

To: Jim Mehl, ERU Supervisor
From: Zack Clayton, Rad Coordinator
Subject: July Monthly Report
Date:

Beans

Training: 0
Drills: 0
Meetings: 7
Technical Assistance: 0
Public Assistance: 2

Web Page Views: There were 19 page views in July.

Coming Attractions

8/2 Working Group
8/2 After Action
8/3 NAS-T TTX planning
8/4 Beaver Valley offsite training
8/5 IZRRAG procedures
8/24 IZRRAG procedures
8/30 RAT training at NASA Plumbrook
9/7 Working Group
9/15 NAS-T TTX
9/29 TTX After Action

Facility updates

Davis-Besse Nuclear Power Station

Davis-Besse operated at full power for July.

On July 6 at Davis-Besse personnel disconnected a temporary water line that was thought to be empty. When disconnected approximately 25 gallons of water contaminated with tritium spilled onto the gravel and soil within the protected area of the plant. The water was contaminated with a tritium concentration of 13,600 pCi/L which exceeds the 2,000 pCi/L trigger that requires State notification. The soil and gravel affected by the spill was removed and placed in a 55 gallon drum. The plant continues

to function normally, no workers were contaminated, and there is no danger to the public.

On July 26 Davis Besse identified two unanalyzed conditions relating to an old design issue identified in a Component Design Basis Inspection Unresolved Item. Two issues were identified with the Safety-Related Direct Current (DC) System: two items in containment that do not meet environmental criteria, and two inverters powered by the safety system that have the potential for a ground fault. See Event No. 47096.

Perry Nuclear Power Plant

Perry operated at full power for July.

Perry's Appendix R analysis was conducted initially by Worley Parsons. Another plant has found the possibility of a fire induced hot short in a circuit required for safe shut down. Since Worley Parsons does not have the affected electrical drawings They issued a letter PNPP-O-CO-011-WCLT-001 to the Perry Design Engineering Manager, recommending Perry to complete the evaluation pursuant to 10CFR21.21(a). See Event No. 46977.

On July 5, 2011, at 1815 hours, Perry confirmed that two circuits were subject to the hot-short-to-ground event and have temporarily isolated the two circuits. Perry will pursue a permanent resolution for this issue. See Event Report 47024.

Beaver Valley Power Station

Beaver Valley Unit I

Unit I operated at full power for July.

Beaver Valley Unit II

Unit II operated at full power for July.

Fermi II

Fermi II operated at full power for July.

Portsmouth Enrichment Plant

On June 11, 2011 Portsmouth had a loss of power that affected ventilation and hydrogen monitor in a battery room. The analysis indicated this should be reported as an event. See Event No. 47014.

Activity

- 7/6 Working Group – Agency updates, news, initiatives review, and URSB agenda finalization.
- 7/6 IZRRAG procedure review
- 7/11 URSB – Quarterly reports from Agencies, NRC, FEMA, and the Utilities. See agenda at <http://www.ursb.ohio.gov/Agendas.stm>
- 7/13 IZRRAG procedure review
- 7/19 NRC Fukushima Webcast – Lessons learned report. <http://pbadupws.nrc.gov/docs/ML1118/ML111861807.pdf>
- 7/20 IZRRAG procedure review
- 7/28 NEPAC

Office Issues

None at this time.

News, NRC Reports, and Statistics

Operating Power Levels

Date	BV1	BV2	DB	Perry	Fermi2
1	100	100	100	100	100
4	100	100	100	100	100
11	100	100	100	100	100
18	100	100	100	100	100
25	100	100	100	100	100
31	100	100	100	100	100

Information Notices

The ADAMS Accession documents are publicly available and will be accessible via the public web site Electronic Reading Room in the Agency Document Access and Management System (ADAMS), <http://www.nrc.gov/reading-rm/adams.html> or to access generic communications files on the NRC Homepage: <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/reg-issues/2010/>. To access these documents use the ADAMS Accession number listed with the title. This is in the format of : ML #####

Beaver Valley Power Station, Unit No. 2 – Pump Relief Requests 4 and 10 Regarding the Service Water Pump Testing Relief Requests PRR4 and PRR10 (TAC Nos. ME4385 and ME4393)

ADAMS Accession No.: ML111751776

Information Notice 2011-13 Control Rod Balance Blade Cracking Resulting in Reduced Design Lifetime

Adams No. ML111380019

DAVIS-BESSE REQUEST FOR INFORMATION LETTER

ADAMS ACCESSION# ML11186A923

Perry 2011-013 SIT Part 1 of 2

ADAMS Accession No ML11187A121

Fermi: Biennial Exercise Inspection Report 2011-503

ADAMS Accession No. ML11187A238

RIS 2011-05, Information on Revision 2 to The Generic Aging Lessons Learned Report For License Renewal of Nuclear Power Plants, dated July 1, 2011,

Adams No. ML11111A105

RIS 2011-06, Pre-Application Communication and Voluntary Submittal of Schedule For Future Molybdenum-99 Facility Licensing Actions for NRC Review, dated July 1, 2011,

Adams No. ML110770331

Perry Nuclear Power Plant, Unit No. 1 - Correction to Safety Evaluation for Relief Request VR-7, One-Time Replacement Frequency Extension –

ADAMS Accession no. ML111870272

Davis Besse: Request For Additional Information For The Review Of The Davis-Besse Nuclear Power Station (TAC No. ME4640)

Adams No. ML11174A191

Davis-Besse: Request For Additional Information For The Review Of The Davis-Besse Nuclear Power Station (TAC No. ME4640)

Adams No. ML11189A043

Davis-Besse Nuclear Power Station, Unit No. 1 - Review of the steam generator tube inspections performed during refueling outage No. 16 in 2010 –

ADAMS Accession no. ML111890322

PERRY PUBLIC MEETING TO DISCUSS THE 2010 END-OF-CYCLE PLANT PERFORMANCE ASSESSMENT –

Adams No. ML111960073

Davis-Besse: request For Additional Information For The Review Of The Davis-Besse Nuclear Power Station (TAC No. ME4640)
Adams No. ML11195A020

Davis-Besse: Request For Additional Information For The Review Of The Davis-Besse Nuclear Power Station (TAC No. ME4640)
Adams No. ML11196A127

Information Notice 2011-14, Component Cooling Water System Gas Accumulation and Other Performance Issues
Adams No. ML111150135

Davis-Besse Nuclear Power Station Integrated Inspection Report 05000346/2011003 –
Adams No. ML112060312

RIS 2011-07, License Renewal Submittal Information For Pressurized Water Reactor Internals Aging Management, dated July 21, 2011,
Adams No. ML111990086

Perry Nuclear Power Plant, Unit No. 1 - Request for additional information related to the 10 CFR 50.55A requests in support of the third 10-year in-service inspection interval –
ADAMS Accession no. ML112020459

Davis-Besse: Request For Additional Information For The Review Of The Davis-Besse Nuclear Power Station (TAC No. ME4640)
Adams No. ML11203A080

Information Notice 2011-17, Calculation Methodologies For Operability Determinations Of Gas Voids in Nuclear Power Plan Piping
Adams No. ML11161A111

PERRY NUCLEAR POWER PLANT NRC INTEGRATED INSPECTION REPORT
05000440/2011003
ADAMS Accession Number ML11209B290

Fermi 2 – Issuance of Amendment Regarding Cyber Security Plan
ADAMS Accession Number: ML111920221

FERMI: NRC SECURITY BASELINE INSPECTION REPORT
05000341/2011404(DRS) – Cover Letter Only
ADAMS Accession No. ML11209C243

Beaver Valley Power Station, Unit Nos. 1 and 2 – Issuance of Amendment Regarding Approval of the FirstEnergy Nuclear Operating Company Cyber Security Plan (TAC Nos. ME4383 and ME4384)
ADAMS Accession No.: ML111940123

News

NUCLEAR: NRC commissioners revisit an old question: How safe are U.S. reactors? (07/20/2011)

Peter Behr, E&E reporter

The Nuclear Regulatory Commission's Fukushima task force has confronted the commissioners with a central quandary of their mission: When are nuclear plants safe enough?

The six-person Near-Term Task Force that dived into the implications of Japan's nuclear disaster concluded in its July 12 report that "continued operation and continued licensing activities do not pose an imminent risk to public health and safety."

Then the task force followed with a dozen major recommendations, some of which would order nuclear plant operators to strengthen defenses against extreme flooding or earthquakes when necessary and to harden vents that would carry away explosive hydrogen gas from damaged reactor cores in the two types of reactors at the Fukushima Daiichi plant. They must also extend plants' capabilities to protect reactors and spent fuel pools in an extended blackout of primary and backup electric power.

"On the one hand there's that reassurance," NRC Commissioner Kristine L. Svinicki said, referring to the "imminent risk" statement by the task force, which briefed NRC commissioners yesterday on their report.

On the other hand, she said the task force appeared to conclude that the rules and policies that assure adequate protection of the public aren't sufficient and need to be expanded. "I think that's a real change in our regulatory framework."



A satellite view of the Fukushima Daiichi nuclear complex in March, showing steam rising from reactors after the powerful tsunami wrecked their cooling systems. Photo courtesy of [Flickr](#).

NRC Chairman Gregory Jaczko wants to hold a series of public sessions on the task force proposals and then get a commission vote on the twelve recommendations by Oct. 7. His overall reaction to the task force report is clear. "They did a tremendous job."

The commission's meeting yesterday offered no solid clues as to how the other commissioners may respond, assuming the recommendations do come to a vote.

Implementation could take months, even years

But some close to the industry believe a number of the recommendations may be approved. The harder question is whether they go forward as commission orders, which could take effect within a

matter of months, or through a formal commission rulemaking process with hearings, industry responses and advisory board inputs, all of which could take five years, and perhaps longer.

Task force members said yesterday they were not asking the NRC to rewrite the Atomic Energy Act. But the obvious implications from the Fukushima accident point to the need to raise the safety bar at U.S. reactors, they said.

Task force member Gary Holahan, deputy director of NRC's Office of New Reactors, said yesterday that the group concluded that action was needed to remedy the kinds of inconsistent performance by nuclear plant operators where safety measures covering extreme hazards were covered by voluntary guidelines. "We were looking for something that would have the commission establish expectations of safety. It's pretty clear in the report that we found much more comfort in things that were required than those that were voluntary."

The task force also wants more certainty in the protections against extreme, low-probability natural disasters that pose potentially catastrophic consequences for reactors. Adequate protection of the public requires a more exacting defenses in depth when nature defies probabilities, its members concluded.

The NRC's choice of orders versus rules is one of timing, Holahan added. "Orders are kind of frightening thoughts -- it sounds like an immediate thing. We saw it as virtually the only tool to fill in between now and perhaps five or six years from now."

Daniel F. Stenger, an attorney with Hogan Lovells who counsels nuclear plant owners, said he could not read the commission members' intentions at yesterday's meeting.

"Still an issue in my mind is what appetite the commission has for proceeding by order. I would not be surprised to see some orders issued directing interim actions," he said, followed by a rulemaking on the same issues.

"I do think the NRC is probably correct that there will be points where they know this is a real lesson learned event, and they need to take action," Stenger said. It is essential, however, for the NRC to be careful where it draws the line, he added. "There's validity to both sides. The key thing is for the NRC to make sure they have an adequate technical basis and understanding of what happened, before imposing significant new requirements."

Industry worries probe will go too far, and too fast

The industry's Nuclear Energy Institute has already drawn a line opposing NRC orders on new safety requirements.

Tony Pietrangelo, NEI's chief nuclear officer, acknowledged that the some companies fell short in the post-Fukushima inspections ordered by the NRC to test compliance with security regulations adopted after the 9/11 attacks and the voluntary severe accident mitigation guidelines now in place. The inspections identified U.S. plants where fire equipment to be used for emergency reactor core cooling was not protected against earthquakes, for example, or where crucial reactor electrical controls could be knocked out by flooding.

"They did find some deficiencies, no question," Pietrangelo said. The industry is taking action, he added.

"We've already started walk-downs [inspections] on seismic and flooding," he said. That process can be verified in ways other than mandatory orders. "I still think that orders are not appropriate.

"There are some near-term things we can definitely do," within a year or two. These could include new measures to extend plant protection when outside and backup alternating current power and new instrumentation to monitor conditions in spent fuel pools in emergencies. "It's how you do it.

"The task force was sequestered for 90 days. Now we need more analysis and more stakeholder interaction. We want to do it right, and we want to do it once. The stuff has to be prioritized so that the new regulations don't preclude us from doing things that could have a greater impact on reliability," Pietrangelo said.

NEI's criticism of the task force for pushing too far and too fast has been picked up by some leading House and Senate Republicans on energy committees. The task force process has become another GOP arrow aimed at Jaczko for his role in halting the NRC's review of the proposed Yucca Mountain nuclear fuel repository.

Roger Mattson, who headed the NRC's division of safety systems at the time of the 1979 Three Mile Island accident and led an investigation of the accident, called the task force work "a good report."

'Things that need to be done now'

"They've drawn a careful line between what they think is required [immediately through orders] and what should take a longer time, and it looks reasonable to me. These are good, common sense recommendations," said Mattson, who helped convene a group of international nuclear safety experts who recommended stronger international reactor safeguards to the International Atomic Energy Agency following the Fukushima accident.

The task force recommendation on converting voluntary guidelines on severe accident responses into mandatory rules is right. It doesn't require a lot more stakeholder involvement, he said.

"The industry said they would do it. The proof came whether they had. And they hadn't, so now it's time to regulate it." The task force recommendation to harden venting systems should be fast-tracked too, he said. "I'm not willing to wait five years to deal with containment venting. To throw everything into rulemaking would be a serious mistake. There are things that need to be done now," Mattson said.

But the industry gets support from an unusual direction. David Lochbaum, director of the Union of Concerned Scientists' Nuclear Safety Project, said he prefers for the industry to make its own arguments, but he agrees that rulemaking is the proper course for most of the task force recommendations.

"An open rulemaking process allows plant owners to complain that the gains [the NRC seeks] are burdensome and that there isn't much in the way of safety gains. At the end of the day, rulemaking defines the proper height of the safety bar." If the NRC skips that, they are depriving the plant owners of their legal right to say this is too burdensome, and equally depriving the public of the right to argue for more protection, he said.

"Why does it take so many years to do a rulemaking?" Lochbaum asked. The NRC is able to expedite licensing issues. "Do they have to take multiple years on the safety side to play paper-rock-scissors?"

"You can do it in a rulemaking in a timely manner. So the process is important. Rather than use orders to short circuit, fix the process."

Source: <http://www.eenews.net/climatewire/2011/07/20/1>

CYBERSECURITY: Experts warn cyber threats growing for nuclear, transmission systems (07/27/2011)

Hannah Northey, E&E reporter

A federal official charged with overseeing the nation's cybersecurity defenses yesterday said nuclear power plants and transmission lines are increasingly vulnerable to ever more sophisticated attacks.

The plants and power lines "are targets, they do have vulnerabilities," Gregory Wilshusen, the Government Accountability Office's director of information security, told reporters after a House Energy and Commerce subcommittee hearing.

"I think it's an area that needs to be reviewed; there certainly should be appropriate security controls over that particular sector because of interdependencies," he added.

Wilshusen pointed to a 2008 GAO report that found increasing "interconnectivity" between the Tennessee Valley Authority's systems to operate generation and its administrative systems used to house financial and personnel information.

Such connections introduced risk into each of the systems at TVA, a federal agency that operates one nuclear plant in Alabama and two in Tennessee. The company has since implemented a number of GAO recommendations to address cyber weaknesses, according to GAO.

"The vulnerabilities on that network created opportunities and attack vectors into the other control systems network, placing those systems at risk," Wilshusen said.

Cyber threats can also stem from system failures, he said, as happened at TVA's Browns Ferry nuclear power plant in north Alabama in 2006. Two circulation pumps at the plant failed because of excessive traffic on the control system network that was created after another control system device failed, all of which forced TVA to shut down the unit manually, according to GAO.

"Even though it wasn't a computer attack, per se, the computer failure caused them to shut down the unit," Wilshusen said.

TVA did not respond to requests for comment by publication time.

NRC also confirmed that in 2003 the Microsoft SQL Server worm known as "slammer" infected a computer network at the idled Davis-Besse nuclear power plant in Oak Harbor, Ohio, disabling a safety monitoring system for nearly five hours and the plant's process computer for about six hours, according to GAO's 2008 report.

Scott Burnell, a spokesman for the Nuclear Regulatory Commission, said reactor control and safety systems are not connected to the Internet and that all computer systems are covered by NRC cybersecurity requirements established in the wake of the Sept. 11, 2001, terrorist attacks.

GAO has also highlighted concerns over "smart grid" technology and released a report in January that found a lack of security features being built into the new systems.

Wilshusen and officials from the Department of Homeland Security said yesterday that attacks on the energy, financial and transportation sectors are increasingly sophisticated, and GAO released a report calling for increased oversight and cooperation with private industry.

"Sensitive information is routinely stolen from both government and private-sector networks, undermining confidence in our information systems and the sharing of information," said Roberta Stempfley, DHS's director of national cybersecurity in the Office of Cybersecurity and Communications.

The hearing was held only days after the Obama administration's top cyber chief -- Randy Vickers, acting director of the Department of Homeland Security's Computer Emergency Readiness Team -- abruptly resigned, the subcommittee said in a press release.

Rep. Cliff Stearns (R-Fla.), chairman of the Subcommittee on Oversight and Investigations, said the subpanel plans to hold a series of hearings to review whether the federal government is adequately safeguarding the country's critical infrastructure. The House efforts align with a legislative push in the Senate and the Obama administration's release of a set of cybersecurity proposals in May ([Greenwire](#), July 25). [Click here](#) to read GAO's report on cybersecurity.

Source: <http://www.eenews.net/EEDaily/2011/07/27/9/>

Plant Reports

Power Reactor	Event Number: 46997
Facility: SUMMER Region: 2 State: SC Unit: [1] [] [] RX Type: [1] W-3-LP NRC Notified By: BRUCE THOMPSON HQ OPS Officer: STEVE SANDIN	Notification Date: 06/29/2011 Notification Time: 09:49 [ET] Event Date: 06/27/2011 Event Time: 16:11 [EDT] Last Update Date: 06/30/2011
Emergency Class: NON EMERGENCY 10 CFR Section: 21.21 - UNSPECIFIED PARAGRAPH	Person (Organization): MARK FRANKE (R2DO) PART 21 GP (email) (NRR)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	N	Y	100	Power Operation	100	Power Operation

Event Text

APPENDIX R ANALYSES FAILS TO RECOGNIZE HOT-SHORT FAILURE RESULTING IN THE LOSS OF AN ESSENTIAL ELECTRICAL BUS

The following Part 21 report was received via fax:

"10 CFR 21: Appendix R analyses conducted for Virgil C. Summer Nuclear Station

(VCSNS) failed to identify that a fire-induced hot-short failure in an ammeter circuit would result in a loss of the B-train 7.2KV essential electrical bus (XSW1DB).

"Appendix R analyses performed by Gilbert/Commonwealth (now Worley Parsons) in the early 1980s failed to recognize the possibility of a fire-induced hot-short condition in a circuit that was identified as being required for safe shutdown. This circuit connects a set of sensing current transformers (CTs) to an ammeter on the Main Control Board, and provides over-current sensing for an over-current relay. Gilbert/Commonwealth recognized that a fire-induced open circuit in this ammeter circuit would result in damage to, or a fire in, the B-train 7.2kV essential switchgear. Thyrite protectors were added to the circuit to protect the CTs from this open circuit condition as part of the Appendix R analysis.

"However, this analysis and resolution failed to consider the hot-short-to-ground failure mode. Current from a hot-short could flow through the ammeters, or neutral conductor, and then through the bus neutral over-current relay to ground. This could actuate the over-current relay, which in turn would actuate a lock-out relay and trip all incoming breakers to bus XSW1DB. This bus provides credited B-train power to safe-shutdown components credited for this scenario. The Appendix R analyses conducted for VCSNS by Gilbert/Commonwealth did not address the hot-short scenario and is considered to be a defect, or omission. reportable under 10 CFR 21.

"This condition was identified during the circuit analysis review for transitioning the Appendix R Fire Protection Program to NFPA 805 and was reported to the NRC as an unanalyzed condition on 05/03/2011 (see Event Notification No. 46811). Corrective actions have been taken to address this issue."

The licensee informed the NRC Resident Inspector.

* * * UPDATE FROM JOE MARSDEN TO MARK ABRAMOVITZ ON 6/30/2011 AT 1643 * * *

"Worley Parsons Investigation Results:

"Although this design was not a generic or standard design, Worley Parsons performed further evaluation, including extent of condition, for other Nuclear Power Plants that Worley Parsons performed the original design and performed Appendix R Compliance Review/Modifications.

Five plants were identified as follows:

"1) Crystal River 3: Worley Parsons discussed the issue with Progress Energy and jointly concluded that Crystal River 3 is not impacted because their corresponding current transformer circuit design has a different configuration. The circuit design is not generic or programmatic.

"2) TMI Unit 1: TMI is not impacted because their corresponding current transformer

circuit design has a different configuration. The circuit design is not generic or programmatic.

"3) **Perry**: The Appendix R Compliance Review was accomplished by a team of Worley Parsons and others. Since Worley Parsons was involved with the Appendix R analysis and the affected electrical drawings are not readily available at Worley Parsons, it was concluded that Worley Parsons could not complete the evaluation to determine if the Perry design condition could cause a substantial safety hazard. Worley Parsons issued letter PNPP-O-CO-011-WCLT-0001 to the Perry Design Engineering Manager, recommending Perry to complete the evaluation pursuant to 10CFR21.21(a).

"4) V.C. Summer: V.C. Summer is the subject plant and is impacted. VC. Summer is issuing LER #2011-001-00, which constitutes the Part 21 Notification for this design defect, or omission.

"5) R.E. Ginna: Worley Parsons did not perform the Appendix R analysis for Ginna.

"Corrective Action:

"V.C. Summer has implemented immediate compensatory measures for this condition until a permanent solution is identified. A root cause analysis was jointly performed with V.C. Summer. The root cause analysis and Worley Parsons corrective action program review considered this an isolated incident due to human error. No programmatic/procedure corrective actions were identified due to the historical nature of the issue.

"Actions to preclude recurrence: Human performance issues from this event will be communicated to the Worley Parsons Nuclear Engineering staff under our corrective action and lessons learned program."

Notified R1DO (Welling), R2DO (Franke), and R3DO (Lipa). Notified the Part 21 Group via e-mail.

Fuel Cycle Facility	Event Number: 47014
Facility: PORTSMOUTH LEAD CASCADE RX Type: URANIUM ENRICHMENT FACILITY Comments: 2 DEMOCRACY CENTER 6903 ROCKLEDGE DRIVE BETHESDA, MD 20817 Region: 2 City: PIKETON State: OH County: PIKE License #: SNM-7003	Notification Date: 07/01/2011 Notification Time: 16:34 [ET] Event Date: 06/11/2011 Event Time: [EDT] Last Update Date: 07/01/2011

Agreement: Y Docket: 70-7003 NRC Notified By: RON CRABTREE HQ OPS Officer: MARK ABRAMOVITZ	
Emergency Class: NON EMERGENCY 10 CFR Section: 70.50(b)(2) - SAFETY EQUIPMENT FAILURE	Person (Organization): MARK FRANKE (R2DO) ROBERT JOHNSON (NMSS)

Event Text

POWER OUTAGE CAUSING LOSS OF BATTERY ROOM VENTILLATION AND HYDROGEN MONITOR

"At approximately 1451 hours EDT on 07/1/2011, the Nuclear Regulatory Affairs Manager completed his review of the initial (draft) engineering report [related to an event that occurred on June 11, 2011].. [The review determined] the impact the June 11, 2011 power outage may have had on the Battery Room 3/4 forced air ventilation and hydrogen monitoring systems. [The review also] determined the incident should be reported to the NRC because he could find no evidence that either system would have met their respective IROFS [Item Relied On for Safety] surveillance requirements during the power outage.

"This incident is being reported to the Nuclear Regulatory Commission (NRC) as a 24-hour event in accordance with American Centrifuge Administrative Procedure ACD2-RG-044 (Nuclear Regulatory Event Reporting), Appendix B, Section I, which states: 'An event in which equipment is disabled or fails to function as designed as described by any of the following: (Paragraph) 2. The equipment is required to be available and operable when it is disabled or fails to function: AND no redundant equipment is available and operable to perform the required safety function .'"

The licensee will notify the NRC Region II office and site Department of Energy.

Power Reactor	Event Number: 47024
Facility: PERRY Region: 3 State: OH Unit: [1] [] [] RX Type: [1] GE-6 NRC Notified By: GLENDON BURNHAM HQ OPS Officer: CHARLES TEAL	Notification Date: 07/05/2011 Notification Time: 20:35 [ET] Event Date: 07/05/2011 Event Time: 18:15 [EDT] Last Update Date: 07/05/2011
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(ii)(B) - UNANALYZED CONDITION	Person (Organization): DAVID HILLS (R3DO)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
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1	N	Y	100	Power Operation	100	Power Operation
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Event Text

TWO APPENDIX R WIRING ISSUES THAT COULD POTENTIALLY AFFECT THE ABILITY TO SHUTDOWN

"On July 5, 2011, at 1815 hours, it was determined that a design deficiency at the Perry Nuclear Power Plant (PNPP) constituted a fire protection program concern which could adversely affect the ability to achieve and maintain safe shutdown of the plant in the event of a control room fire. (Reference event notification numbers 46811 and 46997). In the event of a postulated control room fire, the potential exists that two 4160 VAC breakers could trip open under a hot-short condition.

"PNPP's Appendix R design vulnerability only affects Breakers EH1106, which supplies the Emergency Service Water Pump A and EH1107, which supplies the Control Complex Chiller A. Specifically, the current transformers used in these breakers for the 50/51 instantaneous and time over current protective relays are in line with the component control room ammeters. Therefore, a hot-short-to-ground in the associated control room ammeters could actuate the 50/51 relays and trip the component breaker.

"Actions are in progress to isolate the control room ammeters for the Emergency Service Water Pump A in breaker EH1106 and the Control Complex Chiller A in breaker EH1107. Isolating these ammeters would isolate the affected circuitry from the described Appendix R failure mechanism. Control room amperage indication for the pump and chiller would be lost while this Temporary Modification is installed. PNPP will pursue a permanent resolution to the hot-short-to-ground fault for the EH1106 and EH1107 breakers.

"This event is being reported in accordance with 10 CFR 50.72(b)(3)(ii)(B), as a condition that results in the nuclear power plant being in an unanalyzed condition that significantly degrades plant safety. A follow-up licensee event report will be made in 60 days. The resident inspector has been notified."

Power Reactor	Event Number: 47096
Facility: DAVIS BESSE Region: 3 State: OH Unit: [1] [] [] RX Type: [1] B&W-R-LP NRC Notified By: TOM COBBLEDICK HQ OPS Officer: BILL HUFFMAN	Notification Date: 07/26/2011 Notification Time: 16:47 [ET] Event Date: 07/26/2011 Event Time: 16:00 [EDT] Last Update Date: 07/26/2011
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(ii)(B) - UNANALYZED CONDITION	Person (Organization): JOHN GIESSNER (R3DO)

50.72(b)(3)(v)(A) - POT UNABLE TO SAFE SD 50.72(b)(3)(v)(B) - POT RHR INOP 50.72(b)(3)(v)(D) - ACCIDENT MITIGATION	
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Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	N	Y	100	Power Operation	100	Power Operation

Event Text

UNANALYZED CONDITIONS INVOLVING THE SAFETY RELATED DIRECT CURRENT (DC) SYSTEM

"Information was received in regards to an old design issue identified in a Component Design Basis Inspection Unresolved Item. Two issues were identified with the Safety-Related Direct Current (DC) System:

"1. The plant's licensing basis states that non-safety-related electrical equipment, whose failure under postulated environmental conditions could prevent satisfactory accomplishment of the specified safety-related electrical equipment required safety functions, is qualified as required. However, the Reactor Coolant Pump (RCP) backup lift oil pump motors and the Containment Emergency Lighting Panel L49E1 are located inside containment and are not environmentally qualified. This could challenge the adequacy of electrical separation between the potentially grounded non-safety related equipment and the safety related batteries.

"2. Automatic transfer switches are installed to automatically transfer non-safety related loads such as non-nuclear instrumentation, station annunciators, plant computer, and integrated control system between two non-safety related inverters, which receive power from the safety-related DC power system. If a ground fault existed on one of these switches, the fault could be transferred from one power source to the redundant source, potentially impacting the ability of both safety-related DC power sources to perform their required functions. This type of transfer is not permitted by the plant's licensing basis.

"The breakers for the 4 RCP backup lift oil pump motors and for the Containment Emergency Lighting were opened. One train of instrumentation power was placed on its alternate power source from the Alternating Current (AC) system, eliminating the potential to impact both trains of the DC power system.

"This condition is being reported per 10 CFR 50.72(b)(3)(ii)(B) as a condition that results in the plant being in an unanalyzed condition that significantly degrades plant safety, and per 10 CFR 50.72(b)(3)(v)(A-D) as an event or condition that could have prevented fulfillment of a safety function."

The licensee has notified state and local authorities and the NRC Resident Inspector.

