Aera’s System of Operating Excellence (SOE)

10 Elements
- Leadership, Commitment & Involvement
- Risk Management
- Management of Change
- People
- Facility Design, Operation and Maintenance
- Contractor Stewardship
- Environmental Key Processes & Programs
- Health and Safety Key Processes & Programs
- Incident Preparedness, Response and Followup
- Auditing

The EHS vision:
- Do no harm to people
- 100% compliance
- Protect the environment

The rear view mirror:

Look here for Leading Indicators & Process Measures
The System of Operating Excellence (SOE) framework documents the expectations for Aera’s operations …

• The framework identifies the key elements needed to achieve safe and reliable operations
  • There are ten elements (covering 34 expectations) that must be mastered to achieve excellence
  • Each expectation calls for “A process is in place to …”

• The framework provides a benchmark against which to measure current performance
SOE documentation can be accessed by Aera employees via the intranet...
The web pages document the five characteristics of the processes in place to meet each expectation... 

... and provide links to supporting material...
Each Asset within Aera also has an SOE web page to document and provide links to Asset specific processes ...
**SOE Governance**

### Roles and Responsibilities

- Policy and Focus Area Development
- Risk Management
- Process and Program Development
- Standardization
- Corporate Measures and Feedback
- Change Management
- Business Planning
- Implementation
- Verification & Measurement
- Feedback
- Process Execution
- Operating Excellence
- Data Quality
- Feedback

### Feedback Mechanisms

- Weekly Incident Reporting
- Monthly Standardized Measures
- Monthly Business Plan Compliance
- Quarterly Risk Mgmt Discussion
- Bi-monthly Council Meetings
- Annual Focus Area effort
- Tactical Team status
- SOE Last Planner
- Monthly Reviews
- Annual Plan Effort
- Team Morning Meeting
- Unit Steering Teams
- Training
The SOE teams form a network that drives standardization and execution …
Key SOE processes review built into the Morning Meeting Agenda ...

**Safety Discussion/ Safety Manual Review**  
- Discuss pertinent safety subjects or review sections of the Aera safety manual.  
- Pre-Job Work Plans? Energy Control?  

**Hazards/Near Hits/Incidents**  
- Review any new incidents, Near Hits or reported Hazards, including housekeeping issues, that the group needs to be aware of?

**MOC Review – Permanent or Temporary**  
- Review any new MOC that impacts the work team, including reviewing any temporary defeated safety devices.

**Title V & Other Environmental Issues**  
- Review any planned activities that may have a conflict with the PTO or need regulatory clarification.

**SOE Review**  
- Review an expectation from the SOE framework. Discuss how team members impact, influence, participate or are affected by a particular expectation. Identify gaps and plans to fill gaps.

**Today's Work Schedule**  
- Review work planned for today (Aera employees and contractors). Discuss potential hazards associated with work.

**Restricted Access**  
- Site Orientations needed? Transient Workers?

**CAPP/Planned Observations**  
- Discuss CAPP metrics and planned activities that should be observed.

**RCFA Review of Root Cause & Follow-up**  
- Following incident investigations, review the approved Executive Summary including CAP's

**ISEA**  
- Discuss ISEA metrics and planned activities that could be audited.

**Training (weekly)**  
- Worker Qualification, Adaptability Matrix progress?  
- Training this week? Upcoming backfill requirements?

**Risk Management**  
- Are there any new or unresolved operational risks that need to be elevated?
Each team has their own SOE web page for easy access to commonly used information…
SOE Business Plans developed to ID and Prioritize gaps and focus resources …

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<td>Work with Lean Group to “load level” Ventura CLAM Supervisor and Specialist time</td>
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**Legend:** Green = Done, Red = Not Done, Black = Due Date TBD
Key metrics are tracked for each SOE Element and Process Teams are recognized for meeting goals …

Monthly Operating Excellence Recognition
Process Team Average Recognition Rate

Recognition Rate %

Number of Measures

Recognition Rate
Number of Measures
**2000 Recognition Metrics**

Element 5  
PM Compliance Total Equipment – over 90%  
PM Compliance Critical Equipment – over 95%  
PM/(PM+CM) ratio Total Equipment – over 35%  
PM/(PM+CM) ratio Critical Equipment – over 35%  
Front Line Maintenance over 20%  
Element 7  
PM Compliance Environmental – over 95%  
Element 8  
CAPP Coverage 1X observation - 90% coverage  
CAPP Coverage 2X observation - 60% coverage  
CAPP PIP’s vs. Target 100%  
PM Compliance Safety – over 95%  
Element 10  
ISEA Observations 100% of goal  
ISEA YTD % Follow Ups completed over 50%

**SOE processes have grown and matured over time …**

**2005 Recognition Metrics**

Element 1 - Leadership, Involvement and Commitment  
# of Certificates of Recognition awarded - goal is at least 2* proactive COR’s awarded by each process team to one of the team members  
SOE Refresher Training on Schedule  
Element 2 - Risk Management  
Risk analyses completed and coded on work orders released and used for prioritization - goal > 95% of CORR and MEAS work orders  
Element 3 - Management of Change  
Business closed orders requiring MOC with a user status of MOCC - at least 90% (YTD beginning 11/02)  
Element 4 - People Process  
Work Improvement Team actions implemented - goal is that action(s) are taken each month to positively impact Safety or Environmental Performance and Production or Expenses  
Worker Qualification Progress  
Element 5 - Facility Design and Operation  
PM Compliance - Total Equipment - over 90%  
PM Compliance - Critical Equipment - goal is 100%  
PM/(PM+CM) ratio - Total Equipment over 30%  
PM/(PM+CM) ratio - Critical Equipment over 40%  
Proactive to Reactive Maintenance over 65%  
Vibration Pen Readings One Time Coverage  
CBM CAP’s completed on time  
Element 6 - Contractor Stewardship  
Feedback submitted on Contractor Performance - goal is one feedback form a month  
Element 7 - Environmental Key Processes and Programs  
PM Compliance - Environmental – 100%  
Element 8 - Health and Safety Key Processes and Programs  
CAPP 1X Coverage - > 90% coverage  
CAPP 2X Coverage - > 70% coverage  
CAPP PIP’s vs. Target 100%  
CAPP Coaching Contacts - 2X coverage at least 90%  
PM Compliance - Safety - 100%  
Element 9 - Incident Preparedness, Response and Follow-up  
EHS TapRoot compliance - % of recordable or reportable EHS incidents YTD that have a completed TapRoot analysis - Goal is 100%  
Equipment RCFA compliance - % equipment failures YTD that meet the business rules that have a completed TapRoot analysis - Goal is 80%  
EHS and Equipment RCFA CAP Completion - Goal is to complete all CAP's by due date  
PIPER Reviews and ER Drills – one per month  
Element 10 - Audits  
ISEA Audits 100% of goal  
ISEA Follow Ups completed over 70% (12 month rolling average)  
Level III Audit CAP’s completed on time
Results are also shown by Element to help identify systemic gaps and associated improvement opportunities …
The process is mature, having undergone at least one feedback, review, and improvement cycle. Revisions to process documentation have been made, if required.

- The process is deployed in the organization
- Procedures for key process tasks, based on risk, are documented.
- Ongoing verification and measurement occurs

- The five characteristics of the management system processes are documented, approved, and resourced
- Procedures for key process tasks, based on risk, have been identified and are under development.
- Deployment is underway

- A documented process is being developed to address the potential hazards of the operation and to improve performance

- Execution of the process conforms to the important requirements and most other requirements.
- Most process objectives are being achieved

- Execution of the process conforms to the important process requirements.
- A majority of process objectives are being achieved

- Execution of the process does not always conform to the process requirements.
- The quality of process execution needs improvement
- Some process objectives are achieved
### Location | Number of Deficiencies | Audit Scores
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<td>2001: Initial SOE Audit - Coastal</td>
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<td>2002: Midway Sunset</td>
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<td>2003: Belridge</td>
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<td>2004: Coastal</td>
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<td>2006: Aera-Wide</td>
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Audit results have improved over time …
SOE has contributed to a significant improvement in Aera’s EHS Performance …

Aera’s Key EHS Performance Indicators

Employee & Contractor Injury Rates
TRIR/LTIR

EHS Task Compliance

Notices of Violation from Agency Inspection
NOVs

Spill History
Spills & Volume
SOE expectations support Aera’s Vision …

**Inspired People of Common Purpose**
- We all engage with excitement in Aera’s purpose, vision and values.
- We are an inclusive organization.
- We encourage individuals to pursue their desired balance between work and personal life.
- We are fulfilled through Aera’s success, team results, and individual development.
- We value learning and leverage it through diversity and education.
- We all have a strong sense of ownership in Aera’s results.

**Protecting People and Environment**
- We pursue an accident-free environment through leadership in safety, process innovation, and performance.
- We all behave in a manner that clearly demonstrates commitment to safety.
- We promote and practice environmental responsibility.
- Environmental requirements are not viewed as obstacles but as innovations in process management.
- We participate in shaping public policy.

**Unsurpassed Value Creation**
- Value Creation is validated as unequaled.
- We increase Aera’s value.
- Aera people create value through increased skills and capacity to act.

**World Class Process Performance**
- Innovative ideas and technology are promoted, tracked and implemented with breakthrough speed.
- We value and use data and information management as a competitive advantage.
- Core processes are identified, broadly understood, implemented, measured, improved, and renewed.
- Systems thinking is learned and practiced.
- We are driven by internal and external customer focus.

**Renowned and Respected for Excellence**
- Aera is admired and respected for business results, employee satisfaction and support to the community.
- We are the company of choice for employees, customers, suppliers and investors.
- Aera earns significant external awards and recognition.
- Other companies visit Aera for best practices.

**Respected Community Member**
- Communities welcome Aera’s presence.
- Aera and the community are partners in solving problems.
- Aera and its employees are known for their community involvement.
- Employee participation in the community is encouraged, supported and recognized.