



***DOE Corporate Operating Experience Program,
DOE O 210.2***

**Briefing to the DOE/NNSA Security Workshop
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DOE O 210.2, DOE Corporate Operating Experience Program



- DOE Order 210.2, DOE Corporate Operating Experience Program – Issued June 12, 2006.
- Order required the Contractor Requirements Document (CRD) to be incorporated into affected contracts by December 12, 2006.
- The CRD requires Contractors to incorporate the CRD into affected sub-contracts by June 12, 2007.
- Four Regional Implementation Workshops were held in October and November 2006.



Order Objectives



- To institute a Department of Energy (DOE) wide program for the management of **operating experience** to prevent adverse operating incidents and to expand the sharing of good work practices among DOE sites.
- To provide the systematic review, identification, collection, screening, evaluation, and dissemination of **operating experience** from U.S. and foreign government agencies and industry, professional societies, trade associations, national academies, universities, and DOE and its contractors.
- To reinforce the core functions and guiding principles of DOE's Integrated Safety Management System (ISMS) to enhance mission safety and reliability.



Order Objectives

(cont'd)



- **To provide mutual integration with the lessons learned requirements in other DOE Directives.**
 - (1) Lessons learned requirements defined in DOE O 151.1C, Comprehensive Emergency Management, dated 11-02-05,**
 - (2) DOE O 225.1A, Accident Investigations, dated 11-26-97,**
 - (3) DOE O 226.1, Implementation of Department of Energy Oversight Policy, dated 9 15 05, and**
 - (4) DOE O 414.1C, Quality Assurance, dated 6-17-05**
- **Summary: To combine the disparate OPEX elements into one program that includes requirements for event reporting, safety related statistics and lessons learned.**



Definitions



■ Operating Experience:

- (1) Information that relates to the methods in which work is planned and conducted and an organization's missions are performed.
- (2) Provides the basis for knowledge and understanding that fosters development of lessons learned and improvement of operational performance

■ Lessons Learned from Operating Experience:

- (1) A good work practice or innovative approach that is captured and shared to promote repeat applications of effective work practices
- (2) An adverse work practice or experience that is captured and shared to avoid a recurrence of a negative event



Why DOE Evaluates Operating Experience



- **Safety** of our workers
- Improve Operations
- Price Anderson Amendments Act (PAAA) Implications
- Feedback and Improvement – Core Function of Integrated Safety Management System (ISMS)
- Savings \$\$\$\$
- Required by a Number of DOE Directives – New DOE O 210.2, *DOE Corporate Operating Experience Program*
- Encouragement from the Defense Nuclear Facilities Safety Board (DNFSB)



Drivers for Change to an OPEX Oriented Paradigm



- **Executive Criticism**
 - Lack of Corporate and Federal Involvement
 - Lack of Management Awareness/Support
 - Single Event Focus vs. Operational Event Trending
- **INPO SEE-IN Program Benchmarking**
- **DNFSB Recommendation 2004-1**
 - Recommended that DOE also look at events external to DOE
 - Commitment 18: Develop Comprehensive DOE Operating Experience Program
- **DOE Lessons Learned from Columbia – Davis-Besse Action Plan**



Secretarial Leadership



Secretary Bodman's seven key leadership behaviors to build the safety culture (Re: Remarks to ISM 2006 Champions Workshop)

- 1. Accept your safety responsibilities, make your safety expectations clear, and hold people accountable in a just manner.**
- 2. Get employees involved in safety improvement.**
- 3. Get into your facilities and look around. I did this immediately when I became Secretary of this Department; and I expect you to do this as well.**
- 4. Encourage reporting.**
- 5. Encourage questioning attitudes and differing professional opinions.**
- 6. Search for and eliminate error-likely situations.**
- 7. Learn from internal and external operating experiences.**



DOE O 210.2 Requirements



Prescribes a Formal Process that:

- Evaluates **DOE Internal and External Operating Experiences** (OPEX) to **assess trends, safety, and program issues** and to **promote sharing of Good Work Practices** that may affect safety and success of DOE missions
- OPEX **Clearing House Function**: collection, storage, retrieval
- OPEX **Screened for Significance** – by all stakeholders
- **Timely Communication** of Screening Results and Insights
- DOE Corporate Communication thru **Actionable** or **Informational** Products
- Effectiveness Evaluated thru Periodic Safety Meetings and Metrics



DOE O 210.2 - Contractor Implementation Status



PSO	# CONTR.	# IN CONTRACTS				# IMPLEMENTED				COORDINATORS IDENTIFIED
		Now	End of Year	Later	Unknown	Now	End Of Year	Later	Unknown	
EE	1	0	0	1	0	0	1	0	1	
EM	23*	16	2	0	4	11	7	0	4	22
FE	1	1	0	0	0	1	0	0	0	1
NA	12	8*	0	0	2	7	1	0	3	11**
NE	1	1	0	0	0	1	0	0	0	1
RW	1	1	0	0	0	0	1	0	0	1
SC	12*	10	0	0	1	8	2	0	1	12

79% in contracts now

58% implemented now

*Not Applicable

**One Coordinator for two sites



DOE O 210.2 - DOE Field Implementation Status



PSO	# FIELD SITES	# IMPLEMENTED				COORDINATORS IDENTIFIED
		Now	End Of Year	Later	Unknown	
EE	1	0	0	0	1	1
EM	10	5	2	0	3	9
FE	2	2	0	0	0	2
NA	9*	2	4	0	2	9
NE	1	1	0	0	0	1
RW	1	0	1	0	0	1
SC	12	5	3	2	2	12

*Not Applicable

38% implemented now



Commitments from DNFSB 2004-1



Three Operating Experience Program-Related Commitments

- ***Commitment 17: Complete Department-wide formal review of Columbia and Davis-Besse events, and develop consolidated Department-wide Action Plan.***

DOE Action Plan – issued July 2005 identified Ten DOE Lessons Learned, Five with 20 unique Actions. Complete – July, 2005.

- ***Commitment 18: Develop a Comprehensive Operating Experience Program.***

DOE O 210.2 fulfilled this commitment. Complete – June, 2006.

- ***Commitment 19: Demonstrate Performance of DOE Operating Experience Program.***

Due by December 12, 2007. DNFSB has continued interest in implementation progress. Not complete.



DNFSB 2004-1, Commitment 17 Columbia / Davis-Besse OPEX Related Actions



Action Plan, Lesson Learned #1 : Operating Experience.

- **Action #1.c. - Memo to Establish DOE Operating Experience Committee – Completed.**
Chartered as a subgroup of the ISM Champions Council. DOE program office and DOE and Contractor field representatives will serve on this committee.
- **Action #1.e. - Sponsor Periodic Safety Forums for Sharing Lessons Learned**
 - First Operating Experience Committee (OEC) Meeting was held November 27, 2007 at BNL.
 - Second OEC Meeting was held May 24, 2008 at ORNL
 - Future OEC Meetings/Workshops will continue to coincide with ISM Champions Workshops (next scheduled for August 26, 2008 at INL)



Lead Office Implementation Status



Lead Office: Office of Health, Safety and Security

- HSS Functions Responsibilities and Accountabilities (FRA) has been updated to Reflect Functions.
- Working in conjunction with the EFCOG ISM Working Group – ORPS, Electrical Safety Improvement Project, Feedback and Improvement, HPI.
- HSS Continues to Establish Contacts with External Agencies and Review of External Experience.
- Operating Experience Committee has been Chartered.
- Two OEC meetings and monthly conference calls held.



DOE Operating Experience Program



Primary Sources of OPEX Information:

- **DOE Internal Sources – Databases and Reports**
- **External Sources – Other Government Agencies, Industry, and Foreign Sources**
- ***URL: <http://www.eh.doe.gov/ll/links.html>***
- Interagency Sharing Agreements formal or informal



DOE Operating Experience Program (cont'd)



Internal OPEX Sources:

- **Occurrence Reporting and Processing System (ORPS) – Daily Event Reporting**
- **Type A and B Accident Investigations**
- **Computerized Accident Injury/Illness Reporting System (CAIRS) – OSHA Reportable statistics**
- **Radiation Exposure Monitoring System (REMS) – Rad Dose Information**
- **Corrective Action Tracking System (CATS)**
- **Non-Compliance Tracking System (NTS) – PAAA info**
- **DOE Lessons Learned Database**



DOE Operating Experience Program (cont'd)



Principle External OPEX Sources:

- **Institute of Nuclear Power Operations (INPO)**
- **Nuclear Regulatory Commission (NRC)**
- **U.S. Chemical Safety and Hazards Investigation Board (CSB)**
- **Occupational Safety and Health Administration (OSHA)**
- **Government Industry Data Exchange Program (GIDEP)**
- **National Aeronautics and Space Administration (NASA)**
- **Department of Defense**



Lead Office OPEX Initiatives



■ **DOE has Implemented a Corporate Safety Indicator Process -**

DOE's Corporate Safety Indicator process has been modified to include Corporate Sustainability. The concept of Corporate Sustainability, along with the analysis of other corporate safety indicators, has been briefed to the Deputy Secretary for the last three quarters. Continuing to refine process.

■ **BP Fire Lessons Learned**

HSS issued ES&H Advisory 2007-02, Safety Culture Weakness Cited in BP Accident, based on the findings and recommendations of the independent safety review of BP U.S. refineries.



Lead Office OPEX Initiatives (cont'd)



In CY 2007 & 2008, HS-30 published the following OPEX products:

- 1. Special Operating Reports (actionable) – 2007-0; 2008-0**
- 2. Safety Alerts (response) – 2007-0; 2008-1**
- 3. Safety Bulletins (positive only response) – 2007-7; 2008-1**
- 4. Safety Advisories (information) – 2007-7; 2008-1**
- 5. Operating Experience Summary (information) – 2007-9 Issues; 2008-3 Issues**
- 6. Suspect/Counterfeit Data Collection Sheets (information) – 2007-163; 2008-40**
- 7. Lessons Learned (information) – 2007- 268; 2008-77**
- 8. Facility Call Sheets (in-house) – 2007-105; 2008-16**



Operating Experience Committee (OEC)



Establishment of a DOE Operating Experience Committee

The purpose of the Department of Energy (DOE) Operating Experience Committee (OEC) is to support line management within DOE and the DOE community in developing and sustaining effective operating experience programs so that lessons from internal and external operating experience lead to improvement in future operational and safety performance.

The OEC will facilitate management and worker communications to promote the sharing of operating experiences and associated best practices for using operating experience to improve future performance.



Operating Experience Committee (OEC) (cont'd)



The DOE Operating Experience Committee has been Chartered as a Subgroup of the ISM Champions Council

- Will meet Action 1.c of the Columbia-Davis Besse Action Plan
- Will strengthen the feedback and improvement ISM core function
- Will provide increased Federal leadership and involvement in the review of operating experience
- The SELLS charter will be cancelled.
- In order to realize the benefits of learning from external operating experience, the OEC will open its membership to other government agencies, contractors, and private sector companies and individuals



Operating Experience Committee (OEC) (cont'd)



Designated members of the Committee consist of:

- (1) the designated DOE and Contractor Operating Experience Program Coordinators (as defined in DOE O 210.2),
- (2) the Director, Office of Analysis within DOE's Office of Health, Safety and Security, and
- (3) Chief of Nuclear Safety (CNS) and Chief of Defense Nuclear Safety (CDNS), or their designated representatives.

Associate membership in the Committee is open to:

All DOE federal and contractor employees, as well as to external representatives interested in sharing operating experiences and associated best practices.



Operating Experience Committee (OEC) (cont'd)



Steering Committee is comprised of:

- One HSS Program Lead,
- Four Contractor Coordinators,
- Two Field Office Coordinators, and
- Two Program Office Coordinators.

Task Teams have been created, as follows:

- Metrics/Program Effectiveness
- Tools/Resources
- External Events
- CRADs to Assess DOE Order 210.2 Implementation
- Qualification Standards for OPEX/Lessons Learned Coordinators
- Procedures
- Federal Program Issues



Thank you for
your attention!