



## Department of Energy

Washington, DC 20585

### MEMORANDUM FOR DISTRIBUTION

FROM: JAMES B. O'BRIEN  
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SUBJECT: Facility Representative Program Performance Indicators Quarterly Report, January - March 2011

This memorandum summarizes the Facility Representative (FR) Program Performance Indicators Quarterly Report covering the period January through March 2011. Data for these indicators were gathered by Field Elements per Department of Energy's (DOE) Technical Standard (STD) 1063-2011, *Facility Representatives*, and reported to Headquarters Program Offices for evaluation and feedback to improve the FR Program. This report reflects changes in DOE STD 1063-2011 that deleted one indicator and changed the way two others are calculated. The changes are discussed below.

Highlights from this report:

#### **FR Staffing/Qualification/Oversight Data**

- DOE was staffed at 180 FR Full Time Equivalent (FTEs), which is 91 percent of the full staffing level (DOE goal is 100 percent).
- DOE has 84 percent of the required fully-qualified FR staff (DOE goal is > 80 percent). This indicator changed under the revised standard. Formerly, it was the percentage of the on-board staff fully qualified, but it now is the percentage of the required staff fully qualified. The result is a decrease in the indicator that more accurately reflects the availability of qualified staff compared to the number needed.
- DOE FRs spent 78 percent of their time on oversight activities (DOE goal is > 65 percent). The indicator for percentage of time spent in the field was deleted in the Standard revision since it was determined that the effort to collect the data was not commensurate with the value of the data.

#### **FR Program Highlights**

Individual site program highlights are included in the current FR Quarterly Report.

Current FR information and the current and past quarterly performance indicator reports are available at the FR web site at <http://www.hss.energy.gov/deprep/facrep/>. If you have any questions or comments on this report, please contact me at (301) 903-3331, or the DOE FR Program Manager, Earl Hughes, at (202) 586-0065.



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# Facility Representative Performance Indicators January-March 2011

## OFFICE OF ENVIRONMENTAL MANAGEMENT (EM)

<u>Location*</u>	<u>Analysis FTE</u>	<u>Approved FTE</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Gains/Losses</u>	<u>% Core Qualified</u> <sup>1</sup>	<u>% Fully Qualified</u> <sup>1</sup>	<u>% Oversight Time</u> <sup>**</sup>
CBFO	3	3	3	100	0	100	100	79
ID (EM) <sup>2</sup>	10	10	10	100	±1	100	100	89
OR (EM) <sup>3</sup>	18	17	17	89	0	94	94	70
ORP <sup>4</sup>	15	15	15	100	+2	80	80	76
PPPO <sup>5</sup>	6	6	5	83	0	83	83	75
RL <sup>6</sup>	19	19	19	100	0	100	95	69
SR <sup>7</sup>	34	34	29	85	-1	82	74	88
WVDP	2	2	2	100	0	100	50	75
<b>EM Totals</b>	<b>107</b>	<b>107</b>	<b>100</b>	<b>93</b>	<b>+1</b>	<b>92</b>	<b>85</b>	<b>78</b>
<b>DOE GOALS</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>100</b>	<b>—</b>	<b>—</b>	<b>&gt;80</b>	<b>&gt;65</b>

\* Location Key:

CBFO = Carlsbad Field Office  
 ID = Idaho Operations Office  
 OR = Oak Ridge Office

ORP = Office of River Protection  
 PPPO = Portsmouth/Paducah Project Office  
 RL = Richland Operations Office

SR = Savannah River Operations Office  
 WVDP = West Valley Demonstration Project

\*\* % Oversight Time :

The number of hours spent in oversight activities divided by the number of available work hours in the quarter. The number of available work hours includes normal scheduled work and overtime, but not leave or special assignments greater than 1 week assigned. The previous PI for % Time in the Field was deleted in the revision of DOE STD 1063-2011.

**Notes:**

- 1 Qualification percentages reflect the revision of DOE STD 1063-2011 to use the Staffing Analysis FTE vice Actual Staffing FTE as the denominator of the calculation.
- 2 ID (EM) conducted a new staffing analysis, reducing required staffing from 12 to 10 FTE. One ID (EM) FR transferred to an ID (NE) FR position. One former ID (EM) FR transferred back into the ID (EM) FR organization.
- 3 One OR (EM) FR was on detail the whole quarter and not counted in the statistics
- 4 One ORP FR was on detail all this quarter and is not included in the statistics.
- 5 PPPO is recruiting to fill a vacant FR position
- 6 One FR from RL was on detail the whole quarter and is not counted in the statistics. RL uses 4 additional support service contract personnel for non-nuclear oversight of Recovery Act work.
- 7 SR conducted a new staffing analysis showing 34 FTE required vice 32 before. One FR transferred to a non-FR position at SR.

**EM Facility Representative (FR) Highlights:**

- ID (EM): Three FRs served temporary details providing FR oversight at the Separations Process Research Unit (SPRU) in Niskayuna, New York, which is recovering from a radiological release event.
- ID (EM): FRs monitored two Contractor Readiness Assessments to evaluate the rigor of the contractor review teams and the effectiveness of the Contractor Assurance System.
- ID (EM): While observing construction work, an FR discovered an outside contractor had failed to follow DOE requirements for a critical lift.
- ID (EM): An FR found several Lockout/Tagout issues, including contractor procedures that did not comply with OSHA rules, and improper execution of those procedures.
- OR (EM): An FR reviewed field implementation of various Specific Administrative Controls and observed improper storage of combustible material, a TSR violation. The contractor took immediate corrective actions and performed a formal root cause analysis.

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## **EM Facility Representative (FR) Highlights:**

- OR (EM): An FR observed that the contractor was not going to use an enclosure as a buffer area for entering and exiting several different airborne contamination areas. The FR coordinated a meeting with contractor management to address this issue. This resulted in the contractor purchasing and installing confinement structures in these areas and adding air monitoring.
- OR (EM): FR review of a major work package found numerous issues, including inadequate scope, poorly written steps, and ambiguous information. A meeting was held with the Project Manager, and the contractor has started providing additional detail in its work packages.
- OR (EM): At a facility about to start a DOE Readiness Assessment (RA), the FR noted that there were several documented Radiological Protection and Work Control issues. The FR encouraged contractor and DOE management to postpone the review to resolve these issues. The RA was subsequently postponed, the contractor corrected the problems, and the RA was successfully completed.
- OR (EM): An FR at a Hot Cell facility voiced concern when the contractor placed a portable HEPA unit through the front door of an airborne structure. This provided inadequate airflow and drew contamination closer to the open door. The contractor subsequently connected the ventilation to an existing vent in the back of the structure that provided adequate flow of contaminants away from the door and through the structure.
- OR (EM): An FR noted damage to heavy equipment track pads, pivot axle seals, and hydraulic lines at a waste management facility. The FR associated the damage with the increased size and concentration of structural steel sections received as waste. As a result of the FR's observation, the waste stream was altered by cutting up the steel and mixing it with other lighter material, reducing the heavy equipment damage and raising facility availability.
- ORP: An FR observed improper radiation exposure controls during a waste transfer and raised the issue through contractor management until it was acted upon.
- ORP: An FR identified inconsistent radiation measurement practices that caused inaccurate measurements during waste transfer and resulted in shutting down the process.
- ORP: FRs conducting pre-job documentation reviews found several issues with work process development, improper component identification on checklists, and errors in diagrams.
- ORP: FRs observing work found issues with management coverage, supervision of work, and use of lift platforms..
- ORP: FRs noted workers neglecting radiological exposure control practices, leading to retraining and emphasizing worker accountability for their own exposure control..
- ORP: FRs found fall protection and hoisting and rigging lapses during inspections and initiated corrective actions.
- ORP: FRs noted several issues with portable equipment power cord maintenance documentation that led to an improved inspection and labeling system.
- ORP: An FR noted improved work safety performance in fluorescent lamp maintenance following corrective actions for a previous failed lamp fixture.
- RL: FRs identified several fall protection and elevated work issues.
- RL: FRs identified several Administrative Control issues that constituted violations of Technical Safety Requirements.
- RL: FRs identified an organic vapor monitor that was inaudible under some conditions.

## Facility Representative Performance Indicators January-March 2011

### **EM Facility Representative (FR) Highlights:**

- RL: An FR identified a no-compliance with a Justification for Continued Operation.
- RL: FRs identified several problems with radiological work planning and execution.
- RL: FRs identified several configuration management issues.
- RL: an FR identified issues with Decontamination and Decommissioning work that breached contaminated systems and exposed workers to the risk of radioactive material uptakes.
- SR: Three FRs completed full qualification.
- SR: FRs participated in a DOE Readiness Assessment for remediation of transuranic waste containers.
- SR: An FR identified that a National Fire Protection Association Code requirement for a fire protection standpipe within one deck level of the current construction had not been met on a construction project. It was corrected expeditiously.
- SR: FRs reviewed logs and identified a failed surveillance test on a diesel generator that had gone undetected. The contractor corrected the test procedure to include the acceptance criteria.
- SR: FRs identified flat tires on Radiological Controls Organization emergency spill response carts. The contractor replaced the wheels with wheels using solid tires and included a more comprehensive inspection in the monthly tickler for the carts.
- SR: FRs identified fall hazards due to inadequate scaffold assembly and a potential silica exposure during construction.
- SR: FRs identified issues related to lack of a work authorization, inappropriate subcontract categorization, and inadequate event response during fact finding regarding a loss of steam.

# Facility Representative Performance Indicators January-March 2011

## OFFICE OF NUCLEAR ENERGY (NE)

<u>Location*</u>	<u>Analysis FTE</u>	<u>Approved FTE</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Gains/Losses</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Oversight Time **</u>
ID (NE)	9	9	7	89	+1, -2	77	77	79
<b>NE Totals</b>	<b>9</b>	<b>9</b>	<b>7</b>	<b>89</b>	<b>-1</b>	<b>77</b>	<b>77</b>	<b>79</b>
<b>DOE GOALS</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>100</b>	<b>—</b>	<b>—</b>	<b>&gt;80</b>	<b>&gt;65</b>

\* Location Key:

ID = Idaho Operations Office

\*\* % Oversight Time :

The number of hours spent in oversight activities divided by the number of available work hours in the quarter. The number of available work hours includes normal scheduled work and overtime, but not leave or special assignments greater than 1 week assigned. The previous PI for % Time in the Field was deleted in the revision of DOE STD 1063-2011.

### Notes:

Qualification percentages reflect the revision of DOE STD 1063-2011 to use the Staffing Analysis FTE vice Actual Staffing FTE as the denominator of the calculation.

During this quarter ID (NE) conducted a Staffing Analysis showing a continuing requirement for 9 FTE.

One FR transferred to the Safety System Oversight organization, and one transferred to a Facility Engineer position, both within the Idaho Operations Office.

One ID (EM) FR transferred to an ID (NE) FR position.

### **NE Facility Representative (FR) Highlights:**

- ID (NE): In January 2011, the Idaho National Laboratory Contractor stopped all radiological work at the Materials and Fuels Complex (MFC) as a result of radiological events, a DOE Office of Nuclear Safety Enforcement consent, order, and a DOE for-cause review. ID (NE) FRs developed and implemented an oversight plan to evaluate Contractor performance during the restoration of MFC radiological work. The FRs provided extensive coverage of radiological work to provide DOE and Contractor management with objective information.
- ID (NE): ATR Complex FRs provided extensive oversight of the large project to replace the reactor control system.
- ID (NE): A Materials and Fuel Complex FR observed subcontractor mechanic working in required fall protection gear without anyone else within range to respond and/or call for assistance. If the individual were to fall and become suspended, they could become incapacitated before being found. The FR's intervention resulted in the Contractor changing procedures to improve the safety of future operations.
- ID (NE): FRs completed their first quarterly assessment of the Contractor Assurance System (CAS) and continued to refine the CAS oversight process to improve effectiveness of the DOE-ID oversight program.

# Facility Representative Performance Indicators January-March 2011

## NATIONAL NUCLEAR SECURITY ADMINISTRATION (NNSA)

<u>Location*</u>	<u>Analysis FTE</u>	<u>Approved FTE</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Gains/Losses</u>	<u>% Core Qualified</u> <sup>1</sup>	<u>% Fully Qualified</u> <sup>1</sup>	<u>% Oversight Time</u> <sup>**</sup>
LASO <sup>2</sup>	15	13	13	87	0	92	92	72
LSO <sup>3</sup>	9	9	6	67	0	67	67	73
NSO	7	7	7	100	0	86	86	80
PXSO	10	9	9	90	0	90	90	80
SRSO	3	3	3	100	0	100	100	73
SSO <sup>4</sup>	8	8	6	75	-2	63	63	81
YSO	11	11	10	91	0	91	91	75
<b>NNSA Totals</b>	<b>63</b>	<b>60</b>	<b>54</b>	<b>86</b>	<b>-2</b>	<b>84</b>	<b>84</b>	<b>76</b>
<b>DOE GOALS</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>100</b>	<b>—</b>	<b>—</b>	<b>&gt;80</b>	<b>&gt;65</b>

\* Location Key:

LASO = Los Alamos Site Office  
LSO = Livermore Site Office

NSO = Nevada Site Office  
PXSO = Pantex Site Office

SRSO = Savannah River Site Office  
SSO = Sandia Site Office

YSO = Y-12 Site Office

\*\* % Oversight Time:

The number of hours spent in oversight activities divided by the number of available work hours in the quarter. The number of available work hours includes normal scheduled work and overtime, but not leave or special assignments greater than 1 week assigned. The previous PI for % Time in the Field was deleted in the revision of DOE STD 1063-2011.

Notes:

- 1 Qualification percentages reflect the revision of DOE STD 1063-2011 to use the Approved FTE vice Actual Staffing FTE as the denominator of the calculation.
- 2 LASO conducted a new staffing analysis, resulting in 15 FTE required vice 13 before. Management determined that budgetary constraints limit the program to 13 FTE.
- 3 LSO conducted a new staffing analysis, resulting in 9 FTE required vice 10 before.
- 4 Two SSO FRs took other positions within SSO

### NNSA Facility Representative (FR) Highlights:

- LASO: An FR traveled to Headquarters to meet the Secretary of Energy and be recognized as the Department's Facility Representative of the Year for 2009.
- LASO: AN FR identified multiple work management issues during fire protection system maintenance.
- LASO: An FR identified a issues with contractor sealing of containers credited in the safety basis.
- LASO: An FR served as Acting Assistant Manager for Field Operations for one month
- LASO: An FR identified issues with transuranic waste characterization, documentation, and storage.
- LASO: An FR identified issues with work documentation and life-safety inspections during re-start efforts. The issues resulted in delaying the Beryllium Technology Facility restart while they are resolved.
- LASO: All FRs conducted a site-wide assessment of Conduct of Operations requirements for control of equipment and equipment status.
- LSO: The FR team completed the Triennial FR Program Self Assessment.
- LSO: An FR identified 10 pressure relief devices overdue for inspection/testing in one facility. During previous operational awareness activities, the FR identified numerous similar items in multiple facilities, indicating a potential institutional issue.

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### **NNSA Facility Representative (FR) Highlights:**

- LSO: During a routine walkthrough, an FR found a stack monitor configuration inconsistent with the facility's Documented Safety Basis. Further investigation found additional issues with the monitor that compromised its safety function.
- LSO: While assessing Specific Administrative Controls (SAC), an FR identified that the SAC's implementing procedure failed to list combustible loading limits for a number of rooms. The FR also identified that the training required by the procedure was not implemented. These issues were brought to the attention of the contractor, resulting in identification of a Technical Safety Requirement violation.
- NSO: One FRs completed site-specific qualification for a facility.
- NSO: FRs participated in startup reviews for two facility startups.
- NSO: An FR participated in a Safety Basis Review for a facility.
- PXSO: FRs supported the Chief of Defense Nuclear Safety Biennial Review of the Pantex Site Office.
- SRSO: An FR participated in an Operational Readiness Review at an SR-EM facility.
- SSO: The Annular Core Research Reactor FR completed an assessment of Calendar 2010 data to verify Technical Safety Requirement (TSR) compliance.
- SSO: The FR team completed the Triennial FR Program Self Assessment.
- SSO: FRs provided oversight of a Z-machine experiment, removal of all mixed transuranic waste from the laboratory, and radiological inventory reduction in a storage bunker.
- YSO: Two FRs participated in an Operational Readiness Review (ORR) at Savannah River.
- YSO: An FR participated in verification of ORR finding closure at the Nevada National Security Site.
- YSO: FRs identified issues with the implementation of safety chains for personnel protection.

# Facility Representative Performance Indicators January-March 2011

## OFFICE OF SCIENCE (SC)

<u>Location*</u>	<u>Analysis FTE</u>	<u>Approved FTE</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Gains/Losses</u>	<u>% Core Qualified</u> <sup>1</sup>	<u>% Fully Qualified</u> <sup>1</sup>	<u>% Oversight Time</u> <sup>**</sup>
AMES	1	1	1	100	0	100	100	75
ASO	5	5	4	80	0	100	100	79
BHSO	4	4	4	100	0	100	100	80
FSO	2	2	2	100	0	50	50	79
NBL	1	1	1	100	0	100	100	77
OR (SC)	5	5	5	100	0	100	100	79
PNSO <sup>2</sup>	3	3	2	67	-1	67	67	72
<b>SC Totals</b>	<b>21</b>	<b>21</b>	<b>19</b>	<b>90</b>	<b>-1</b>	<b>88</b>	<b>88</b>	<b>77</b>
<b>DOE GOALS</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>100</b>	<b>—</b>	<b>—</b>	<b>&gt;80</b>	<b>&gt;65</b>

\* Location Key

AMES=AMES Site Office      BHSO = Brookhaven Site Office      NBL = New Brunswick Laboratory      PNSO = Pacific Northwest Site Office  
 ASO = Argonne Site Office      FSO = Fermi Site Office      OR = Oak Ridge Office

\*\* % Oversight Time:

The number of hours spent in oversight activities divided by the number of available work hours in the quarter. The number of available work hours includes normal scheduled work and overtime, but not leave or special assignments greater than 1 week assigned. The previous PI for % Time in the Field was deleted in the revision of DOE STD 1063-2011.

Notes:

1 Qualification percentages reflect the revision of DOE STD 1063-2011 to use the Staffing Analysis FTE vice Actual Staffing FTE as the denominator of the calculation.

2 PNSO: One FR took a lateral transfer within PNSO

### SC Facility Representative (FR) Highlights:

- ASO: FRs participated in several safety basis reviews and preparation of Safety Evaluation Reports at Argonne National Laboratory facilities.
- ASO: An FR participated in a contractor-led incident investigation of an unexpected pyrophoric event involving trimethylgallium. During causal analysis, the FR identified key issues associated with work planning and control and on-the-job training for student researchers.
- BHSO: An FR participated in a contractor-led investigation into recurring radioactive contamination events during nuclear medicine research.
- BHSO: A former BHSO FR was selected as the Princeton Plasma Physics Laboratory Site Office Manager
- BHSO: An FR participated in a review to allow equipment installation at the National Synchrotron Light Source-II.
- BHSO: FRs participated in a causal factor analysis of a burst reagent waste collection bottle.
- NBL: An FR issued a Stop Work order due to fall protection deficiencies. Subsequent investigation found fall protection postings had been changed without abating the original hazard.
- NBL: The FR found work planning issues and inadequate management reviews. The corrective actions delayed the start of a decontamination job.
- OR (SC): FRs conducted 21 joint walkthroughs with Subject Matter Experts (SMEs), working to increase the coordination between FRs and SMEs.
- PNSO: An FR identified issues with a hot cell intercom system. The contractor is working to replace the equipment.
- PNSO: An FR identified a door latch issue that prevented emergency egress. The issue was quickly resolved

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### **SC Facility Representative (FR) Highlights:**

- PNSO: An FR reviewing the cause and corrective actions for an electrical shock found that the contractor was behind on corrective actions for electrical issues. The FR's involvement resulted in refocused contractor management attention to completing the actions.