

To: Jim Mehl, ERU Supervisor
From: Zack Clayton, Rad Coord
Subject: May Monthly Report
Date: June 10, 2010

Beans:

Training:	0
Drills	0
Meetings:	2
Technical Assistance:	1
Public Assistance:	1

Web Page Hits: There were 66 page views for May

Coming Attractions:

WG 6/10

Facility Updates:

Davis Besse Nuclear Power Station

Ground water results from recent testing were received. of shallow ground water monitoring well 105 A indicate 4177 picocuries (of tritium) per liter of water (pCi/l).. Results are above the 2,000 pCi/l limit for notification per EPPI procedure but below the drinking water limits of 20,000 pCi/l. The last time this well was sampled, the results indicated 4158 pCi/l. The elevation is due to migration of sediments from an October, 2008 underground pipe break. This is the well closest to the area that experienced a underground pipe break in October, 2008.

The results of the additional 7 older construction wells indicate 5 of the 7 above 2,000 picocuries per liter. One well showed a significant increase from 1680 picocuries (Spring, 2009) to the current 4184 picocuries (Spring, 2010).

Due to the recent elevations in sample results, Davis-Besse has formed a problem solving team to evaluate the results and determine if an active leak may be contributing to the elevated results. Other monitoring wells have also been sampled. The results of these wells are expected in two weeks. It is anticipated that additional sampling will be conducted to augment the fall sampling campaign.

A preliminary notification of a Differing Professional Opinion has been issued by the NRC. The notification concerns the publication of the NRC's review of two internal documents relating to the 2002 Davis-Besse Nuclear Power Station (DBNPS) reactor head event. These documents are Differing Professional Opinions (DPO) submitted by an employee who wished to express an opinion which differed from the NRC's official position. These documents were made public at the request of the employee and are posted on the NRC's website.

The DPOs do not relate to the current situation at DBNPS, but refer to decisions made relating to the 2002 reactor head event. See ADAMS number ML101400174.

Perry Nuclear Power Plant

On May 11, 2010, at approximately 2318 hours, Perry Nuclear Power Plant (PNPP) initiated a manual Reactor Protection System (RPS) actuation as required by Technical Specification (TS) Limiting Condition for Operation (LCO) 'Control Rod Scram Accumulators.' The Control Rod Drive (CRD) charging water header pressure was below the specification (i.e., no CRD pumps operating) and there were multiple accumulator faults on withdrawn control rods. At the time of the event, the plant was at 100% power. All control rods are inserted into the core and the plant is currently stable in Hot Shutdown. No Emergency Core Cooling Systems were required or utilized to respond to the event and there were no other 10 CFR 50.72 reportable actuations. Reactor coolant level is being maintained in its normal band by the feedwater system and decay heat is being removed by the condenser.

The cause of the event initiator was an invalid Division 2 Loss of Coolant Accident (LOCA), i.e., High Drywell Pressure/Low Reactor Vessel Water Level, signal. Prior to the manual RPS Actuation, the invalid LOCA signal resulted in invalid actuations of Division 2 equipment and systems including, the Division 2 Emergency Diesel Generator (EDG), (which started but did not load onto the bus), Low Pressure Coolant Injection B and C subsystems (which started the pumps but did not inject into the vessel), discharge of the Suppression Pool Makeup subsystem B into the suppression pool, startup of the Control Room Emergency Recirculation subsystem B, and isolation of Group 2B Containment isolation valves which included the Nuclear Closed Cooling System Containment Return Isolation valve that was not already closed. The affected equipment is being restored in accordance with plant procedure.

The facility experienced an instrumentation rack loss of power which appears to have resulted in the inadvertent Division 2 initiation. The initiator of this event also led to a loss of power to both control rod drive charging water header pumps resulting in charging water header pressure less than required and related accumulator faults which placed the facility in a technical specification required shutdown condition.

The initiator for the event was a blown fuse in an instrument rack which resulted in an invalid emergency core cooling system that per plant design prohibited an electrical bus

from providing power to non safety related systems but continued to supply power to safety related systems. The control rod drive pumps are considered non safety related.

On May 12, the Plant repaired the electrical problem. Plant startup began on May 17 and the plant synchronized to the grid on May 19.

Perry received elevated readings (greater than 5,000 picocuries per liter) of tritium in the under ground drain system (collection basin). This is in the same area as the elevated readings (59,500 picocuries per liter) reported in 2006 due to a feedwater pipe leak. Additional samples were taken and are waiting for analysis.

Beaver Valley Nuclear Power Station

Beaver Valley Unit I

Beaver Valley Unit I operated at full power for May.

Beaver Valley Unit II

Beaver Valley Unit II operated at full power for May.

Fermi II

Fermi operated at full power for May.

Portsmouth Gaseous Diffusion Plant

On May 10, 2010 at 1710 hours a USEC (United States Enrichment Corporation) Protective Force Officer entered the X-104 Police Headquarters Weapon Cleaning Area to perform cleaning maintenance on his assigned weapon. The officer began to disassemble the weapon while pointing the weapon in a safe direction. He pulled the trigger to release the slide and the weapon discharged (this action is required to remove the slide from this type of weapon). The officer in question was the only person in the room at the time of the incident. The officer was not struck by the discharge, however he did sustain minor powder burns to his hand. The area and weapon was immediately secured by Protective Force Management personnel. USEC Fire/EMS was summoned to the incident scene where the officer's injury was evaluated at which time the officer refused treatment. Personal statements were collected from all personnel in the immediate area. A critique was conducted. The Protective Force Manager has generated a Long Term Order to provide compensatory actions to prevent recurrence of an accidental discharge of a weapon due to the same or similar circumstances. An internal investigation as well as an independent investigation is currently in progress.

On May 13, Portsmouth Gaseous Diffusion Plant notified Ohio EPA of a discharge from their Sewage Treatment Facility that exceeded limits for fecal coliform.

Activity:

- 5/7 Working Group meeting. The group heard updates on plant status and agency activities. The results of the Beaver Valley Exercise were discussed.
- 5/27 Presentation at OEMA by Thermo-Electron on new meters and instruments.

Office Issues:

None at this time.

NRC Reports and Statistics:

May operating power levels

Date	BV1	BV2	DB	Fermi2	Perry	
1	100	100	0	100	100	
3	100	100	0	100	100	
10	100	100	0	100	100	
11	100	100	0	100	0	TECH SPEC REQUIRED SHUTDOWN AND RX SCRAM - SEE EN# 45918
17	100	100	0	100	0	
19	100	100	0	100	17	
24	100	100	0	100	100	
31	100	100	0	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 #####

PDF version RIS 2007-16, Rev 1, Implementation of the Requirements of 10 CFR 54.37(b) for Holders of Renewed Licenses, dated April 28, 2010 ML100250279

Perry Nuclear Power Plant NRC Integrated Inspection Report 05000440/2010002 -

ML101240949

Request for 10 CFR 50.55A Request for Alternate Repair Methods for Reactor Pressure Vessel Head Penetration Nozzles – ADAMS Accession no. ML101310199

Letter to FirstEnergy regarding Public Meeting to Discuss the Results of Repairs Made to the Reactor Vessel Head and the Basis for your Decision to Start Up Davis-Besse Nuclear Power Station. ADAMS Accession Number ML101320757

FERMI 2 - ISSUANCE OF EMERGENCY AMENDMENT REGARDING ONE-TIME EXTENSION OF THE COMPLETION TIME FOR TECHNICAL SPECIFICATION 3.7.3, "CONTROL ROOM EMERGENCY FILTRATION (CREF) SYSTEM," CONDITION B (TAC NO. ME3930)- ML101340861

SUMMARY OF THE MAY 5, 2010, PUBLIC MEETING TO DISCUSS THE 2009 FERMIL UNIT 2 END-OF-CYCLE PERFORMANCE ASSESSMENT – ML101370565

Summary of April 21, 2010, Category 1 Teleconference with FirstEnergy Nuclear Operating Company on Generic Letter 2004-02 (TAC Nos. MC4665 and MC4666) ADAMS Accession No.: ML101320665

Davis-Besse Nuclear Power Station, Unit 1 - Audit of Steam Generator Program Focusing on Steam Generator Tube Integrity During a Large-Break Loss-of-coolant accident – ADAMS Accession no. ML101170196

Beaver Valley Power Station, Unit Nos. 1 and 2 – Issuance of Amendments Re: Spray Elimination of Recirculation Spray Pump Response Time Surveillance Requirement (TAC Nos. ME1501 and ME1502) ADAMS Accession No.: ML101120926

Davis-Besse Nuclear Power Station, Unit 1 - License Amendment Request for Approval of Cyber Security Plan – ADAMS Accession no. ML101390600

BEAVER VALLEY POWER STATION: NRC SECURITY INSPECTION REPORT NOS. 05000334/2010402 AND 05000412/2010402

ADAMS Accession No. ML101450353

Perry Nuclear Power Plant, Unit No. 1 - License Amendment Request for approval of the Cyber Security Plan – ADAMS Accession no. ML101250512

RIS 2010-05, Applicability of 10 CFR Part 21 Requirements to Applicants for Standard Design Certifications, dated May 24, 2010 (ML091620498)

Beaver Valley Power Station, Unit Nos. 1 and 2 - FirstEnergy Nuclear Operating Company Re: cyber Security Plan License Amendment Request (TAC Nos. ME2867 and ME2868) ADAMS Accession No.: ML101400095

RIS 2010-04, Monitoring the Status of Regulated Activities during a Pandemic, dated May 25, 2010 (ML100539611)

NUCLEAR ENERGY: Toshiba, Babcock & Wilcox invest \$200M in Ohio fuel plant (05/25/2010)

Katherine Ling, E&E reporter

Toshiba Corp. and Babcock & Wilcox Investment Co. have invested \$200 million in the only American nuclear fuel fabrication plant that uses U.S. centrifuge technology, a company that supplies low-enriched uranium for commercial nuclear plants announced today.

USEC Inc. said the two companies will each invest \$100 million into the Piketon, Ohio, facility in three phases, subject to USEC's getting regulatory approvals. Bethesda, Md.-based USEC said it has already lined up \$3.1 billion in committed sales for the project. "We have decided to make this investment in American know-how and American technology in order to produce more uranium fuel for the growing worldwide nuclear power market with high confidence in USEC as a leading supplier of low enriched uranium," said Yasuharu Igarashi, corporate senior vice president of Toshiba, in a statement.

Brandon Bethards, president and CEO of Babcock & Wilcox, said the investment will expand his company's global reach through USEC and Toshiba and "further enhance our already-strong relationship with the U.S. Department of Energy."

The investment news is a buoy for USEC, as it comes on the heels of DOE's announcement that it provided \$2 billion in a conditional loan guarantee to Areva SA to build a different uranium-enrichment facility near Idaho Falls, Idaho ([Greenwire](#), May 21).

USEC withdrew its loan guarantee application last August after DOE warned the Ohio project was "not technically or financially ready to complete." In the meantime, USEC has worked with DOE on testing the technology, for which the department provided a \$45 million grant.

USEC plans to resubmit an application later this year for an additional \$2 billion in loan guarantee authority DOE made available from 2007 congressional authority for front-end technology.

Power Reactor	Event Number: 45900
Facility: FERMI Region: 3 State: MI Unit: [2] [] [] RX Type: [2] GE-4 NRC Notified By: GREG MILLER HQ OPS Officer: MARK ABRAMOVITZ	Notification Date: 05/05/2010 Notification Time: 05:07 [ET] Event Date: 05/05/2010 Event Time: 05:00 [EDT] Last Update Date: 05/05/2010
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(xiii) - LOSS COMM/ASMT/RESPONSE	Person (Organization): DAVE PASSEHL (R3DO)

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

Event Text

TECHNICAL SUPPORT CENTER OUT OF SERVICE FOR PREVENTIVE MAINTENANCE

"On May 5, 2010, at 0500 hours EDT, Fermi 2 removed the Technical Support Center (TSC) from operation to facilitate routine preventive maintenance on the facilities' heating ventilation and air-conditioning system. During this work, which is expected to last approximately 12 hours, the TSC will be unavailable. In the event TSC activation is necessary, the Emergency Operations Facility (EOF) will be used for the TSC function. Activation and use of the EOF as a backup for the TSC is included in Fermi 2's Radiological Emergency Response Preparedness Plan. The Emergency Call Out System (ECOS) is designed to facilitate contacting TSC personnel to respond directly to the EOF in the event of an emergency. Fermi 2 is making this notification in accordance with 10 CFR 50.72(b)(3)(xiii). Fermi 2 will notify the NRC upon completion of this work. Fermi 2 has notified the NRC Resident Inspector."

Fuel Cycle Facility	Event Number: 45917
Facility: PORTSMOUTH GASEOUS DIFFUSION PLANT RX Type: URANIUM ENRICHMENT FACILITY Comments: 2 DEMOCRACY CENTER 6903 ROCKLEDGE DRIVE BETHESDA, MD 20817 Region: 2 City: PIKETON State: OH County: PIKE License #: GDP-2 Agreement: Y Docket: 0707002 NRC Notified By: KEITH VANDERPOOL HQ OPS Officer: CHARLES TEAL	Notification Date: 05/11/2010 Notification Time: 17:48 [ET] Event Date: 05/11/2010 Event Time: 17:09 [EDT] Last Update Date: 05/11/2010
Emergency Class: NON EMERGENCY 10 CFR Section: OTHER UNSPEC REQMNT	Person (Organization): KATHLEEN O'DONOHUE (R2DO) MARISSA BAILEY (NMSS)

Event Text

OFFSITE NOTIFICATION

"[On] May 10, 2010 at 1710 hours a USEC (United States Enrichment Corporation) Protective Force Officer entered the X-104 Police Headquarters Weapon Cleaning

Area to perform cleaning maintenance on his assigned weapon. The officer began to disassemble the weapon [while] pointing the weapon in a safe direction. He pulled the trigger to release the slide and the weapon discharged (this action is required to remove the slide from this type of weapon). The officer in question was the only person in the room at the time of the incident. The officer was not struck by the discharge, however he did sustain minor powder burns to his hand. The area and weapon was immediately secured by Protective Force Management personnel. USEC Fire/EMS were summoned to the incident scene where the officers injury was evaluated at which time the officer refused treatment. Personal statements were collected from all personnel in the immediate area. A critique was conducted. The Protective Force Manager has generated a Long Term Order to provide compensatory actions to prevent recurrence of an accidental discharge of a weapon due to the same or similar circumstances. An internal investigation as well as an independent investigation are currently in progress.

"This event was reportable to the Department of Energy per XP2-RA-RE1001 6.2.1, which requires a formal notification. This formal notification constitutes the need to report this event to the Nuclear Regulatory Commission within four (4) Hours per criteria listed in procedure UE2-RA-RE1030, Appendix 'D', P."

Power Reactor	Event Number: 45918
Facility: PERRY Region: 3 State: OH Unit: [1] [] [] RX Type: [1] GE-6 NRC Notified By: DAVE DUESING HQ OPS Officer: BILL HUFFMAN	Notification Date: 05/12/2010 Notification Time: 03:12 [ET] Event Date: 05/11/2010 Event Time: 23:18 [EDT] Last Update Date: 05/12/2010
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(2)(i) - PLANT S/D REQD BY TS 50.72(b)(2)(iv)(B) - RPS ACTUATION - CRITICAL	Person (Organization): MARK RING (R3DO)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	M/R	Y	100	Power Operation	0	Hot Shutdown

Event Text

MANUAL REACTOR SCRAM DUE TO LOSS OF CONTROL ROD DRIVE CHARGING WATER HEADER PUMPS

"On May 11, 2010, at approximately 2318 hours, a manual Reactor Protection System (RPS) actuation was initiated as required by Technical Specification (TS) Limiting Condition for Operation (LCO) 3.1.5 'Control Rod Scram Accumulators.' Control Rod Drive (CRD) charging water header pressure was less than 1520 psig (i.e., no CRD

pumps operating) and there were multiple accumulator faults on withdrawn control rods. At the time of the event, the plant was in Mode 1 at 100% power. All control rods are inserted into the core and the plant is currently stable, in Mode 3 (Hot Shutdown) with reactor pressure at approximately 930 psig. No Emergency Core Cooling Systems were required or utilized to respond to the event and there were no other 10 CFR 50.72 reportable actuations. Reactor coolant level is being maintained in its normal band by the feedwater system and decay heat is being removed by the condenser. The plant is in a normal electrical line-up with all three Emergency Diesel Generators operable and available if needed.

"The cause of the event initiator, an invalid Division 2 Loss of Coolant Accident (LOCA), i.e., High Drywell Pressure/Low Reactor Vessel Water Level, signal, is currently under investigation. Prior to the manual RPS Actuation, the invalid LOCA signal resulted in invalid actuations of Division 2 equipment and systems including, the Division 2 Emergency Diesel Generator (EDG), (which started but did not load onto the bus), Low Pressure Coolant Injection B and C subsystems (which started the pumps but did not inject into the vessel), discharge of the Suppression Pool Makeup subsystem B into the suppression pool, startup of the Control Room Emergency Recirculation subsystem B, and isolation of Group 2B Containment isolation valves which included the Nuclear Closed Cooling System Containment Return Isolation valve that was not already closed. The affected equipment is being restored in accordance with plant procedure. The NRC Resident Inspector has been notified."

The licensee experienced an instrumentation rack loss of power which appears to have resulted in the inadvertent Division 2 initiation. The initiator of this event also led to a loss of power to both control rod drive charging water header pumps resulting in charging water header pressure less than required and related accumulator faults which placed the licensee in a technical specification required shutdown condition. The action statement allows only 20 minutes to restore the condition which was insufficient time for the licensee to correct the condition so a manual scram was initiated from 100% power. The scram was characterized as an uncomplicated scram and all system responses (not related to the initial instrument fault) functioned as required.

Fuel Cycle Facility	Event Number: 45925
Facility: PORTSMOUTH GASEOUS DIFFUSION PLANT RX Type: URANIUM ENRICHMENT FACILITY Comments: 2 DEMOCRACY CENTER 6903 ROCKLEDGE DRIVE BETHESDA, MD 20817 (301)564-3200 Region: 2 City: PIKETON State: OH County: PIKE	Notification Date: 05/13/2010 Notification Time: 19:43 [ET] Event Date: 05/13/2010 Event Time: 16:02 [EDT] Last Update Date: 05/13/2010

License #: GDP-2 Agreement: Y Docket: 0707002 NRC Notified By: GARY SALYERS HQ OPS Officer: DONALD NORWOOD	
Emergency Class: NON EMERGENCY 10 CFR Section: OTHER UNSPEC REQMNT	Person (Organization): KATHLEEN O'DONOHUE (R2DO) KING STABLEIN (NMSS)

Event Text

NOTIFICATION OF OHIO ENVIRONMENTAL PROTECTION AGENCY DUE TO EXCEEDING NPDES DISCHARGE PERMIT VALUE

"At 1602 hrs on 5/13/2010 the Plant Shift Superintendent's (PSS) office was notified by USEC Environmental Management that NPDES [National Pollutant Discharge Elimination System] permit maximum concentration limit for fecal coliform at the X-6619 (Sewage Treatment Facility) discharge (NPDES Outfall 003) was exceeded. Sample results from 5/12/2010 revealed the permit limit of 2000 colonies / 100 ml was exceeded which resulted in a notification to the Ohio Environmental Protection Agency (OEPA).

"Procedure UE2-RA-RE1030, appendix D, Section Q (Miscellaneous) which states: 'USEC shall notify NRC of any event or situation, related to the health and safety of the public or on-site personnel, or protection of the environment, for which a news release is planned or notification to other government agencies has been made or will be made. Such an event may include an on-site fatality or inadvertent release of radioactively contaminated materials.'"

The licensee notified the NRC Resident Inspector.
