

# Regulatory Information Conference Achievements and Challenges of Transition to NFPA 805

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## NFPA 805

**A New Way to Think**



Slide 2



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## Background

NFPA 805 enhances and brings together  
three legs to the Fire Protection Program

*Classical FP* – Suppression, Detection,  
Prevention, Barriers, Brigade,  
Fire Models

*Safe Shutdown Analysis* – Deterministic  
Plant Systems Analysis

*Fire PRA* – Risk Informed Decisions



Slide 3



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# Background

Risk Informed Change Process:

*Delta CDF/LERF*

*Defense in Depth*

*Safety Margins*



Slide 4



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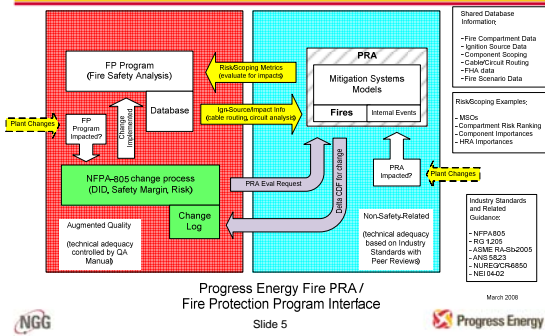
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# Background



Slide 5



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# Achievements

NFPA 805 Pilot Process and Results

NEI 04-02 FAQ Process and Results

Pilot of NUREG 6850, Fire PRA



Slide 6



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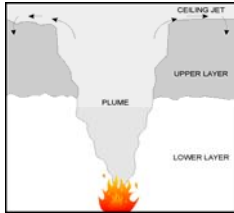
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## Achievements

The New Way to Approach Fire Protection  
Performance Based – Follow the Physics



Slide 7




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## Achievements

Identification of important Fire Scenarios in  
a Compartment improves focus on  
Nuclear Safety

Ignition Source Examples	Ignition Source Description	Example Targets	Example CDF
FC99_S99001	Control Panel	Tray10, Conduit 11555	1.22E-06
FC99_S99002	Inverter	Conduits 88899, 34666	1.93E-07
FC99_S99003	Electrical panel	Panel 200, Tray 50	1.60E-07
FC99_S99004	MCC	Trays 30, 60, 90	1.13E-08

Slide 8




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## Achievements

NFPA 805 Tools are resolving:

*Multiple Spurious Operations*

*Operator Manual Actions*

*Hemyc / MT Fire Barrier Usage*

Slide 9




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## Remaining Challenges for Pilot

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- | Complete the LAR
- | Set up Program Maintenance, Monitoring
- | Knowledge Transfer and Training Beyond the Implementation Team
- | RI FP Inspection Process

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## Remaining Challenges

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- | Establish the 'New Normal' of risk informed/performance based Fire Protection decision making
- | Ingrain concept into thought process of plant organization
- | Ingrain concept into implementation of plant design, procedures, and processes

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## Summary

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**A New Way to Think**

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