

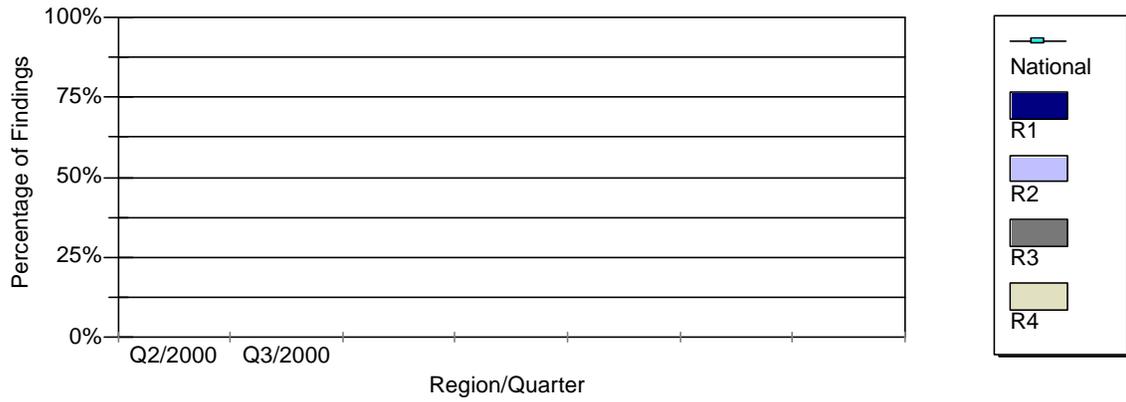
# Reactor Oversight Process

Inspection Program

# Performance Metrics

## OBJECTIVE

OI1a, Program is objective when inspection findings are documented in accordance with program guidance.



Percentage of Inspection Report Findings Properly Documented by Region

Analysis:

Data from sampling audit of inspection reports, which began in fourth quarter.

OBJECTIVE—Conclusion:

## **Reactor Oversight Process**

Inspection Program

## **Performance Metrics**

RISK INFORMED

RI1.a - see OS1.b (no SDP OS1.b) Inspection findings are related to risk if they meet established standards.

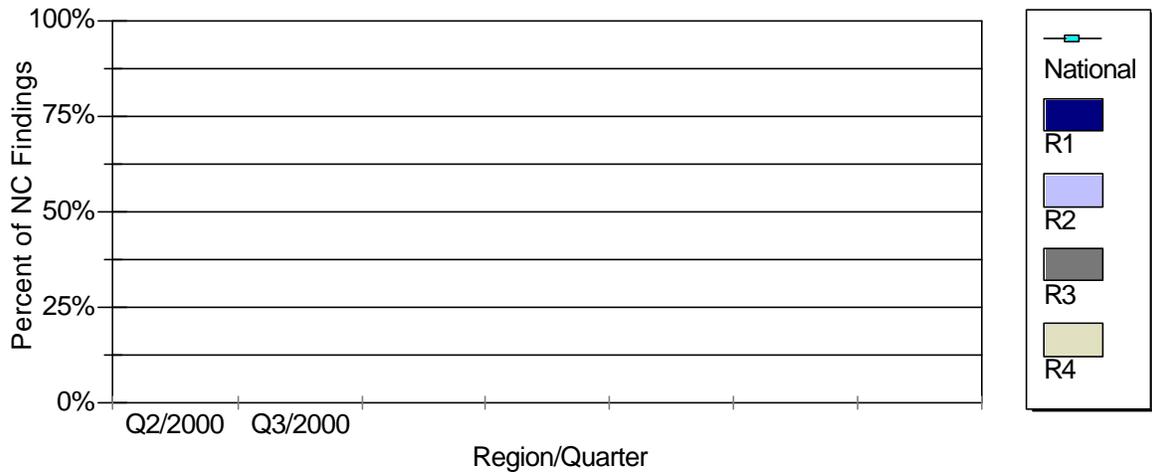
No metric. Measured by independent audit of inspection reports.

# Reactor Oversight Process

Inspection Program

# Performance Metrics

RI1.b, Inspection program uses risk insights if non-SDP findings are documented in accordance with program guidance.



Percentage of "No Color" Findings Properly Documented by Region

Analysis:

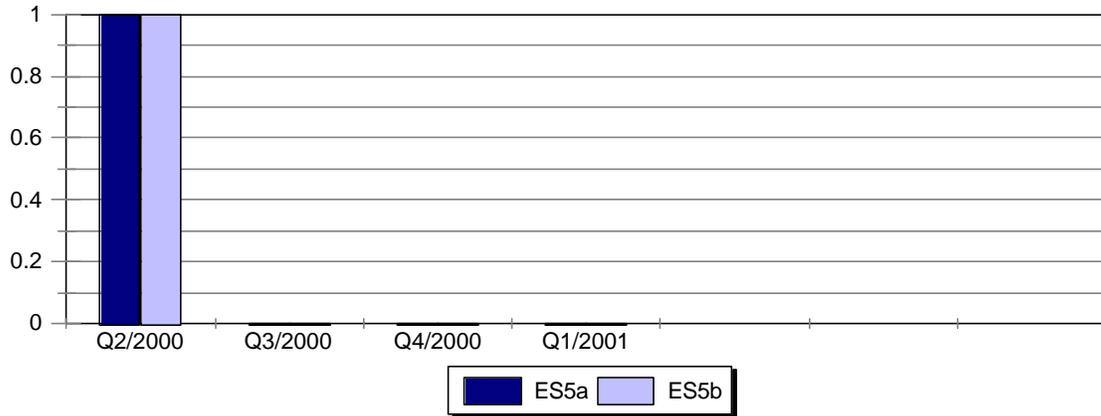
Data from sampling audit of inspection reports, which began in fourth quarter.

# Reactor Oversight Process

Inspection Program

# Performance Metrics

RI1.c and RI1.d (same as ES5.a and b), Inspection findings are related to risk as evidenced by appeals of SDP determinations



(Get from Alan)

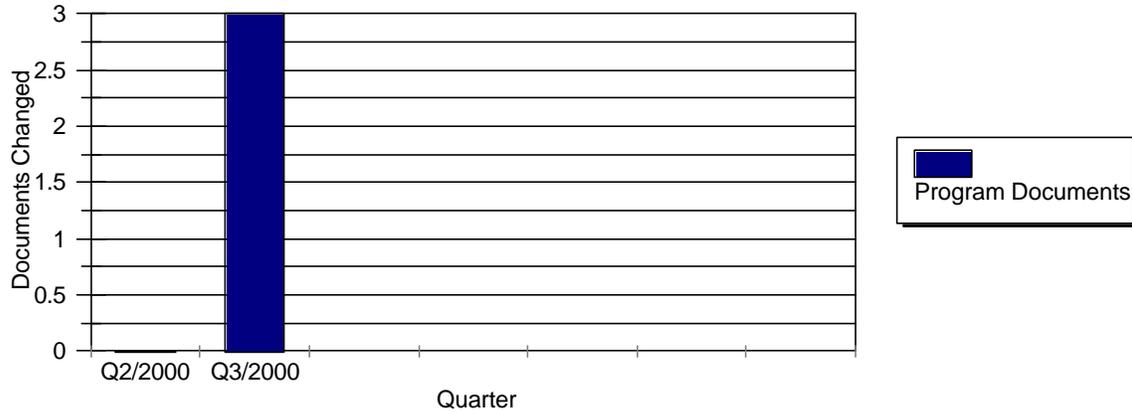
Analysis:

## Reactor Oversight Process

Inspection Program

## Performance Metrics

RI2a. Inspection program uses risk insights as evidenced by the number of changes to inspection program documents relating to improving risk informed aspects



Number of Program Documents Changed Affecting Risk-Informed Aspect of Program

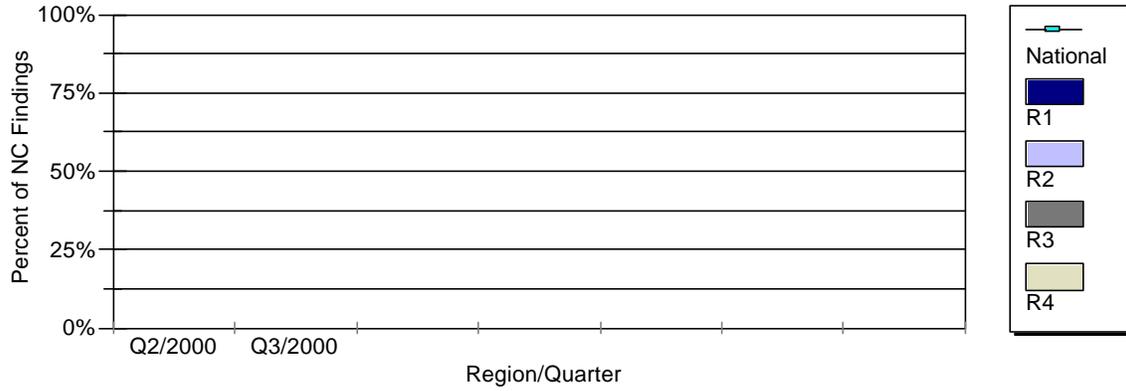
Analysis:

# Reactor Oversight Process

# Performance Metrics

## Inspection Program

RI2.b, Inspection program uses risk insights as evidenced by the number of inspection reports with “no color” findings in IAW program guidance.



Number of Reports with “No Color” Findings Properly Documented

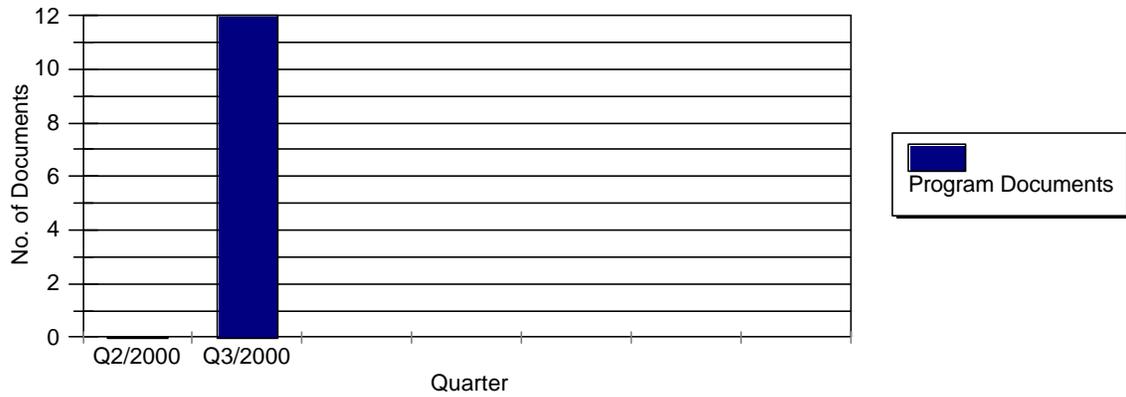
Analysis:

## Reactor Oversight Process

## Performance Metrics

### Inspection Program

RI3.a, The inspection program is risk informed if it covers all appropriate areas as evidenced by the number of changes to baseline inspection program documents that affect scope or frequency of inspections.



Number of Baseline Inspection Program Documents  
Changed Effecting Scope or Frequency

Analysis:

RISK-INFORMED—Conclusion

## **Reactor Oversight Process**

Inspection Program

UNDERSTANDABLE

No metric. Public and internal survey results.

Analysis:

UNDERSTANDABLE—Conclusion

## **Performance Metrics**

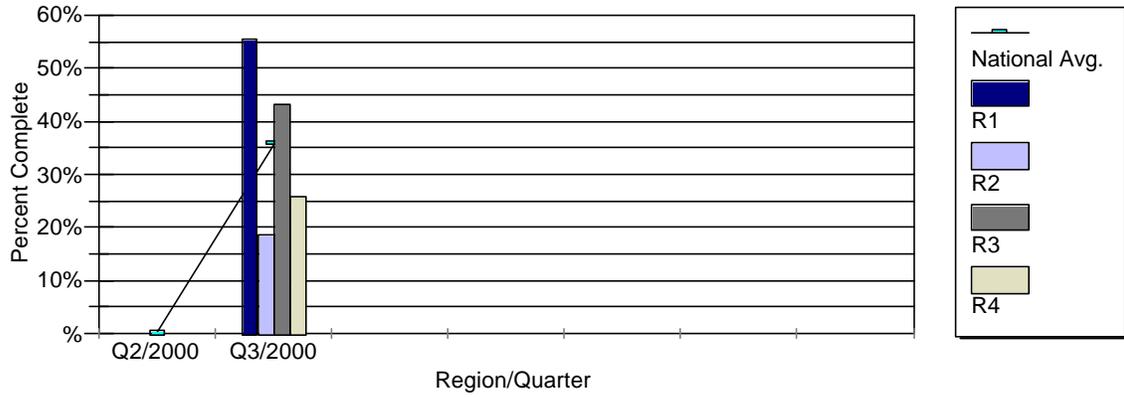
# Reactor Oversight Process

Inspection Program

# Performance Metrics

## PREDICTABLE

PI1.a, Inspection program is predictable if implemented as defined.



Percent Baseline Inspection Procedure Completion

Comments:

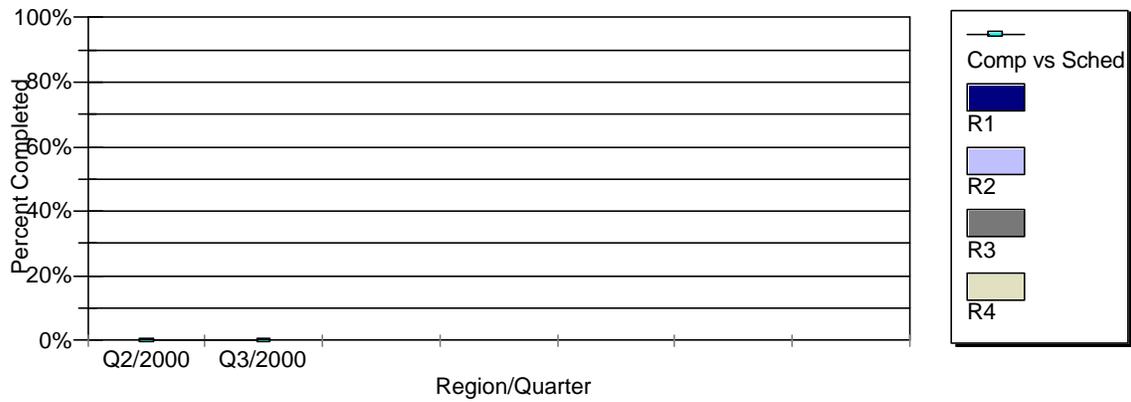
Graph shows cumulative percent of baseline inspection procedure completion by region.

# Reactor Oversight Process

# Performance Metrics

Inspection Program

PI1.b, Inspection program is predictable if implemented as defined and implemented as planned.  
Inspection Procedure Completion vs Scheduled



Comment: Graph shows percent of inspection procedures completed vs procedures scheduled by quarter.

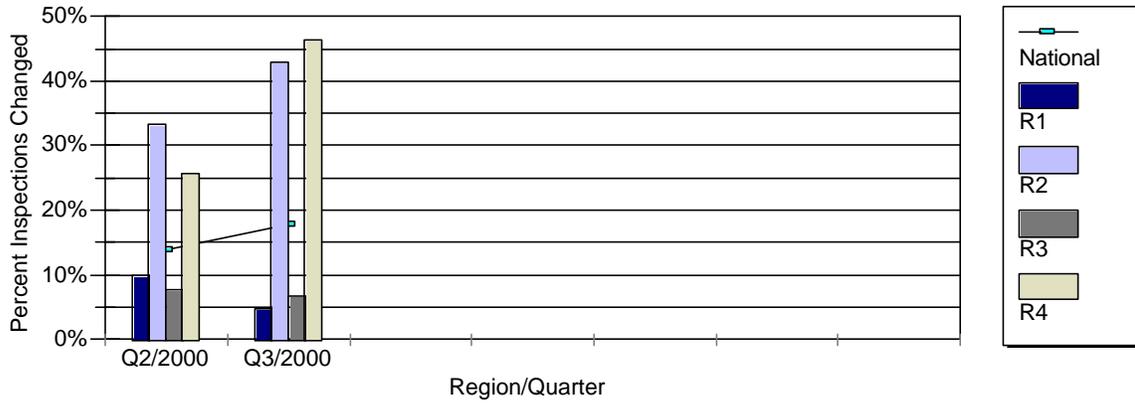
(Data is not yet available)

# Reactor Oversight Process

# Performance Metrics

## Inspection Program

PI1.c, Inspection program is predictable as evidenced by the proportion of and reasons for changes of inspection schedules for reasons other than regulatory impact.



Percentage of Scheduled Inspections Changed Each Quarter by Region

Analysis:

## Reactor Oversight Process

## Performance Metrics

### Inspection Program

PI2.a, Inspection program is predictable if its scope is implemented consistently across regions as evidenced by a comparison of frequencies of baseline inspections, sample sizes, and direct inspection effort (DIE) hours to program requirements by inspector type (specialist, resident)

#### O/T Contribution to Direct Inspection Activities

4/2/00 - 9/30/00

(Non-regular hours as a percent of Total hours)

	Region I (%)	Region II (%)	Region III (%)	Region IV (%)	National Average (%)
All Baseline IPs	4.9	4.5	6.8	6.6	5.6
Specialist IPs	5.5	7.7	8.5	7.3	7.1
Specialist IPs	4.2	1.8	4.7	5.8	4.0

#### O/T Contribution to Non-Direct Inspection Activities

4/2/00 - 9/30/00

(Non-regular hours as a percent of Total hours)

Activity Code	Region I (%)	Region II (%)	Region III (%)	Region IV (%)	National Average (%)
BIP	2.5	1.2	2.1	4.3	2.5
BID	2.9	1.7	2.9	4.1	2.9
PS	2.4	0.9	3.8	1.8	2.2
AT	17.5	14.9	25.8	19.4	19.4

**Reactor Oversight Process**  
Inspection Program

**Performance Metrics**

Non-Direct Inspection Activities

4/2/00 - 9/30/00

Activity Code	Region I 19 sites		Region II 18 sites		Region III 16 sites		Region IV 14 sites		National Average
	Total Hours*	Hours/site	Total Hours*	Hours/site	Total Hours*	Hours/site	Total Hours*	Hours/site	Hours/site
AT	2891	152	2115	118	2345	147	2560	183	148
COM	3298	174	1580	88	1030	64	1227	88	107
BIP	9779	515	8286	460	6330	396	6831	488	466
BID	7005	369	5297	294	6546	409	5716	408	367
ASM	218	12	228	13	847	53	471	34	26
SDP	612	32	719	40	702	44	544	39	39
ASM + SDP	830	44	947	53	1549	97	1015	73	65**

\*Actual total hours (regular + non-regular) charged 4/2/00 to 9/30/00

\*\* Program six-month estimate is 96 hours/site (annual estimate of 192 hours/site)

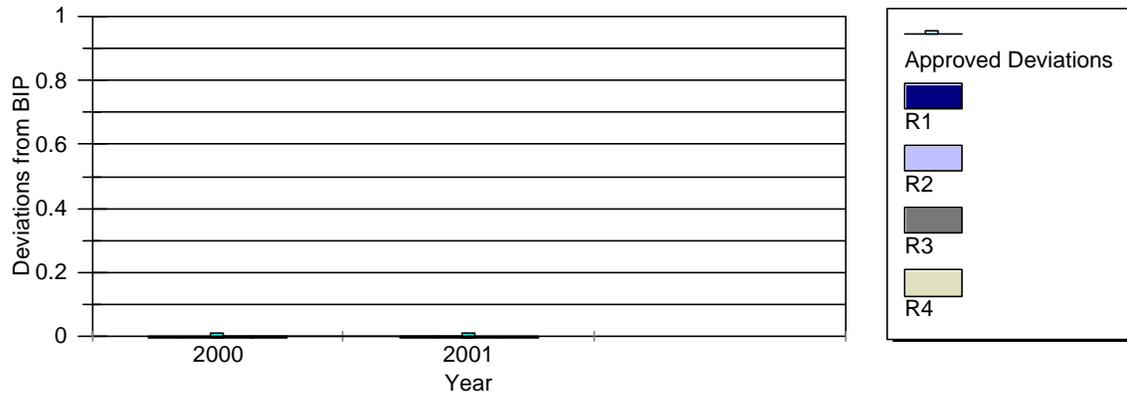
Analysis:

## Reactor Oversight Process

### Inspection Program

## Performance Metrics

PI2.b, Inspection program is predictable if its scope is implemented consistently across regions as evidenced by the number and justifications for approved “significant alterations” (as defined in IMC 2515) from the baseline inspection program



Number of Approved Deviations from Baseline Program  
by Region

Analysis:

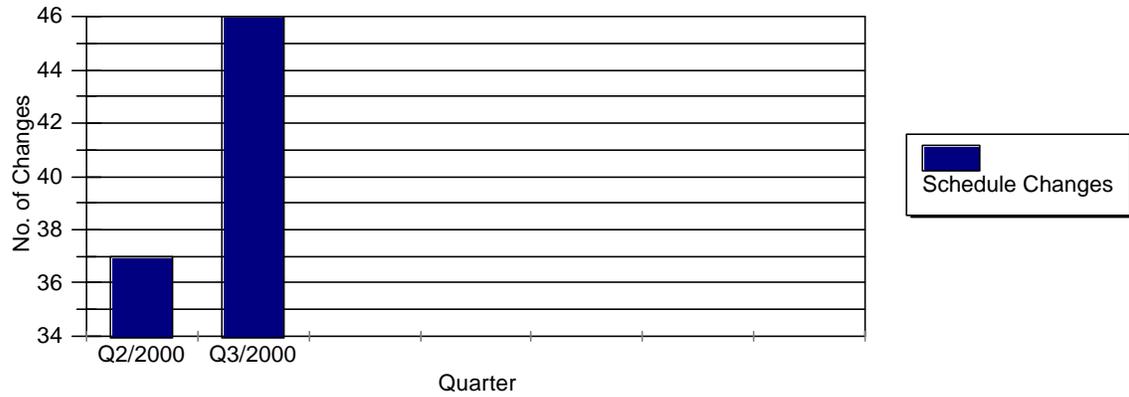
No deviations from the baseline inspection program were sought during initial implementation.

## Reactor Oversight Process

### Inspection Program

## Performance Metrics

PI2.c, Inspection program is predictable if its scope is implemented consistently across regions as evidenced by the number of changes to inspection schedules and reasons for the changes



Number of Changes to Inspection Schedules  
for Reasons Other Than Regulatory Impact

Analysis:

PREDICTABLE—Conclusion

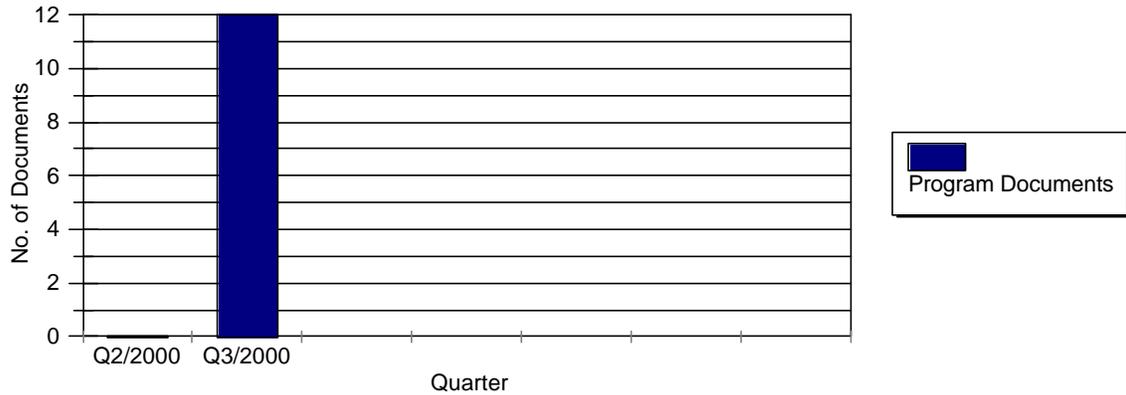
## Reactor Oversight Process

Inspection Program

## Performance Metrics

### MAINTAINS SAFETY

M11.a (same as RI3.a), The inspection program maintains safety if it covers all appropriate areas as evidenced by the number of baseline inspection program documents changed that affect scope or frequency of inspections.



Number of Baseline Inspection Program Documents Changed Effecting Scope or Frequency

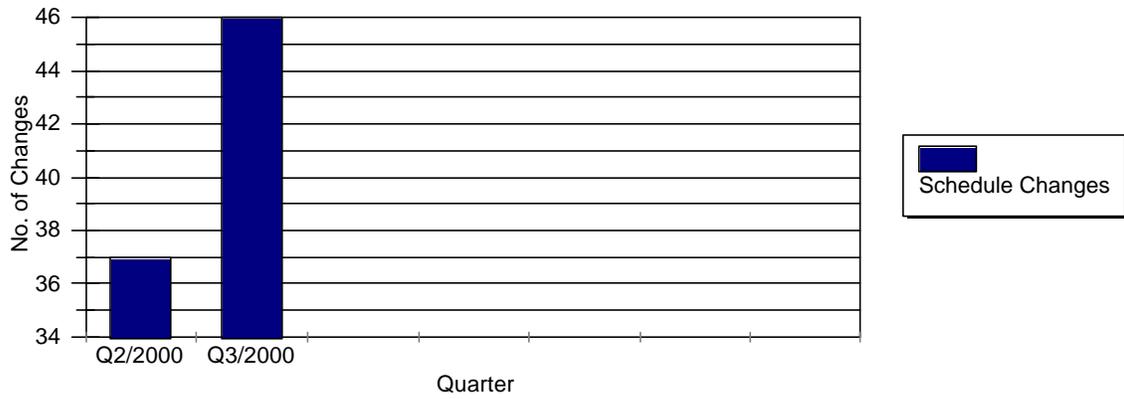
Analysis:

## Reactor Oversight Process

## Performance Metrics

### Inspection Program

MI2.a (same as PI2.c), Inspection program maintains safety if changes to inspection schedules are minimized.



Number of Changes to Inspection Schedules  
for Reasons Other Than Regulatory Impact

Analysis:

MAINTAINS SAFETY—Conclusion

## Reactor Oversight Process

### Inspection Program

## Performance Metrics

### EFFICIENT, EFFECTIVE, AND REALISTIC

EI1.a (same as PI2.a), The inspection program is efficient, effective, and realistic if inspection resources are consistently applied within program guidelines, as evidenced by a comparison of frequencies of baseline inspections, sample sizes, and direct inspection effort (DIE) hours to program requirements by inspector type (specialist, resident).

#### O/T Contribution to Direct Inspection Activities

4/2/00 - 9/30/00

(Non-regular hours as a percent of Total hours)

	Region I (%)	Region II (%)	Region III (%)	Region IV (%)	National Average (%)
All Baseline IPs	4.9	4.5	6.8	6.6	5.6
Specialist IPs	5.5	7.7	8.5	7.3	7.1
Specialist IPs	4.2	1.8	4.7	5.8	4.0

#### O/T Contribution to Non-Direct Inspection Activities

4/2/00 - 9/30/00

(Non-regular hours as a percent of Total hours)

Activity Code	Region I (%)	Region II (%)	Region III (%)	Region IV (%)	National Average (%)
BIP	2.5	1.2	2.1	4.3	2.5
BID	2.9	1.7	2.9	4.1	2.9
PS	2.4	0.9	3.8	1.8	2.2
AT	17.5	14.9	25.8	19.4	19.4

Non-Direct Inspection Activities

4/2/00 - 9/30/00

Activity Code	Region I 19 sites		Region II 18 sites		Region III 16 sites		Region IV 14 sites		National Average
	Total Hours*	Hours/ site	Total Hours*	Hours/ site	Total Hours*	Hours/ site	Total Hours*	Hours/ site	Hours/ site
AT	2891	152	2115	118	2345	147	2560	183	148
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ASM	218	12	228	13	847	53	471	34	26
SDP	612	32	719	40	702	44	544	39	39
ASM + SDP	830	44	947	53	1549	97	1015	73	65**

\*Actual total hours (regular + non-regular) charged 4/2/00 to 9/30/00

\*\* Program six-month estimate is 96 hours/site (annual estimate of 192 hours/site)

Analysis:

## Reactor Oversight Process

## Performance Metrics

### Inspection Program

EI2.a The inspection program is efficient, effective, and realistic if available inspection resources are sufficient to conduct the program as evidenced by a comparison of FTE used to implement baseline inspection program to estimated FTE to complete baseline inspection program.

Actual Baseline Inspection Program DIE Hours vs. Estimated Hours  
4/2/00 - 9/30/00

Activity Code	Region I		Region II		Region III		Region IV	
	Actual Hrs	Est Hours						
BI/CO	19313	19830	14337	19262	15276	16828	11355	14747
BIP	9779		8286		6330		6831	
BID	7005	19830	5297	19262	6546	16828	5716	14747
PS	6247	6230	5543	6195	5071	5320	4143	4690
Total Hours	42344	45889	33463	44718	33223	38976	28045	34184
Prep/Doc** BI/CO	0.87		0.95		0.84		1.11	

\*\* Ratio of Prep/Doc hours to Direct Inspection hours was assumed = 1.0 during initial implementation

Actual Plant Status Hours vs. Estimated Hours  
4/2/00 - 9/30/00

	One-Unit Sites	Two-Unit Sites	Three-Unit Sites
Region I	306 hours/site	368 hours/site	-----
Region II	280 hours/site	310 hours/site	401 hours/site
Region III	306 hours/site	329 hours/site	-----
Region IV	259 hours/site	343 hours/site	357 hours/site
National Average	290 hours/site	333 hours/site	379 hours/site
Initial Program Estimate*	315 hours/site	350 hours/site	420 hours/site

\*Annual Estimates:

One-unit sites = 630 hours/site  
Two-unit sites = 700 hours/site  
Three-unit sites = 840 hours/site

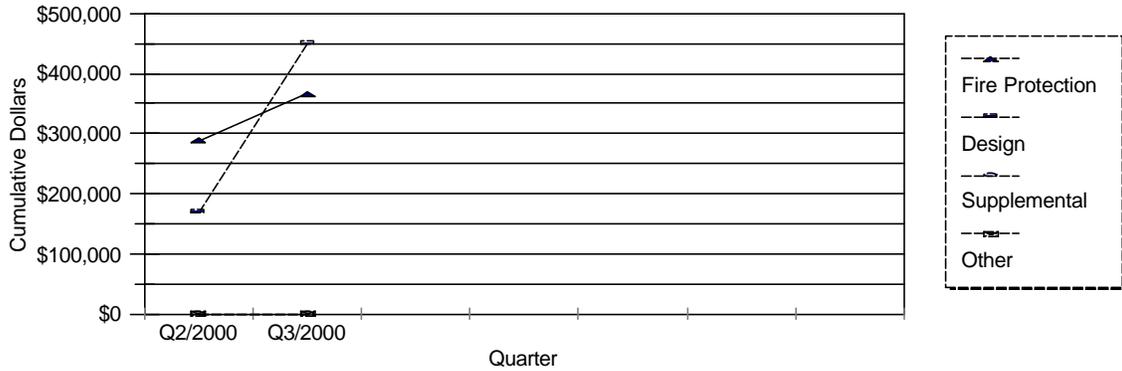
Analysis:

# Reactor Oversight Process

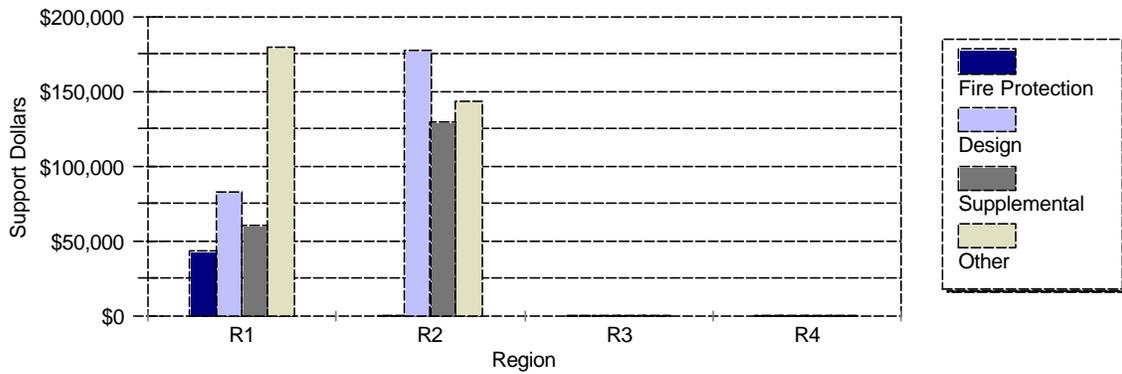
# Performance Metrics

## Inspection Program

EI2.b, The inspection program is efficient, effective, and realistic if available inspection resources are sufficient to conduct the program as evidenced by tracking and trending contracted inspection support



Total Contracted Support By Inspection Type



Contracted Support by Region and Inspection Type

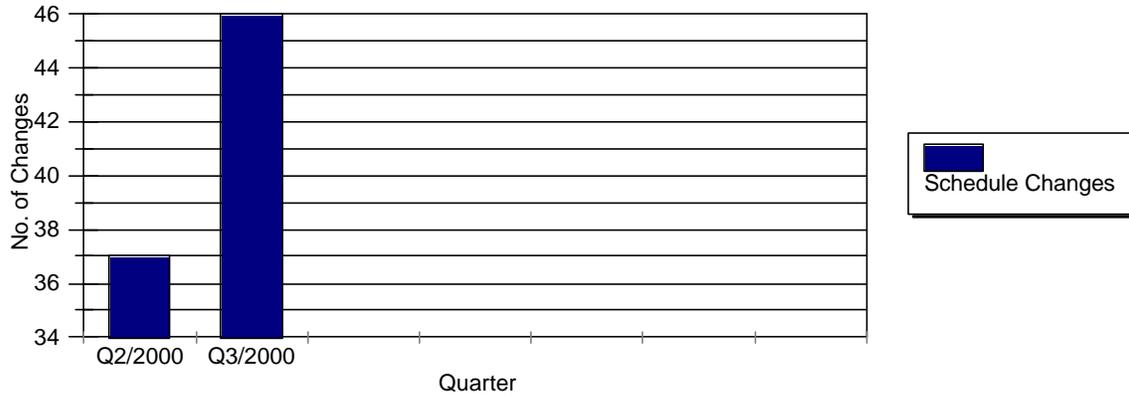
Analysis:

## Reactor Oversight Process

## Performance Metrics

### Inspection Program

EI2.c (same as see PI2.c), The inspection program is efficient, effective, and realistic if available inspection resources are sufficient to conduct the program as evidenced by the number of changes to inspection schedules and reasons for the changes



Number of Changes to Inspection Schedules  
for Reasons Other Than Regulatory Impact

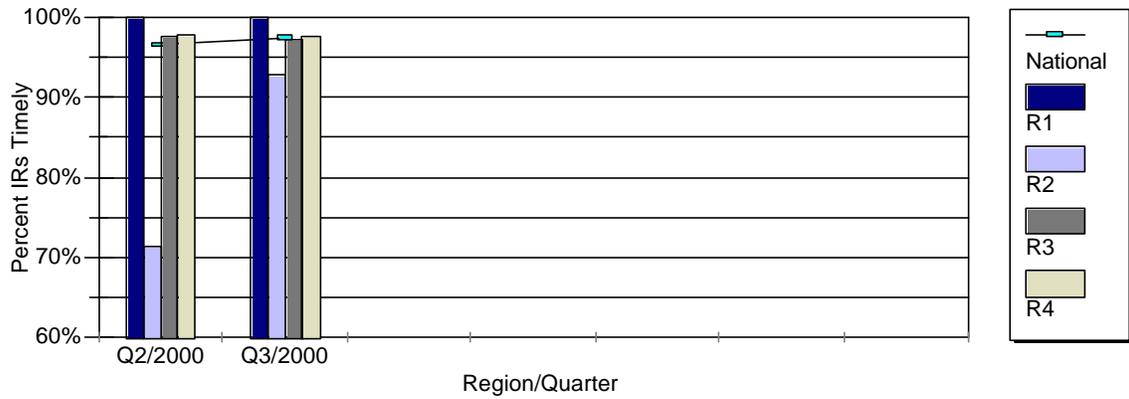
Analysis:

# Reactor Oversight Process

# Performance Metrics

## Inspection Program

EI3.a, The inspection program is efficient, effective, and realistic if inspection program is timely as evidenced by inspection reports being issued within timeliness goals



Percentage of Inspection Reports Issued w/i Timeliness Goals

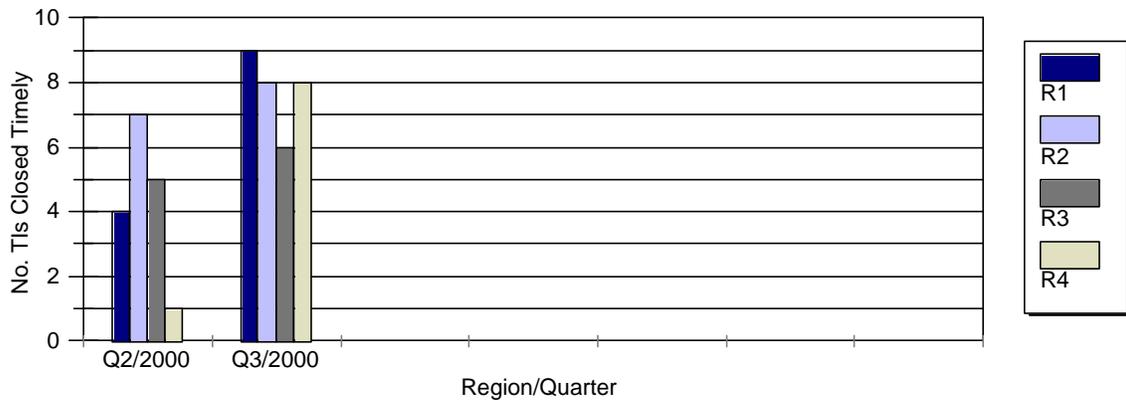
Analysis:

# Reactor Oversight Process

## Inspection Program

# Performance Metrics

EI3.b, The inspection program is efficient, effective, and realistic if it is timely as evidenced by temporary instructions (TI's) being completed within time requirements



Number of TI's Completed on Time

Analysis:

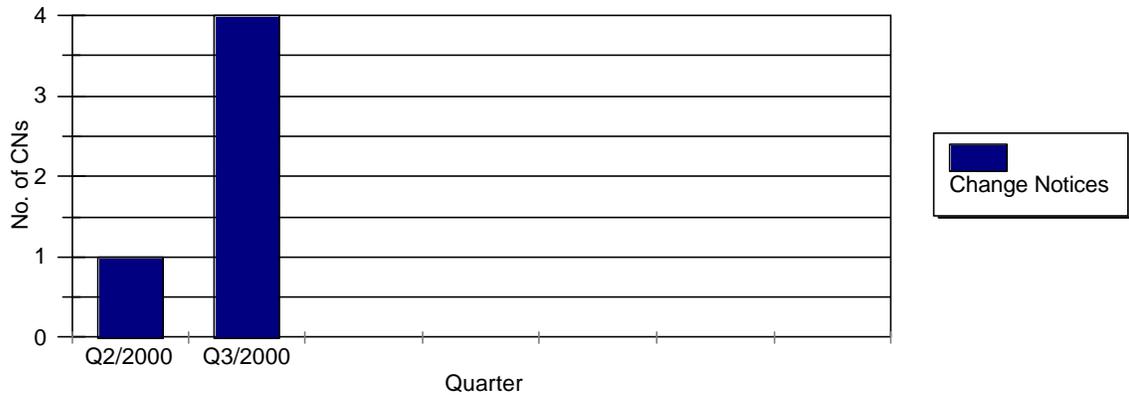
Metric was not clearly explained causing regions to report different numbers.

## Reactor Oversight Process

### Inspection Program

## Performance Metrics

EI4.a, The inspection program is efficient, effective, and realistic if it is stable as evidenced by few significant changes



Number of Change Notices Issuing Significant Changes to Program

Analysis:

EFFICIENT, EFFECTIVE, AND REALISTIC—Conclusion

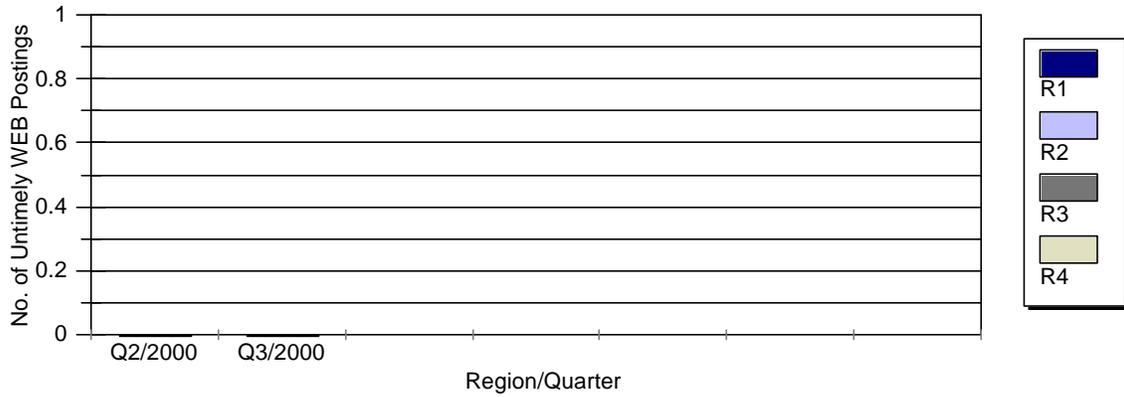
# Reactor Oversight Process

Inspection Program

# Performance Metrics

ENHANCES PUBLIC CONFIDENCE

CI1.a, The inspection program enhances public confidence as evidenced by timely posting of



inspection results

Number of Untimely Postings of Inspection Data  
By Region Each Quarter

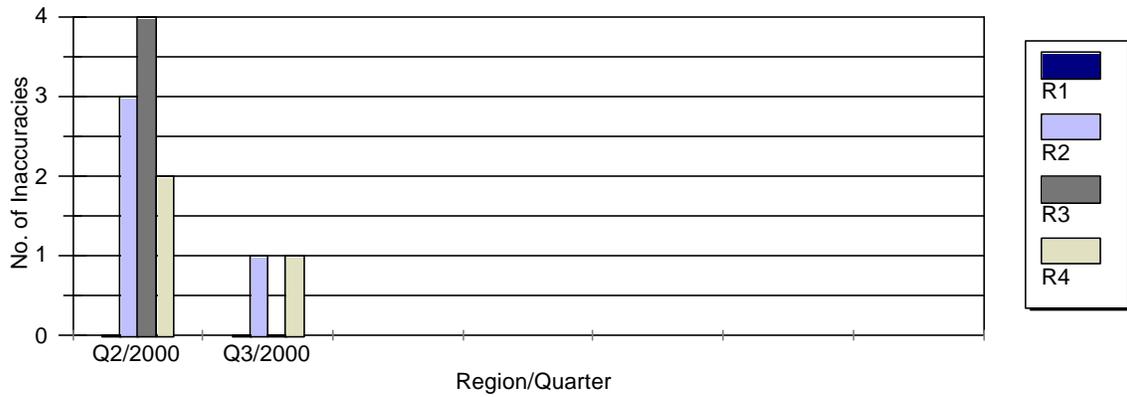
Analysis:

# Reactor Oversight Process

# Performance Metrics

## Inspection Program

CI1.b, The inspection program enhances public confidence as evidenced by few inaccuracies in issued or posted data.



Number of Reported Inaccuracies in Posted and Issued Inspection Data by Region

Analysis:

ENHANCES PUBLIC CONFIDENCE—Conclusion

## **Reactor Oversight Process**

Inspection Program

## **Performance Metrics**

REDUCES UNNECESSARY BURDEN

No metrics. Measured by public and internal surveys.

Analysis:

REDUCES UNNECESSARY BURDEN—Conclusion