

To: Jim Mehl, ERU Supervisor
From: Zack Clayton, Rad Coord
Subject: April Monthly Report
Date: May 17, 2010

Beans:

Training:	2
Drills	1
Meetings:	3
Technical Assistance:	1
Public Assistance:	1

Web Page Hits: There were 53 page views for April

Coming Attractions:

WG	5/7
WG	6/10
After Action	6/10
WG	7/7
URSB	7/12

Facility Updates:

Davis-Besse Nuclear Power Station

Davis-Besse continues in the outage while the axial cracks in the control rod drive nozzles and associated J-welds are examined and repaired. A team of metallurgical experts is working on this issue from both NRC and Industry.

Tritium Monitoring results for groundwater:

Shallow well 105A continues to trend upward. February reading was 3906 pico curies per liter (tritium). March reading was 4158 pico curies per liter. This is well below the EPA standard for drinking water which is 20,000 pico curies per liter. It continues to be assumed that the upward trend in 105A is due to migration of tritium adsorbed on sediment from a leak in an underground pipe that occurred in October 2008. A sampling of all the groundwater monitoring wells to include 105A will be conducted in May.

Perry Nuclear Power Plant

On April 1, Perry Nuclear Power Plant has returned to 100% power after a fire in one of three reactor feedwater pumps caused the plant to reduce power to approximately 70%.

One of the three pumps was manually tripped after a fire was discovered in the turbine lube oil system on March 28. The motor-driven pump, which serves as the back-up to the two steam driven pumps started as designed and the reactor recirculation system lower power as expected. The fire that started at 6:18 pm was reported to be out at 9:22 pm.

The root cause was identified as two leaks in the lube oil system. Repairs were made and the steam driven feedwater pump has returned to service.

Perry Nuclear Power Plant was doing routine testing of electrical control systems and discovered that a control logic circuit was malfunctioning. This logic controls a set of 5 valves that isolate the containment in case of a loss of coolant accident. Perry informed the Nuclear Regulatory Commission of this at 6:11 am, Tuesday, April 6. Part of the operating conditions for Perry (and any licensed plant) are technical specifications that set rules for the length of time a repair may take before the plant must take action. The Technical Specifications for this repair are 6 hours to restore the logic circuit to functional operation. If the plant cannot repair the circuit before 12:05 pm the plant must be in hot shutdown. The plant may start reducing power as early as 9:00 am to shut the plant down in a controlled operation.

Perry has made the necessary electrical repairs to return the 5 containment isolation valves to operability. They exited the technical specification between 9 and 11:00 am on April 6. The plant is currently operating at 100% power. See event number 45815.

Beaver Valley Power Station

Beaver Valley Unit I

Beaver Valley Unit I operated at full power until April 19 when Unit 1 of the Beaver Valley Power Station downpowered to conduct routine maintenance of the condenser. The Unit went to 82% power at 8:15 Monday April 19. Full power was restored on April 30.

Beaver Valley Unit II

Beaver Valley Unit II operated at full power for April.

Fermi II

Fermi operated at full power for April.

Portsmouth Gaseous Diffusion Plant

There were no reports for Portsmouth in April.

Activity:

- 4/7 Working Group and After Action meeting at OEMA. Most of the meeting was in preparation for the URSB meeting. The After Action meeting focused on the issues that came up during the Dry run for Beaver Valley.
- 4/12 URSB meeting covering NRC oversight of the FENOC plants and a discussion of the NUREG 0645 Supplement 3 draft. The second half of the meeting covered Utility reports.
- 4/20 Beaver Valley full scale evaluated exercise. The state received two ARCAs and a deficiency on this exercise. The ARCAs were in information flow from the plant and protective action decision making. The deficiency was on the field monitoring team for KI.
- 4/27-29 Radiological Assessment Team training at OSU Stone Laboratory.

Office Issues:

None at this time.

NRC Reports and Statistics:

April operating power levels

Date	BV1	BV2	DB	Fermi2	Perry	
1	100	100	097	100	DB - defueled	
5	100	100	0	100	100	
12	100	100	0	100	100	Perry - CIRC WATER PUMP REPAIRS STILL IN PROGRESS
19	82	100	0	100	100	BV1 - WATERBOX MAINTENANCE
26	82	100	0	100	100	
30	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>

To access these documents use the ADAMS Accession number listed with the title.

This is in the format of : ML#####

Or, for Information notices:

<http://www.nrc.gov/reading-rm/doc-collections/gen-comm/info-notices/2010/> Followed by the Adams #: ML#####

Forthcoming Teleconference With FirstEnergy Nuclear Operating Company, Beaver Valley Power Station, Unit Nos. 1 And 2 (TAC Nos. MC4665 And MC4666)
ADAMS Accession: ML100840756

Perry Nuclear Power Plant, Unit No. 1 - Closure Letter for Bulletin 2007-01 "Security Attentiveness" (TAC No. MD7635) ADAMS Accession No.: ML100740642

Beaver Valley - Open House and Annual Assessment Meeting, May 4, 2010
ADAMS Accession No. ML100960041

PERRY 02/05/10 Emergency Preparedness Exercise
ADAMS Accession# ML100361255

FERMI - NRC INSPECTION REPORT 050-00016/10/08(DNMS) - ENRICO FERMI UNIT 1. ADAMS Accession Number ML100970691

Fermi: Fatigue Management Program Inspection
ADAMS Accession No. ML100980648

Davis-Besse: Fatigue Management Program Inspection
ADAMS Accession No. ML100980621

Public Meeting to Discuss the 2009 End-of-Cycle Plant Performance Assessment for Fermi Power Plant Unit 2 - ADAMS # ML100990156

Davis-Besse Nuclear Power Station, Unit No. 1 - Request for Additional Information
Adams Accession No. ML100980486

Information Notice 2010-07, Welding Defects In Replacement Steam Generators, dated April 5, 2010 ADAMS # ML100070106

Davis-Besse Nuclear Power Station, Unit 1 - Corrections of Typographical Errors Re: Amendment No. 281 and Safety Evaluation- ADAMS Accession no. ML100970549

Davis-Besse Nuclear Power Station Unit 1 - Summary of March 18, 2010, Conference Call Regarding The Spring 2010 Refueling Outage Steam Generator Inservice Inspections (TAC No. ME3427) ADAMS Accession No. ML100970031

Information Notice 2010-08, Welding and Nondestructive Examination Issues, dated April 9, 2010 ADAMS # ML091670177

BEAVER VALLEY POWER STATION UNIT 2: SENIOR REACTOR AND REACTOR OPERATOR INITIAL EXAMINATIONS ADAMS Accession No. ML101040650

Information Notice 2010-09, Importance of Understanding Circuit Breaker Control Panel Indications, dated April 14, 2010. ADAMS # ML101020184

Beaver Valley Power Station, Unit No. 2 - Request for Withholding Information From Public Disclosure (TAC No. ME1079) ADAMS Accession No.: ML100840784

Beaver Valley Power Station - NRC Integrated Inspection Report 05-334/2010002 and 05-412/2010002 ADAMS Accession No. ML101130145

Beaver Valley, Unit Nos. 1 and 2; Davis-Besse Nuclear Power Station, Unit No. 1; and Perry Nuclear Power Plant, Unit No. 1 - Request for additional information regarding the FirstEnergy Nuclear Operating Company Exemption (10 CFR Part 26)- ADAMS Accession no. ML101020130

Davis-Besse Withdrawal of NCV Ltr 04/26/2010
ADAMS Accession No. ML101160221

Fermi Power Plant Unit 2 Integrated Inspection Report 05000341/2010002 – ADAMS # ML101170629

DAVIS-BESSE NUCLEAR POWER STATION INTEGRATED INSPECTION REPORT 05000346/2010-002 - ADAMS # ML101170741

Fermi IR 2010-006 CDBI ADAMS Accession No. ML101180295

ERRATA--FERMI 2010-006DRS (CDBI) ADAMS ACCESSION#ML101200553

Davis-Besse: EA-09-332 Notice of Violation ADAMS Accession No. ML101200649

NUCLEAR WASTE: State regulators sue DOE over repository fees (04/05/2010)

Katherine Ling, E&E reporter

The nation's state utility regulators are taking legal action against the Energy Department to stop the government from collecting fees to manage spent nuclear fuel. The National Association of Regulatory Utility Commissioners filed a [lawsuit](#) Friday in the U.S. Circuit Court of Appeals for the District of Columbia seeking to overturn DOE's decision in October not to suspend payments into the Nuclear Waste Fund. NARUC asked DOE last July to suspend the one-tenth-cent-per-kilowatt-hour fee paid by customers of nuclear-powered electricity because the Obama administration planned to cancel the waste repository at Yucca Mountain, Nev., and establish a "blue ribbon" commission to consider alternative waste disposal options.

"There is no clearly defined program for disposal of spent nuclear fuel and high-level radioactive waste. Therefore, there is no basis to assess the adequacy of fees that continue to be paid into the Nuclear Waste Fund," the NARUC letter said. "If we are going to pause to reconsider disposal options, we feel it is also appropriate to pause the fee payments."

Congress established the Nuclear Waste Fund to finance the management and ultimate disposal of the nation's commercial nuclear waste and later signed contracts with utilities that committed to taking the spent fuel away beginning in 1998. DOE has long since missed that deadline, and the government has paid hundreds of millions of dollars

in settlement and legal fees to U.S. utilities over the partial breach of contract. Meanwhile, customers of nuclear power have continued to pay fees on their electricity bills into the Nuclear Waste Fund, which is estimated to be worth about \$25 billion on paper. But the money is not actually in a bank account somewhere. Congress voted to include the waste fund in the general spending fund, so it is used to offset discretionary appropriations every year. Stopping the fee payment would drop annual spending by at least \$770 million.

DOE is required by law to review the nuclear waste fee every year to decide if it is appropriate to finance the eventual transportation and disposal of the nation's nuclear waste. DOE determined last July that the current waste fee was adequate and "essential" for meeting the government's obligations, the agency said in its rejection letter to NARUC.

"The Department of Energy has consistently determined that the current fee of one-tenth cent per kilowatt hour is adequate to cover the total system life cycle costs of disposing of the commercial spent nuclear fuel and high-level radioactive waste, using assumptions in place at the time," said Christopher Kouts, acting director of DOE's Civilian Radioactive Waste Management Office.

When pressed by lawmakers on suspending the nuclear waste fee, Energy Secretary Steven Chu has repeated DOE's findings to keep the fee in place but that DOE would review the fee's adequacy every year.

The Nuclear Energy Institute, which represents the nation's nuclear industry, previously has said it would consider taking legal action on the fee issue and was copied on the NARUC appeal filing. NEI said it did not have a comment on the matter at this time. NARUC also filed last month to intervene against DOE's motion to withdraw its Yucca Mountain license application with prejudice from the Nuclear Regulatory Commission.

[Click here](#) to read the lawsuit.

Cleanup agreement reached at former gaseous diffusion plant in Piketon

Site to be decontaminated and decommissioned, to enable potential redevelopment
By Staff Report | The Tribune

Published Thursday, April 15, 2010

PIKETON — Ohio EPA and the United States Department of Energy (DOE) have reached mutual agreement about how to address the future decontamination and decommissioning (D&D) at the former DOE Portsmouth Gaseous Diffusion Plant (GDP) located in Piketon (Pike County). D&D refers to a variety of activities, such as demolishing structures, dismantling building contents and foundations and deactivating equipment.

Production of enriched uranium ceased at the facility in 2001. The D&D agreement addresses this and other hazardous and industrial wastes, substances and pollutants (e.g., solvents, metals, PCBs, asbestos) at a subset of the entire facility, namely the GDP-related structures and equipment located on DOE's property.

The agreement provides for Ohio EPA's oversight of the D&D and will govern DOE's performance of the D&D activities at the site under the terms of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, better known as Superfund.

Ohio EPA will provide input and oversee how the D&D work will be accomplished at the plant, how waste and demolition debris will be managed and how potential

environmental releases will be prevented. Additionally, Ohio EPA will maintain its authority under the existing permits, authorizations and orders to which the facility is already subject, including the Resource Conservation and Recovery Act (RCRA) consent decree and permit.

The existing consent decree, signed in 1989 by Ohio EPA and DOE, governs the continuing cleanup of ground water, soils, sediments, surface water, air and waste management units (e.g., unpermitted landfills, lagoons, etc.) at the facility.

"This clean up at the former Portsmouth Gaseous Diffusion complex is setting the stage for long-term site redevelopment and economic enhancement for the region," said Governor Ted Strickland. "What's more, this multi-billion dollar investment will bring with it many jobs over the coming decade."

"Ohio EPA is dedicated to cleaning up contaminated sites in Ohio, making them safe again and returning them to productive use," said Ohio EPA Director Chris Korleski.

"Our Agency has been eagerly anticipating this cleanup at the former Portsmouth Gaseous Diffusion Plant for many years and actively negotiating with DOE to define a mutually agreeable order so we can move the cleanup process forward. The agreement we've reached is a positive step forward for the site and the state."

"This is an example of a federal and state partnership that will accelerate cleanup work while driving critical economic development in Southern Ohio," said Senator Sherrod Brown. "This represents a renewed federal commitment to Piketon and the surrounding region. These federal funds will go a long way toward ensuring clean water, clean air, and clean land while also creating jobs."

The director's orders require DOE to:

- Develop a remedial investigation/feasibility study (RI/FS) and remedial design/remedial action (RD/RA) for process buildings and complex structures at the former GDP;
- Develop an engineering evaluation/cost analysis (EE/CA) and removal actions for support structures and other buildings no longer in use at the former GDP;
- Evaluate site-wide waste and demolition debris disposition alternatives, including secure on- and off-site options for managing demolition waste using the RI/FS and RD/RA process;
- Establish and implement a community relations plan to address how DOE will coordinate its activities under the director's orders with the existing community advisory board and other local stakeholders and the public; and
- Conduct public meetings on any proposed plan and allow the public the opportunity to review and comment on proposed plans and EE/CAs, including waste disposition.

The RI is designed to define the type and extent of contamination in the buildings and structures; define risks to human health and the environment; and establish criteria for cleanup.

The FS evaluates the potential cleanup alternatives and their applicability and effectiveness, based on data collected during the RI. The RD/RA refers to the actual design and implementation of the remedies, including D&D and waste disposition.

The director's orders, the 1989 consent decree and related documents are available for review at Ohio EPA's Southeast District Office, 2195 Front Street, Logan, by first calling or e-mailing project coordinator Maria Galanti at (740) 380-5289 or

maria.galanti@epa.state.oh.us to schedule an appointment. Issuance of these orders can be appealed to the Ohio Environmental Review Appeals Commission (ERAC).

Appeals often must be filed within 30 days of issuing the final action; therefore, Ohio

EPA recommends that anyone wishing to file an appeal contact ERAC at (614) 466-8950 or www.erac.ohio.gov for more information.

NUCLEAR POWER: NRC requests study of cancer risks near reactors (04/07/2010)

Katherine Ling, E&E reporter

The Nuclear Regulatory Commission today requested a study of cancer risks faced by people who live near nuclear power plants, the first such federal study in 20 years. The agency currently relies on a 1990 study by the National Institutes of Health and National Cancer Institute that found no increased risk of cancer deaths for people living near plants that opened before 1982. That report was based on an analysis of 900,000 cancer deaths from 1950 to 1984 in 107 counties near 62 nuclear power plants. The commission is now asking the National Academy of Sciences to evaluate cancer diagnosis rates based on the old and new data and examine areas around the power plants in smaller tracts.

The commission and NAS's Nuclear and Radiation Studies Board will discuss the request at the end of this month. NRC says it would like the study to begin this summer. Several studies, including one done by the German Federal Office for Radiation Protection two years ago, have indicated there may be an increase in children's cancer near nuclear power plants. And Rep. Ed Markey (D-Mass.) called on NRC to conduct a cancer study in 2005.

The nuclear industry maintains that reactors' levels of radiation are below normal "background" levels.

A spokesman for the Nuclear Energy Institute welcomed the study, saying "it will deliver updated data from the 1990 one" and that "NAS will generate a good and helpful product."

NUCLEAR POWER: Bipartisan House bills back development of modular reactors (04/29/2010)

Katherine Ling, E&E reporter

Lawmakers introduced two bipartisan bills yesterday aimed at promoting the development of small, modular nuclear reactors that would lower the cost of nuclear power.

One bill, [H.R. 5163](#), directs the Department of Energy's secretary to conduct research into lowering the cost of reactor systems, including developing advanced technology for small modular reactors, manufacturing and construction, licensing process and "enhanced proliferation controls."

The second, [H.R. 5164](#), requires DOE to establish a private-public partnership to develop a standard design for two reactors with a capacity of less than 300 megawatts. The bill specifies that one design be no larger than 50 megawatts. The designs would need to be certified by the Nuclear Regulatory Commission by 2018 and receive a construction and operating license by 2021.

Both bills were introduced by Rep. Jason Altmire (D-Pa.) and have almost 20 co-sponsors, including Reps. John Salazar (D-Colo.), Chris Murphy (D-Conn.) and Joe Barton (R-Texas), ranking member of the Energy and Commerce Committee. Sens. Jeff Bingaman (D-N.M.), Lisa Murkowski (R-Alaska) -- chairman and ranking

member of the Energy and Natural Resources Committee, respectively -- and Mark Udall (D-Colo.) introduced parallel bills in the Senate last year (*E&E Daily*, Dec. 14, 2009).

Interest in small reactors has jumped in recent few years as the cost for the average 1,000-megawatt reactor has risen to about \$10 billion. Moreover, electric grids in other countries cannot handle the larger reactors, and energy-intensive industries maintain small-scale reactors could provide reliable electricity with less price volatility (*Greenwire*, Sept. 9, 2009).

Energy Secretary Steven Chu has repeatedly said small reactors could be the technology that boosts the United States back into a world leadership role in nuclear power technology.

The Nuclear Energy Institute included the issue as a legislative priority in a white paper in October, and Sens. John Kerry (D-Mass.), Lindsey Graham (R-S.C.) and Joe Lieberman (D-Conn.) included support for modular reactors in their framework for climate legislation.

But critics -- including the Institute for Energy and Environmental Research -- note that small modular reactors are still not cost-effective, there are considerable concerns about proliferation, and they still produce highly radioactive waste that must be disposed of.

Power Reactor	Event Number: 45815
Facility: PERRY Region: 3 State: OH Unit: [1] [] [] RX Type: [1] GE-6 NRC Notified By: DOUGLAS SHORTER HQ OPS Officer: HOWIE CROUCH	Notification Date: 04/06/2010 Notification Time: 06:11 [ET] Event Date: 04/05/2010 Event Time: 22:50 [EDT] Last Update Date: 04/06/2010
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(v)(C) - POT UNCNTRL RAD REL	Person (Organization): HIRONORI PETERSON (R3DO)

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

LOSS OF SAFETY FUNCTION TO CONTROL THE RELEASE OF RADIOACTIVE MATERIAL

"At 2145 [EDT] hours on April 5, 2010, a loss of electrical power to the Division 1 Loss of Coolant Accident (LOCA) initiation logic occurred. Control room annunciators for 'Residual Heat Removal (RHR) Out of Service', 'Reactor Core Isolation Cooling (RCIC) Out of Service', and 'RCIC/RHR D2 to D1 00 File Power Loss' were received. At 2250 hours, the Control Room staff determined a loss of isolation function existed. The operators entered Technical Specification (TS) action statements for Emergency Core Cooling System Instrumentation (TS

3.3.5.1), RCIC Instrumentation (TS 3.3.5.2), and Primary Containment and Drywell Isolation Instrumentation (TS 3.3.6.1). The power loss was caused by a blown fuse which occurred during surveillance testing. The surveillance test was suspended and plant personnel commenced troubleshooting and investigation efforts. A recovery plan is being developed to back out of the surveillance test and replace the fuse to re-energize the logic, while ensuring the plant does not experience an undesirable actuation of the logic.

"The power loss caused five containment isolation valves to lose automatic isolation function. These valves have no associated inboard automatic isolation valve powered by Division 2. As a result of the power loss, the valves cannot automatically close on demand to isolate and therefore cannot perform their automatic function to isolate the containment.

"This event is being reported in accordance with 10 CFR 50.72(b)(3)(v)(C) as an event or condition that at the time of discovery could have prevented the fulfillment of the safety function of structures or systems that are needed to control the release of radioactive material.

"The NRC Resident Inspectors have been notified."

The licensee entered a 12-hour shutdown action statement for the loss of containment isolation function as a result of the power failure.

Power Reactor	Event Number: 45880
Facility: PERRY Region: 3 State: OH Unit: [1] [] [] RX Type: [1] GE-6 NRC Notified By: DOUGLAS SHORTER HQ OPS Officer: DONG HWA PARK	Notification Date: 04/29/2010 Notification Time: 08:31 [ET] Event Date: 04/29/2010 Event Time: 08:30 [EDT] Last Update Date: 04/29/2010
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(xiii) - LOSS COMM/ASMT/RESPONSE	Person (Organization): DAVID HILLS (R3DO)

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

PLANT INTEGRATED COMPUTER SYSTEM OUTAGE DUE TO SCHEDULED MAINTENANCE

"Beginning at approximately 0830 hours EDT on April 29, 2010, Perry Plant personnel will be taking the plant Integrated Computer System (ICS) out of service for planned maintenance. During the time ICS is out of service, the Safety Parameter Display System (SPDS), the

Emergency Response Data System (ERDS), and the automatic mode calculation of the Computer Aided Dose Assessment Program (CADAP) will be unavailable. The computer outage is scheduled for six hours.

"In the event of an emergency, plant parameter data will be orally transmitted to the facilities through the Status Board Ring Down circuit with back-up by the Private Branch Exchange, Off-Premise Exchange, and various redundant intra-facility circuits throughout the emergency facilities. The dose assessment function will be maintained during the out of service time period by manual input of data into CADAP and, if required, by manual calculation. The ability to open and maintain an 'open line' using the Emergency Notification System will not be affected and will be the primary means of transferring plant data to the NRC as a contingency until the ERDS can be returned to service during the period of unavailability.

"This event is being reported in accordance with 10 CFR 50.72(b)(3)(xiii), as a condition that results in a major loss of offsite communications capability. A follow-up notification will be made when the maintenance activities are completed and the equipment is restored."

The NRC Resident Inspector has been notified.

* * * UPDATE AT 1036 EDT ON 04/29/10 FROM DOUGLAS SHORTER TO CHARLES TEAL * * *

The plant ICS has been returned to service and the system is functioning normally. The NRC Resident Inspector has been notified.

Notified R3DO (Hills).
