are vague and inadequate.

Performance Indicators: more effort required to define and validate unavailability.

The guidance for handling of cross-cutting issues and the appropriate thresholds for NRC action for cross-cutting issues remain the most significant program elements that need to be addressed for the continued success of the program.

There is too much legal jargon in inspection report cover letters to call them plain language.

The inspection reports content is too restricted and doesn't provide sufficient information.

There have been a number of "grey area" instances in which guidance was sufficiently vague that subjective decisions had to be made. These need to be reviewed and the agency's position and logic established for everyone to review. This isn't being consistently done.

There is too much legal jargon in inspection report cover letters to call them plain language.

I've heard comments from the public that the color coding and PIs are difficult to understand and question what happens to the ones that mysteriously disappear (after the PI is rolled off). Inspection reports contain insufficient information in the 'findings' sections to improve public confidence on the bases of inspectors' conclusions.

Excerpted Comments Related to the ROP Performance Metric *PREDICTABLE*

The resident inspectors are getting conflicting interpretations of the program requirements from HQ and the regions. Therefore, I don't think we are applying the ROP uniformly nationwide.

Experienced inspectors will identify trends before they appear on performance indicators or result in adverse plant performance; but if not documented, would this be considered "appropriate identification?"

Region I management requested information on issues and assessment of licensee's performance that did not meet the threshold of documentation.

Report writing is still an area of continuous change.

There also appears to be a disconnect between the technical branches in NRR and the inspection program branch, issues, such as how licensee oversee the conduct of Steam Generator inspections appear to be extremely important to the Division of Engineering, yet the inspection program branch acts as if it is only a minor problem that can be handled by refocusing a biennial ISI procedure.

Agency personnel still do not share a common, consistent, and appropriate vision of what the new oversight process is.

We aren't applying the ROP uniformly nationwide.

The program is more predictable to licensees and to some of the public (experts only).

There is an enormous disconnect between the inspection program and the assessment portion of the Revised Reactor Oversight Program.

Region III management subverts the process by requiring inspectors to identify findings in reports that are not warranted per the group I and II questions and push issues that are not safety related.

NRC management is interested in hearing about minor licensee performance insights; however, most of these items do not rise to the level for documenting in inspection reports. This presents a dilemma for inspectors: should we document or retain these insights?

We need to have one set of performance indicators for the industry. The industry is spending too much time calculating system availability 3 different ways.

We still are inconsistent, within various DRP branches as to what issues get documented in reports.

There is no consistency between the various groups (branches) regarding the format and content of the reports based upon 0610* interpretations.

Agency personnel still do not share a common, consistent, and appropriate vision of what the new oversight process is.

Still too much inconsistency among Regions in documenting low level issues.

We have received conflicting guidance on what constitutes a 'cross cutting' issue.

The SDP Group 1 questions are not consistently applied across the country. Specific examples (similar to the PI FAQs) should be provided to clarify how the Questions are to be applied.

The resident inspectors are getting conflicting interpretations of the program requirements from HQ and the Regions.

The 0610* is a great improvement, but has not been embraced throughout the various Regions and managers. For true uniformity, more NRR oversight of Regional activities is needed.

I have received many different interpretations from different sources regarding topics such as cross-cutting issues and documentation thresholds.

Treatment of minor issues may not be consistent within and across Regions in regard to what is and is not documented.

Inspection Procedures: level of effort is variable depending on licensee practices (e.g., conduct of on-line maintenance) and complexity of identified issues.

An area that needs more management oversight from Headquarters is the consistency of the NCVs or violations being documented. My review in this area indicated that even with the SDP process, NCVs and violations are not meeting the threshold but still being issued. Also, no color findings would appear to need better guidance.

Significance is too dependent on exposure time, which is subject to shortening due to circumstances independent of licensee performance. This creates inconsistencies in evaluation of similar events occurring at different times or locations.

Thresholds of significance vary among inspectors and may be too high.

Regions appear to be implementing a supposedly objective program very differently. For example we were told to hit number of occurrences and number of hours defined as guidance in the inspection procedures; another Region just does the inspections and lets the hours/occurrences fall where they may.

Treatment of minor issues may not be consistent within and across Regions in regard to what is and is not documented.

The way a person answers the Group 1 and Group 2 questions dictates how an issue will be documented. These questions leave a lot to interpretation. The program is not predictable on how these questions will be answered.

Reports are not consistent and could be simpler because the 0610 guidance has changed several times and feedback on reports is not always consistent with the 0610 guidance.

Threshold for reporting is inconsistently applied and not well defined.

Excerpted Comments Related to the ROP Performance Metric MAINTAIN SAFETY

The performance indicators are items that are easily managed by the licensee or have ridiculous numbers such as 25 scrams to be in the red.

Supplemental inspection procedures do not adequately handle the situation when licensees do not perform the expected behaviors such as performing a root cause evaluation.

Licensees will continue to tell the agency the process is working well regardless if it really is because they are getting less findings, no civil penalties and less inspection.

The information provided on the web site may paint a myopic picture of plant performance; to know the real story, the residents or branch chief may need to fill in details that are is not provided on the web site.

In the mid- and end-of-cycle review process, my experience has been that Green and No Color findings are completely ignored, as if they say nothing of performance. No Color findings can be significant and should be addressed.

Reports that predominantly document "No Significant issues identifie" provide a false sense of well being about the facility, or worse, provide the perception that the NRC is in collusion with the licensee's to hide the real problems from the public.

The ROP is not a predictor of failure, and doesn't allow the inspector sufficient freedom to seek out the licensee's weakness and to document it in the inspection reports.

I am not confident the ROP would be able to identify a future problem plant. We need to have a broken piece of risk significant equipment to identify a finding, rather than identifying adverse trends early and preventing equipment problems before they start.

The green/white threshold is too high.

Inspection reports are easier to write, but do not communicate the whole story. Minor issues that do not reach a certain threshold do not make the reports. Previously, the reports were used as a documenting tool so that if the licensee were to repeat a number of minor mistakes, the NRC could track the progress over a period of time. This would help the NRC determine if the licensee performance was degrading before this degradation was noted in an area of higher safety significance.

The new ROP does not communicate effectively plant performance of minor issues, which are indicators of a trend in declining plant performance, becasue these are omitted from the report.

The program and procedures are also written as 'one-size-fits-all' when we all should know by now that some reactor designs/equipment present different problems than do others.

The Agency is still too compliance focused, is not willing to delete/address regulations that add little to safety. The ROP doesn't allow the inspector sufficient freedom to seek out the licensee's weakness and to document it in the inspection reports.

So much emphasis is placed on the SDP and perceived risk significance that we are forgetting that we are safety inspectors first and are to rely upon risk tools in the performance of our job.

The ROP is not set up to look at engineering or design basis issues. These issues tend not to show themselves until after an accident - when something didn't work as intended. The basis for the SDP depends greatly on the frequency of events occurring. Failure to maintain the design basis invalidates the PRA and SDP as the frequency of occurrence may be affected.

The PI&R inspections are much too frequent to provide useful new information for assessment of the corrective action programs. Because they are so resource intensive, both for the NRC and the licensee, they are counterproductive to maintaining safety and impose an unnecessary regulatory burden on the licensees.

We would get much more insight from watching more actual control room performance and more actual maintenance activities. I also believe that the ROP process has no good way to raise issues where licensee make several minor errors, each of which does not rise to the level of documentation. Licensee's corrective action programs are being overwhelmed with trivia and they are not picking up on trends.

It is way too early to determine if the ROP is 'effective' or not or if it adequately protects safety or not. It is not very predictive of licensee performance unless that performance is shown by the indicators or is in the areas inspected. Licensee performance could decline in areas not well indicated by the PIs nor be chosen as a subject for inspection.

Some licensees strive to be the best on their own, while others strive for adequate performance. The ROP does not affect the top performers and provides the others with the acceptable performance range.

The public exposure cornerstone and SDP focus solely on actual releases and not potential releases. No matter how close a licensee gets to releasing millions of curies into the environment, it is not a finding unless there is an actual release.

With fewer experienced (actual industry work exposure) personnel, making decisions of how to dig on root cause may not be in the best interests of the NRC and more in the interests of putting an item to 'bed'.

The program assumes the licensee has an adequate corrective action program. If this is not true the system fails.

This new process is a regulation its worst and will not identify poor performance BEFORE significant accidents occur.

The ROP needs to allow inspector flexibility. Licensees will generally do well in areas that have NRC attention. Other areas are questionable.

The SDP process is prematurely screening out potential safety issues.

The ROP is insensitive to a large number of important issues.

NRC kowtows too much to the licensee/industry in resolving PI FAQs, determining final safety significance determinations, etc.

For two unit sites without identical units, the baseline hours/samples are too low to sufficient gain insight into the different aspects of the licensee performance.

Due to the extreme brevity of inspection report documentation, other than extreme plant problems, no assessment information is available to the NRC staff.

Inspection reports do not provide a means to transmit below GREEN and predictive indications of licensee performance.

The current inspection program has little predictive value. It is reactive rather than proactive. The information conveyed in inspection reports doesn't provide an accurate picture of a licensee's strengths and weaknesses. With such a dearth of information, establishing performance trends in a timely manner is unlikely.

Minor equipment problems can combine in ways that are risk significant, but which are not inclined to be identified by the ROP inspection procedures.

The inspection program is too structured and does not allow inspectors flexibility to emphasize licensee weaker areas.

Minor violations, which are an indicator of declining performance, are not documented in reports. Licensee response to issues not documented in reports is extremely low priority.

Inspection modules for maintenance activities should be included because declining human performance in this area can be a predictor of equipment failure and transients.

Without a means to track 'minor' issues or violations an importance performance measure has been lost.

The SRI/RI should have the flexibility to document performance issues that do not strictly meet the Group 1/2 threshold.

More flexibility should be provided to SRI/RI to adjust sample sizes to areas where licensee performance is questioned.

MC 0610* doesn't allow documentation of programmatic issues which could be precursors to more significant problems.

We have lost the ability to document leading indications of declining performance or likely inspection areas to pursue in later or other cross-cutting inspections.

It seems fruitless to the inspectors when the inspection procedures tells us to find problem yet 0610* does not allow us to document it.

Radiation Protection threshold is so defined that a few Rads of exposure one way or another make the difference between a White issue and not documented at all issue. And if the issue is not documented it is hard to assess station's performance.

Because the NRC only has a picture of material/equipment problems, I am not sure they can adequately assess station performance in Reactor Safety.

However, the thresholds for many of the PIs are far too high and provide no meaningful data for use in the assessment process. The PI thresholds that I believe need to be lowered the most are: 1) safety system functional failures, 2)all of the barrier integrity cornerstones, and 3)the protected area security equipment performance index.

Still need a containment PI that reflects actual containment performance.

71111.11 can be a false indication of operator performance. Operators are aware they are being evaluated.

The credibility of the performance indicators will decrease with the increase in caveats and interpretations of the performance indicators, especially regarding unavailability.

Not sure PI's are of low enough threshold to be predictive.

These indicators are not leading indicators and therefore the program can not reasonably catch developing issues nor developing problem plants.

Programmatic issues (mr, 50.59, corrective action programs) are some of the best leading indicators and they are not captured.

The performance indicators do not always reflect station risk significant areas. They are not predictable, and are not well defined. Each licensee will define available or unavailable so that they can keep the indicator in the green band, and if they say system is available then it is until we prove otherwise.

Licensee's are manipulating and managing the performance indicator data to avoid reporting data that crosses out of green.

Licensees continue to sharpen their pencils in order to get failures previously reported as safety system functional failures or system unavailabilities, to be called 'inoperable but available.'

The limitations of the PSA are not recognized in the evaluation of significance.

The safeguards program/SDP is not adequate in the new terrorist climate.

We should reconsider making civil penalties a part of the process for all yellow and red findings because of the potential safety consequences.

SDPs for reactors do not adequately handle significant equipment failures that fortuitously occur during a plant shutdown.

There are some licensee's that consider certain plants to be 'problem children' yet the plant's performance indicators are all green. We need to look at how this is happening and whether our performance indicator thresholds are appropriate.

Too many issues are screened out as non-findings.

The SDP is not a good tool to assess design related issues. Consequently, many design related deficiencies do not make it into reports and could be precursors to potentially bigger problems if not corrected in a timely manner.

SDP results are very complete and valuable, except a) when the issues involve significant design issues that do not result in equipment inoperability but reflect overall poor design performance by a licensee, b) performance issues that render equipment substantially degraded but still operable, c) substantial human performance issues indicative of a broader problem, or d) poor corrective action effectiveness.

Green findings, albeit of low risk, should be tracked/trended to assure that licensee corrective action programs are effectively handling these issues.

The SDP relies on the licensee PRA results, yet the ROP does not inspect the PRA.

The SDP is merely an over-simplification of the IPEs and not a very good one because the assumption that the SDPs are correct is bad and unverified. The IPEs were established over ten years ago with the use of many probabilistic assumptions, so they are not exact measures of a plant's safety.

Fire Protection SDP screens out non-Appendix R fire protection issues which may have risk significance.

The threshold for documenting cross cutting issues is too high to be useful in identifying degrading programmatic performance before it results in risk significant events.

Cross cutting issues don't have 'teeth'...needed if we are to rely on licensee corrective action programs

The ROP doesn't effectively resolve cross cutting issues.

I'm also uncertain about the effectiveness of the cross-cutting issues inspections and their periodicity - again this is the area where good 'leading pi's can be created and monitored and the current RROP does not seem to use them nor inspect them on an adequate periodicity.

ROP assessment does not fully deal with cross cutting issues. I believe that loss of reasonable assurance in a cross cutting issue could lead to a rapid decline in performance without sufficient warning for NRC action. Identifying additional cross cutting issues and developing a standard for reasonable assurance as well as a strategy for assessing licensees in the cross cutting issues would be a big improvement.

There should be increased focus on human performance and emphasis that human errors are identified and resolved at a low threshold.

The ROP lacks definitive thresholds for addressing cross-cutting issues such as human performance.

Human Performance, which is the highest contributor to plant risk and core damage is not covered adequately, given that we are more risk informed, in the ROP.

The SDP does not handle human performance issues.

The process cannot handle cross cutting issues.

Insights into cross cutting performance are not documented or used for assessment. This method of dealing with cross cutting issues does not foster long-term improvements and could result in licensees becoming complacent to minor issues/violations that are not documented.

If no-color findings are eliminated (as we were told in our Region) then how will you ever get a cross cutting issue in human performance documented?

Current process does not increase regulatory response, regardless of how frequently performance issues occur, unless a White or higher condition occurs. However, these Green findings could be providing a strong indication of poor performance that is heading toward a highly significant performance issue.

Indication of declining safety performance can be significantly lagging because human performance issues can reveal themselves as a number of green findings with no regulatory response.

We need to get a better handle on cross cutting issues to ensure that we are not letting potential precursors to bigger issues to go unnoticed.

As no definitive guidance has been provided for cross-cutting issues, precursor to poor performance are being ignored.

By the nature of evaluating potential cross-cutting issues, the ROP is being diverted from being an indicative performance tool to that which is more predictive. Predictive tools are overly subjective and may not truly indicate actual performance. Recommend cross-cutting issues be evaluated as part of allegation follow-up, supplemental inspection activities, or incident response.

There are some cases where the level of effort in supplemental inspections 95001 and 95002 is too low to properly follow-up the licensee performance issues.

The PI&R inspections that I have been on have been instructed to review condition reports (CRs) initiated within the last 2 years to identify current licensee performance. However, if the CR is two years old and significant, then the issue may not be a finding because the licensee still has time to correct the condition. The next PI&R inspection will not be able to review the issue if it is not a finding because it is greater than 2 years old and not representative of licensee performance. Therefore, it will fall off of our 'radar screen,' until an event occurs.

We don't engage the licensee early enough to address problems with their corrective action system.

Some licensees' corrective action programs are not as robust as others. It seems inappropriate to give wholesale credit of corrective action programs to all the licensees where some licensees clearly demonstrated that their programs are not effective.

I believe the PI&R inspections need to have more clout in order to hold the licensees more accountable for having good CAPs. If they have a program that is not that good, we should have them responding to more violations on the docket, instead of giving them NCVs.

The NEI FAQ process has not helped much and has actually resulted in backing off on many of the things that would have been reported early in the ROP pilot process.

Not sure thresholds for actual use of DFI, CAL, ORDER are low enough.

We now issue a CAL if the improvement commitment needed is significant enough that the agency would go to an Order if the CAL where not met. This greatly removes a useful tool for the NRC has used effectively in some cases to bring about improved licensee performance.

Based on observations and deliberations involving Performance Indicators (e.g., system unavailability and fault exposure hours, scrams with loss of normal heat removal) and fire protection and maintenance rule inspections and findings, it is evident that many inspectors believe that the program office is getting steam-rolled by NEI because it is a voluntary program.

The ROP still fails to adequately deal with issues of compliance (i.e. TS) as a part of the baseline program.

Throwing everything not identified in the Attachments into Plant Status fails to provide for the primary inspection activities.

Excerpted Comments Related to the ROP Performance Metric INCREASE PUBLIC CONFIDENCE

The SVP and Plant manager want to hear what the inspectors have identified during exits, no matter how minor. These observations are discussed during the exit, but not documented in the inspection reports probably since licensee's don't want this information on the public docket. This sets up a double standard that I'm sure the public (if they knew) would not tolerate!

I've heard comments from the public that the color coding and PIs are difficult to understand and question what happens to the ones that mysteriously disappear (after the PI is rolled off).

If the public were to understand that we no longer find some regulations important and therefore do not take any actions when a licensee violates them, would that not decrease public confidence?

The "format" of the inspection reports is fine for the public.

The current process would not enhance public confidence if public advocate groups were aware of how we plan inspections with the full knowledge of the licensee as to when and what the inspection will cover.

Licensees get more value out of the observations that are not included in the inspection reports. By not documenting this information we could be perceived as hiding things by the public.

Need a more effective means to accept input from external stakeholders (licensees and public) and respond to them.

Putting issues in the inspection reports, which are public, is a very effective way to prevent complacency among licensees.

The supplemental inspections do not allow for good communication to the public about the safety significance of the issue nor of the aggregate impact of the several 'minor' PIs hits and their safety impact.

The PI system will not provide public confidence (in my opinion) if everyone or most everyone is 'green.'

The fire protection inspections have been conducted using draft evaluation guidance not available to the public, which impacts the openness, predictability, and 'scrutability' of the assessment process for fire protection problems.

The fire protection SDP relies on a detailed evaluation of fire brigade drills. These are not documented, absent a 'significant' deficiency during the routine resident inspections. This again results in NRC using information not available to the public for evaluating inspection findings.

We seem to have taken enforcement out of the equation. In some cases this was one of the public's best indicators that we were doing our job and not part of the nuclear industry complex.

Although I understand the PRA approach and the new RROP, I don't feel the public has grasped it.

There is too much legal jargon in inspection report cover letters to call them plain language.

I've heard comments from the public that the color coding and PIs are difficult to understand and question what happens to the ones that mysteriously disappear (after the PI is rolled off). Inspection reports contain insufficient information in the 'findings' sections to improve public confidence on the bases of inspectors' conclusions.

I doubt most 'Public stakeholders' can decipher our coded messages. The Agency and the industry do a miserable job of communicating risk to the Public.

Since we also need to be concerned about public confidence, there needs to be room in the ROP for those activities that are not risk-significant, but could be of concern to the public, media, etc.

Excerpted Comments Related to the ROP Performance Metric MAKE NRC ACTIVITIES AND DECISIONS MORE EFFECTIVE, EFFICIENT, REALISTIC

The reports do not provide adequate information to the licensee. We have been required to substantially increase our level of "unofficial" communication with them because of this.

The baseline program (level of effort/scope) inadequately considers the level of activity at the facility. Forced and non-refueling outages aren't adequately considered. The sample size in some performance areas should be more tailored to licensee programs and performance.

It takes too long to arrive at a final SDP decision.

The draft worksheets haven't worked well either time (0 for 2) that I've had to try to use them.

We have reduced a lot of repetition and administrative burden within the NRC.

Need to assure that the tools provided to the inspectors are usable and that management can use the outputs to make pertinent regulatory decisions.

The Agency is still too compliance focused, is not willing to delete/address regulations that add little to safety.

The SDP process is extremely cumbersome in handling programmatic issues.

The number of hours spent on maintenance rule reviews is far in excess of the safety significance of the inspect able area.

The questions do not do a good enough job of screening out minor issues.

Have never seen ANY feedback from the Region I or NRR.

Response to feedback forms has neither been timely or useful.

There may not be sufficient site resources to complete the program as written.

Based on the new oversight program and enforcement there is very little that we do to foster long-term self -improvement.

Some plants will need more hours to perform and accurately communicate the issues to the Regional management and licensee management. Some plants do not respond to NRC requests in a timely and accurate manner. Because of this the inspectors must perform more extensive reviews (more hours) of licensee documents to ensure that licensee management has a full appreciation of the issue, within the 6 week inspection period so that the issue can be closed and counted in the report. This can also reduce the inspection activities in other portions of the program.

Creating a 95% baseline inspection program provides little, if any flexibility to respond to emergent activities, as well as administrative and program requests from the Regional and Headquarters offices.

The inspection reports are ridiculous. We routinely put out 20 page inspection reports that say nothing. If we find nothing let's put out a single page that says we found nothing.

To know the real story, the residents or branch chief may need to fill in details that are is not provided on the web site.

The minimizing of documenting information that is already in the licensee's domain is an efficiency benefit to all.

The inability to easily modify inspection content or move an inspection date makes it difficult to manage an inspection program.

The performance indicators and inspection findings are not really 'overlapping' one another, they instead are supposed to be complementary of one another. They don't necessarily tell the same story.

The SDP process is extremely cumbersome in handling programmatic issues.

SDP is very resource intensive. Issuance of the Phase 2 worksheets would be helpful. They very late in being issued for the sites.

The SDP is cumbersome and not complete.

The SDP should be modified to state that operability must be demonstrated for the current/last operating cycle for conditions identified.

Because of the large number of attachments, Regional managers have focused on inspector's timemanagement instead of inspection program effectiveness.

Agency management still does not always disposition risk-significant issues in a timely manner.

With respect to direct inspection ratio, the current metric of 0.5 direct inspection to all NRR activities is inappropriate, given the planning requirements of the ROP. The result will be to reduce oversight effectiveness to meet an arbitrary metric. The ratio, overall, measures nothing. A well-prepared inspection is more effective and efficient.

DRS management is pressuring inspectors NOT to use prep time - at the insistence of NRR who won't budget it. This furthers the impression that the goal is not to find anything.

Some of my managers seem too worried about whether inspection tasks were completed without exceeding the estimated budgeted hours versus whether an inspection topic was sufficiently covered.

There is too much micro-management on such minor matters as what RITS codes should be used for entrance and exit meetings.

It is difficult to accurately account for time spent on different inspection procedures. When inspecting, a conversation or time touring the plant may shift back and forth between several procedures. So administration has become much more difficult and time-consuming. Ultimately, it may be best for accounting purposes to combine similar procedures into groups and account for the time by group.

There are too many attachments and many of the attachments overlap and are redundant. These should be combined into a few attachments of broader scope.

The supplemental inspection procedures in some area are just more of the same Baseline inspection. This should be changed to add value in data collection and analysis of a degraded program.

Supplemental inspections should not be performed until the licensee has declared that corrective actions have been developed and implemented so that the supplemental inspection can verify the adequacy and effectiveness of corrective actions tracking hours for each attachment increases the administrative burden on inspectors.

The resources we spend on reaching final significance determinations are exorbitant in some cases due to the incompleteness of some of our tools and the licensee's excessive debate of SDP results.

Resources are woefully inadequate to accomplish agency inspection goals.

The current baseline inspection program doesn't allow any time for administrative duties mandated by Regional or headquarters management or the inspection program requirements (outside of the confines of the ROP).

Inspection modules give us inspection quotas on time and number of observations. I spend more time budgeting instead of looking at risk significant areas. Regional management wants inspectors to hit 100% of inspection hours and has made it clear this is the expectation. With a cap on the number of observations a short term risk significant inspection area has to be overlooked or the system has to be manipulated to review the area.

Two RI's on site is too few, given the vacation, travel, and other duties assigned inspectors. More site continuity is needed, in my opinion.

We spend WAY too much time on the maintenance rule, which is an administrative program, and which takes me away from other activities in the plant.

The number of hours spent on maintenance rule reviews is far in excess of its safety significance.

The ROP focuses too many resources on some areas that are non-productive, have little likelihood of exposing safety issues, and have no good way to express findings in a risk informed manner. Examples are inspecting implementation of the maintenance rule, flood protection, and licensed operator re-qualification simulator observations.

There is too much emphasis on maintenance rule, maintenance rule implementation. Maintenance effectiveness may be better assessed by PIs and periodic inspection, rather than continuous review by residents.

Areas such as determining a "safety conscious work environment" are generally beyond the scope of routine inspections.

Most procedures are good, however trend data shows that slightly more hours than allotted are required.

This program still has several elements that provide little safety benefit. For example, the 50.59 inspections should be stopped as few if any findings are identified. Similarly the PI&R inspections should be performed biannually.

Experience to date, and discussions with the SRAs and NRR indicates that the emphasis is to "drive issues to green." This gives inspectors the impression that it is not worth the effort to find risk significant issues, as they will turn out green anyway.

It is way too early to determine if the ROP is 'effective' or not or if it adequately protects safety or not. It is not very predictive of licensee performance unless that performance is shown by the indicators or is in the areas inspected. Licensee performance could decline in areas not well indicated by the PIs nor be chosen as a subject for inspection.

The fire protection team inspection and the safety system design inspection occur too frequently.

The baseline inspection program and procedures focus the inspection activities on past licensee performance.

There should be more emphasis on technical specification compliance throughout the inspection procedures.

More training is needed on the use of supplemental procedures.

To date, after ten months of the initial implementation, the NRC still has not developed training for resident inspectors in what to look for in reviews of suppression, detection, barriers, penetrations, and penetration seals.

Inspectors conducting PI&R (71152) inspections have not been adequately trained in conducting interviews and in evaluating cross-cutting areas.

Since we have not seen a final SDP (which the licensee has bought into) this process does not enjoy as much confidence as it can.

There should be a resident inspectors inspection procedure for PI&R instead of the 10% in each procedure, this would allow for a better assessment of the licensee's corrective action program.

Reports accurately reflect inspection but not sure of their value to licensees when they contain no findings.

We (NRC/industry) would be better off using the old inspection procedures (scope/flexibility) in conjunction with the new threshold for documentation and the new definitions/characterizations of findings.

Licensees get more from the exit meeting than the inspection report, especially when there are no findings.

All performance issues (programmatic) must be captured in the assessment process.

EP Drill Performance PI is too flexible to ensure meaningful drills/exercises are performed.

The SDP process is an effective tool for sorting out some kinds of findings according to risk significance. And the inspector's awareness of the SDP ranking scheme can be an effective inspection-focusing device relative to potential risk significant areas.

We need more accurate SDPs and better GEMS models so that we can have better risk information at the sites.

Program management is receptive to change and appears to want to do the right thing.

Supplemental inspection procedures do not adequately handle the situation when licensees do not perform the expected behaviors such as performing a root cause evaluation.

Effectively dealing with cross cutting issues remains a major task.

There are a number of technical inaccuracies in the plant-specific SDPs.

Excerpted Comments Related to the ROP Performance Metric REDUCE REGULATORY BURDEN

There is significantly less burden on the licensee.

The baseline program is too much inspection for a minimum program.

Licensees will continue to tell the agency the process is working well regardless if it really is because they are getting fewer findings, no civil penalties and less inspection.

The licensee can have two responses to low risk significant requirements: 1) If the licensee follows them, it is unnecessary regulatory burden, or 2) the licensee does not follow them and nothing happens. Either scenario seems intolerable for the long haul.

The PI&R inspections are much too frequent to provide useful new information for assessment of the corrective action programs. Because they are so resource intensive, both for the NRC and the licensee, they are counterproductive to maintaining safety and impose an unnecessary regulatory burden on the licensees.
Other Comments

Are the risk thresholds correct? Should they be relative or absolute?

Why document green findings? If we want to document them, maybe they should be white (change the thresholds)?

The RCS Identified Leakage PI is not very useful.

The website is too focused on PI's and appears to downplay the importance of inspection.

Need a better internal feedback process - timely response to issues.

Feedback is non-existent. It appears NRRs answer to questions and problems is to ignore them and hope they will go away. Or maybe, it's 'if I keep saying the same thing often enough, it will finally click and they'll stop asking all these questions.'

Feedback Form - Overall, a complete failure. Lack of feedback to originator regarding resolution of concerns biggest problem.

It does not appear that we are receiving information regarding feedback forms.

Any questions I have had have been answered in a timely manner.

After speaking with many inspector who have sent in feedback forms the response rate appears to be only about 20%.

My initial feedback forms were processed slowly, or the info was not provided back to me in a timely manner. Also those answers were written such that I was not sure the question was answered. That is why I put a negative mark in the feedback area. Recently, several times I have called directly to the RROP office - I have received staright forward answers, immediately.

Never received feedback on comments submitted to Region nor did I expect any. Always got good support from HQs when I called with questions.

I have not yet received the replies to my feedback forms, so I can't comment on the response.

The Region I feedback process was non-existent. This may be the fault of Region 1's internal coordination of responses by one individual and their lack of priority to ensure feedback was provided to comment originators. This certainly had a strong chilling effect - that comments were not wanted and that we (the Regions) have no part to play in developing the ROP process.

Using the Region I feedback forms (in PIRA)I have not received answers to any of my feedback.

I stopped trying to use the "feedback form" process months ago once it became apparent that my management was overly concerned about potential criticism on them because one of their staff dared to question NRR on some aspect of the RROP by wanting to submit a 'feedback form'.

I submitted two feedback forms and never received a response.