

Facility Representative Program Improvement

**Compare Elements of the DOE-ID FacRep Program
With the NRC Resident Inspector Program**

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Process

- Arrange extended (3-week) detail at a NRC regulated facility
- Determine FacRep and Resident Inspector (RI) Program aspects to be compared
- Complete pre-visit preparation
- Conduct shadowing detail
- Analyze the results
- Develop recommendations

Detail Location

- Minnesota in August (Bad idea - heat and mosquitoes)
- Majority of detail with the Senior Resident Inspector (SRI) at the Monticello Plant a one-unit Boiling Water Reactor (BWR)
- Visit to Prairie Island a Two-Unit Pressurized Water Reactor (PWR) plus Dry Cask Storage
- NRC Region III Offices



Aspects to Compare

- **Qualification and Continuing Training**
 - **Daily Routine**
 - **Scheduling, Planning, and Recording Oversight**
 - **Evaluation of Performance**
 - **Issue Reporting**
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Similarities and Differences

- Similarities
 - FacRep and SRI Competence
 - FacRep and SRI Training Processes
 - FacRep and SRI Oversight Techniques
- Differences
 - FacReps more involved in employee safety and health than SRI because the utility is regulated by OSHA
 - SRI more involved in Emergency Preparedness and Security, while FacRep relies on DOE-ID SMEs for oversight of these areas
 - For determining safety significance the NRC has performed extensive Probabilistic Risk Analysis (PRA) on operating reactor designs, while DOE does not perform PRA on all of the numerous one-of-a-kind facility designs

Qualification and Continuing Training

NRC RI

- **Basic Level**
Expectations, basic concepts, PRA
- **Final Qualification**
7 Week Rx Series and Power Plant Engineering, Communication, Tech Specs, Operations, Final Board
- **Refresher Training**
24 or 36 month cycle - Oversight Process, Tech Refresh and Sim
- **Continuing Training**
Lessons Learned, Updates

ID FacRep

- **Initial Qualification**
GTB, FacRep Functional Area, ID Site Core, ID Facility Specific, Final Written, Final Board, Cert with DOE-ID Manager
- **Requalification**
36 month cycle - Changes, Written Exam, Walkthrough, Certification with DOE-ID Manager
- **Continuing Training**
Quarterly Meetings, Occasional Specific Training on Changes and New Processes

Daily Routine

NRC RI

- Attend and observe POD
- Attend and observe Shift Turnover in the Control Room
- Review daily and weekly schedules to determine oversight activities
- Review new corrective action tracking system entries
- Status call with the Branch (other plants in Branch and Branch Chief)
- Conduct Plant Status oversight activities
- Attend Plan of the Next Day (POND) (At least every other day)

ID FacRep

- Attend and observe at least one POD
- Attend and observe Shift Turnover in the ATR Control Room (3 to 4 times a week)
- Review daily and weekly schedules to determine oversight activities
- Conduct Operational Awareness oversight activities

Scheduling, Planning, and Recording Oversight

NRC RI

- Procedure Driven – Very Detailed
- 150 – 175 Separate Inspections Annually
- 10% of Each Inspection for Previously Identified Issues
- Short Range Planning by SRI Using Risk-Informed Approach
- Time Closely Tracked using Over 30 Timecard Codes

ID FacRep

- Procedure Driven – Moderate Detail
- 24 – 30 Separate Inspections Annually
- Short Range Planning by DOE-ID management based on Trending Analysis and Events
- Time Moderately Tracked Using 3 Timecard Codes

NRC Evaluation of Performance

- NRC Identified
 - RI identifies basic issue that may have safety significance of more than minor or very low safety significance
 - Informs Licensee of the potential issue
 - Continues to develop issue and provides it to Team Leader for review and development if necessary
 - Once finalized at Regional level the issue is disclosed to Licensee
- Self Revealing / Identified – Issue such as an equipment failure, reactor SCRAM, personal contamination, radioactive spill, etc., where the issue is obvious because of the resulting conditions
- Licensee Identified – Similar to NRC Identified issue but it is identified and developed by Licensee. Licensee Identified issues that have very low safety significance are documented in NRC reports but are not used to evaluate performance, while Licensee Identified issues of greater safety significance are

DOE-ID Evaluation of Performance

- - FacRep identifies basic issue that is, or may be, a deviation from a contractual requirement
 - Informs Contractor of the potential issue
 - Continues to develop issue
 - Issue presented to DOE-ID management for review and acceptance
 - Once accepted and finalized the issue is transmitted to Contractor in the next Monthly Assessment Report
- Issues are not categorized by any formal risk or safety significance process
- Only DOE identified issues are used to evaluate DOE-ID Contractor performance

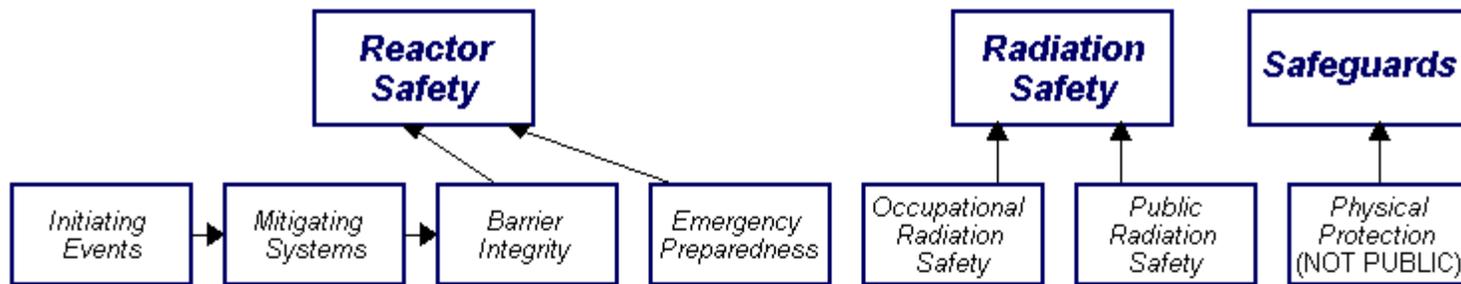
Issue Reporting

NRC RI

- Items of No or Very Low Safety Significance Verbally Reported to Appropriate Manager (SM, CRS, Etc.)
- Licensee Immediately Enters SRI Issues in CA Process
- Items of More than Minor or Very Low Safety Significance Verbally Reported to Licensee Management - Issues Developed Using NRC Procedures and Reported in Quarterly Letter

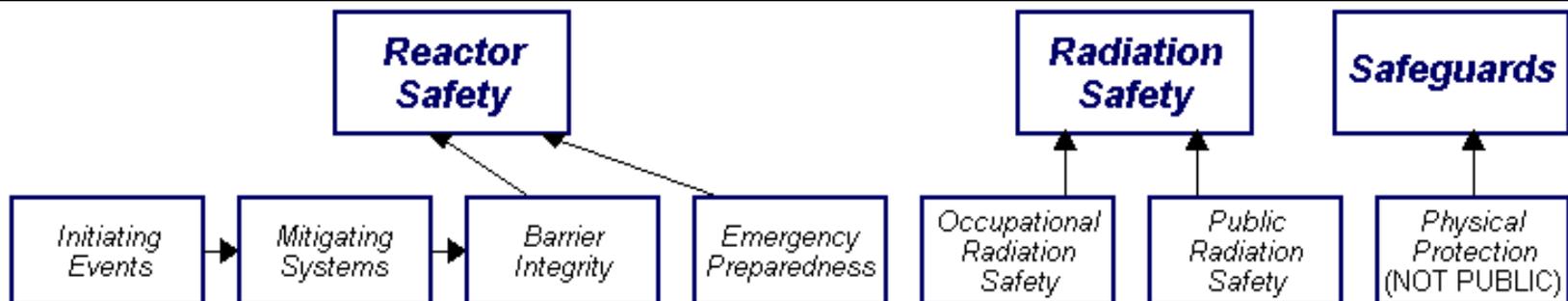
ID FacRep

- All Findings (Deviations From Requirements) Verbally Reported to Appropriate Manager
- Nearly All Findings are Formally Documented and Reported to Contractor in Monthly Report
- Significant Administrative Burden Associated With Developing and Reporting Minor Issues



Performance Indicators

Unplanned Scrams (G)	Safety System Functional Failures (G)	Reactor Coolant System Activity (G)	Drill/Exercise Performance (G)	Occupational Exposure Control Effectiveness (G)	RETS/ODCM Radiological Effluent (G)
Scrams With Loss of Normal Heat Removal (G)	Emergency AC Power System (G)	Reactor Coolant System Leakage (G)	ERD Drill Participation (G)		
Unplanned Power Changes (G)	High Pressure Injection System (G)		Alert and Notification System (G)		
	Heat Removal System (G)				
	Residual Heat Removal System (G)				
	Cooling Water Systems (G)				



Most Significant Inspection Findings

Quarter	Initiating Events	Mitigating Systems	Barrier Integrity	Emergency Preparedness	Occupational Radiation Safety	Public Radiation Safety	Physical Protection (NOT PUBLIC)
4Q/2006	G	G	G	No findings this quarter	No findings this quarter	No findings this quarter	
3Q/2006	No findings this quarter	No findings this quarter					
2Q/2006	No findings this quarter	G	G	No findings this quarter	No findings this quarter	No findings this quarter	
1Q/2006	No findings this quarter	G	G	No findings this quarter	No findings this quarter	No findings this quarter	

Miscellaneous findings

Recommendations

- Consider utilizing selected NRC training courses for ID FacReps
- Consider developing ID FacRep risk based oversight schedule and assessment criteria
- Consider modifying DOE-ID evaluation of Contractor performance to include Contractor (Contractor Assurance Program) and Self Revealing / Identified issues
- Consider modifying DOE-ID evaluation of Contractor performance to include longer term consideration of issues
- Consider reviewing NRC Inspection Procedures (available online) when developing DOE-ID FacRep assessment criteria