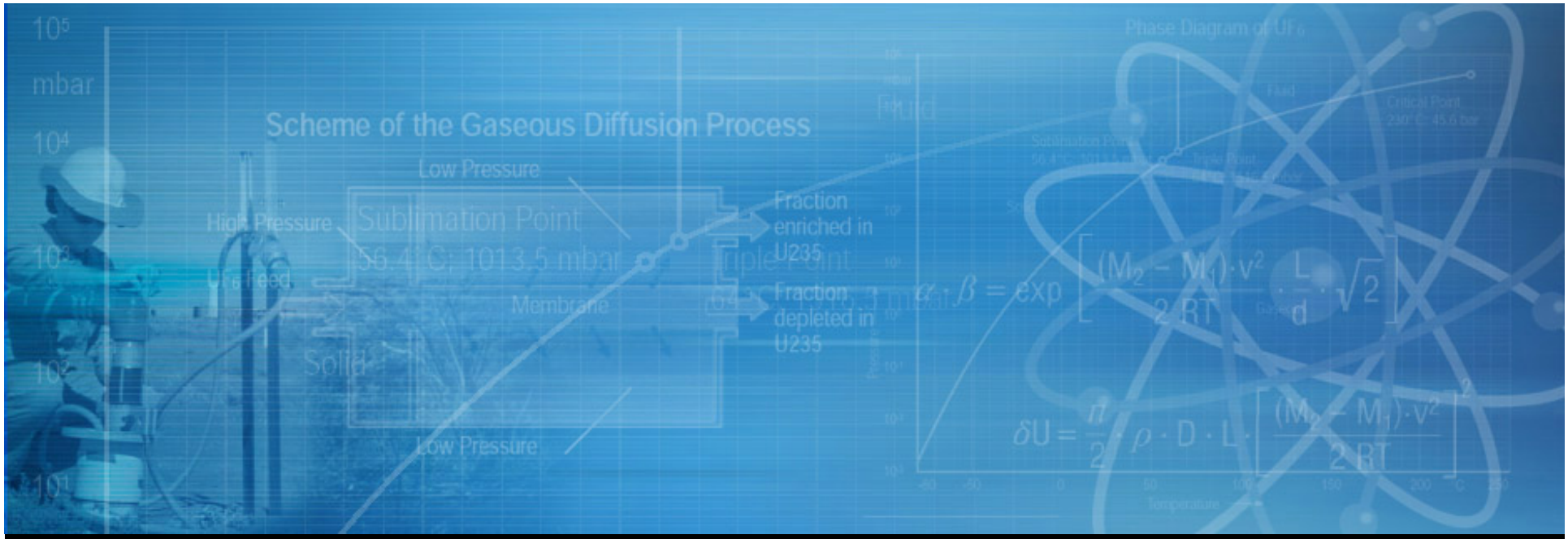


FirstEnergy

FENOC

FENOC
Licensing Activity Status Meeting

December 11, 2008

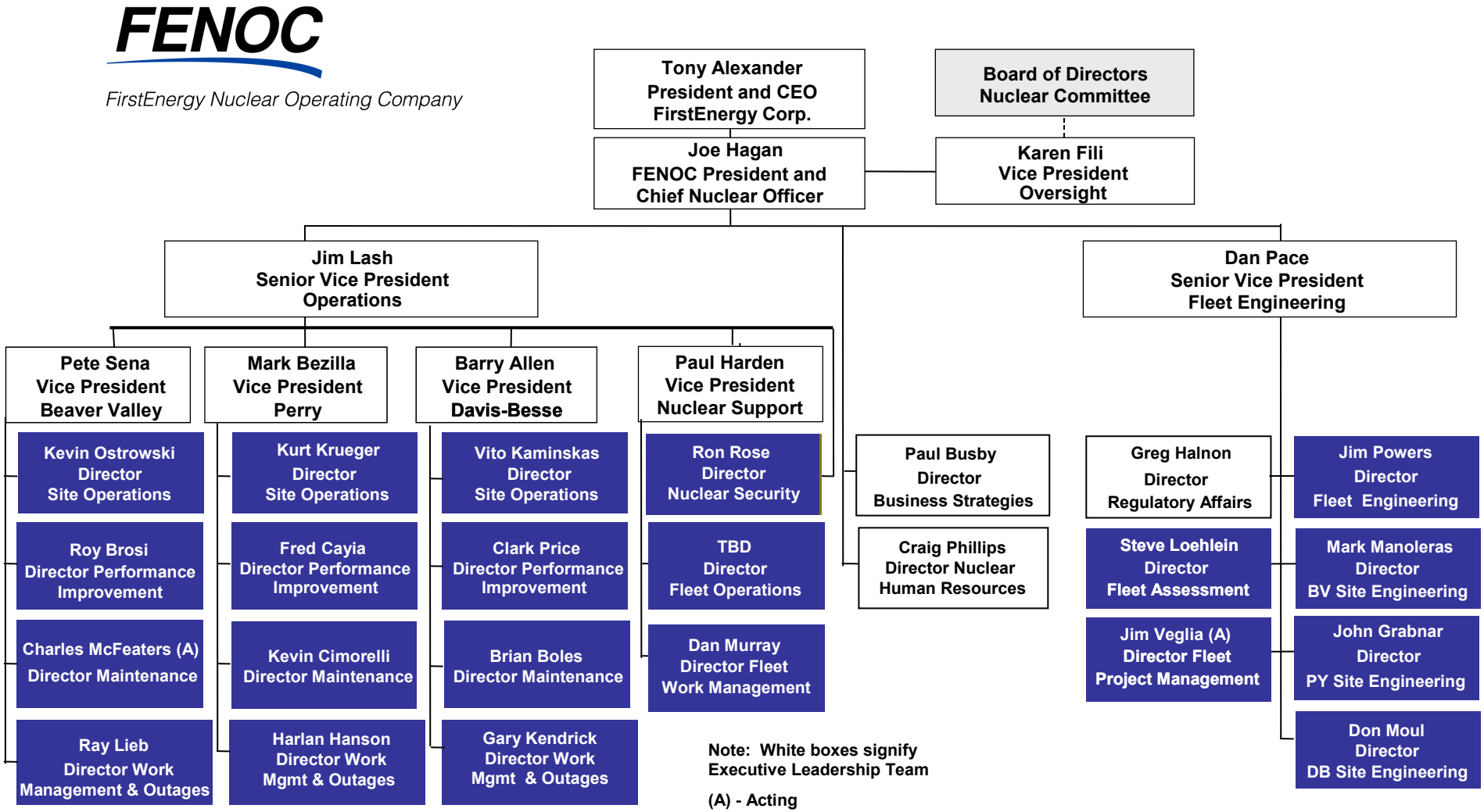
Agenda

Opening Remarks	Greg Halnon
FENOC Regulatory Affairs	Greg Halnon
Fleet Licensing Activities	Tom Lentz
Beaver Valley Licensing Activities	Ken McMullen Steve Sarver
Davis-Besse Licensing Activities	Phil Lashley
Perry Licensing Activities	Cal Heintz
Open Discussion	All
Closing Remarks	Greg Halnon

Meeting Objectives

- Provide an overview of FENOC Fleet Regulatory Affairs organization and roles and responsibilities
- Provide an overview of ongoing and future FENOC Licensing Activities
- Share insights/perspectives on current issues

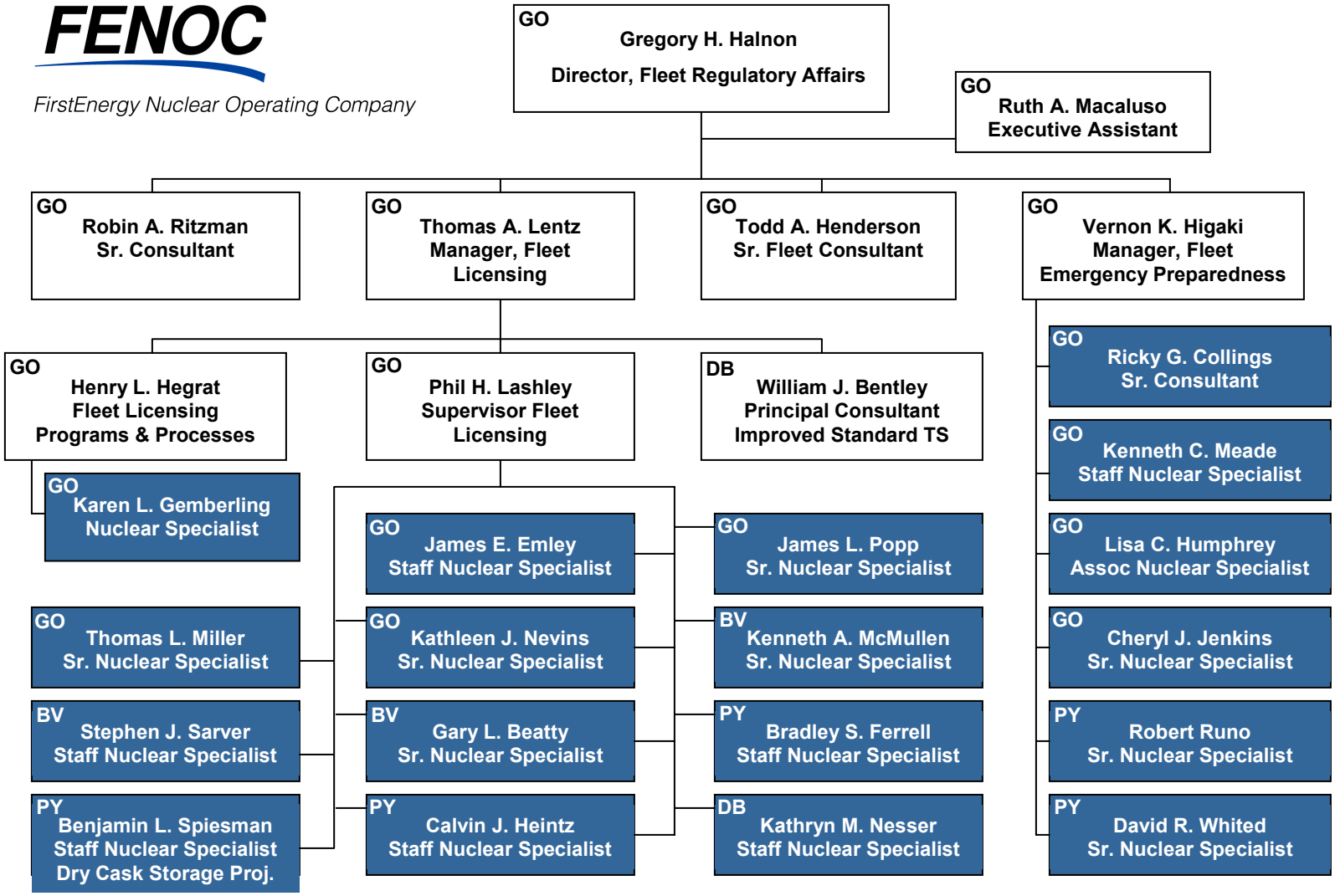
FENOC Organization



Fleet Regulatory Affairs

FENOC

FirstEnergy Nuclear Operating Company



Note: GO = General Office, BV = Beaver Valley, PY = Perry, DB = Davis Besse

FENOC Organization

- **The Regulatory Affairs Mission**
  - The mission of the Regulatory Affairs Departments is to manage the relationship between regulatory agencies and the FENOC organization, and to improve the regulatory performance of the Fleet.
- **Nuclear Regulatory Affairs Department Role**
  - Regulatory Affairs personnel manage communications between the company and regulatory agencies. In so doing, Regulatory Affairs accepts responsibility for leading the company in meeting both the letter and the spirit of regulatory requirements.

Fleet Licensing Activities

- Generic Letter 08-01 – Gas Accumulation
  - Fleet resources coordinated a common fleet regulatory and technical response.
  - Industry underestimated the resources required to respond.
  - FENOC is anticipating a significant level of follow-on activities in 2009.

Fleet Licensing Activities

- License Renewal Amendments
  - Common fleet/team approach
  - Beaver Valley Status
    - Submitted August 2007
    - ACRS Subcommittee Meeting on February 4, 2009
  - Davis-Besse Status
    - Project commenced in September 2008
    - Submittal scheduled for August 2010
  - Perry Status
    - Submittal scheduled for August 2013

Fleet Licensing Activities

- Improved Technical Specifications (ITS)
  - Perry
    - Implemented in mid 1990s
  - Beaver Valley
    - Implemented in June 2007
  - Davis-Besse
    - License Amendment received in November 2008
    - Some review challenges
    - Implementation planned in December 2008

Fleet Licensing Activities

- NFPA 805 Transition
  - Beaver Valley
    - Extension request submitted in December, 2008
  - Davis-Besse
    - Enforcement discretion through March 2010
    - Submittal targeted for 1st quarter 2010
    - Schedule alignment with license renewal
  - Perry
    - Conversion schedule not determined at this time

Fleet Licensing Activities

- Power Uprates
  - Beaver Valley Unit 2 completed in 2008
  - Davis-Besse Caldon Power Uprate implemented in 2008
- No new FENOC licensing activities related to power uprates in near-term

Fleet Licensing Activities

- Spent Fuel Storage
  - Beaver Valley Unit 1
    - No licensing actions in near-term
  - Beaver Valley Unit 2
    - Re-rack required to be implemented by end of 2010
  - Davis-Besse
    - No licensing actions in near-term
  - Perry
    - Dry storage required before 2011

Fleet Licensing Activities

- Risk-Informed Licensing Initiatives
  - Constrained by Regulatory Guide 1.200 compliance resource commitments
  - Beaver Valley and Davis-Besse
    - Regulatory Guide 1.200 Revision 1 compliant by end of 1st quarter 2010
    - Regulatory Guide 1.200 Revision 2 compliant by end of 1st quarter 2012
  - Perry
    - Regulatory Guide 1.200 Revision 1 compliant by end of 4th quarter 2010
    - Regulatory Guide 1.200 Revision 2 compliant by end of 4st quarter 2012

Fleet Licensing Activities

- Submittal Quality Performance Indicator
  - Containment Sump Buffer LAR submitted in September, failed acceptance review in October
  - Indicator modified in November to include feedback from acceptance reviews
  - Four requested licensee actions (RLAs) passed acceptance review in November with no failures
  - For December, nine RLAs passed acceptance review with no failures to date

Beaver Valley

GL 2004-02 Resolution

- Unit 1
  - Response Submitted October 2008
  - Downstream Effects Evaluation for Recirculation Spray and Low Head Safety Injection Pumps to be Submitted by March 20, 2009
  - Insulation Modifications to be Implemented During April 2009 Outage
- Unit 2
  - Response to be Submitted by April 30, 2009 With Insulation Modifications During October 2009 Outage, Pending NRC Approval of Corrective Action Extension Request
  - Containment Overpressure License Amendment
    - Increases Margin Through Realistic Calculation of Available Recirculation Spray Pump NPSH
    - Requested by February 27, 2009 to Support April 30, 2009 Generic Letter Response

Beaver Valley

Unit 2 License Amendment Requests

- Buffer Change License Amendment Request
  - Containment Spray Additive (Liquid Sodium Hydroxide) to be Replaced by Granular Sodium Tetraborate
  - Provides Passive Buffer Delivery System (Baskets)
  - Approval Requested by September 14, 2009 to Support Outage Implementation
- Alloy 800 License Amendment Request
  - Adds Alloy 800 Sleeves (WCAP-15919) to List of Acceptable Steam Generator Tube Repair Methods
  - Installed Without Welding Brazing or Heat Treatment, Resulting in Low Strain Within Tube
  - Approval Requested by October 12, 2009 to Support Outage Implementation

Beaver Valley

10 CFR 50.55a Requests

- Unit 1 – September 2008 Submittal Proposes 20 Day Extension of 40-Month Inservice Inspection Period for Flaw Examination
  - Approval Requested by March 31, 2009 to Permit Outage Implementation
- Unit 2 - October 2008 Submittal Proposes Embedded Flaw Repair as Alternative to Flaw Removal in Reactor Head Penetrations and J-Groove Welds
  - Approval Requested by October 10, 2009 to Support Outage Implementation
- Units 1 & 2 – December 2008 Submittal Proposes Full Flow Test of Buried Service Water, River Water and Auxiliary Feedwater Piping As Alternative to Pressure Test or Determining Flow Rate Between Ends of Buried Piping
  - Approval Requested by December 11, 2009
- Unit 2 – Planned December 2008 Submittal Proposes Alternative Examination Coverage Zone For Control Rod Drive Mechanism Penetration Tubes
  - Approval will be Requested by October 2009 to Support outage Implementation

Beaver Valley

Unit 2 Rerack

- Replace existing spent fuel pool racks with high density racks
  - storage capacity to be increased from 1088 to 1690
  - Metamic used as the neutron absorber
  - Holtec rack design and analyses
- To be submitted in March, 2009

– NRC Acceptance Review (Projected)	April, 2009
– NRC issues Amendment (Requested)	April, 2010
– Start modification implementation	May, 2010
– Complete modification implementation	December, 2010
– Unit 2 refueling outage	Spring, 2011

- Without this change Unit 2 will run out of spent fuel storage locations in 2011

Beaver Valley

Unit 2 Rerack

- Lessons Learned from
  - Unit 2 Amendment 165 (March 27, 2008)
  - Review of similar submittals
    - Clinton Power Station Unit No. 1 (October 31, 2005)
    - Arkansas Nuclear One, Unit No. 1 (January 26, 2007)
    - Turkey Point Plant, Units 3 and 4 (July 17, 2007)
- Criticality analysis incorporates the lessons learned from the above and other submittals

Davis-Besse

Davis-Besse Nuclear Power Station Improved Technical Specification Conversion

- Nuclear Regulatory Commission approved on November 21, 2008.
- Site Implementation scheduled for December 13, 2008.
- The Senior Leadership Team along with site personnel are prepared and ready for a successful implementation.
- After implementation, the NRC can expect:
  - A letter verifying implementation.
  - An updated Core Operating Limits Report.
  - An updated Pressure Temperature Limits Report.
  - A letter for relocation of inservice snubber exams and testing.

Davis-Besse

Davis-Besse Upgraded Emergency Action Levels

- First significant upgrade to the Emergency Action Levels (EALs) since initial implementation.
- Response to the NRC Request for Additional Information was completed and sent to the NRC on November 24, 2008.
- To align with site activities, FENOC requested an extension for the Davis-Besse implementation proposed EALs to September 30, 2009.
- Current indication from the NRC is review response will be issued in December 2008.

Davis-Besse

Upcoming Davis-Besse 10 CFR 50.55a Request Submittals

- Expected FENOC submittal date for both requests will be February 6, 2009
- Alloy 600 Mitigation Requests
  1. Relief Request for Optimized Weld Overlay (OWOL)
     - Reactor Coolant Pump Suction Nozzles (4)
     - Reactor Coolant Pump Discharge Nozzles (4)
  2. Relief Request for Full Structural Weld Overlay (FSWOL)
     - Cold Leg Drain Lines (3)
     - Core Flood Nozzles (2)
     - Contingency for OWOL request
- Requests will support planned outage activities in February 2010

Davis-Besse

Upcoming Davis-Besse License Amendment Requests

- Elimination of Source Range Monitor preamplifier from Channel Calibration
- Incorporation of several ASME Code Cases into the PTLR
- Exemption from End of Life Moderator Temperature Coefficient Measurement

Perry

Independent Spent Fuel Dry Storage Project

- Dedicated Licensing Specialist assigned full-time (started September 2008; expected duration approximately one year)
- Cask vendor- Holtec International
- Major construction activities scheduled to commence second quarter of 2009; expected to conclude by end of 2009
- Initial Cask Loading Campaign scheduled to take place during third quarter of 2010
- Project addresses loss of full core offload capability after RFO13
- No License Amendment Requests are expected

Perry

Technical Specifications “catch-up” activities

- Recent NRC approved License Amendment Requests
  - TSTF-448; incorporates changes to address Control Room Habitability issues
  - TSTF-45 / 269; incorporates means to verify Containment/Drywell Isolation Devices that are Locked, Sealed or otherwise Secured
  - TSTF-476; Modifies control rod block instrumentation specification to allow rapid soft reactor shutdown using improved BPWS control rod insertion process
- License Amendment Request in NRC Review process
  - TSTF-479-A and TSTF-497; In-Service Testing Program shall include testing frequencies applicable to the ASME OM Code and to specify that the provisions of SR 3.0.2 are applicable to non-standard frequencies

Perry

Technical Specifications “catch-up” activities (continued)

- Upcoming License Amendment Requests
  - TSTF-475-A; extend control rod notch testing frequency from 7 days to 31 days
  - TSTF-460-A; extend control rod scram time testing from 120 days to 200 days
  - Address inconsistent Division 3 Emergency Diesel Generator start time surveillance requirements

Perry

Upcoming Correspondence

- Upcoming 10 CFR 50.55a Request Submittal
  - Proposes use of provisions within Code Case OM-18 as an alternative to comprehensive pump testing requirements
- Other Submittals
  - Results from evaluations of completed in-plant piping system laser scans [GL 2008-01]
  - Evaluation of fabrication defects in N6A and N6C nozzle to safe-end welds [ASME Section XI, IWB-3434]

discussion

Questions

Answers

discussion