



Office of Environment, Safety, and Health

Evolution of DOE Lessons Learned

1994 - Present

Briefing to SELLS Workshop
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What We Will Cover

- What is a Lesson Learned?
- How the current Lessons Learned program works
- Brief Time Line of DOE Lessons Learned
- Evolution to DOE Corporate Operating Experience Program – what is required by the new Order
- Tools for sharing knowledge
- Conclusion





DEFINITIONS

OPERATING EXPERIENCE

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





DEFINITIONS

LESSONS LEARNED from Operating Experience

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





DOE Lessons Learned Format

- **Title:**
- **Date:**
- **Identifier:**
- **Lessons Learned Summary: ***
- **Discussion of Activities: ***
- **Analysis: ***
- **Recommended Actions:***
- **Estimated Savings/Cost Avoidance:**
- **Priority Descriptor:**
- **Work / Function:**
- **Hazard:**
- **ISM Core Function:**
- **Originator:**
- **Contact:**
- **Authorized Derivative Classifier:**
- **Reviewing Official:**
- **Keywords:**
- **References:**

***Key fields**





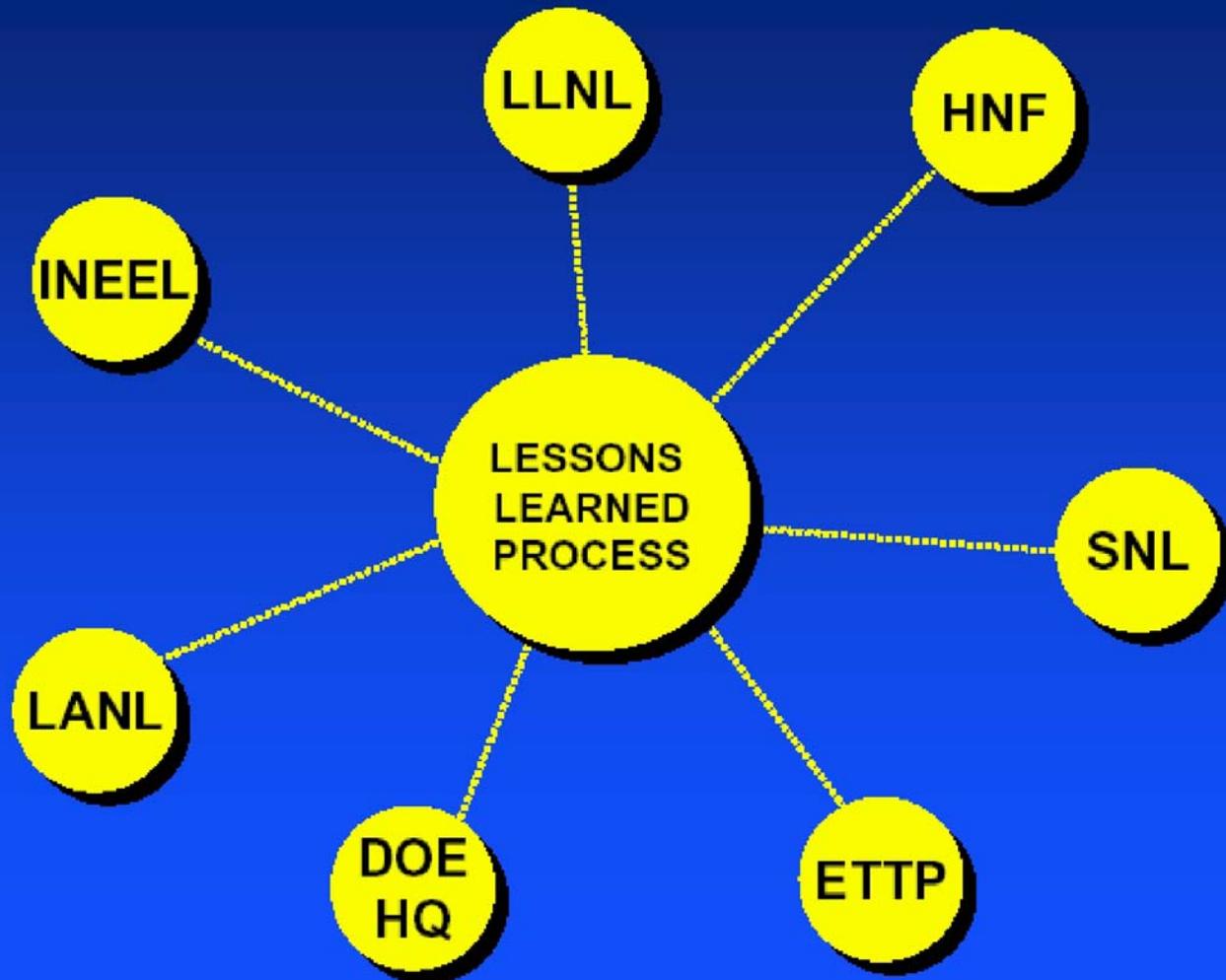
Reasons to Share Lessons Learned

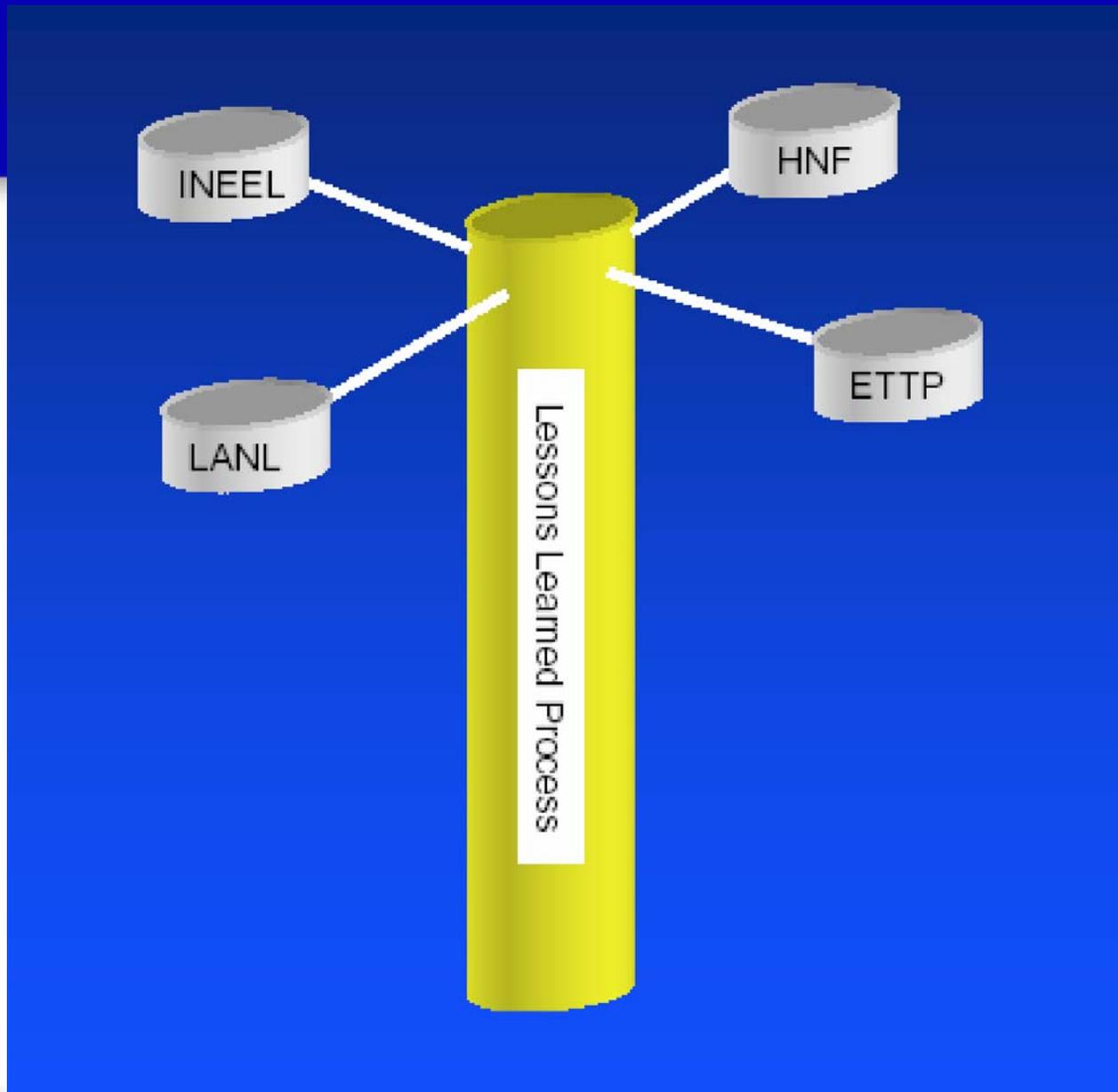
- **Safety** of our workers
- Improve Operations
- DNFSB Criticism of DOE
- PAAA Implications
- ISMS Feedback and Improvement
- Saving \$\$\$\$
- Required by a Number of DOE Directives – New DOE O 210.1, *DOE Corporate Operating Experience Program*

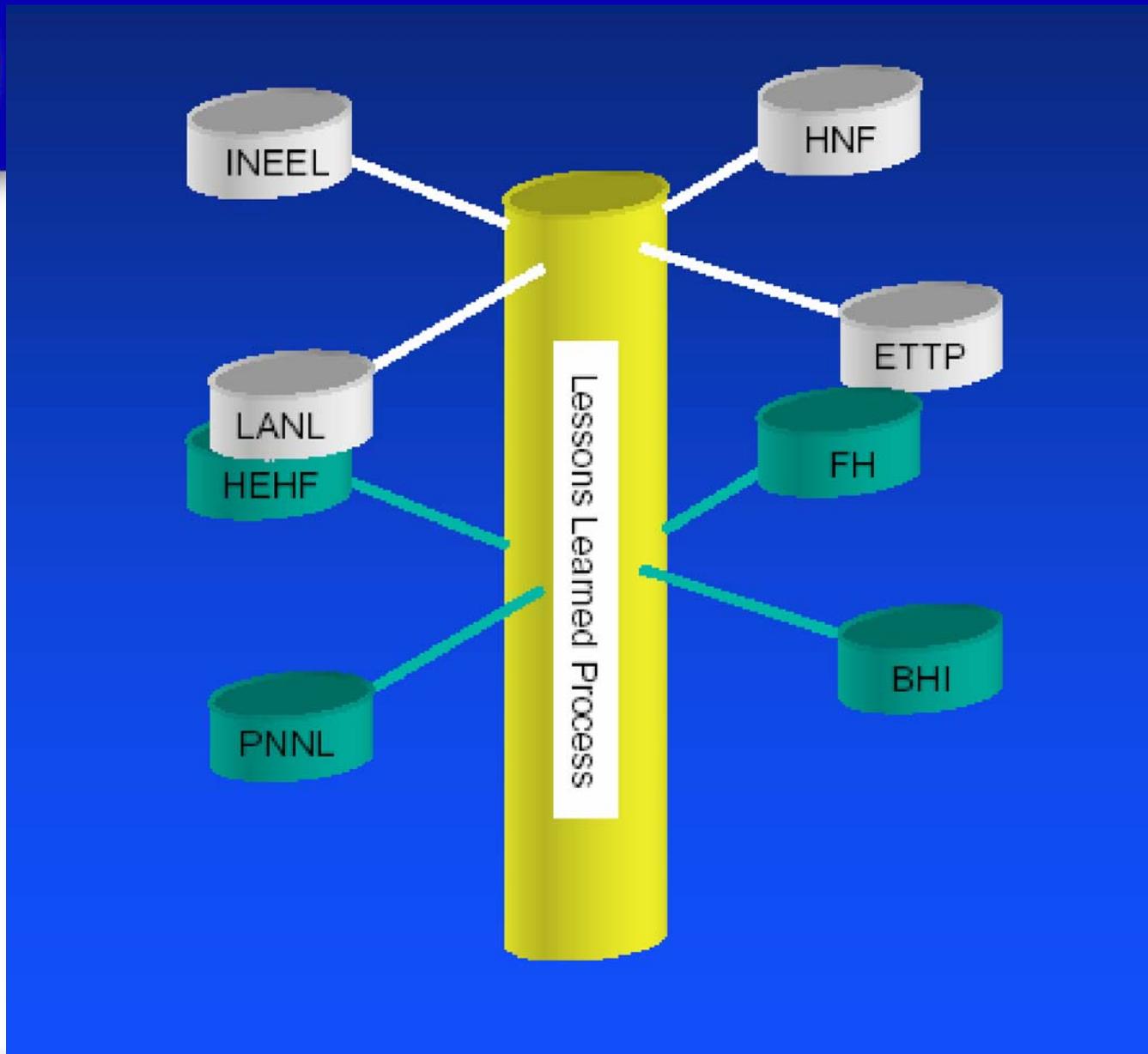


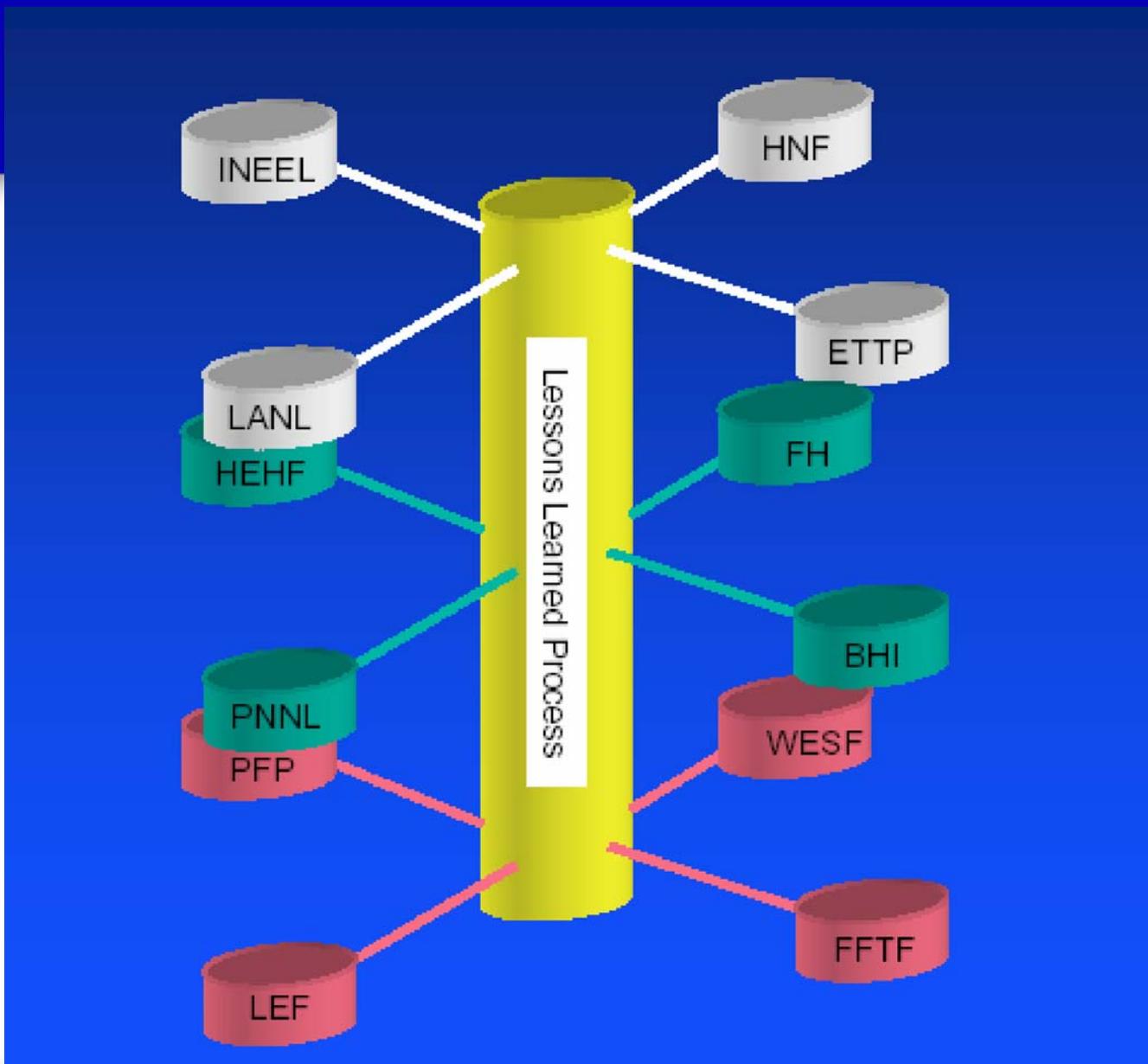


Sharing Across DOE



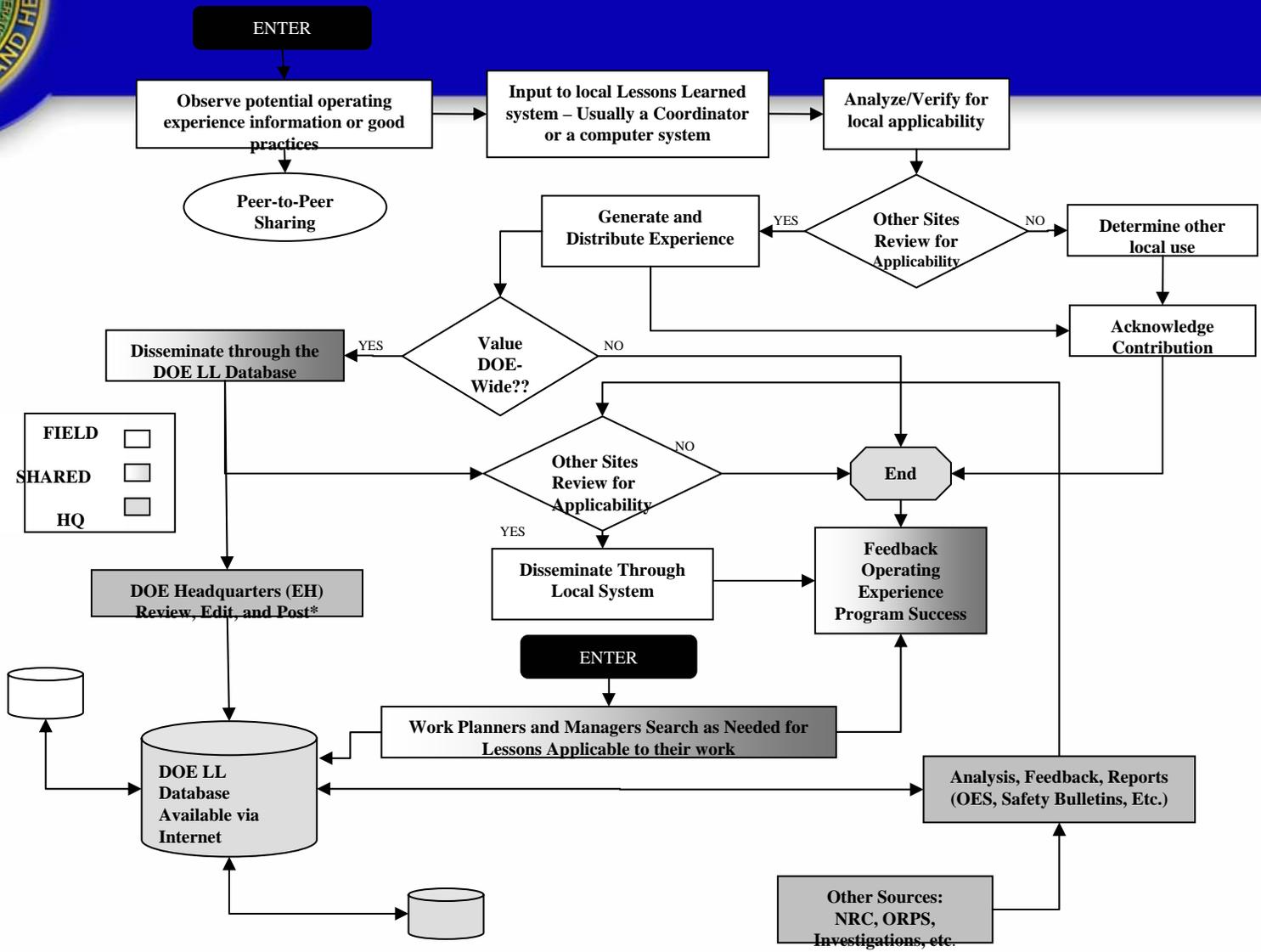








DOE Lessons Learned Flow





Time Line of DOE Lessons Learned





Drivers for Change to OPEX Program

- DOE Executive Safety Summit (Dec 2002)
- Reyes Report (2002-2003)
- 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
- Columbia – Davis-Besse Action Plan





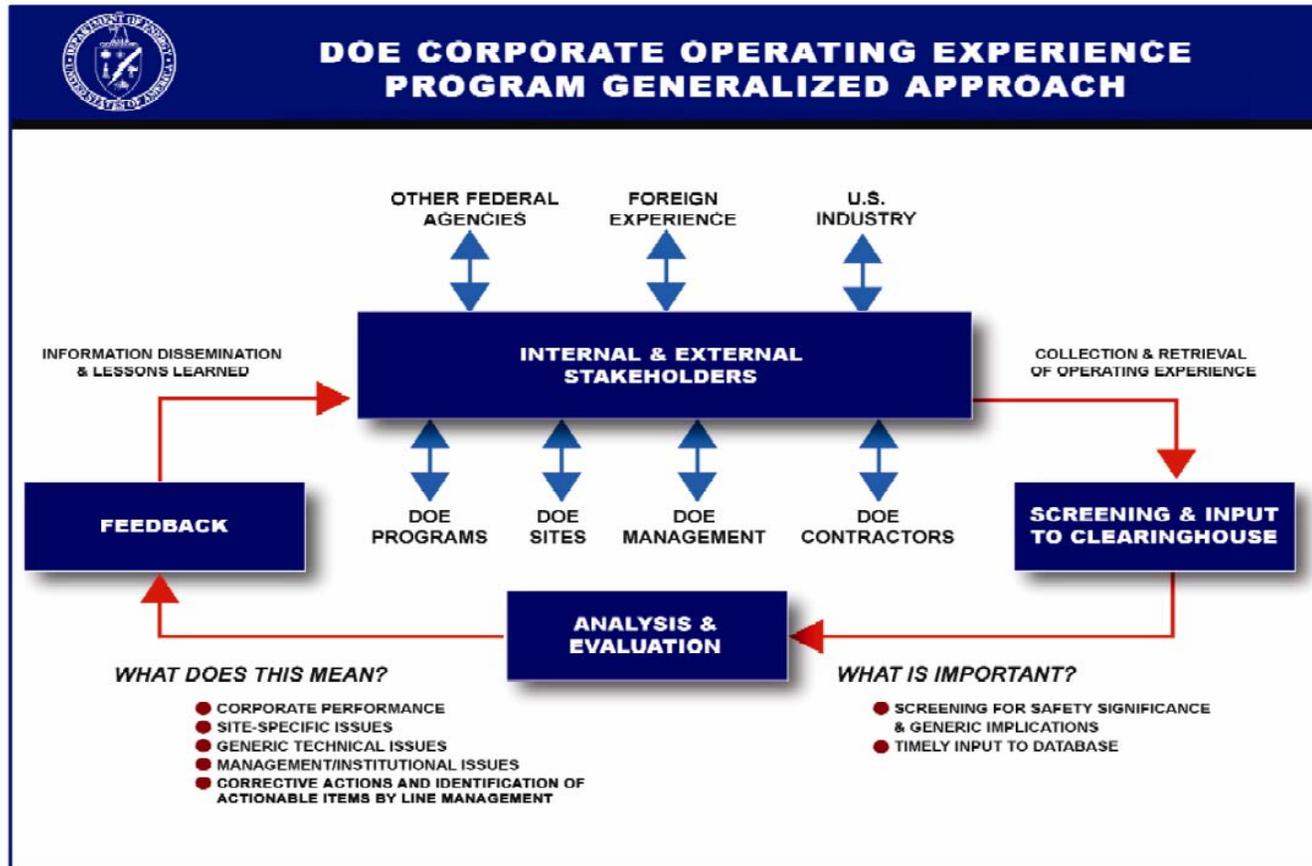
DOE Order 210.1, DOE Corporate Operating Experience Program

- TO BE ISSUED APRIL 2006, Establishes a Formal Process that:
 - Evaluates **DOE Internal and External Operating Experiences (OPEX)** to **assess trends and safety issues** that may affect safety and success of DOE missions
 - **OPEX Clearing House Function:** collection, storage, retrieval
 - **OPEX Screened for Significance**
 - **Timely Communication** of Screening Results and Insights – OPEX Disseminated
 - DOE Corporate Communication – thru **Actionable** or **Informational** Products
 - Performance Monitored – thru Periodic Safety Meetings





Corporate Operating Experience Program Approach





DOE Corporate Operating Experience Program

TWO TYPES OF PRODUCTS

- Operating Experience **Performance Information** Shared with Management
- **Lessons Learned** Focused Reports and Communications Mechanisms





Performance Information – Shared with Management

- Daily Event Summary
 - Summarizes all daily occurrences
- Under Secretary Weekly Report
 - Summarizes most significant occurrences and trends
- Monthly Deputy Secretary Briefing
- Periodic Site Performance Reviews
 - ESE and SC Under Secretary with Direct Reports
 - NNSA Administrator/Under Secretary
- Developing SAFEMARK Tool – Provide Real-Time Access to OPEX Performance





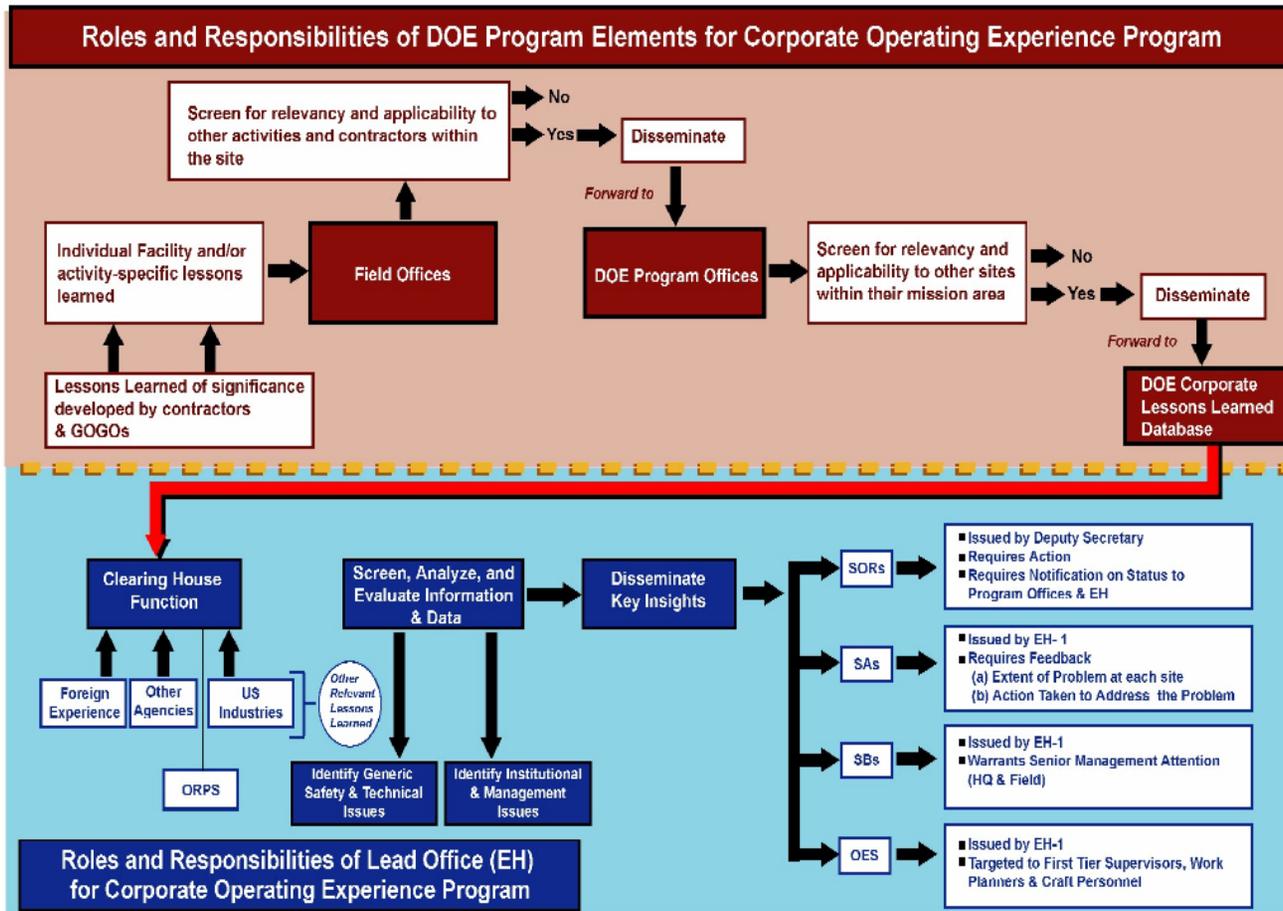
Corporate Lessons Learned - Communications Mechanisms

- Special Operations Reports (SOR's)
- ES&H Alert (SA)
- ES&H Bulletin (SB)
- ES&H Advisories (SAd)
- Lessons Learned Issued by NNSA Deputy Administrators / PSOs
- Operating Experience Summary
- Push Mail Lessons Learned (Database)
- Just-In-Time Reports
- Data Collection Sheets (SCDI)





DOE Federal Roles and Responsibilities





Basic Order Requirements and Organizational Roles & Responsibilities

- Designated Lead Office (EH) for DOE Corporate Operating Experience Program – responsible for:
 - **Clearinghouse Function** – computer resources
 - **Collects and analyzes DOE** operating experience information to **identify significant** corporate level performance **trends and issues**
 - Collects and analyzes **External** operating experience
 - **Communicates performance** trending and analysis **information to Management** – Dailys, Weeklys, Monthly, Quarterly
 - **Develop/Disseminate Corporate lessons learned** – SOR, SA, SB, SAd, OE Sum, JIT, DCS





Basic Order Requirements and Organizational Roles & Responsibilities

(Continued)

DOE PSO's

- Review Site and Program Specific Operating Experience
- Review Performance with Senior Management Periodically
- Screen Lessons Learned (forwarded by Field Elements) for Program and Mission Applicability. Disseminate.
- Develop/Promulgate Program Unique Operating Experience Documents
- Recommend Issues for SORs, SAs, SBs
- Participate in development and Concur on Corporate Operating Experience documents
- Self-Assessment of OPEX Program during ISM Assessments





Basic Order Requirements and Organizational Roles & Responsibilities

(Continued)

DOE Field Elements

- Review Contractor OPEX Program – Screen Contractor OPEX for Operational Awareness, Performance and Trending, Lessons Learned
- Recommend Local Lessons Learned to be shared locally – between contractors
- Forward Lessons Learned to PSOs for Consideration
- Ensure Contractors held accountable – e.g., contractor fee and performance mechanisms, CPOF clause
- Share Field Element Developed LLs (DOE Database)
- Designate an Operating Experience Program coordinator.
- Self Assessment of OPEX Program during ISM Assessments





Basic Order Requirements and Organizational Roles & Responsibilities

(Continued)

GOVERNMENT OWNED/GOVERNMENT OPERATED (GOGOs)

- **MUST Participate in Corporate OPEX Program**
 - **Share GOGO Developed LLs (DOE Database)**
 - Required for Type A & B Accidents, Significance Category 1 and R Occurrences
 - Optional for all other OPEX
 - **Screen DOE Corporate and External OPEX:**
 - DOE OPEX Documents (e.g., SORs, SAs, SBs, SAd, OE Summaries, LL Database, JITs, DCS and respond as required
 - Major OPEX from other Government Agencies or Industry Accidents
 - **Distribute applicable OPEX to GOGO Personnel for review, analysis, internalization and corrective action**





Basic Order Requirements and Organizational Roles & Responsibilities

(Continued)

GOVERNMENT OWNED/GOVERNMENT OPERATED (Continued)

- Implement Required Actions of Corporate OPEX Documents (e.g., SORs, SAs, SBs, etc.) and Formally respond as required
- Trend GOGO Operating Events for Lesson Learned from Recurring Issues
- Conduct Causal Analysis
- Trend Corrective Actions and Develop Lessons Learned on Successful Actions
- Assess OPEX Program Performance during ISM Assessment
- Designate an Operating Experience Program coordinator





Basic Order Requirements and Organizational Roles & Responsibilities

(Continued)

Procurement Executives of DOE and NNSA

- Implement pertinent requirements of the CRD of this Order in the Department of Energy Acquisition Regulation or other appropriate procurement directive

Contracting Officers

- Must incorporate the CRD without modification into their contracts within 6 months





Contractors Requirements Document (CRD)

- **CONTRACTOR MUST** Participate in Corporate OPEX Program
 - **MUST** Share Contractor Developed LLs (DOE Database)
 - Required for Type A & B Accidents, Significance Category 1 and R Occurrences
 - Optional for all other OPEX
 - **MUST** Screen DOE Corporate and External OPEX:
 - DOE OPEX Documents (e.g., SORs, SAs, SBs, SAd, OE Summaries, LL Database, JITs, DCS and respond as required
 - Major OPEX from other Government Agencies or Industry Accidents – As deemed **Significant** and **Relevant** by **Contractor Management**
 - **MUST** Distribute applicable OPEX to Contractor Personnel for review, analysis, internalization and corrective action implementation





Contractors Requirements Document (CRD)

- MUST Implement Required Actions of Corporate OPEX Documents (e.g., SORs, SAs, SBs, etc.) and Formally respond as required
- MUST Trend Contractor Operating Events for Lesson Learned from Recurring Issues
- MUST Conduct Causal Analysis
- MUST Trend Corrective Actions and Develop Lessons Learned on Successful Actions
- MUST Establish Metrics and Assess OPEX Program Performance during ISM Assessment
- MUST Designate an Operating Experience Program coordinator
- Head of Contractor Organization – MUST Apply CRD requirements to Subcontracts within 6 months





How are DOE Lessons Learned Shared

- DOE Corporate Operating Experience Web Page (<http://www.eh.doe.gov/ll>) web based resource tool to:
 - DOE Site Performance Information
 - DOE Corporate Lessons Learned Collection
 - SELLS
 - EFCOG
 - Links to Other Lessons Learned Resources (Websites)





How are DOE Lessons Learned Shared

- **DOE Corporate Lessons Learned Collection**
(<http://www.eh.doe.gov/ll/oellproducts.html>) web based resource tool to:
 - **DOE Lessons Learned Database**
 - internet Push-email
 - 2,232 Registered Users (as of 4/7/2006)
 - **DOE Corporate Operating Experience Documents web pages**
 - Actionable Documents – SORs, SAs, SBs
 - Informational Documents – SAds, OE Summary, J-I-Ts
 - Suspect/Counterfeit and Defectives Items websites (registry required)
- **Actionable Documents** – are formally transmitted thru the line PSOs/NNSA Deputy Secretaries to the Contractor





How are DOE Lessons Learned Shared

- SELLS ListServer
- Bi-Weekly SELLS Conference Calls
- Semi-Annual Workshops





Conclusion

- Lessons learned can help everyone work safer, more efficiently, and more economically.





QUESTIONS?





BACKUP SLIDES





Special Operations Reports (SOR)

- Most significant safety concerns
- Issued by the Deputy Secretary of Energy
- Sets performance expectations
- Requires action and feedback
- Issued: 1 in 2005 - *Laser Safety, SOR 2005-1, Feb 2005, 1 currently in development for 2006 on Electrical Safety*





ES&H Alert (SA)

- Issued to advise DOE and contractors of potentially significant ES&H issues that require immediate attention
- Issued by EH-1 thru PSOs/NNSA Deputy Administrators
- Actions are Required
 - Requires positive & negative responses
 - Field/PSO verification
- Implementation feedback required to PSOs and EH-1
- Issued 2 in 2005, 2 in 2004, 2 in 2003, e.g., *Untested Compressed Gas Cylinders (Oct 2005)*, *Respirator Recall (Sep 2005)*





ES&H Bulletin (SB)

- Issued to advise DOE and contractors of a potentially significant ES&H issue that:
 - Requires management awareness and/or
 - Has longer term impacts
- Issued by EH-1 through PSOs/NNSA Deputy Administrator
- Actions are Recommended
- Implementation/applicability feedback required to PSOs and EH
- Issued: 2 in 2006, 15 in 2005, e.g. *Natural Gas Line Breaks (Jan 2006)*





ES&H Advisory (SAd)

- Issued to advise DOE and contractors of a potentially significant ES&H issue that:
 - Requires management awareness
- Issued by EH-1
- Informational only
- Issued: 2 in 2006, 3 in 2005, e.g. *Three Type B Accident Investigations Initiated in January 2006, Feb 2006*





Operating Experience Summary

- Reviews of selected occurrences for workers and first line supervisors – convey operating errors and best practices
- Intended for use at safety meetings, e.g., tail gate meetings
- OE Summary issued by-weekly to monthly by EH





Other Informational Products

Just-In-Times/ Data Collection Sheets

- Informational OE products issued to improve awareness of OE issues
- Can include:
 - Notification of events at other sites (inside or outside of DOE)
 - Suspect/Counterfeit or Defective Items Identification
- No specific action or feedback is required beyond internal dissemination

