UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

November 6, 2008

Mr. Timothy G. Mitchell
Vice President Operations
Arkansas Nuclear One
Entergy Operations, Inc.
1448 S.R. 333
Russellville, AR 72802-0967

SUBJECT: MEETING SUMMARY FOR PUBLIC MEETING WITH ENTERGY

Dear Mr. Mitchell:

On November 3, 2008, representatives of Entergy met with NRC personnel in the Region IV office located in Arlington, Texas, to discuss an open substantive crosscutting issue at the Arkansas Nuclear One, Units 1 and 2, facility. The meeting was held at the request of the NRC. Entergy managers presented information regarding their internal assessment as well as their plans to achieve performance improvement. The meeting attendance list and a copy of the licensee presentation are included as Enclosures 1 and 2.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the Public Electronic Reading Room page of the NRC's public web site at http://www.nrc.gov/reading-rm/adams.html.

Sincerely,

Charles J. Paulk, Chief
Project Branch E
Division of Reactor Projects

Enclosures:
1. Attendance List
2. Arkansas Nuclear One Presentation Slides

cc w/Enclosures:
Senior Vice President
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Jackson, MS 39286-1995

Senior Vice President
& Chief Operating Officer
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Section Chief, Division of Health
Emergency Management Section
Arkansas Department of Health
4815 West Markham Street, Slot 30
Little Rock, AR 72205-3867

Pope County Judge
Pope County Courthouse
100 West Main Street
Russellville, AR 72801

PUBLIC MEETING
ENTERGY OPERATIONS, INC.
ARKANSAS NUCLEAR ONE
November 3, 2008, 2008

PRINTED NAME	ORGANIZATION/REPRESENTING
C.J. Paulk	NRC/RIV/PBG
Jim Gallman	Luminant
Tim Mitchell	Entergy
Dale James	Entergy
George Replogle	NRC-PBE
TROY PRUETT	NRC
DWIGHT CHAMBERLAIN	NRC
CHUCK CASTO	NRC

Enclosure 1

ANO Human Performance Cross Cutting Issue

Arkansas Nuclear One

November 3, 2008

Entergy

CORE PLATFORMS

1. Trust, Fairness, Honesty, Integrity
2. Be deliberate (actions under control); follow the rules
3. Supervisors and above set and continually reinforce high standards
4. Do what you say you are going to do

AGENDA

- Background
- Corrective Actions
- Human Performance Initiatives
- Site Focus Areas
- Conclusions

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BACKGROUND

- Substantive cross cutting issue identified in the area of human performance
  - March 3, 2008 Annual Assessment Letter identified an issue with a cross cutting theme in the component of decision making (instances of not using conservative assumptions and failure to verify the validity of underlying assumptions)
  - September 2, 2008 Mid-Cycle Assessment Letter identified an issue with a cross cutting theme in the component of resources (assuring that personnel use complete and accurate procedures and work packages)

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BACKGROUND
Decision Making

- January 8, 2008 - CR-ANO-C-2008-00013 was initiated based on the number of findings with the cross cutting aspect of decision making prior to the identification of the cross cutting issue by the NRC
- March 5, 2008 - CR-ANO-C-2008-00457 was initiated to determine the apparent cause of the substantive cross cutting issue and to develop and implement a corrective action plan to correct the condition

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BACKGROUND
Decision Making

1st Qtr 07	2nd Qtr 07	3rd Qtr 07	4th Qtr 07	1st Qtr 08	2nd Qtr 08	3rd Qtr 08

- Inadequate modification in 2004 contributes to failure of CR isolation damper (H1b)
- Non-conservative battery intercell connection resistance value specified in TS SR (H1b)
- Failure to follow work management procedures while adjusting RPS parameters (H1b)

- Inadequate evaluation on non-routine hot work activities resulted in a failure to maintain fire watch (H1b)

- Failure to adequately monitor the performance of the emergency switchgear room chillers (H1b)
- Failure to identify and control inadequate stroke time testing of EFW flow control valves in 2006 (H1b)

- Failure to Adequately Monitor the Performance of the Alternate AC diesel generator (April 2006 – March 2008) (H1b)
- Failure to Adequately Monitor the Performance of the Unit 1 Emergency Switchgear Chillers (July 2007) (H1b)

BACKGROUND
Resources

- April 10, 2008 - CR-ANO-C-2008-00777 was initiated based on the number of findings with the cross cutting aspect of decision making prior to the identification of the cross cutting issue by the NRC
- September 4, 2008 - CR-ANO-C-2008-01727 was initiated to determine the cause of the substantive cross cutting issue and to develop and implement a corrective action plan to correct the condition

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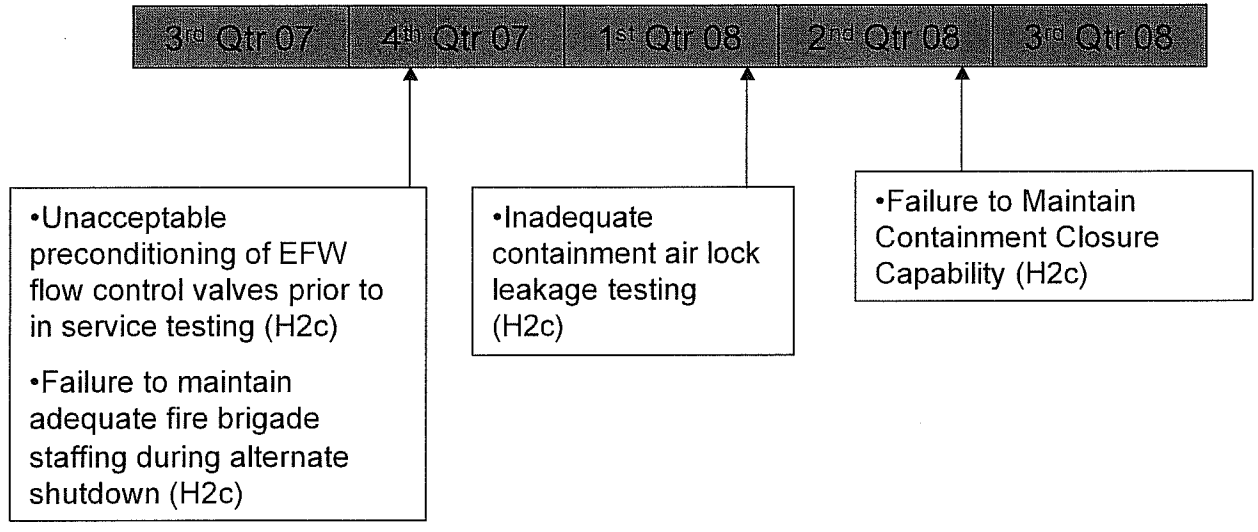
BACKGROUND
Resources



ISSUE

- Cat A and B Condition Reports (CRs) completed since 2006 were reviewed for decision making elements (340 total)
  - 5% were determined to have some decision making element documented in the ACE as either root, apparent, or contributing cause (18 total)

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CAUSE DETERMINATION

- Decision-making is challenged when there is vague and interpretative guidance associated with compliance. In the conditions reviewed a more conservative decision would have prevented the condition from occurring or mitigated its impact.
- Correct decisions are more likely to occur when available processes and tools are used to make decisions.

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COMPLETED CORRECTIVE ACTIONS

- Supervisors and managers were provided training on effective decision making when faced with uncertain or unexpected plant conditions
- The CRG, CARB, and SARB members were provided refresher training on the content of LI-102 related to prioritization of condition reports
- A CRG Safety Advocate was established
- Conservative decision making training was conducted with maintenance personnel

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COMPLETED CORRECTIVE ACTIONS

- Expectations for conservative decision making coaching was provided to supervisors and above
- A "day in the life" of supervisors initiative was established
  - Focus on behaviors
  - Focus on standards
  - Focus on employee development
- Conservative decision making training was conducted with engineering personnel by the Engineering Director

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ENGINEERING

- Training Focus
  - Acknowledgement of standards weakness
  - Case study review
  - Focus on questioning attitude
- Stand Down
  - Reviewed recent examples
  - Physical plant changes and transitional circumstances
  - Technical justification must be quantifiable or rely on standard
  - Raise awareness
    - Procedure use expectations
    - Specific coaching

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ENGINEERING

- Message
  - Performance reflects insufficient rigor in technical justifications
  - Performance does not reflect ability or standards
  - Expectation is perfection
- Results
  - Performance improvement is evident by identification of past deficiencies and correcting before activity is executed

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ISSUE

- Informational and reference use procedural adherence behaviors during the previous year do not meet expectations

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CAUSE DETERMINATION

- Changes not adequately communicated
- Expectations in the areas of administrative procedure usage unclear

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CORRECTIVE ACTIONS

- Training session to ANO management team
- 5 Key points of administrative procedures
- Operations Department HUPIG team has established administrative procedures as a Focus Item
- Expectation for LEL entries on information use requirements established
- Procedure quality emphasized
- Improvements to Change Management Process
- Level of Use review and training

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Measure of Effectiveness

- Plant Performance
  - Transients
  - Trips
  - Unplanned Shutdown LCOs
  - Performance Indicators
- A and B CR Trend/Human Performance Indicators
- Violation Trend
- Examples of Conservative Decisions

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HUMAN PERFORMANCE EXCELLENCE PLAN

- Paired observations
- Department level procedure review
- Reference Use Procedures
  - Change Management
  - Content Knowledge
- Human Performance Behaviors
  - Self Check
  - Questioning Attitude
- Supervisors focused on behaviors

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SITE FOCUS AREAS

- Conservative Decision Making
- Procedure Usage
- Procedure Quality
- Change Management
- Oversight

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CONCLUSIONS

- Actions taken to improve decision making and resources
- Performance demonstrates actions are effective

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