

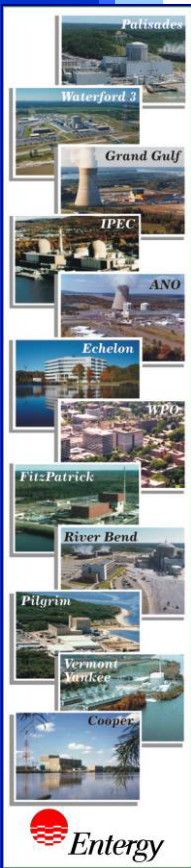
# ***NFPA 805 LICENSE AMENDMENT REQUESTS***

Pre-Application Meeting with NRC Staff  
April 13, 2011

*Arkansas Nuclear One (ANO) 1&2  
Palisades (PLP)  
Waterford 3 (WF3)*

# Agenda

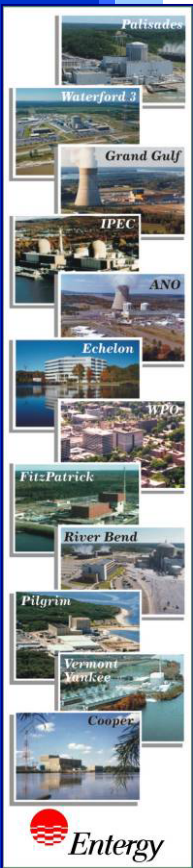
- Introductions
- Fleet Project Management Approach
- LAR Submittal Forecast
- 805 PRA Peer Review Status
- 6850 Alternative Treatments
- Site Specific Updates
  - ANO-1 & 2
  - PLP
  - WF3
- Summary



Dial-In: 800-369-3325 with Participant  
passcode: 56518 followed by #

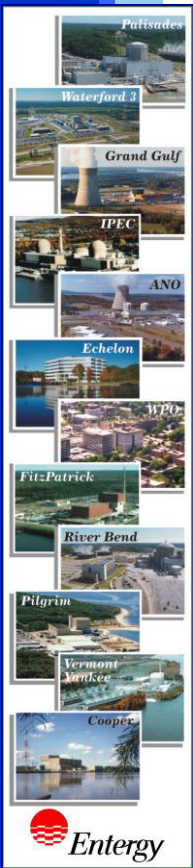
# Introductions

- Corporate Team
  - Licensing – Dave Mannai, Bryan Ford
  - Engineering Manager – Luis Terrazas
  - Fleet Project Management – Andy Thomas, Doug Kibler
  - Corporate PRA – Deepak Rao
  - NFPA 805 Technical Lead – Jessica Walker
- Site Teams
  - ANO
    - Engineering Director – Jaime McCoy
    - Licensing – David Bice
    - Fire Protection/PRA – Jessica Walker
  - PLP
    - Engineering Manager – Jim Miksa
    - Licensing – James Kuemin
    - Fire Protection – Tom Swiecicki
  - WF3
    - Engineering Manager – Rex Putnam
    - Licensing – David Ferris
    - Fire Protection – Dennis Kunas



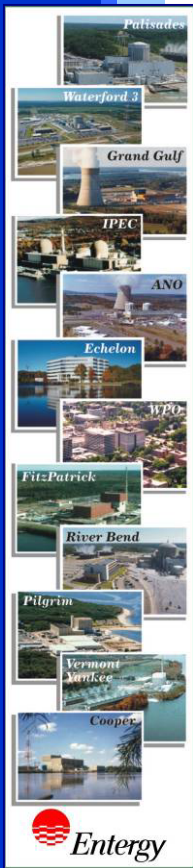
# Fleet Project Management Approach

- Integrated Fleet (corporate and site) Project Team
- Bi-Monthly Executive Stakeholder Briefs
- Weekly Fleet Project Team Meetings
- Active Project Risk Management Program
- Dedicated Fleet and Site Schedulers



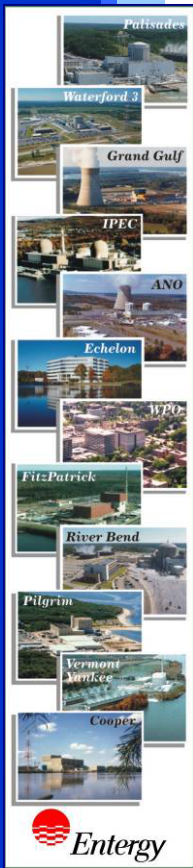
# LAR Submittal Forecast

- ANO 1&2, PLP, and WF3 - June 29, 2011
- Submittals will meet acceptance criteria (LIC-109)
- Challenges

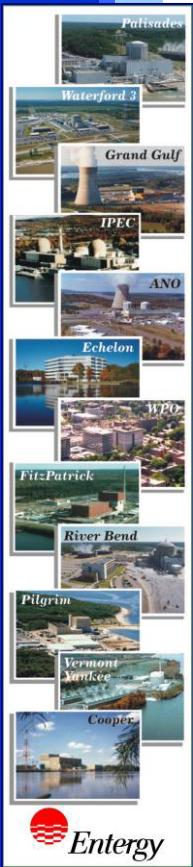


# 805 PRA Peer Review Status

- Conduct Internal Events Peer Review
  - Complete
- Closure / disposition of Internal Events Peer Review
  - F&Os will be resolved prior to LAR Submittal
- Conduct Fire PRA Peer Review
  - Complete (Palisades Draft Report)
- Closure / disposition of Fire PRA Peer Review
  - F&Os will be resolved prior to LAR Submittal



# 6850 Alternative Treatments

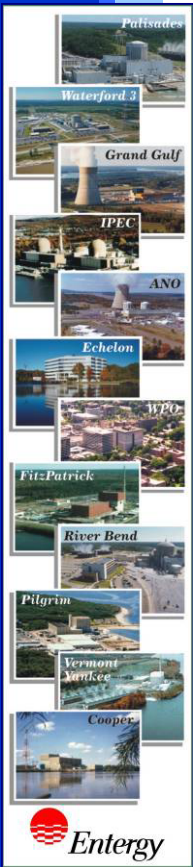


Treatment	ANO-1	ANO-2	PLP	WF3
Transient combustible HRR. Use a lower HRR for a postulated transient fire. Instead of using the HRR for 'transients' as shown in NUREG/CR-6850, Table E-1, Case 8, the HRR for Case 7 is used. The basis for this is described in the ERIN Fire Factors report submitted to the EPRI/NEI Review Group.	X	X	X	X
Transient Combustible Ignition Frequency – Use of a weighting factor applied to transient fires to reflect the reduced probability of a fire impacting critical targets based on procedural controls and the reduced likelihood of transient type fire conditions existing in close proximity to targets of concern (submitted to methodology review committee).	X	X	X	X
Treatment of Ventilated Panels for Non-Suppression Probability.	X	X		
Credit for reduction of zone of influence for panels with limited ventilation, used to support Multi-Compartment Analysis.	X	X		
Hot Short Probability Reduction for Outside of a Panel Configuration (ANO-2 only)		X		

# ANO-1 & 2 – Current Status

## Major Project Milestones

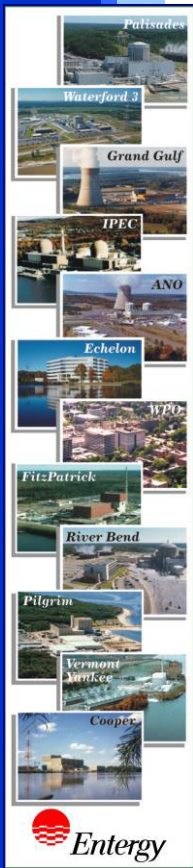
Milestone	ANO-1 Status	ANO-2 Status
Table B-1 Fundamental FP Elements	In Progress	In Progress
Internal Events PRA	COMPLETE	COMPLETE
Fire PRA	In Progress	In Progress
Table B-2 – NSCA Methodology	In Progress	COMPLETE
Table B-3 – NSCA Fire Area Compliance	In Progress	In Progress
Fire Risk Evaluations	In Progress	In Progress
Table F-1 – Non-Power Operations	In Progress	In Progress
Table G-1 – Radioactive Release	COMPLETE	COMPLETE





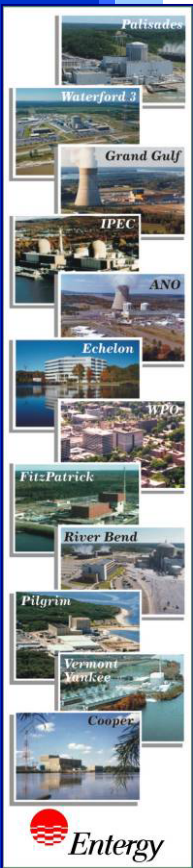
# ANO-1&2 – Challenges

- Challenges
- Gaps
- Technical Issues



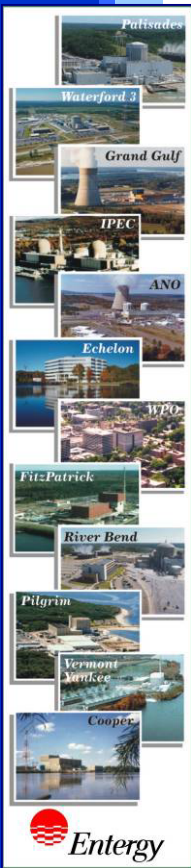
# ANO-1&2 – Items for Approval

- 3.3.5.2 Metal conduits and cable trays
  - ANO uses PVC in underground and embedded applications
- 3.5.16 Firewater dedicated for Fire Protection use
  - ANO uses the fire water system for other functions



# ANO-1&2 – Modification Overview

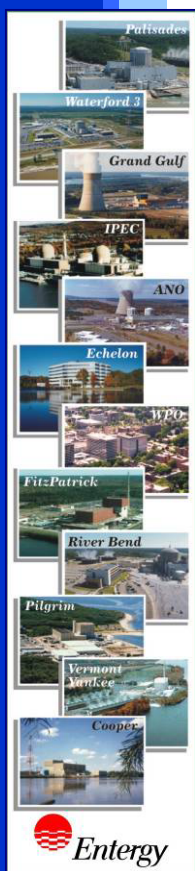
- Independent AFW pump/piping/valves/controls
- Primary Control Station
- Electrical cable re-route/fire wrap
- RCP trip circuit backup power supply
- Detection system upgrade
- Modifications for Table B-1 Issues
  - NFPA 10 fire extinguisher type and location changes
  - NFPA 15 update non-UL listed modules
  - NFPA 30 room ventilation changes
  - NFPA 50A hydrogen relief valves & bottle relocation
  - NFPA 805 fire barriers/seals/doors/dampers upgrade



# PLP – Current Status

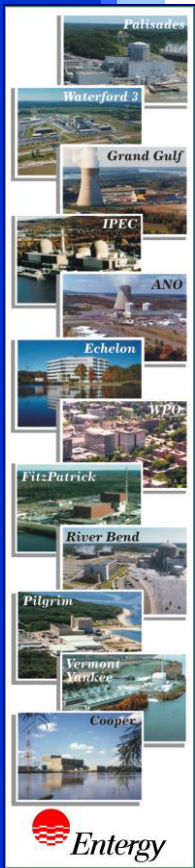
## Major Project Milestones

Milestone	Status
Table B-1 Fundamental FP Elements	In Progress
Internal Events PRA	COMPLETE
Fire PRA	In Progress
Table B-2 – NSCA Methodology	COMPLETE
Table B-3 – NSCA Fire Area Compliance	In Progress
Fire Risk Evaluations	In Progress
Table F-1 – Non-Power Operations	In Progress
Table G-1 – Radioactive Release	COMPLETE



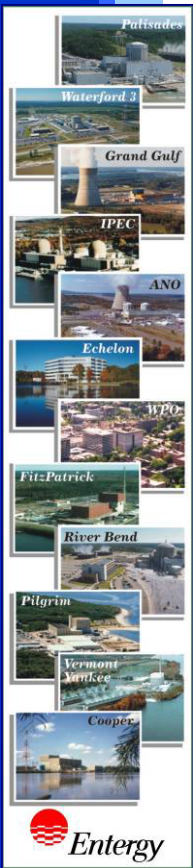
# PLP – Challenges

- Challenges
- Gaps
- Technical Issues



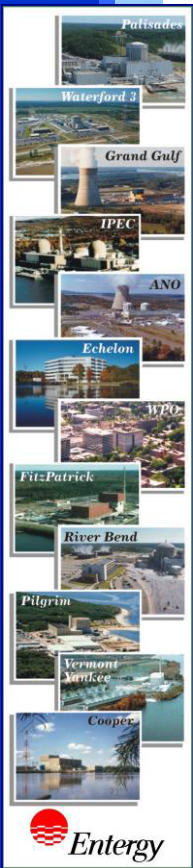
# PLP – Items for Approval

- 3.5.16 Firewater dedicated for Fire Protection use
  - PLP uses the fire water system for other functions
- 3.11.4. Through Penetration Fire Stops
  - Unsealed conduits 5 feet or longer



# PLP – Modification Overview

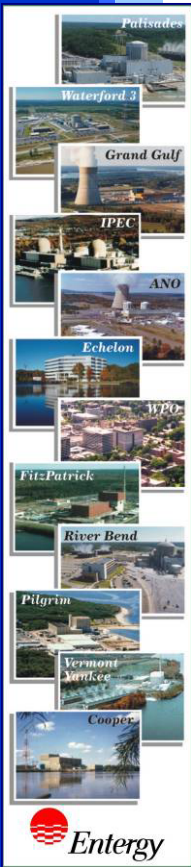
- Independent AFW pump / piping / valves / controls
- Electrical cable re-route / fire wrap
- Independent breakers for 2400 VAC Safeguards & Startup Transformers
- Primary Coolant Pump breaker trip pushbuttons
- Detection system upgrade
- 2400 VAC breaker control power fuses
- Bypass switches for AFW & ECCS systems



# WF3 – Current Status

## Major Project Milestones

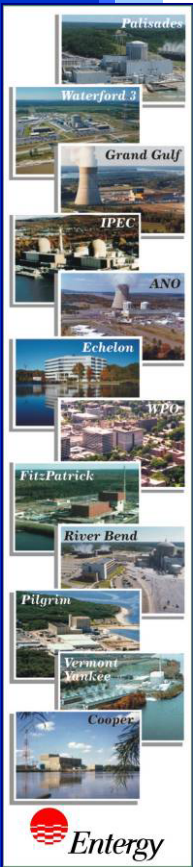
Milestone	Status
Table B-1 Fundamental FP Elements	In Progress
Internal Events PRA	COMPLETE
Fire PRA	In Progress
Table B-2 – NSCA Methodology	In Progress
Table B-3 – NSCA Fire Area Compliance	In Progress
Fire Risk Evaluations	In Progress
Table F-1 – Non-Power Operations	In Progress
Table G-1 – Radioactive Release	In Progress





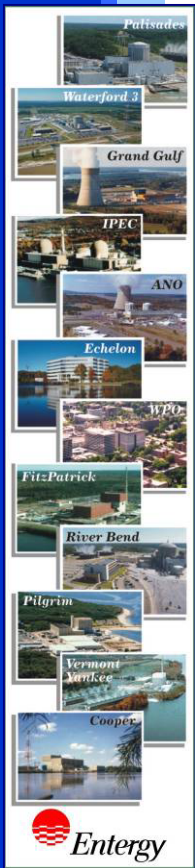
# WF3 – Challenges

- Challenges
- Gaps
- Technical Issues



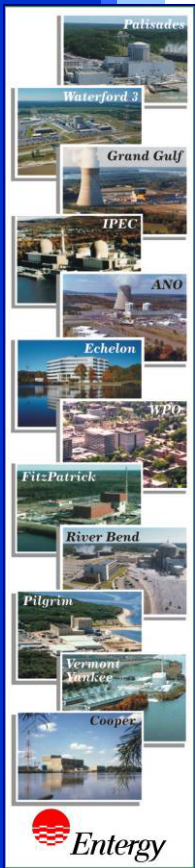
# WF3 – Items for Approval

- None



# WF3 – Modification Overview

- Electrical circuit modifications
- Suppression system upgrades
- Detection system upgrade



# Summary

- All Entergy sites plan to meet June 29, 2011
- Action Items
- Closing Remarks

