

ROP Budget History - Significant Events Impacting ROP Budgets

PURPOSE:

The purpose of this paper is to list and describe the events that have occurred since the initial implementation of the ROP that have impacted the resources allocated to ROP inspections.

BACKGROUND:

The development of the ROP and the cornerstones of safety framework have resulted in an oversight process that is more focused on safety significant issues, with a better defined and consistent set of inspection requirements. Data obtained during initial implementation were used to determine resource changes required for the ROP.

Initial Estimates of ROP Resource Requirements

Resource requirements for the ROP were estimated prior to initial implementation based on assumptions relative to the time needed to complete each baseline procedure at the appropriate depth and scope, and the frequency for performing the inspection. The expected needs for supplemental and event response inspections, generic safety issues, and performance assessment were also considered.

An expert panel of inspectors and senior staff reviewed the individual inspection procedures and arrived at a consensus as to the content, scope and the hours required to complete the baseline procedure for single-, dual-, and triple-unit sites. However, the staff concluded that it would be premature to make any resource reduction decisions at initial implementation beyond those already documented in the fiscal year (FY) 2000 and FY 2001 budgets. The ROP was implemented at all operating commercial nuclear power reactors, effective April 2000, with the resources already budgeted for FYs 2000 and 2001. Oversight process resource requirements were reevaluated following the first year of initial implementation as reported to the Commission in June 2001 in SECY-01-0114, "RESULTS OF THE INITIAL IMPLEMENTATION OF THE NEW REACTOR OVERSIGHT PROCESS."

As a result of the first year of ROP implementation, the staff concluded that the resources budgeted for initial implementation of the new oversight process were appropriate. The results of initial implementation indicated that: (1) current regional resources were adequate to carry out the ROP effectively and to achieve its stated objectives, (2) the regional resource model developed for the ROP, modified based on the results of the first year of ROP implementation, provided reasonably accurate estimates of regional resource requirements to implement the ROP, and (3) overall ROP resource requirements during initial implementation were comparable to the overall requirements in the previous program, although the resources were allocated differently.

In SECY-02-0062, "CALENDAR YEAR 2001 REACTOR OVERSIGHT PROCESS SELF ASSESSMENT," the staff reported that:

The ROP resource data and the experience gained during the initial year of ROP implementation, were used to revise the resource model to provide a more accurate estimate of regional resources required to implement the ROP.

A review of all baseline inspection procedures to better understand the reasons for regional

variations, the variation in the hours required to complete the procedure at different sites, and to determine if adjustments to the frequency and scope of the individual procedures were appropriate and resulted in a more realistic annual resource estimate for a number of baseline inspection procedures.

The more significant changes made to the resource model were:

- The ratio of hours allocated for inspection preparation/documentation to direct inspection effort was revised based on actual charges and expected, continued, near-term improvements.
- The resource estimate for supplemental inspections was revised based on the actual number and color distribution of findings reported during the first year of implementation.
- The resource estimates for generic safety issue/special inspections and licensee performance assessment were revised to reflect actual charges and realistic expectations for safety issues.
- The model now explicitly includes charges for other direct inspection related activities (e.g.; inspection related travel, regional assistance, routine communication, significance determination of inspection findings, enforcement), effort for other infrequently performed inspections (IMC 2515, Appendix C inspection procedures), and expected contractor assistance.

The FY 2002 actual expenditures compared favorably with the resource requirements estimated by the current ROP resource model (approximately 300 full time equivalents (FTE)); however, CY 2002 could not be considered a representative year for the purpose of resource analysis. Experience in CY 2002 demonstrated that additional refinements to the ROP resource model were needed to reflect actual and expected program needs. The primary changes that were evaluated are the inclusion of IMC 0350 inspections and increased supplemental inspections.

Additional Information

A detailed evaluation of ROP resource issues since initial implementation is provided in the annual ROP Self-assessment reports to the Commission as follows:

SECY-01-0114 RESULTS OF THE INITIAL IMPLEMENTATION OF THE NEW REACTOR OVERSIGHT PROCESS

SECY-02-0062 CALENDAR YEAR 2001 REACTOR OVERSIGHT PROCESS SELF ASSESSMENT

SECY-03-0062 REACTOR OVERSIGHT PROCESS SELF-ASSESSMENT FOR CALENDAR YEAR 2002

SECY-04-0053 REACTOR OVERSIGHT PROCESS SELF-ASSESSMENT FOR CALENDAR YEAR 2003

SECY-05-0070 REACTOR OVERSIGHT PROCESS SELF-ASSESSMENT FOR CALENDAR YEAR 2004

SECY-06-0074 REACTOR OVERSIGHT PROCESS SELF-ASSESSMENT FOR CALENDAR YEAR 2005

SECY-07-0069 REACTOR OVERSIGHT PROCESS SELF-ASSESSMENT

FOR CALENDAR YEAR 2006

MAJOR EVENTS

FY 2001, FY 2002 and FY 2003 inspection budget:

Prior to initial implementation of the Reactor Oversight Process (ROP), the staff stated in SECY-00-0049 that there would be no resource adjustments to the inspection and assessment programs until adequate experience was gained with the revised ROP. A full year of implementation beyond the pilot program was planned to obtain reliable data in order to estimate the resources needed to complete the individual inspections and execute the overall ROP.

The ROP was implemented in 2001; however, the inspection budget for 2001 was developed in prior years and was based on the previous inspection program (SALP) because the NRC inspection budget is developed several years in advance. The budget for ROP in FY 2002 and 03 was maintained as it existed.

With the knowledge gained in the first year of implementation, the revised ROP resource model was used in 2002 for the first time as the basis for inspection budget formulation for the FY 2004 budget.

FY 2004- 2006 budget:

The resource model developed from data and experience gained during ROP initial implementation was used to develop budget requirements for the FY 2004 budget. However, experience gained during the 2002 and 2003 inspection cycles -- primarily as a result of events at Davis Besse and Indian Point Unit 2 -- resulted in additional refinements to the ROP resource model and led to a number of changes to the FY 2004 regional inspection budget as compared to the FY 2003 budget.

- Resources for supplemental and reactive inspections were increased 15 FTE to provide for regulatory oversight of a plant under IMC 0350, follow-up activities to verify licensees' improvement plans pursuant to Inspection Procedures 95002 and 95003, and reactor pressure vessel head inspections.
- Resources for performance assessment activities were increased 4.8 FTE
- Program development resources were decreased 2 FTE

In addition, a 15 FTE efficiency reduction (approximately 5%) was imposed on baseline inspections; i.e., baseline inspections were budgeted 15 FTE less than was estimated by the resource model. (b)(5)

(b)(5)

These changes were included in the regional inspection budget for FY 2004 -- FY 2006.

The other significant event that impacted the NRR ROP inspection budget for FY 2004-2006 was the creation of the Office of Nuclear Safety and Incidence Response (NSIR) and the transfer of oversight responsibility for the reactor safeguards and emergency response baseline inspections to this new NRC office. The NRR inspection budgets for these years reflect the

transfers of 16 FTE to NSIR (8 FTE in FY 2005 for safeguards/security baseline inspections -IP71130.xx and 8 FTE in 2006 for emergency preparedness baseline inspections - IP71114.xx). Resources for these inspections are provided by NSIR.

FY 2007 budget:

The regional NRR ROP inspection budget for FY 2007 was adjusted from FY 2006 levels (b)(5)

(b)(5)

(b)(5) The additional baseline resources were obtained primarily from realignment of NRR budget allocations for supplemental inspections and other NRR programs.

FY 2008 budget:

The ROP inspection budget for FY 2008 essentially maintains the same numbers as FY 2007 with one exception.

The staff conducted a review of the inspection data for the Millstone (MILL), Nine Mile Point (NMP), and Beaver Valley (BV) sites as part of an overall reevaluation of inspection resource requirements for a number of dual-unit sites that are "unique" due to design, vintage or operational differences between the units. The previous resource model treated Millstone, Units 2 and 3, as two single-unit sites instead of one dual-unit site and BV and NMP are treated as standard dual-unit sites. This "unique site" model was tested and evaluated in 2006 at MILL, NMP, and BV.

The impact of this unique site model on regional inspection resource requirements and the resulting implications for the regional inspection budget was evaluated by the staff. The review concluded that this approach has merit, and the "unique site" has been factored into the ROP resource model for the 2008 and 2009 budget formulation.

FY 2009 budget:

The FY 2009 budget request includes two significant adjustments:

- a staff initiative is currently underway to review the efficiency and value of the ROP baseline inspections with the goal of identifying resource savings. One recommendation resulting from this review is to reduce the frequency of the component design bases inspections from biennial to triennial and the realignment of inspection activities among other procedures as appropriate. The resulting resource savings have been allocated and the FY 2009 baseline inspection budget reflects these reductions.

- a total of 6 FTE has been transferred from baseline inspections to ROP inspection management and oversight to provide better accounting for effort used in public outreach activities and time spent training new inspectors.

Attachments:

1. Tables that reflect the events described above and provide a summary of the NRR inspection resources provided to NRC Regional Offices for FY 2002 through 2009.
2. FY 2004 regional resource model

3. FY 2008 regional resource model

NRR Direct FTEs:

| NRR | FY 2002 | | | | | FY 2003 | | | | | FY 2004 | | | | |
|------------------------------|---------------------------------------|-----------|------------|-----------|-------|----------|-----------|------------|-----------|-------|----------|-----------|------------|-----------|-------|
| | Region I | Region II | Region III | Region IV | Total | Region I | Region II | Region III | Region IV | Total | Region I | Region II | Region III | Region IV | Total |
| Major Program: | Nuclear Reactor Safety | | | | | | | | | | | | | | |
| Program: | Reactor Licensing | | | | | | | | | | | | | | |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Program: | Reactor Oversight & Incident Response | | | | | | | | | | | | | | |
| Activity: | License Renewal Inspections | | | | | | | | | | | | | | |
| | Baseline inspections | | | | | | | | | | | | | | |
| | 76.6 | 74.9 | 64.8 | 56.6 | 272.9 | 76.4 | 74.8 | 65.0 | 57.1 | 273.3 | 76.6 | 72.3 | 65.5 | 56.6 | 271.0 |
| | Supplemental/Reactive inspec | | | | | | | | | | | | | | |
| | 3.1 | 3.0 | 2.8 | 2.6 | 11.5 | 3.1 | 2.8 | 2.6 | 11.8 | 7.9 | 6.5 | 7.7 | 4.7 | 26.8 | |
| | Generic safety issue inspections | | | | | | | | | | | | | | |
| | 1.0 | 0.9 | 0.8 | 0.7 | 3.4 | 1.0 | 0.9 | 0.8 | 0.7 | 3.4 | 1.1 | 1.0 | 0.9 | 0.8 | 3.8 |
| | Allegation follow-up | | | | | | | | | | | | | | |
| | Reactor performance assmt | | | | | | | | | | | | | | |
| | 2.8 | 2.7 | 2.4 | 2.1 | 10.0 | 2.8 | 2.7 | 2.4 | 2.1 | 10.0 | 4.7 | 3.0 | 4.0 | 3.1 | 14.8 |
| | Inspection & assmt mgmt oversight | | | | | | | | | | | | | | |
| | 1.4 | 1.4 | 1.4 | 1.4 | 5.6 | 1.9 | 1.9 | 1.9 | 1.9 | 7.6 | 1.3 | 1.4 | 1.4 | 1.4 | 5.5 |
| | Licensing & exam of reactor operators | | | | | | | | | | | | | | |
| | Operator lic. Prog & train. Oversight | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Sub Total: | 84.9 | 82.9 | 72.2 | 63.4 | 303.4 | 85.2 | 83.6 | 72.9 | 64.4 | 306.1 | 91.6 | 84.2 | 79.5 | 66.6 | 321.9 |
| Program: | New Reactor | | | | | | | | | | | | | | |
| Activity: | Watts Bar Unit 2 Inspections | | | | | | | | | | | | | | |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.0 | 0.0 | 0.0 | |
| Nuclear Reactor Safety Total | 84.9 | 82.9 | 72.2 | 63.4 | 303.4 | 85.2 | 83.6 | 72.9 | 64.4 | 306.1 | 91.6 | 94.2 | 79.5 | 66.6 | 321.9 |

As of March 14, 2007 6:39am

POC:
 Steve Hoffman - DLR
 Larry Vick -DIRS
 Armando - DIRS
 Regions Budget Analyst
 NRR Budget Analyst: Cherrie Corley and Donald Williams

Attachment 1

NRR Direct FTEs:

| NRR | FY 2005 | | | | | FY 2006 | | | | | FY 0000 | | | | |
|------------------------------|---------------------------------------|-----------|------------|-----------|-------|----------|-----------|------------|-----------|-------|----------|-----------|------------|-----------|-------|
| | Region I | Region II | Region III | Region IV | Total | Region I | Region II | Region III | Region IV | Total | Region I | Region II | Region III | Region IV | Total |
| Major Program: | Nuclear Reactor Safety | | | | | | | | | | | | | | |
| Program: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Program: | Reactor Oversight & Incident Response | | | | | | | | | | | | | | |
| Activity: | License Renewal Inspections | | | | | | | | | | | | | | |
| | 76.0 | 73.8 | 64.8 | 57.4 | 272.0 | 74.4 | 72.0 | 63.4 | 56.2 | 266.0 | | | | | 0.0 |
| | 6.1 | 10.2 | 6.3 | 5.7 | 28.3 | 7.2 | 11.2 | 7.5 | 6.8 | 32.7 | | | | | |
| | 1.1 | 1.0 | 0.9 | 0.8 | 3.8 | 1.1 | 1.0 | 0.9 | 0.8 | 3.8 | | | | | |
| | | | | | | | | | | | | | | | 0.0 |
| | 4.2 | 4.0 | 3.5 | 3.1 | 14.8 | 4.2 | 4.1 | 3.5 | 3.2 | 15.0 | | | | | 0.0 |
| | 0.9 | 0.9 | 0.9 | 0.9 | 3.6 | 1.3 | 1.2 | 1.3 | 1.2 | 5.0 | | | | | 0.0 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Sub Total: | 88.3 | 89.9 | 76.4 | 67.9 | 322.5 | 88.2 | 89.5 | 76.6 | 68.2 | 322.5 | | | | | 0.0 |
| Program: | New Reactor | | | | | | | | | | | | | | |
| Activity: | Watts Bar Unit 2 Inspections | | | | | | | | | | | | | | |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | |
| Nuclear Reactor Safety Total | 88.3 | 89.9 | 76.4 | 67.9 | 322.5 | 88.2 | 89.5 | 76.6 | 68.2 | 322.5 | | | | | |

As of March 14, 2007 6:39am

POC:
 Steve Hoffman - DLR
 Larry Vick - DIRS
 Armando - DIRS
 Regions Budget Analyst
 NRR Budget Analyst: Cherrie Corley and Donald Williams

NRR Direct FTEs:

| NRR | FY 2007 | | | | | FY 2008 | | | | | FY 2009 | | | | |
|------------------------------|---------------------------------------|-----------|------------|-----------|-------|----------|-----------|------------|-----------|-------|----------|-----------|------------|-----------|-------|
| | Region I | Region II | Region III | Region IV | Total | Region I | Region II | Region III | Region IV | Total | Region I | Region II | Region III | Region IV | Total |
| Major Program: | Nuclear Reactor Safety | | | | | | | | | | | | | | |
| Program: | Reactor Licensing | | | | | | | | | | | | | | |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | | | | | |
| Program: | Reactor Oversight & Incident Response | | | | | | | | | | | | | | |
| Activity: | License Renewal Inspections | | | | | | | | | | | | | | |
| | | | | | 0.0 | | | | | 0.0 | | | | | 0.0 |
| | Baseline inspections | | | | | | | | | | | | | | |
| | 77.0 | 78.0 | 67.5 | 59.5 | 282.0 | 76.6 | 78.7 | 67.4 | 60.1 | 282.8 | 75.9 | 77.9 | 66.7 | 59.0 | 279.5 |
| | Supplemental/Reactive inspec | | | | | | | | | | | | | | |
| | 5.4 | 6.4 | 5.3 | 5.0 | 22.1 | 5.4 | 5.4 | 5.3 | 5.2 | 21.3 | 5.5 | 5.5 | 5.4 | 5.3 | 21.7 |
| | Generic safety issue inspections | | | | | | | | | | | | | | |
| | 1.1 | 1.0 | 0.9 | 0.8 | 3.8 | 1.5 | 1.5 | 1.4 | 1.1 | 5.5 | 1.9 | 1.9 | 1.7 | 1.5 | 7.0 |
| | Allegation follow-up | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | Reactor performance assmt. | | | | | | | | | | | | | | |
| | 4.2 | 4.1 | 3.5 | 3.2 | 15.0 | 4.0 | 4.0 | 3.5 | 3.2 | 14.7 | 4.0 | 4.0 | 3.6 | 3.1 | 14.7 |
| | Inspection & assmt mgmt oversight | | | | | | | | | | | | | | |
| | 1.3 | 1.2 | 1.3 | 1.2 | 5.0 | 1.3 | 1.2 | 1.3 | 1.2 | 5.0 | 3.3 | 3.3 | 3.2 | 3.2 | 13.0 |
| | Licensing & exam of reactor operators | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | Operator lic. Prog & train. Oversight | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Sub Total: | 89.0 | 90.7 | 78.5 | 69.7 | 327.9 | 88.8 | 90.8 | 78.9 | 70.8 | 329.3 | 90.6 | 92.6 | 80.6 | 72.1 | 335.9 |
| Program: | New Reactor | | | | | | | | | | | | | | |
| Activity: | Watts Bar Unit 2 Inspections | | | | | | | | | | | | | | |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Nuclear Reactor Safety Total | 89.0 | 90.7 | 78.5 | 69.7 | 327.9 | 88.8 | 90.8 | 78.9 | 70.8 | 329.3 | 90.6 | 92.6 | 80.6 | 72.1 | 335.9 |

As of March 14, 2007 6:39am

Note: Jim Please explain the deltas, i.e., 13.0 in FY 2009

POC:
 Steve Hoffman - DLR
 Larry Vick - DIRS
 Armando - DIRS
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NRR RESOURCE TO REGIONS

PA 103-140 (Baseline Inspections)

| | One-unit sites | Two-unit sites | Three-unit sites |
|--------------|---------------------|---------------------|---------------------|
| Baseline DIE | 1912 hrs/site | 2114 hrs/site | 2279 hrs/site |
| Prep/Doc | 1434 hrs/site | 1586 hrs/site | 1709 hrs/site |
| Plant Status | <u>630 hrs/site</u> | <u>700 hrs/site</u> | <u>840 hrs/site</u> |
| Total | 3976 hrs/site | 4400 hrs/site | 4828 hrs/site |

Notes:

- Safeguards baseline inspections (71130 series and 81110) are funded separately by NSIR and are not included in above numbers.
- Baseline DIE hours are annual total of baseline inspection estimates as specified in the baseline inspection procedures
- Prep/Doc = 0.75 of Baseline DIE hours (CY 2003 actual charges = 0.74)
- Annual Baseline Inspection Hours Required per Region = (3976 x number of 1-unit sites in region) + (4400 x number of 2-unit sites in region) + (4828 x number of 3-unit sites in region)

Other Baseline Inspection Activities:

- AT, COM, RLD, REG, SDP, ENF = 700 hrs/site
- time spent training new inspectors = 4 FTE (1.0 FTE per region)
- Public outreach activities = 2 FTE (0.5 FTE per region)

PA 103-142 (Plant-specific Inspections)

Supplemental Inspection:

- IP95001 30 hrs per site DIE and 30 hrs per site Prep/Doc = 60 hours/site
- IP95002 200 hrs per region DIE and 200 hours per region Prep/Doc = 400 hours/region
- IP95003 450 hours per region DIE and 450 hours per region Prep/Doc = 900 hours/region

Event Response:

- 500 hrs/region DIE and 250 hours/region Prep/Doc = 750 hrs/region

Other Plant Specific Activities:

- IMC 2515 App C inspections = 220 hrs/region DIE and 175 hours/region Prep/Doc = 395 hours/region
- IMC 0350 oversight of one plant = 5.6 FTE (1.4 FTE per region)

IP 95003 followup = 1.6 FTE (0.4 FTE per region)

Additional IMC 2515 App C reactor head inspections = 1.6 FTE (0.4 FTE per region)

ISFSI inspections at operating reactors = 3 FTE (regional distribution based on expected of ISFSI activity in region)

Browns Ferry 1 restart inspections = 3.6 FTE

PA 103-144 (GSI/SI inspections)

- 35 hrs/site DIE and 25 hrs/site Prep/Doc = 60 hours/site

PA 103-148 (Licensee Performance Assessment)

250 hours/site.

PA 103-150 (Program Development)

4.6 FTE

FTE equivalent= 1140 hrs/FTE based on actual five year average for all regions (FY 96-FY 00)

Contractor support = approximately 230 hours effort per \$35,000 of funding.

Estimated Regional Resource Requirements (FTEs) For Reactor Oversight Process By Program Element

| Program Element | Region I 18 sites (10 single-unit sites) (8 dual-unit sites) | Region II 18 sites (5 single-unit sites) (12 dual-unit sites) (1 triple-unit site) | Region III 16 sites (8 single-unit sites) (8 dual-unit sites) | Region IV 14 sites (8 single-unit sites) (5 dual-unit sites) (1 triple-unit site) |
|-----------------------------|---|--|--|---|
| PA 103140 | | | | |
| Baseline Inspection | 65.75 | 67.99 | 58.8 | 51.4 |
| AT, COM, RLD, REG, SDP, ENF | 11.05 | 11.05 | 9.8 | 8.6 |
| New Inspector Training | 1.0 | 1.0 | 1.0 | 1.0 |
| Public Outreach | <u>0.5</u> | <u>0.5</u> | <u>0.5</u> | <u>0.5</u> |
| Sub-Total | 78.3 | 80.5 | 70.1 | 61.5 |
| PA 103142 | | 3.6 BF1 | | |
| Supplemental Inspection | 2.1 | 2.1 | 2.0 | 1.9 |
| Event Response | 0.65 | 0.65 | 0.65 | 0.65 |
| Plant Specific Activities | 2.55 | 2.55 | 2.55 | 2.55 |
| ISFSI | <u>0.5</u> | <u>1.0</u> | <u>1.0</u> | <u>0.5</u> |
| Sub-Total | 5.8 | 9.9 | 6.2 | 5.6 |
| PA 103144 | | | | |
| GSI/SI Inspection | 0.95 | 0.95 | 0.84 | 0.74 |
| PA 103148 | | | | |
| Performance Assessment | 3.95 | 3.95 | 3.5 | 3.1 |
| PA 103150 | | | | |
| Program Development | 1.2 | 1.1 | 1.2 | 1.1 |

| | | | | |
|-------|------|------|------|------|
| Total | 90.2 | 96.4 | 81.8 | 72.0 |
|-------|------|------|------|------|

Estimated Regional FTE Requirements For Reactor Oversight Process By Program Element

| Program Element | Region I | Region II | Region III | Region IV | Total | CY 2003 Actual |
|------------------------|--------------|--------------|--------------|--------------|-----------------|----------------|
| Baseline Inspections | 78.3 (74.26) | 80.5 (76.34) | 70.1 (66.48) | 61.5 (58.32) | 290.4 (275.4)* | 276** |
| Plant Specific/Suppl | 5.8 | 9.9 | 6.2 | 5.6 | 27.5 | 24.1 |
| GSI/SI Inspections | 0.95 | 0.95 | 0.84 | 0.74 | 3.48 | 2.04 |
| Performance Assessment | 3.95 | 3.95 | 3.5 | 3.1 | 14.5 | 18.8 |
| Program Development | 1.2 | 1.1 | 1.2 | 1.1 | 4.6 | 3.5 |
| Total | 90.2 (86.16) | 96.4 (92.24) | 81.8 (78.18) | 72.0 (68.82) | 340.48 (325.48) | 324.4 |

*Numbers in (parentheses) reflect 15 FTE efficiency reduction applied in proportion to baseline allocation.

**does not include safeguards inspections

Current FY 2005 Budget (July 2004)

| | | | | | |
|--|------|------|------|------|----------|
| Baseline Inspections | 76.0 | 73.8 | 64.8 | 57.4 | 272.0*** |
| Plant-Specific/Suppl | 6.1 | 10.2 | 6.3 | 5.7 | 28.3 |
| GSI Inspections | 1.1 | 1.0 | 0.9 | 0.8 | 3.8 |
| Performance Assessment | 4.2 | 4.0 | 3.5 | 3.1 | 14.8 |
| Inspection & Assmt. Pgm. Dev. & Oversight | 0.9 | 0.9 | 0.9 | 0.9 | 3.6 |
| Total | 88.3 | 89.9 | 76.4 | 67.9 | 322.5 |

***includes a 15.0 FTE forced efficiency reduction

FY 2008 Regional Resource Model

BASELINE PROCEDURE HOURS

2/2007

| IP # | FREQ | STAFF HOURS | | | | ANNUAL HOURS | | | |
|-----------|------|-------------|----------|----------|----------|--------------|----------|----------|----------|
| | | <u>1</u> | <u>2</u> | <u>3</u> | <u>U</u> | <u>1</u> | <u>2</u> | <u>3</u> | <u>U</u> |
| 7111101 | A | 18 | 18 | 18 | | 18 | 18 | 18 | |
| 7111102 | B | 29 | 36 | 41 | | 15 | 18 | 21 | |
| 7111104 | A | 48 | 48 | 48 | | 48 | 48 | 48 | |
| 7111104S | A | 32 | 32 | 32 | | 32 | 32 | 32 | |
| 7111105AQ | A | 45 | 45 | 45 | | 45 | 45 | 45 | |
| 7111105T | T | 200 | 200 | 200 | | 67 | 67 | 67 | |
| 7111106 | A | 20 | 20 | 20 | | 20 | 20 | 20 | |
| 7111107A | A | 6 | 6 | 6 | | 6 | 6 | 6 | |
| 7111107B | B | 40 | 40 | 40 | | 20 | 20 | 20 | |
| 7111108G | R | 24 | 48 | 72 | | 16 | 32 | 48 | |
| 7111108P | R | 90 | 180 | 270 | | 60 | 120 | 180 | |
| 7111111B | B | 96 | 96 | 96 | | 48 | 48 | 48 | |
| 7111111Q | A | 16 | 16 | 16 | | 16 | 16 | 16 | |
| 7111112B | T | 36 | 36 | 36 | | 12 | 12 | 12 | |
| 7111112Q | A | 108 | 108 | 108 | | 108 | 108 | 108 | |
| 7111113 | A | 108 | 120 | 144 | | 108 | 120 | 144 | |
| 7111114 | A | 50 | 60 | 62 | | 50 | 60 | 62 | |
| 7111115 | A | 93 | 107 | 122 | | 93 | 107 | 122 | |
| 7111117A | A | 16 | 16 | 16 | | 16 | 16 | 16 | |
| 7111117B | B | 80 | 80 | 80 | | 40 | 40 | 40 | |
| 7111119 | A | 84 | 84 | 84 | | 84 | 84 | 84 | |
| 7111120 | B | 110 | 195 | 280 | | 55 | 98 | 140 | |
| 7111121 | B | 408 | 408 | 408 | | 204 | 204 | 204 | |
| 7111122 | A | 105 | 105 | 105 | | 105 | 105 | 105 | |
| 7111123 | A | 22 | 26 | 34 | | 22 | 26 | 34 | |

IP # FREQ STAFF HOURS ANNUAL HOURS

Attachment 3

| | | <u>1</u> | <u>2</u> | <u>3</u> | <u>U</u> | <u>1</u> | <u>2</u> | <u>3</u> | <u>U</u> |
|---------|-----|----------|----------|----------|----------|----------|----------|----------|----------|
| 7112101 | A | 32 | 32 | 32 | | 32 | 32 | 32 | |
| 7112102 | B | 80 | 80 | 80 | | 40 | 40 | 40 | |
| 7112103 | B | 40 | 40 | 40 | | 20 | 20 | 20 | |
| 7112201 | B | 44 | 44 | 44 | | 22 | 22 | 22 | |
| 7112202 | B | 40 | 40 | 40 | | 20 | 20 | 20 | |
| 7112203 | B | 32 | 32 | 32 | | 16 | 16 | 16 | |
| 71151 | A | 42 | 60 | 65 | | 42 | 60 | 65 | |
| 71152 | A | 211 | 255 | 298 | | 211 | 255 | 298 | |
| 71152BB | | 250 | 250 | | 125 | 125 | 125 | | |
| 71153 | A | 105 | 115 | 120 | | 105 | 115 | 120 | |
| TOTAL | | | | | | | | | |
| | BWR | | | | | 1831 | 1995 | 2156 | 2294* |
| | PWR | | | | | 1875 | 2083 | 2288 | 2395* |

*Unique sites estimated at 115% of nominal two-unit site

REGIONAL INSPECTION RESOURCE ESTIMATES

1. Baseline Inspections (PA 122-140)

- Direct inspection hours (DIE) is the sum of the annual nominal estimated hours in each baseline procedure
- Prep/Doc = 0.75 of DIE
- Plant Status reflects additional requirements for RCS leakage reviews and FY 05 actual charges
- Safeguards and EP baseline procedures are funded by NSIR and are not included
- Difference between BRW and PWR totals is due to different IST requirements
- Regional hours are based on distribution of reactor types and number of units per site in the region
- "Unique" two-unit sites are estimated at 115% of a standard two-unit site

| | | | | |
|-------------|------|------|------|------|
| Annual DIE: | 1 | 2 | 3 | U |
| BWR | 1831 | 1995 | 2156 | 2294 |
| PWR | 1875 | 2083 | 2288 | 2395 |

| | | | | |
|-----------|------|------|------|------|
| Prep/Doc: | | | | |
| BWR | 1373 | 1496 | 1617 | 1720 |
| PWR | 1406 | 1562 | 1716 | 1796 |

| | | | | |
|---------------|-----|-----|-----|-----|
| Plant Status: | 625 | 683 | 892 | 977 |
|---------------|-----|-----|-----|-----|

| | | | | | | | |
|-----------------------|------|---|------|---|-----|---|------|
| Total Baseline Hours: | DIE | + | P/D | + | PS | = | |
| 1-unit BWR | 1831 | + | 1373 | + | 625 | = | 3829 |
| 2-unit BWR | 1995 | + | 1496 | + | 683 | = | 4174 |
| 3-unit BWR | 2156 | + | 1617 | + | 892 | = | 4665 |
| Unique BWR | 2294 | + | 1720 | + | 977 | = | 4991 |
| 1-unit PWR | 1875 | + | 1406 | + | 625 | = | 3906 |
| 2-unit PWR | 2083 | + | 1562 | + | 683 | = | 4328 |
| 3-unit PWR | 2288 | + | 1716 | + | 892 | = | 4896 |
| Unique PWR | 2395 | + | 1796 | + | 977 | = | 5168 |

Other Baseline Activities:

- AT, COM, SDP, ENF = 750 hrs/site
- train new resident inspectors 1 FTE/ region = 1140 hrs/region
- public outreach 0.5 FTE/ region = 570 hrs/region

DISTRIBUTION OF REACTOR TYPES

| | Region I | Region II | Region III | Region IV |
|------------|----------|-----------|------------|-----------|
| 1-unit BWR | 5 | 0 | 5 | 4 |
| 2-unit BWR | 3 | 2 | 3 | 0 |
| 3-unit BWR | 0 | 1 | 0 | 0 |
| Unique BWR | 1 | 0 | 0 | 0 |
| 1-unit PWR | 5 | 5 | 3 | 4 |
| 2-unit PWR | 2 | 9 | 5 | 5 |
| 3-unit PWR | 0 | 1 | 0 | 1 |
| Unique PWR | <u>2</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| Totals: | 18 | 18 | 16 | 14 |

2. Plant-Specific Inspections (PA 122-142)

- Supplemental Inspections:
 - 95001 60 hrs/site = 3960 hrs
 - 95002 400 hrs/region = 1600 hrs
 - 95003 900 hrs/region = 3600 hrs
- Other Plant-Specific Inspections:
 - Event Response (AIT & Special Inspections)
 - IMC 2515 Appendix C Inspections
 - 95003 Followup
 - IMC 0350 Oversight

ISFSI Inspections (NRR-funded Portions) 3750 hrs/region = 15000 hours

3. Safety Issues Inspections (PA 122-144)

120 hrs/site = 7920 hrs

4. Licensee Performance Assessment (PA 122-148)

250 hrs/site = 16500 hrs

5. Program Development (PA 122-150)

- 1.25 FTE/ region
- 0.5 FTE/ region (TSS support for RPS)

SUMMARY
 NRR-FUNDED REGIONAL INSPECTION RESOURCES
 (FTE)

| | Region I (18 sites) | Region II (18 sites) | Region III (16 sites) | Region IV (14 sites) | Totals (66 sites) |
|-----------------------------------|------------------------|-------------------------|--------------------------|-------------------------|----------------------|
| Baseline (PA122140) | 77.0 | 78.4 | 67.5 | 59.7 | 282.6 |
| Plant-Specific (PA122142) | 5.4 | 5.4 | 5.3 | 5.2 | 21.3 |
| Safety Issues (PA122144) | 1.9 | 1.9 | 1.7 | 1.5 | 7.0 |
| Performance Assessment (PA122148) | 3.9 | 3.9 | 3.5 | 3.1 | 14.4 |
| Program Development (PA122150) | 1.75 | 1.75 | 1.75 | 1.75 | 7.0 |
| Total | 90.0 | 91.4 | 79.7 | 71.2 | 332.3 |
| Current FY 2007 Request | 87.0 | 88.5 | 75.5 | 67.6 | 318.2 |