

# NFPA 805 Transition Project

## Meeting with NRC

04/17/2012





# INTRODUCTION

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**Safety Message**

**NRC Attendees**

**PGE Attendees**

**General Overview**



# MEETING OBJECTIVES

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- **Share progress**
  - **FPRA**
  - **Seismic PRA**
  - **IE PRA**
  - **Internal Flooding PRA**
  - **FREs**
- **Modifications**
- **NFPA 805 LAR Submittal**



# PROGRESS

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## Fire PRA Model Development

### **Peer Review:** (December 6-9, 2010)

- 17 Findings
  - 13 Resolved
  - 4 Open (to be completed by 11/30/12)
- Three Best Practices (CS, FSS, MCA)
- All supporting requirements (SRs) Capability Category-II (CC-II) or higher except two CC-I's
  - Site specific data has been gathered to upgrade CC-I's to CC-II's scheduled completion (Complete)



# PROGRESS (Cont)

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## Fire Risk Evaluations (FREs)

- |                                     |            |
|-------------------------------------|------------|
| • VFDR Descriptions                 | Complete   |
| • Second iteration FREs Complete    | 9/30/2012  |
| • Determination of $\Delta$ Risk    | 09/30/2012 |
| • Recovery Action Identification    | 09/30/2012 |
| • In progress (Anticipate ~35/Unit) |            |
| • Modification Identification       | 09/30/2012 |



# PROGRESS (Cont)

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## Seismic PRA

- Seismic PRA (SPRA) model developed in 1988. Not peer reviewed.
- No significant fragilities update since original SPRA (1988)
- Update to Probabilistic Seismic Hazard Analysis (PSHA) completed in 2010.
- Actions required to become RG 1.200, Rev 2 compliant:
  - Incorporate updated PSHA into PRA model
  - Update Building models and SSC fragilities
  - Update Seismic PRA model
  - Focused peer review in January 2013



# PROGRESS (Cont)

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## Internal Events

- Last gap analysis was done in ~2006
- By end of April 2012 Internal Events PRA will be updated to meet the 2005 standard at Capability Category II (CCII)
- Actions to be taken to become RG 1.200, Rev 2 compliant:
  - Gap analysis for RG 1.200, Rev 2 to be completed by May 2012
  - Peer review to be done in December 2012
  - Any gaps identified from December 2012 peer review will be closed or addressed in the LAR submittal



# PROGRESS (Cont)

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## Internal Flooding

- **Current IPE analysis was done in the early 1990's to meet the DCPD IPE submittal requirements**
- **Actions to be taken to become RG 1.200, Rev 2 compliant:**
  - **Re-perform Walkdowns and analysis to meet Capability Category II requirements of ASME/ANS PRA Standard RA-SA-2009**
  - **Peer review to be done in December 2012 (in parallel with Internal Events Peer Review)**
  - **Any gaps identified from December 2012 peer review will be closed or addressed in the LAR submittal**



# MODIFICATIONS

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**“Four (4) plant modifications are being proposed to baseline DCCP fire risk”**

- 1. Fire Detection System Upgrade;**
- 2. Hot Shutdown Panel Upgrade; and,**
- 3. Electrical Raceway Fire Barrier System (ERFBS);**
- 4. RCP Seal Cooling.**

**NOTE: Westinghouse seal may provide adequate assurance a small LOCA will not occur in the event of a fire**



# MODIFICATIONS (Cont)

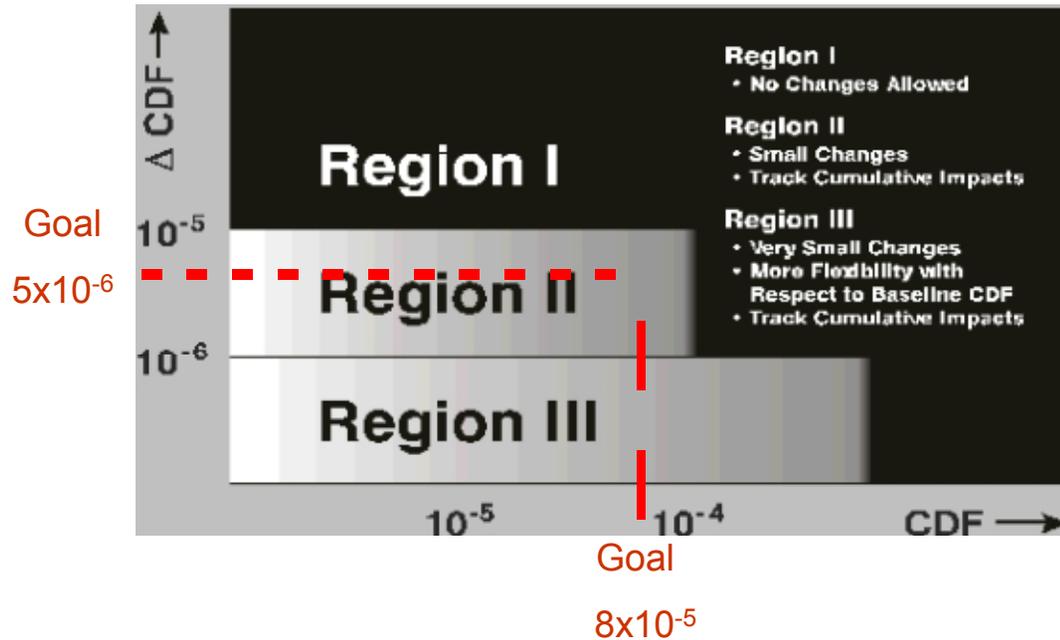


Figure 3 (RG 1.174). Acceptance Guidelines\* for Core Damage Frequency (CDF)

\*The analysis will be subject to increased technical review and management attention as indicated by the darkness of the shading of the figure. In the context of the integrated decision making, the boundaries between regions should not be interpreted as being definitive; the numerical values associated with defining the regions in the figure are to be interpreted as indicative values only.



# SUMMARY

**DCPP to submit by 06/28/2013**

**FPRA/SPRA/IEPRA/IFPRA to be**

**updated to RG 1.200 Rev 2;**

**Peer Reviewed;**

**Fragilities complete by EOY 2013;**

**Most Risk Significant Bldg Complete**

**with LAR Submittal**