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To:	Wilkins, Lynnea
Subject:	Fort Calhoun 2.206 meeting
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Attachments:	SUMMARY - Ft. Calhoun.doc

Ms. Wilkins:

In advance of the teleconference meeting on my 2.206 petition to revoke the Fort Calhoun license, I am attaching a summary of the violations and problems we have documented at Fort Calhoun since 1992. I hope this will be helpful to the Board in following our discussion. Thank you.

Wally Taylor

SUMMARY

Incidents Substantiating Basis for
Sierra Club Iowa Chapter 2.206 Petition
Regarding Fort Calhoun Station

7-3-1992	On July 3, 1992, there was an electrical malfunction leading to the loss of 25,000 gallons of reactor coolant. After that incident, Sudesh Gambhir, writing in an OPPD newsletter, stated that Fort Calhoun had "hit the other side of the 'bathtub-shaped' reliability curve." In other words, the Fort Calhoun plant was reaching the end of its useful life. OPPD Nuclear Notes 8-21-1992
10-26-1998	A Notice of Violation was issued by the NRC because OPPD had not monitored the performance or conditions of certain systems, thereby failing to demonstrate that the performance or condition of structures, systems, and components had been effectively controlled. In addition, OPPD had not maintained the 125 Vdc, circulating water, chemical and volume control emergency core cooling and engineering safety features systems commensurate with safety. Notice of Violation 10-26-1998
2001	In 2001 leaking fuel rods at Fort Calhoun resulted from fretting and a mix of fuel assemblies. Letter from Westinghouse Electric Co 5-3-2001
2003	In 2003, OPPD received a warning from the Corps of Engineers about flooding, which, given the occurrence of recent events, OPPD obviously ignored. New York Times 6-24-2011
4-15-2005	NRC issued a **Notice of Violation** associated with a **White** Significance Determination Finding involving a violation of 10 CFR Part 50, Appendix B, Criterion XVI, and Fort Calhoun Technical Specification 2.7(1). Specifically, the licensee: --Failed to investigate a drop in diesel

	generator output voltage at the conclusion of a surveillance test; and --Failed to properly respond to an Emergency Facility Computer System alarm that annunciated for low diesel generator output voltage when the diesel generator output breaker was opened. *NRC Escalated Enforcement Actions Issued to Reactor Licensees.* http://www.nrc.gov/reading-re/doc-collections/enforcements/actions/reactors/f.html Accessed 8/15/12. On July 21, 2004, during surveillance testing of an emergency diesel generator, DG-2, the licensee failed to identify the failure of Fuse 2FU in the emergency diesel generator excitation circuit. The failure to promptly identify this failure and correct it resulted in DG-2 being inoperable **from July 21 to August 19, 2004 (a period of 29 days).** *Letter from Bannister to NRC dated May 15, 2005, ML051320335.*
2005-2006	In 2005-2006, improper installation of a valve at Fort Calhoun degraded the condition of a safety system for 454 days. This resulted in a higher level of scrutiny by the NRC, to the Degraded Cornerstone Column. During that same inspection Fort Calhoun accumulated seven reportable failures of various components in mitigating systems that count towards the safety system functional failure performance indicator. NRC News Release 6-28-2007
5-11-2007	Detectable levels of tritium, cesium-137, and antimony-125 were found seeping into the transfer canal pump room of the auxiliary building through an exterior wall. 30-Day Ground Water Protection Plan Report from OPPD to NRC 6-8-2007
5-29-2007	NRC issued **Notice of Violation** and Final Significance Determination for a **White** Finding related to the improper installation of the valve disk of Containment Spray Header Isolation Valve HCV-345. The improper installation

	resulted in a condition in which the actual position of the valve was **nearly opposite** of the indicated position. --Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." In May of 2005, FCS personnel performed maintenance and post-maintenance activities on Containment Spray Header Isolation Valve HCV-345 using procedures that were not appropriate to the circumstances because the procedures did not require actions to verify the correct orientation of the value. As a result the valve was installed in the wrong orientation during maintenance, and post-maintenance testing did not detect the improper reassembly prior to returning the valve to service. This failure caused one train of the Containment Spray system to be **inoperable from May 11, 2005 to Sept. 9, 2006 – an entire operating cycle.** This provided a reactor coolant system diversion flow path if shutdown cooling was initiated following certain postulated accident conditions. *Letter from Mallett to Ridenoure dated May 29, 2007, ML071500074.* *NRC Escalated Enforcement Actions Issued to Reactor Licensees.* http://www.nrc.gov/reading-re/doc-collections/enforcements/actions/reactors/f.html Accessed 8/15/12.
12-7-2007	NRC issued a **Notice of Violation** and a Final Significance of Determination for a **White** Finding associated with the Febr. 14, 2007 failure of the Train A emergency diesel generator. --Determined that the failure of the Train A emergency diesel generator field flash auxiliary contacts involved two violations of NRC requirements. ▫ Violation of 10 CFR 50, Appendix B, Criterion XVI (Corrective Action) for: **--Prior to Febr. 14, 2007,** failure to promptly identify and correct a significant condition adverse to quality involving high resistance across the field flash contacts of a relay in

	the Train A emergency diesel generator voltage regulator circuit. ▫ Violation of Fort Calhoun Technical Specification 5.8.1(a) for: --**As of Febr. 16, 2007,** failure to provide a written procedure for maintenance that could affect the performance of safety-related EDG voltage regulator relay auxiliary contacts. Specifically, the licensee failed to establish a written procedure for the proper lubrication of the safety-related auxiliary contact sliding mechanism. *Collins letter to Bannister dated Dec. 7, 2007, ML073410416.* NRC issued a **Notice of Violation** for violations associated with a **White** Significance Determination finding involving a violation of 10 CFR 50, Appendix B, Criterion XVI, and a violation of the Fort Calhoun Technical Specifications. --Specifically, the licensee failed to promptly identify and correct a significant condition adverse to quality involving high resistance across the field flash contacts of a relay in the Train A emergency diesel generator voltage regulator circuit and failed to provide a written procedure for maintenance that could affect the performance of safety-related EDG voltage regulator relay auxiliary contacts. *NRC Escalated Enforcement Actions Issued to Reactor Licensees.* http://www.nrc.gov/reading-re/doc-collections/enforcements/actions/reactors/f.html Accessed 8/15/12.
8-12-2008	NRC Integrated Inspection. Violations include: --Green: failure to promptly implement corrective actions for a condition adverse to quality. In 1990 the licensee identified that containment spray pumps may run out, and possibly fail, under certain conditions. Corrective measures were inadequate in that the potential failure mode continued to exist **from 1990 until identified by the inspectors in 2008.**

	Letter from Wayne C. Walker, NRC, to D. J. Bannister, OPPD, dated Aug. 12, 2008, with Inspection Report 2008003, ML082260418.
12-30-2009	NRC Component Design Bases Inspection. Violations include: --Green: **From Febr. 1992 to Sept. 8, 2009,** failure to adequately evaluate the seismic qualification of the raw water pumps to ensure that the pumps' anchor bolts imbedded in the floor would meet Seismic Class I standards. --Green: **From Aug. 9, 1973 to Sept. 8, 2009,** failure to prescribe instructions into procedures that would ensure that the plant could be safely shutdown at the probable maximum flood elevation of 1009.3 feet mean sea level. During an intake structure walkdown, the inspection team observed two unsealed, 14-inch diameter fire protection piping penetrations in the outer wall, with bottom of the penetration at elevation 1008.5 feet mean sea level. The penetrations had an air gap of about ½ inch between the wall and the pipe. After reviewing station procedures, the inspection team determined that the unsealed penetrations would not be sealed during flooding conditions. *Letter from Thomas Farnholtz, NRC, to David J. Bannister, OPPD, dated December 30, 2009 with Inspection Report 2009006, ML093641134.*
2010	In 2010, issues relating to lack of flood preparedness gave Fort Calhoun the distinction of being one of three nuclear plants in the U.S. that the NRC was most concerned about. When the NRC issued a notice of violation to OPPD regarding the flood preparedness, OPPD challenged the NRC's conclusions, rather than taking steps to correct the problems. OPPD eventually backed down and agreed to install additional flood protection. Omaha World-Herald 3-31-2011
10-6-2010	NRC Notification of Final Significance Determination for a **Yellow** Finding and Notice of Violation. --**Since 1978**, the licensee failed to maintain written procedures for combating a significant

	external flood as recommended by NRC Regulatory Guide, Appendix A, Section 6.4, "Acts of Nature." The licensee's written procedures did not adequately prescribe steps to mitigate external flood conditions in the auxiliary building and intake structure up to 1014 feet mean sea level, as documented in the Updated Final Safety Analysis Report. *Letter from Collins to Bannister dated October 6, 2010. ML102800342.* The NRC issued a **Notice of Violation**, associated with a **Yellow** Significance Determination Process finding, for violation of Technical Specification 5.8.1.a., "Procedures." --The violation involved the licensee's failure to develop an adequate procedure for protecting vital facilities and equipment from external flooding events to the level described in the Updated Final Safety Analysis Report. Specifically, the inspectors identified that the licensee's strategy of using sandbags stacked on top of floodgates would not be effective in protecting the auxiliary building, intake structure, and turbine building basement because the tops of the floodgates were too small to support the necessary number of sandbags. This could have resulted in flooding impacting multiple, redundant trains of equipment required for safe shutdown of the plant. *NRC Escalated Enforcement Actions Issued to Reactor Licensees.* http://www.nrc.gov/reading-re/doc-collections/enforcements/actions/reactors/f.html Accessed 8/15/12.
3-4-2011	On March 4, 2011, OPPD sent a letter to the NRC stating the flooding at Fort Calhoun was highly unlikely and, therefore, requested that NRC remove the provision in the technical specification for the plant requiring a plant shutdown if the Missouri River level reaches 1009 feet. This was extremely poor planning by OPPD to say the least. Actually, it was reckless conduct

	with no consideration for the safety and operation of the plant. The NRC was not satisfied with this position and requested further information from OPPD. NRC letter to OPPD 10-19-2011
5-10-2011	NRC Integrated Inspection. Violations include: --Green: **Between July 28, 2003 and November 29, 2010,** the licensee failed to determine the cause of the out of tolerance condition impacting reactor protection system channel A trip unit 6, which was a significant condition adverse to quality. The licensee's **repeated failure** to preclude the out-of-tolerance condition regarding reactor protection system channel A trip unit 6 is a performance deficiency. --Green: **Since 1998,** the licensee failed to verify the adequacy of the design of the safety injection refueling water tank vortex eliminator to prevent potential air entrainment due to vortexing in safety-related pump suction piping. *Letter from Jeffrey A. Clark, NRC, to David J. Bannister, OPPD, dated May 10, 2011, with Inspection Report 2011002, ML 111310013.*
5-24-2011	In a February 14, 2012, inspection report, the NRC refers to an incident that occurred on May 24, 2011, that apparently resulted in a breach of security. The report does not describe the event or the problem but describes the violation as greater than very low security significance. NRC Special Inspection Report; Preliminary Greater Than Green Findings 2-14-2012
6-7-2011	Fire occurred in electrical switchgear that distributes power to vital systems and components needed for the safe shutdown of the plant. --This resulted in the complete loss of spent fuel pool cooling for approximately 90 minutes, resulting in a 3°F temperature rise in the pool. **--An acrid odor that existed for three days preceding the bus fire** was not adequately communicated to engineering, maintenance, or management.

	Licensee Event Report dated October 27, 2011, ML113010208.
6-16-2011	On June 16, 2011, a potential flooding issue was found in relation to a hole in the floor at the 1007.5 foot level where the relief valve from a discharge pipe goes through the raw pump bay. Flooding from this penetration could have impacted the ability of the plant's raw water pumps to perform their mitigation functions. Event Notification Report 6-16-2011
6-26-2011	During the time the flood waters surrounded the plant in June of 2011, a water-filled berm burst when a forklift punctured the berm. This caused the berm to collapse, so that it no longer provided protection to the plant from the floodwaters. CNN.com 6-26-2011
7-18-2011	NRC issued a notification of final significance determination of a **white** finding (preliminarily characterized as a yellow finding) and **Notice of Violation**. --Related to April 15, 2011 inspection. --Associated with June 14, 2010 failure of a reactor trip contactor (M2) in reactor protection system. --**Between November 3, 2008 and June 14, 2010,** the licensee failed to preclude shading coils from **repetitively** becoming loose material in the M2 reactor trip contactor. *Letter from Collins to Bannister dated July 18, 2011, ML112000064* The NRC issued a **Notice of Violation** of 10 CFR 50, Appendix B, Criterion XVI, associated with a White Significance Determination Process finding involving the failure to assure that the cause of a significant condition adverse to quality was determined and corrective actions taken to preclude repetition. --Specifically, **between November 3, 2008 and June 14, 2010,** the licensee failed to preclude shading coils from **repetitively** becoming loose material in the M2 reactor trip contactor. The

	licensee failed to identify that the loose parts in the trip contactor represented a potential failure of the contactor if they became an obstruction; and therefore, failed to preclude repetition of this significant condition adverse to quality, that subsequently resulted in the contactor failing. *NRC Escalated Enforcement Actions Issued to Reactor Licensees.* http://www.nrc.gov/reading-re/doc-collections/enforcements/actions/reactors/f.html Accessed 8/15/12.
9-1-2011	On September 1, 2011, Fort Calhoun was placed in Column Four of the NRC's Reactor Oversight Process Action Matrix because of multiple violations of NRC regulations. These included a "yellow" finding of substantial safety significance because of inadequate strategies to protect the plant from flooding and a "white" finding of low to moderate safety significance for the failure of electrical components used to automatically shut down the reactor. Fort Calhoun was one of only two reactors nationwide in Column Four. Letter from Elmo Collins to David Bannister 9-1-2011
10-6-2011	In October of 2011, it was discovered that 8 snubbers had been degraded due to the floodwaters. The snubbers' original design function was to allow thermal motion but restrain seismic motion. The snubbers were degraded to the point that they no longer provide adequate protection to the piping in the case of seismic events. Event Report issued by OPPD 10-6-2011
11-14-2011	On November 14, 2011, the NRC issued an inspection report concerning Fort Calhoun. Several violations of NRC regulations were found. ● Failure to incorporate design information into the procedures for operation of the component cooling water system for temporary off-normal system conditions during refueling.

	● Failure to have adequate instructions, procedures, or drawings including appropriate quantitative or qualitative acceptance criteria to ensure they can detect reactor coolant leakage. This resulted in a situation where no credited method was in place to ensure that the operators of Fort Calhoun were able to detect a one gallon per minute leak in four hours. This violation apparently occurred from November 21, 2008 until April 14, 2009, but was not corrected by OPPD prior to the post-flood inspection. ● Failure to identify and correct a condition adverse to quality. Specifically, with regard to the calibration of the load weighing system for the HE-2 crane prior to its use in lifting the spent fuel transfer cask, loaded with spent fuel, out of the fuel pool. This apparently occurred on July 7, 2009, but was not reported by OPPD and was not discovered by NRC until the post-flood inspection. This situation adversely impacted the spent fuel pool fuel handling attribute of the Barrier Integrity Cornerstone objective of providing reasonable assurance that physical design barriers (fuel cladding) protect the public from radionuclide releases caused by accidents or events. NRC Integrated Inspection Report 11-14-2011
2-14-2012	On February 14, 2012, the NRC issued an inspection report concerning Fort Calhoun. Several violations of NRC regulations were found. ● Failure to follow a procedure for placing the reactor coolant system level monitors into service. This failure resulted in the draining of approximately 1,800 gallons of reactor coolant to the reactor coolant drain tank. This problem could have led to a complete loss of reactor coolant inventory. ● Failure to perform testing and evaluation of safety-related heat exchangers in accordance with written procedures. Specifically, prior to November 16, 2011, the prerequisite calculated

	heat loads used to demonstrate validity of the performance testing of component cooling water heat exchanger test conditions did not agree to within the expected uncertainty, and ultrasonic flow meters were not calibrated to the appropriate range of test flow conditions. This affected the ability of systems to respond to initiating events to prevent core damage. ● Failure to follow procedures requiring workers to comply with radiological work permit instructions. Specifically, two workers changed the work scope for a valve from reassembly to rework using abrasive pads without notifying radiation protection personnel. This violation affected the objective of ensuring adequate protection of worker health and safety from exposure to radiation during routine operations. ● Failure to develop and put into place guidelines for the choice of protective actions during an emergency that implemented federal guidance. This failure allowed the subsequent removal of recommendations to evacuate members of the public during a radiological emergency. NRC Integrated Inspection Report 2-14-2012
3-1-2012	On March 1, 2012, OPPD submitted to the NRC a revised event report regarding inadequate flooding protection due to ineffective oversight. During identification and evaluation of flood barriers, unsealed through wall penetrations in the outside wall of the intake, auxiliary and chemistry and radiation protection buildings were identified that are below the licensing basis flood elevation. Additionally, a potential flooding issue was identified on the inside of the intake structure. Holes were noted in the floor at the 1007'6" level, which is the ceiling of the raw water vault. According to OPPD, a summary of the root causes included: a weak procedure revision process; insufficient oversight of work activities associated with external flood matters; ineffective identification, evaluation and resolution of performance deficiencies related to external flooding; and "safe as is" mindsets relative to

	external flooding events. OPPD reported that during identification and evaluation of flood barriers, unsealed through wall penetrations in the outside wall of the intake, auxiliary and chemistry and radiation protection buildings were identified that are below the licensing basis flood elevation. OPPD reported that during its extent of cause analysis, additional penetrations were identified that had not been previously reported. These include an unspecified number of old penetrations that were abandoned and not sealed when the security system was replaced in **approximately 1985.** Thus, these penetrations, through which flood water could seep or flow, have existed for **about 27 years.** *Licensee Event Report, Mar. 1, 2012 attached to OPPD letter dated Mar. 1, 2012, ML12061A224.*
3-2-2012	On March 2, 2012, a review of records for reactor containment building electrical penetrations found six penetrations that may not provide an adequate seal during worst case conditions as required. The current penetration configuration has existed since the plant was built. The concern is that the Teflon connections may degrade under conditions of high radiation and high temperature during an event. Event Report 3-2-2012.
3-16-2012	On March 16, 2012, the NRC issued an inspection report and notice of violation regarding Fort Calhoun. The cover letter stated in pertinent part: Overall, the [inspection] team noted deficiencies in all three areas of the problem identification and resolution process. Based on the inspection sample, the team concluded that the implementation of the corrective action program and overall performance related to identifying, evaluating, and resolving problems was frequently less than adequate. Licensee identified problems were entered into the corrective action program at a low threshold;

	however, problems were not consistently prioritized and evaluated commensurate with the safety significance of the problems and corrective actions were not always implemented in a timely manner. Lessons learned from industry operating experience were not consistently reviewed and applied when appropriate. Audits and self-assessments were generally used to identify problems and appropriate actions; however, the adequacy of the corrective actions for issues identified in audits and self-assessments was inconsistent. . . . [T]here is a displayed lack of confidence by licensee employees that their concerns will receive the appropriate prioritization and resolution by licensee processes as required. Additionally, there were indications of a lack of resources in personnel as revealed by the high workload of many organizations.
3-16-2012	NRC Problem Identification and Resolution Inspection. 2011006. **Notice of Violation** (associated with Green Finding): **From 1998 to Oct. 28, 2011,** licensee failed to establish measures to assure that conditions adverse to quality were promptly identified and corrected. Following the discovery of water intrusion in manholes MH-5, and MH-31, in **1998, 2005, and 2009,** the licensee failed to establish an appropriate monitoring frequency to identify when the condition was occurring in order to mitigate potential common mode failure of safety-related raw water 4160 V motor cables in underground ducts and manholes. --Among several things noted, **from 2005 until 2011,** the licensee chose to postpone installation of proposed water level control corrective actions and failed to appropriately monitor water intrusion into underground ducts and manholes MH-5 and MH-31 for raw water 4180 V motor cables **multiple** times. *Letter from Ryan D. Alexander, NRC, to David J. Bannister, OPPD, dated March 16, 2012, ML12079A224.* --An NRC Component Design Bases Inspection **in 2009** identified the specific violation of water

	intrusion into manholes MH-5 and MH-31 but OPPD did not correct the problem. *Letter from Thomas Farnholtz, NRC, to David J. Bannister, OPPD, dated December 30, 2009 with Inspection Report 2009006, ML093641134.* In response to the NOV, OPPD acknowledged: --It was aware in June 2010 that 25 inches of water had been found in MH-5 and in July 2010 that almost five and one-half feet of water had been found in MH-5 and five feet of water in MH-3—water which submerged the cables; and --For **approximately 16 months** OPPD failed to perform any work to develop a permanent solution for dewatering manholes that contained Maintenance Rule cables. *Letter from David J. Bannister, OPPD, to NRC, dated April 13, 2012, ML12107A036.*
4-10-2012	On April 10, 2012, the NRC issued an inspection finding concerning the fire that occurred at the Fort Calhoun plant on June 7, 2011. This finding was given a designation of "red" or high safety significance. The fire started in a replacement electrical breaker where poor alignment between components and inadequate maintenance increased the electrical resistance in some parts, causing them to heat up and fail. Soot and smoke from the resulting fire then knocked out power to a redundant electrical system used for shut down at the time because of flooding along the Missouri River. The fire resulted in the loss of spent fuel cooling for approximately 90 minutes and could have resulted in the loss of a safety function or multiple failures in systems used to mitigate a severe accident, had one occurred. In the event of a serious accident, operators would have had to take compensatory measures to safely shut the plant down. NRC News Release 4-10-2012 NRC issued a **Red** Significance Determination Process finding and a **Notice of Violation** for three violations to OPPD as a result of inspections at FCS. The **Red** finding was based

	on deficient modification and maintenance of the safety-related 480Vac electrical distribution system that resulted in a catastrophic switchgear fire. Three violations were associated with the **Red** finding. (1) 10 CFR Part 50, Appendix B, Criterion III, "Design Control" associated with modifications to safety-related breakers, (2) 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action" associated with inadequate electrical maintenance, (3) License Condition 3.D, "Fire Protection Program" associated with train separation. *NRC Escalated Enforcement Actions Issued to Reactor Licensees.* http://www.nrc.gov/reading-re/doc-collections/enforcements/actions/reactors/f.html http://www.nrc.gov/reading-re/doc-collections/enforcements/actions/reactors/f.html Accessed 8/15/12. Specifically, --**From Nov. 2009 to June 7, 2011,** the licensee failed to implement and maintain in effect all provisions of the approved Fire Protection Program. This includes violation of a requirement that one train of systems necessary to achieve and maintain hot shutdown conditions be free of fire damage. --**From May 22, 2008 to June 7, 2011,** the licensee failed to ensure that their preventative maintenance program for the safety-related 480 Vac electrical power distribution system was adequate to ensure proper cleaning of conductors, proper torquing of bolted conductor or bus bar connections, and adequate inspection guidance for abnormal connection temperatures. --**From November 2009 to June 7, 2011,** the licensee failed to ensure that design reviews for electrical protection and train separation of the 480 Vac electrical power distribution system were adequate to ensure that a fire in load center 1B4A would not adversely affect operation of redundant safe shutdown equipment in load center 1B3A, such that one train of

	systems necessary to achieve and maintain hot shutdown conditions were free of fire damage. *Letter from NRC's Elmo Collins to OPPD's David J. Bannister dated April 10, 2012.* Thus, **from November 2009 to June 7, 2011,** OPPD failed to implement and maintain in effect all provisions of the approved Fire Protection Program.
4-27-2012	On April 27, 2012, a "non-licensed supervisory" employee was determined to be under the influence of illegal drugs. The implications of this situation are obvious, from not attending to duties, to not being able to think though and follow procedures, to being unable to appropriately function during regular and emergency events. Event Report 4-27-2012
5-11-2012	On May 11, 2012, an inspection report identified three violations of NRC requirements. These violations related to a previously issued Yellow finding regarding the ability of the plant to mitigate an external flooding event. That previous finding was issued in 2010. These violations had apparently not been corrected by OPPD by the time of the flood in 2011. NRC Integrated Inspection Report 5-11-2012
5-23-2012	On May 23, 2012, a crack was discovered in a pressurized heater. This was considered to be a degradation of the reactor coolant system barrier, the water piping and setup that keeps the reactor fuel from overheating. Event Report 5-23-2012
6-1-2012	OPPD identified that the Emergency Diesel Generator (EDG) fuel oil transfer pumps have not been tested in accordance with the requirements of Technical Specifications **since 1990—or for about 22 years.** --Consequently, the EDGs cannot be considered operable because all auxiliary equipment to support operability has not demonstrated that it is fully capable of performing its safety

	function. --This event does result in a safety system functional failure in accordance with NEI-99-02. *J. R. Goodell, OPPD, letter to NRC dated June 1, 2012, with Licensee Event Report 2012-005, Revision 1, ML12061A224.*
6-4-2012	On June 4, 2012, two instrument racks at Fort Calhoun were identified that were over the analyzed weight for the seismic analysis. The instruments on those racks are used for coolant pressure transmitters that are part of the reactor coolant system pressure boundary. A failure of the racks during a seismic event due to the excessive weight could result in a unisolible leak from the reactor coolant system. Event Report 6-4-2012
6-13-2012	NRC Triennial Fire Inspection. Violations include: --Bounded by **red**: Inadequate fire protection procedure. The post-fire safe shutdown procedure had several deficiencies that would have prevented implementation for fires that occurred in the East and West Switchgear Rooms. **From Nov. 1997 to Apr. 13, 2012**, the licensee failed to establish written procedures covering the implementation of the Fire Protection Program. Thus, for about 14 and one-half years, OPPD has been in violation of federal fire protection regulations related to procedures. *Letter from Geoffrey B. Miller, NRC, to David J. Bannister, OPPD, with Inspection Report 2012007, dated June 13, 2012, ML12165A258.*
7-18-2012	**Original report 5/1/12**: OPPD notified NRC of potential degradation of reactor containment electrical penetration seals. --**Six** penetrations were identified that may not provide an adequate seal during worst case Design Basis Accident conditions as required. --These penetrations are through wall from the containment into the auxiliary building. --The Teflon connections may degrade under conditions of high radiation and high temperature during a DBA event.

	--The current penetration configuration has existed since the plant was built. **--The affected penetrations are original plant equipment** **Update 6/26/12:** OPPD notified NRC that the Issue was identified with **530 primary containment electrical penetration feed-throughs** used for non-CQE devices. --Due to the design of the penetration feed-throughs, when the inboard Teflon seal fails (as it is expected to, due to high level of radioactivity in the primary containment, following a Loss of Coolant Accident (LOCA)), the atmosphere of the primary containment will be introduced to the penetration assembly, first through the failed seal or seals, and then through the weep hole between the inboard and outboard seals of the feed-through. This will put the same high level of radioactivity in direct contact with the outboard seals, resulting in the failure of its Teflon Seal. This would result in **approximately 530 breaches** of the Primary Containment during post LOCA conditions. **Update 7/18/12:** OPPD notified NRC that **additional penetration feed-through assemblies were identified** that are subject to the same failure mechanism. These penetrations are associated with the containment sump recirculation isolation valves, and also associated with the personnel air lock. NRC Current Event Notification Report for July 18, 2012, Event No. 47884, http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2012/20120718en.html
7-27-2012	OPPD reported to NRC that Fort Calhoun Station has moved fuel while the Spent Fuel Pool Area ventilation charcoal filer (VA-66) was inoperable due to failing the methyliodide penetration surveillance. OPPD reported that **there have been repeated charcoal efficiency test failures since 2005.**

	Licensee Event Report dated July 27, 2012, ML12212A334.
8-3-2012	OPPD reported that components classified as seismic class 1 were installed in instrument racks classified as seismic class 2, specifically RCS pressure transmitters that are part of the RCS pressure boundary. A failure of these racks during a seismic event could result in an unisolable RCS leak. OPPD stated that **this appears to be a legacy issue.** *Licensee Event Report dated August 3, 2012, ML12219A010.*