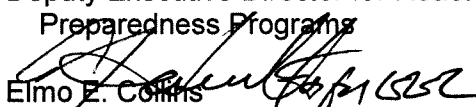




UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
612 EAST LAMAR BLVD, SUITE 400  
ARLINGTON, TEXAS 76011-4125

December 13, 2011

MEMORANDUM TO: Martin S. Virgilio  
Deputy Executive Director for Reactor and  
Preparedness Programs

FROM:   
Elmo E. Collins  
Regional Administrator, Region IV

SUBJECT: NOTIFICATION OF CHANGE TO REGULATORY OVERSIGHT  
OF FORT CALHOUN STATION

As a result of the U.S. Nuclear Regulatory Commission's (NRC's) continuous assessment of Fort Calhoun Station's (FCS) performance, Region IV, in consultation with the Office of Nuclear Reactor Regulation has made a change in the regulatory oversight of FCS. Effective December 13, 2011, oversight of FCS will transition from Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program," to IMC 0350, "Oversight of Reactor Facilities in a Shutdown Condition due to Significant Performance and/or Operational Concerns." The basis for this change in regulatory oversight is provided in Enclosures 1 and 2.

The IMC 0350 process for FCS is being implemented to: establish a regulatory oversight framework as a result of significant performance problems and a significant operational event, ensure the NRC communicates a unified and consistent position in a clear and predictable manner, establish a record of actions taken and technical issues resolved, verify corrective actions are sufficient for restart, and to provide assurance that following restart the plant will be operated in a manner that provides adequate protection of public health and safety. Troy Pruet, the Region IV Deputy Director of the Division of Reactor Projects (DRP) has been assigned as the Chairman of the IMC 0350 Oversight Panel. The Oversight Panel consisting of regional and headquarters personnel is responsible for development and implementation of an oversight plan (panel process plan), restart checklist, inspection plan, and any necessary updates to Confirmatory Action Letter (CAL) 4-11-03 (ADAMS Accession No. ML112490164), dated September 2, 2011. The inspection program will be under the direction of the Oversight Panel, utilizing existing inspection guidance from the Reactor Oversight Process regulatory framework. A panel charter that provides the purpose, objectives, panel composition, and outcomes will be developed by January 2012. A Communication Plan is also being developed.

If you have any questions regarding the ongoing reviews at FCS, please contact me at 817-860-8225 or the Region IV DRP branch chief responsible for inspection program activities at FCS, Jeff Clark, at 817-860-8147 until December 16, 2011, and 817-200-1100 thereafter.

Enclosures:

1. Fort Calhoun Station Regulatory Oversight Summary
2. Inspection Manual Chapter 0350 Entry Criteria

cc:

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## **Fort Calhoun Station Regulatory Oversight Summary**

Fort Calhoun Station initially shutdown in April 2011, for a scheduled refueling outage. The shutdown was extended because of the Missouri River flood affecting the site from June through September 2011, and to address longstanding technical issues.

The licensee is currently in the Repetitive Degraded (Column IV) Column for the mitigating systems cornerstone (MS) for two significant findings of NRC regulations:

- A Yellow (substantial safety significance) finding identified by the NRC for inadequate strategies to protect the plant from flooding events was issued on October 6, 2010. For more information on the Yellow finding, see Inspection Reports IR 05000285/2010007 (ADAMS Accession No. ML102800342) and 05000285/2010008 (ADAMS Accession No. ML102800284). This finding has been open for more than four quarters.
- A White (low to moderate safety significance) finding identified by the NRC for the failure of electrical components used to automatically shutdown the reactor was issued on July 18, 2011. For more information on this White finding, see Inspection Report 05000285/2011007 (ADAMS Accession No. ML111260664). This finding has been open for 2 quarters.
- The facility transitioned to Column IV because the MS cornerstone was degraded for more than four consecutive quarters (Yellow finding), with an additional input to the action matrix (White finding).
- The licensee has yet to inform the NRC of its readiness for inspection of either the Yellow or White findings described above.

After the plant shutdown for a scheduled refueling outage, several additional performance issues were identified (the risk significance of these issues have yet to be determined) that will require additional NRC oversight.

1. On June 7, 2011, the licensee declared an emergency (ALERT) for an electrical breaker fire that was caused by inadequate replacement breaker design or installation. The replacement breakers did not have adequate electrical bus engagement, leading to a high resistance condition that started the fire.
2. The licensee identified that analyses for high energy line breaks and environmental qualifications were incomplete.
3. As noted above, on June 7, 2011, the licensee declared an emergency (ALERT) for the electrical fire. However, the licensee failed to contact state and local officials within the required 15 minutes. Additionally, during an emergency drill the licensee withdrew a Protective Action Recommendation after it had been communicated to emergency responders. Withdrawing recommendations after they have been communicated could impede the effectiveness of the offsite organizations.

Enclosure 1

The NRC issued Confirmatory Action Letter (CAL) 4-11-003 (ADAMS Accession No. ML112490164) on September 2, 2011, to confirm the actions FCS plans to take in its submitted Post-Flooding Recovery Action Plan (ADAMS Accession No. ML112430102) and identify those actions the NRC has determined are necessary for review or inspection prior to restart of the plant. Specifically, the CAL focused on six areas: site restoration, plant systems and equipment, equipment reliability, design and licensing basis, emergency planning, and security.

The licensee has yet to inform the NRC of its readiness for inspection of either the Yellow or White findings described above. Fort Calhoun Station is in the formative stages of establishing the scope for the extent of condition and extent of cause reviews. Additionally, the licensee is in the formative stages for establishment of an independent team to assess the breadth of performance concerns at the facility.

## Inspection Manual Chapter 0350 Entry Criteria

The Reactor Oversight Process (ROP) envisioned circumstances in which a facility might be in an extended shutdown with or without significant performance issues. To ensure an appropriate level of oversight for facilities in an extended shutdown, the ROP has an established process to transition plants to Inspection Manual Chapter (IMC) 0350, "Oversight of Reactor Facilities in a Shutdown Condition due to Significant Performance and/or Operational Concerns," provided certain criteria are met.

The criteria for IMC 0350 are:

1. Plant performance is in Column 4 or 5 of the Action Matrix, or a significant operational event has occurred as defined by NRC Management Directive 8.3, "NRC Incident Investigation Program,"
  - **Fort Calhoun Station transitioned to Column 4 on September 1, 2011 for multiple inputs into the ROP Action Matrix. Specifically, a Yellow (substantial safety significance) finding was identified by the NRC in 2009 for inadequate strategies to protect the plant from flooding events. The final significance of this finding was issued via letter dated October 6, 2010 (ADAMS Accession No. ML102800284). Additionally, a White (low to moderate safety significance) finding was identified in 2010 for the failure of electrical components used to automatically shutdown the reactor. The final significance of this finding was issued via letter dated July 18, 2011(ADAMS Accession No. ML112000064). Both the Yellow finding associated with flooding and the White finding associated with the reactor shutdown components remain open inputs in the ROP Action Matrix. The licensee has yet to inform the NRC of its readiness for inspection of either the Yellow or White findings.**
  - **Additionally, a significant operational event occurred on June 7, 2011, involving an electrical fire in safety related switchgear.**
2. The plant is shutdown or the licensee has committed to shutdown the plant to address these performance issues (whether voluntary or via an NRC order to shutdown),
  - **Restart of the facility has been delayed by performance concerns involving the electrical fire and inadequate electrical train separation, incomplete analyses for high energy line breaks and environmental qualifications, and recovery actions associated with the flood (restoration of plant systems, security, and geotechnical/site restoration).**
3. A regulatory hold is in effect, such as a Confirmatory Action Letter (CAL) or an NRC order, and
  - **The NRC issued Confirmatory Action Letter (CAL) 4-11-003 (ADAMS Accession No. ML112490164) on September 2, 2011, to confirm the actions**

**Fort Calhoun Station plans to take in its submitted Post-Flooding Recovery Action Plan (ADAMS Accession No. ML112430102) and identify those actions the NRC has determined are necessary for review or inspection prior to restart of the plant. Specifically, the CAL focused on six areas: site restoration, plant systems and equipment, equipment reliability, design and licensing basis, emergency planning, and security.**

4. An NRC management decision is made to place the plant in the IMC 0350 process.
  - a) Expected length of the plant shutdown
    - **No definitive restart date has been established.**
  - b) Degree to which the licensee performed an extent of condition evaluation pertaining to the reasons for the shutdown
    - **The licensee has focused efforts on restoring plant systems affected by the flood and the electrical fire. Efforts to determine the breadth of performance issues related to the extent of cause and extent of condition for the significant performance issues associated with the electrical fire, concerns with the analyses for high energy line breaks and environmental qualifications, and emergency preparedness are in the initial stages.**
  - c) Amount of discovery still required of the licensee to identify all the problems associated with the shutdown
    - **The licensee has yet to inform the NRC of its readiness for inspection of either the Yellow or White findings described above. Fort Calhoun Station is in the formative stages of establishing the scope for the extent of condition and extent of cause reviews. Additionally, the licensee is in the formative stages for establishment of an independent team to assess the breadth of performance concerns at the facility.**

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Publicly Avail	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sensitive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sens. Type Initials	
<b>BC: PBF</b>	<b>DD: DRP</b>	<b>NRR: DIRS</b>	<b>NRR: DORL</b>	<b>NSIR</b>	
JClark	TPruett	FBrown	MEvans	JWiggins	
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12/13/2011	12/13/2011	12/13/2011	12/13/2011	12/13/2011	
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