

To: Jim Mehl, ERU Supervisor  
From: Zack Clayton, Rad Coordinator  
Subject: May Monthly Report  
Date: June 9 , 2013

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## Beans

Training: 0  
Drills: 0  
Meetings: 2  
Technical Assistance: 4  
Public Assistance: 1

Web Page Views: There were 13 page views in May.

## Coming Attractions

6/10 Working Group  
6/4-6 RAT Training  
6/17 BV HAB Exercise  
7/ Working Group  
7/14 URSB meeting in Lake County  
7/24 NEPAC

## Facility updates

### **Davis-Besse Nuclear Power Station**

Davis-Besse was in a refueling outage until May 8.

At 1456 on May 5 a control rod high temperature alarm during start up required a manual shutdown of the reactor. Manual reactor shutdowns must be reported to the U.S. Nuclear Regulatory Commission (NRC) within 8 hours of discovery of the event. At 6:30 PM May 8 Davis-Besse made an additional notification to the when staff identified another instance of the reactor having to be manually shutdown during testing. The plant is operating normally following it's synchronization to the electrical grid early on May 8. See event No. 50086.

At 2:52 am on May 26, the control room annunciators malfunctioned resulting in the inability to receive more than one station alarm. The station computer alarms and Safety Parameter Display System was functional during the incident. The annunciators were restored at 5:16 am. See event No. 50143.

## **Perry Nuclear Power Plant**

Perry operated for May at full power with some fluctuations for maintenance and testing.

### **Beaver Valley Power Station**

Each operating unit has two un-fused DC control circuits for non safety-related DC motors which are routed from the turbine building through other separate fire areas including the Control Room. Compensatory fire watch measures have been implemented until an analysis of the correction can be made. See Event number 50075.

### **Beaver Valley Unit I**

Unit I operated at full power for the month.

### **Beaver Valley Unit II**

Unit II started May in a refueling outage. The plant returned to full power May 26.

On 5/01/2014 it was determined that the ultrasonic (UT) examinations performed on 1 of the 66 penetrations of the reactor vessel head would fail. This penetration will require repair prior to returning the vessel head to service. There was no evidence of leakage on the top of the reactor vessel head. The UT examinations are done on a regular basis to find potential flaws before they grow to a size that compromise the reactor vessel head pressure boundary. Currently 52 have been examined, with 51 satisfactory; all of the penetrations will be examined during the current refueling outage. Repairs to the penetration will be completed during the outage. See Event number 50079.

At 9am on May 20, the Unit 2 reactor shutdown unexpectedly as the unit was preparing to synchronize with the electrical grid after the refueling outage. The reason for the reactor trip was oscillating water level in a steam generator. See Event number 50124.

## **DTE**

### **Fermi II**

Fermi II operated in May at full power.

### **Fermi III**

Fermi III continues as a documentation evaluation.

## Portsmouth Enrichment Plant

There were no event reports for the sites at Portsmouth for May. But there were ADAMS documents submitted.

### Activity

- 5/7 Working Group. Agency updates, activity snapshots, and plant reports.
- 5/7 NARR webinar with working group. Lessons learned and best practices from recent HAB exercises.
- 5/27 BV 2<sup>nd</sup> dry run. This was run as a communications test and lasted 1½ hours. Ohio EPA did not participate.

### Office Issues

A copy of RASCAL 4.3 has been installed.  
The Letter of Agreement for the REP Plan was signed.

## Statistics, NRC Reports, News, and ADAMS References

### Operating Power Levels

May

Date	BV1	BV2	DB	Perry	Fermi2	
1	100	0	0	100	98	DB in refueling outage, SG replacement
5	100	0	0	100	98	BV in refueling outage
8	100	0	26	100	100	
12	100	0	100	100	100	
16	100	0	100	94	100	Perry – maintenance and testing
17	100	0	100	64	100	
18	100	0	100	72	100	
19	100	0	100	94	100	
20	100	18	100	82	100	
21	100	0	100	96	100	BV2 tripped while synchronizing to grid
22	100	0	100	84	100	
24	100	24	100	85	100	BV2 synchronizing to grid
26	100	100	100	95	100	

**Plant Reports**

Power Reactor	Event Number: 50075
Facility: BEAVER VALLEY Region: 1 State: PA Unit: [1] [2] [ ] RX Type: [1] W-3-LP,[2] W-3-LP NRC Notified By: ROBERT KRISTOPHEL HQ OPS Officer: JEFF ROTTON	Notification Date: 04/30/2014 Notification Time: 16:59 [ET] Event Date: 04/30/2014 Event Time: 11:40 [EDT] Last Update Date: 04/30/2014
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(ii)(B) - UNANALYZED CONDITION	Person (Organization): WILLIAM COOK (R1DO)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	N	Y	100	Power Operation	100	Power Operation
2	N	N	0	Defueled	0	Defueled

**Event Text**

POSTULATED HOT SHORT FIRE EVENT COULD ADVERSELY IMPACT SAFE SHUTDOWN EQUIPMENT

"Based on a review of industry operating experience, it was identified that each unit has two un-fused DC control circuits for non safety-related DC motors which are routed from the turbine building through other separate fire areas including the Control Room. The DC breakers used to protect the motor power conductors are insufficient to protect the control conductors for these circuits. It is postulated that a fire induced short in one fire area could adversely impact safe shutdown equipment by overheating the cable and causing a secondary fire in other fire areas where the cable is routed. At Unit 1, cables for the affected circuits are routed in the Turbine Building, Cable Spreading Area and Control Room. At Unit 2, cables for the affected circuits are routed in the Turbine Building, Normal Switchgear, Service Building Cable Tray Area, Cable Vault, Instrument Relay Room, Control Building West Communication Room, Control Building Cable Spreading Area and Control Room.

"The postulated secondary fires or cable failures are outside the assumptions of each unit's fire protection analysis. A preliminary investigation of the issue indicates that existing fire protection safe shutdown procedures could be used to safely shut down the plant if needed. This condition is reportable as an 8-hour report in accordance with 10 CFR 50.72(b)(3)(ii)(B). Interim compensatory measures will be implemented for affected areas of the plant.

"The NRC Resident Inspector has been notified."

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Power Reactor	Event Number: 50079
Facility: BEAVER VALLEY Region: 1 State: PA Unit: [ ] [2] [ ] RX Type: [1] W-3-LP,[2] W-3-LP NRC Notified By: MATT ENOS HQ OPS Officer: JEFF ROTTON	Notification Date: 05/01/2014 Notification Time: 18:12 [ET] Event Date: 05/01/2014 Event Time: 16:10 [EDT] Last Update Date: 05/01/2014
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(ii)(A) - DEGRADED CONDITION	Person (Organization): WILLIAM COOK (R1DO)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
2	N	N	0	Defueled	0	Defueled

#### Event Text

#### DEGRADED CONDITION DISCOVERED ON REACTOR VESSEL HEAD CONTROL ROD DRIVE PENETRATION

"On 5/01/2014 during the Beaver Valley Power Station Unit No. 2 (BVPS-2) refueling outage, it was determined that the results of planned ultrasonic (UT) examinations performed on one of the 66 penetrations of the reactor vessel head would not meet the applicable acceptance criteria. This penetration will require repair prior to returning the vessel head to service. The indication was not through wall and there was no evidence of leakage based on inspections performed on the top of the reactor vessel head. The examinations were being performed to meet the requirements of 10CFR50.55a(g)(6)(ii)(D) and ASME Code Case N-729-1, to find potential flaws/indications well before they grow to a size that could potentially jeopardize the structural integrity of the reactor vessel head pressure boundary. Currently 52 of 66 penetrations have been examined, with 51 satisfactory. All of the penetrations will be examined during the current refueling outage.

"The plant is currently shutdown and in a mode undefined [Defueled] and the reactor vessel head is not currently installed. Repairs are currently being planned and will be completed prior to startup.

"This is reportable pursuant to 10CFR50.72(b)(3)(ii)(A) since the as found indications did not meet the applicable acceptance criteria referenced in ASME Code Case N-729-1 to remain in-service without repair.

"The NRC Resident Inspector has been notified."

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Power Reactor	Event Number: 50086
Facility: DAVIS BESSE Region: 3 State: OH Unit: [1] [ ] [ ] RX Type: [1] B&W-R-LP NRC Notified By: NICK BUEHLER	Notification Date: 05/05/2014 Notification Time: 21:17 [ET] Event Date: 05/05/2014 Event Time: 14:56 [EDT] Last Update Date: 05/05/2014

HQ OPS Officer: DONALD NORWOOD	
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(iv)(A) - VALID SPECIF SYS ACTUATION	Person (Organization): KENNETH RIEMER (R3DO)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	M/R	N	0	Hot Standby	0	Hot Standby

**Event Text**

MANUAL REACTOR SCRAM WITH ROD MOTION WHILE SHUTDOWN

"During planned testing of the Control Rod Drive (CRD) system, the reactor trip breakers were opened via the manual reactor trip push buttons to de-energize a CRD motor in response to a high temperature. The partially withdrawn control rods fully inserted and all other rods remained in their initial positions.

"This manual Reactor Protection System (RPS) actuation while the reactor was not critical is reportable in accordance with 10 CFR 50.72(b)(3)(iv)(A)."

The licensee notified the NRC Resident Inspector, the State of Ohio, and Ottawa and Lucas Counties.

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Part 21	Event Number: 50096
Rep Org: SCIENTECH Licensee: SCIENTECH Region: 4 City: IDAHO FALLS State: ID County: License #: Agreement: N Docket: NRC Notified By: VINCENT CHERMAK HQ OPS Officer: STEVE SANDIN	Notification Date: 05/08/2014 Notification Time: 14:57 [ET] Event Date: 05/07/2014 Event Time: [MDT] Last Update Date: 05/08/2014
Emergency Class: NON EMERGENCY 10 CFR Section: 21.21(d)(3)(i) - DEFECTS AND NONCOMPLIANCE	Person (Organization): JOHNATHAN LILLIENDAHL (R1DO) KENNETH RIEMER (R3DO) JACK WHITTEN (R4DO) NRR PART 21 (EMAI)

**Event Text**

PART 21 - POTENTIAL DEFECT IN NUS-710DU TRIP UNIT TO PRODUCE A VALID TRIP OUTPUT SIGNAL

The following summary was provided by Curtiss-Wright Flow Control Corporation:

"In certain operating configurations, NUS-710DU Trip Units could fail to produce a valid trip output signal.

"Transistor Q8 on the referenced units uses a TO-66 package and is flush mounted on the component side of the PCB. The TO-66 package, based on JDEC drawing TO-213 does not specify the size of the glass-sealed holes in the case (collector) around the base and emitter leads. Random samples measure approximately 0.11" in diameter. The PCB includes standard 0.100" solder pads on both non-component and component sides. During manufacture, Q8 is secured using screws and nuts with leads centered in the through-holes, so no direct solder pad to case contact is possible. However, the presence of the pad on the component side could facilitate, under certain conditions, excessive solder flow, creating a close proximity, or in the extreme case bridging, between solder on the emitter or base solder pad and the Q8 case. Permanent bridging would be detected during acceptance testing. However, in at least one case, with the trip unit mounted in the trip unit chassis via an extender card, the proximity was close enough to create contact when the board was slightly flexed.

"The trip units have two modes of operation, NORM and REV, selectable by switch S2, and four operating configurations: (1) NORM mode, rising trip, energize on trip, (2) REV mode, falling trip, energize on trip, (3) NORM mode, falling trip, de-energize on trip and (4) REV mode, rising trip, de-energize on trip.

"In configuration (1), the set point is applied to the negative terminal of a comparator and the input is applied to the positive terminal. When the input rises above the set point, the output of the comparator goes to the positive rail, turning on Q7. When Q7 turns on, it pulls the base of Q8 low, causing Q8 to turn on. When Q8 turns on, the trip output goes to approximately +24V.

"In configuration (2), the set point is applied to the positive terminal of the comparator and the input is applied to the negative terminal. When the input drops below the set point, the output of the comparator goes to the positive rail and turns on Q8, resulting in a trip output of approximately +24V.

"In configurations (1) and (2), bridging at Q8 would cause an output trip signal.

"In configuration (3), when the input drops below the reset point, the output of the comparator goes to the negative rail, which causes Q8 to turn off. When Q8 turns off, the trip output goes to approximately zero volts.

"In configuration (4), when the input rises above the reset point, the output of the comparator goes to the negative rail and turns off Q8, de-energizing the unit output.

"In configurations (3) and (4), bridging at Q8 would prevent a valid trip signal from being generated by keeping the output at logic high.

"Plant: Limerick/Part Number: NUS-710DU0TS/Quantity: 2/Serial Numbers:1303582, 1303583

"Plant: Limerick/Part Number: NUS-710DU0TT27000/Quantity: 6/Serial Numbers: 1304197, 1304198, 1304199, 1304200, 1304201, 1304202

"Plant: Columbia/Part Number: NUS-710DU0TT45059/Quantity: 5/Serial Numbers: 1303632, 1303633, 1303634, 1303635, 1303636

"Plant: Grand Gulf/Part Number: NUS-710DU0TT27000/Quantity: 3/Serial Numbers: 1303672, 1303673, 1303674

"Plant: **Perry**/Part Number: NUS-710DU0TT27000/Quantity: 33/Serial Numbers: 1304219, 1304220, 1304221, 1304222, 1304223, 1304224, 1304225, 1304226, 1304227, 1304228, 1304229, 1304230, 1304231, 1304232, 1304233, 1304234, 1304235, 1304236, 1304237, 1304238, 1304239, 1304240, 1304241, 1304242, 1304243, 1304244, 1304245, 1304246, 1304247, 1304248, 1304249, 1304250, 1304251.

"Should you have any questions regarding this matter, please contact Robert Queenan, Division Manager, Scientech/Instrumentation and Controls, at (208) 524-9311."

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Power Reactor	Event Number: 50097
Facility: DAVIS BESSE Region: 3 State: OH Unit: [1] [ ] [ ] RX Type: [1] B&W-R-LP NRC Notified By: ROBERT W. OESTERLE HQ OPS Officer: DONG HWA PARK	Notification Date: 05/08/2014 Notification Time: 17:46 [ET] Event Date: 05/04/2014 Event Time: 08:32 [EDT] Last Update Date: 05/08/2014
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(iv)(A) - VALID SPECIF SYS ACTUATION	Person (Organization): KENNETH RIEMER (R3DO)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	N	N	0	Hot Standby	0	Hot Standby

**Event Text**

**MANUAL INITIATION OF THE REACTOR PROTECTION SYSTEM WHILE SHUTDOWN**

"On 5/4/14 while the plant was in Mode 3 and the reactor not critical, unexpected position indications were observed on a Control Rod while withdrawing an Axial Power Shaping Rod (APSR). Due to the uncertainty of rod positions, the APSR was inserted into the core. The reactor trip breakers were then opened from the Control Room using the manual trip pushbuttons. All Control and Safety Rods were unlatched and fully inserted into the reactor core before the reactor trip breakers were opened.

"This manual initiation of the Reactor Protection System with the reactor not critical is being reported per 10 CFR 50.72(b)(3)(iv)(A). The reportability of this event was determined based on an extent of condition review for Event Number 50086 that occurred 5/5/14. The failure to meet the 8-hour reporting requirement has been entered into the Corrective Action Program."

The licensee notified the NRC Resident Inspector, the State of Ohio, and Ottawa and Lucas Counties.

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Power Reactor	Event Number: 50112
Facility: FERMI	Notification Date: 05/13/2014

Region: 3 State: MI Unit: [2] [ ] [ ] RX Type: [2] GE-4 NRC Notified By: BRETT JEBBIA HQ OPS Officer: STEVE SANDIN	Notification Time: 14:40 [ET] Event Date: 03/18/2014 Event Time: 19:30 [EST] Last Update Date: 05/13/2014
Emergency Class: NON EMERGENCY 10 CFR Section: 50.73(a)(1) - INVALID SPECIF SYSTEM ACTUATION	Person (Organization): HIRONORI PETERSON (R3DO)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
2	N	N	0	Refueling	0	Refueling

### Event Text

#### 60-DAY OPTIONAL TELEPHONIC NOTIFICATION FOR AN INVALID ACTUATION OF CONTAINMENT ISOLATION VALVES

"This 60-day report, as allowed by 10 CFR 50.73(a)(1), is being made pursuant to 10 CFR 50.73(a)(2)(iv)(A) to describe an unplanned, invalid actuation of containment isolation valves which occurred during the most recent refueling outage at Fermi 2. On 3/18/2014, at approximately 1930 EST, shortly after transferring Division 2 Reactor Protection System (RPS B) from the alternate to the normal power supply, Operations personnel noted that an unexpected half-scrum occurred. Initial investigation found a fuse in an RPS Power Distribution Panel had blown. Further investigation found that a power contactor had failed causing the fuse to blow. The contactor failure resulted in an invalid half scram and actuations (closure) of Torus Water Management System (TWMS) Outboard containment isolation valves, Division 2 Drywell Pneumatics Inboard and Outboard containment isolation valves and the Drywell Floor and Equipment Drain Sumps Inboard containment isolation valves. All valves operated as expected. Since containment isolation valves in more than one system were actuated by this failure, this event constitutes an event or condition that resulted in manual or automatic actuation of the system listed in paragraph 10 CFR 50.73 (a)(2)(iv)(B)(2) and is reportable under 10 CFR 50.73(a)(2)(iv)(A).

"The NRC Resident Inspector has been informed of this notification."

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Power Reactor	Event Number: 50124
Facility: BEAVER VALLEY Region: 1 State: PA Unit: [ ] [2] [ ] RX Type: [1] W-3-LP,[2] W-3-LP NRC Notified By: MICHAEL STERANKO HQ OPS Officer: MARK ABRAMOVITZ	Notification Date: 05/20/2014 Notification Time: 10:52 [ET] Event Date: 05/20/2014 Event Time: 08:35 [EDT] Last Update Date: 05/20/2014
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(2)(iv)(B) - RPS ACTUATION - CRITICAL 50.72(b)(3)(iv)(A) - VALID SPECIF SYS ACTUATION	Person (Organization): HAROLD GRAY (R1DO)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
2	M/R	Y	17	Power Operation	0	Hot Standby

#### Event Text

##### MANUAL REACTOR TRIP DURING REACTOR STARTUP

"On May 20, 2014, at 0835 hours during plant startup, Beaver Valley Power Station Unit 2 Operations personnel manually tripped the reactor due to meeting the pre-briefed trip criteria of 85% narrow range level on the 'A' Steam Generator. This manual trip criterion was reached after the steam generator water level began to oscillate following the start of the 'A' Condensate pump. A manual main steam line isolation was performed in order to limit reactor coolant system cool down. Plant trip response was as expected without complications, and all control rods fully inserted in the core. The plant is currently stable in Mode 3.

"This event is reportable pursuant to 10 CFR 50.72(b)(2)(iv)(B) and 10 CFR 50.72(b)(3)(iv)(A).

"Beaver Valley Power Station Unit 1 was not affected by this event.

"The NRC Resident Inspector has been notified."

No relief or safety valves lifted during this event. The unit is maintaining primary temperature using the atmospheric steam dumps and main feedwater pumps. There is no primary to secondary leakage. The plant is in its normal shutdown electrical lineup.

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Power Reactor	Event Number: 50143
Facility: DAVIS BESSE Region: 3 State: OH Unit: [1] [ ] [ ] RX Type: [1] B&W-R-LP NRC Notified By: ERIC HORVATH HQ OPS Officer: DONALD NORWOOD	Notification Date: 05/26/2014 Notification Time: 10:39 [ET] Event Date: 05/26/2014 Event Time: 02:52 [EDT] Last Update Date: 05/26/2014
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(xiii) - LOSS COMM/ASMT/RESPONSE	Person (Organization): STEVE ORTH (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

##### CONTROL ROOM OVERHEAD ANNUNCIATOR MALFUNCTION

"At time 0252 EDT, the control room overhead annunciators malfunctioned resulting in the inability to receive more than one station alarm input and could not be acknowledged using the normal station alarm acknowledge pushbutton.

"This condition existed from time 0252 EDT until time 0516 EDT on 5/26/2014 at which time

the system was restored. During the entire period, backup assessment capability was functional, dependent upon redundant assets as described in existing station documentation and/or functionality of the control room alarm typer. Additionally, the station computer alarms and Safety Parameter Display System remained functional during the entire time period.

"The licensee will continue to investigate the annunciator system.

"The licensee notified the NRC Resident Inspector."

The licensee will also notify State and local government agencies.

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## News

Sandusky Register Online

### Davis-Besse up and running

Plant replaces generators costing \$600 million

Melissa Topey

Oak Harbor

May 9, 2014

Davis-Besse Nuclear Power Station restarted Thursday, despite a glitch Monday. The FirstEnergy facility had been shut down for three months as workers replaced two steam generators at a cost of \$600 million. The investment signals FirstEnergy has every intention of operating the plant through 2037.

The plant was operating at 48 percent power Thursday, and crews anticipated it would be at 100 percent within a week, said Jennifer Young, spokeswoman for FirstEnergy. A problem arose Monday night during routine control rod testing, which is done in preparation for the startup. Plant employees were sending commands to the control rods, to ensure the equipment was properly reacting to the signals, when a motor started overheating.

In a quick-stop process known as SCRAM, controllers shut down the test. The rod being tested at the time went back into the nuclear reactor core without incident.

"There were no safety implications" Young said.

The

plant experienced no problems as it connected to the grid Thursday afternoon, she said. Workers on Monday determined adjustments needed to be made to the cooling lines that serve the motor. They adjusted the equipment and successfully completed the testing.

Kevin Kamps, nuclear watchdog for Beyond Nuclear, predicted FirstEnergy would brush the incident off. He said it was a good thing the reactor was shut down.

"If you had a loaded reactor core and you withdraw the control rod and a problem happens, it will increase the nuclear reactor," Kamps said. "You certainly want your control rods to function as you want them to."

“Yet again, another problem with Davis-Besse that I hope does not line up one day for disaster” Kamps said.

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The News-Messenger.com

Davis-Besse returns to service

May 9, 2014

Written by

News Herald staff report

CARROLL TOWNSHIP

—

The Davis-Besse Nuclear Power station returned to service Thursday after a shutdown to refuel and install two new steam generators.

The station began producing electricity again at 12:20 p.m. It is at 20 percent power and is expected to reach full power within the next week.

The outage started Feb. 1 and brought more than 2,300 contractors and additional FirstEnergy workers to the area, filling local hotels and condos and causing some businesses to expand hours earlier in the season than normal.

During the outage, FirstEnergy replaced two massive steam generators that are 74 feet long, 12 feet in diameter and weigh 470 tons.

The units are constructed almost entirely of carbon steel and nickel alloy and took about three years to build.

The steam generators function as heat exchangers, producing the steam that is used to drive the turbine generator, which ultimately produces electricity.

In addition to the generators, 80 of the plant's 177 fuel assemblies were replaced.

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Nuclear Engineering International

Davis-Besse restarts with two RSGs

12 May 2014

Davis-Besse Nuclear Power Station in Oak Harbor, Ohio has returned to service following refueling and installation of two new steam generators. The outage began on February 1, 2014.

The two-loop 900MW B&W reactor is operated by FirstEnergy Nuclear Operating Company (FENOC).

Installation of the components was a massive undertaking, with each measuring 74 feet in length, 12 feet in diameter and weighing 470 tons. More than 2300 temporary contractors and FENOC employees from the company's other nuclear plants supplemented the Davis-Besse workforce to complete the outage projects.

"Installation of the steam generators will help us meet our long-term objective of remaining a safe, reliable source of electricity while providing high-paying jobs and tax revenues that support the economic health of Northwest Ohio," said Ray Lieb, site vice president, Davis-Besse Nuclear Power Station prior to the outage.

While the plant was shut down, 80 of Davis-Besse's 177 fuel assemblies were exchanged and numerous safety inspections and preventative maintenance activities were completed on components throughout the plant.

The steam generators were manufactured and shipped by Babcock & Wilcox Canada Ltd. (B&W Canada) after an extensive six-year planning and manufacturing process. The units were designed and manufactured in B&W Canada's Cambridge, Ontario facility, which houses North America's largest clean room for nuclear component assembly. They arrived at the Davis-Besse site in October 2013.

Davis Besse's current operating licence expires in 2017, but operator FENOC submitted a 20-year life extension application in 2010, and the renewal process now seems to be quite advanced. The draft supplemental environmental impact statement was issued in February, and a public comment period on it ended in April.

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### Japan's Fukushima operator begins groundwater release to ocean



May 21, 2014 1:00 AM



Workers, wearing a protective suit and a mask, are seen near welding storage tanks for radioactive water, ...

TOKYO (Reuters) - The operator of Japan's destroyed Fukushima nuclear plant began releasing groundwater that it said is within legal radiation safety limits into the Pacific Ocean on Wednesday, in a bid to manage huge amounts of radioactive water built up at the site.

Tokyo Electric Power, or Tepco, has been fighting a daily battle against contaminated water since the Fukushima nuclear station was wrecked by a massive earthquake and tsunami in March 2011.

The controversial release, which was agreed by local fishermen after extended talks, coincides with a breakdown of a water treatment system for the highly contaminated water held in makeshift tanks.

It also comes amid revelations this week in the Asahi Shimbun newspaper that the majority of workers at the plant fled during the height of the meltdowns after the quake and tsunami knocked out cooling and backup power.

Groundwater flows down from nearby hills and 400 metric tonnes (440 tons) enters basements of the wrecked reactor buildings on a daily basis, according to Tepco's estimates, mixing with highly radioactive water used to cool reactors.

Workers then pump out the contaminated water, treat it and store it in more than 1,000 makeshift tanks that cover the facility grounds. The tanks that hold the most contaminated liquids are nearly full and workers are rushing to build more capacity. Tepco said 560 tonnes of groundwater captured and stored before it entered the basements is to be released on Wednesday, using a bypass system that funnels it toward the sea after checking for radiation levels.

Using the bypass, Tepco hopes to divert on average 100 tonnes of untainted groundwater a day into the ocean.

A water treatment facility known as the Advanced Liquid Processing System, designed to remove the most dangerous nuclides, was completely shut down again this week. The system has not been fully operational since it was installed nearly two years ago. The manager of the plant has admitted the repeated leaks and equipment malfunctions are "embarrassing."

About 90 percent of Tepco workers defied orders and left the Fukushima Daiichi plant on March 15, 2011, after an explosion rocked the site, the Asahi reported on Tuesday, citing unreleased transcripts of interviews with the manager at the time, Masao Yoshida. Yoshida, widely viewed as a national hero for taking decisive action in the critical days and weeks of the disaster that prevented a more serious crisis, died of cancer last year. Fukushima fishermen opposed plans to release groundwater for more than two years, fearing it would cause even more damage to the reputation of produce from the region. In March, local fisheries unions approved the plan, calling it a "painful decision," but necessary to stem the tide of radioactive water piling up at Fukushima. Many of them have been out of work after a voluntary ban on fishing in the area.

Tepco, the Japan Atomic Energy Agency and independent groups found that radioactive elements in the released water have less than 1 becquerels per liter of Cesium-134 and Cesium-137. All other radioactive elements checked are also far below standards for groundwater release.

The legal limit for releasing Cesium-134 into the ocean is 60 becquerels per liter. (Reporting by Mari Saito; Editing by Aaron Sheldrick and Simon Cameron-Moore)

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## Information Notices

Unless otherwise noted, these are 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/2013/>

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

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

## Part 21 and Miscellaneous

Subject: Seismic Screening and Prioritization Results Regarding Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Seismic Hazard Reevaluations for Recommendation 2.1 of the Near-Term Task Force Review of Insights

ADAMS Accession No.: ML14111A147

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PER 2014 007 CDBI IR

ADAMS Accession No.: ML14128A310

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RIS 2014-05, Preparation and Scheduling of Operator Licensing Examinations, dated April 29, 2014

ADAMS Accession No.: ML14042A493

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Information Notice 2014-07, Degradation of Leak-Chase Channel Systems for Floor Welds of Metal Containment Shell and Concrete Containment Metallic Liner, dated May 5, 2014 ADAMS Accession No.: ML14070A114

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RIS 2014-06, Consideration of Current Operating Issues and Licensing Actions in License Renewal, dated May 5, 2014

ADAMS Accession No.: ML13177A325

\*\*\*\*\*

RIS 2014-07, Enhancement To The Vendor Inspection Program Vendor Information Request, dated May 5, 2014

ADAMS Accession No.: ML13168A215

\*\*\*\*\*

IN 2014-05, "Verifying Appropriate Dosimetry Evaluation," dated May 12, 2014

ADAMS Accession No.: ML14028A513

\*\*\*\*\*

RIS 2014-04, "National Source Tracking System Long-Term Storage Indicator," dated May 12, 2014

ADAMS Accession No.: ML14100A152

\*\*\*\*\*

## **Davis-Besse**

DAV-BESSE 2013 009 IR

ADAMS Accession Number ML14132A259

\*\*\*\*\*

Davis-Besse Nuclear Power Station, Unit No. 1 - Safety Evaluation for Relief Request Related to Notification of Impracticality for the Third 10-year Interval (TAC NO. MF0750)(L-13-076)

ADAMS Accession Number: ML14087A429

\*\*\*\*\*

Summary of Public Meetings to Discuss Draft Supplement 52 to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Davis-Besse Nuclear Generating Station, Unit 1

ADAMS Accession No. ML14099A464

\*\*\*\*\*

Davis-Besse, Unit 1 - Combined Annual Radiological Environmental Operating Report and Radiological Effluent Release Report for 2013.

ADAMS Accession No.: ML14140A215

\*\*\*\*\*

Davis Besse, Unit 1 - Offsite Dose Calculation Model, Revision 27.

ADAMS Accession No.: ML14140A288

\*\*\*\*\*

FENOC's Answer Opposing Intervenors's Motion for Admission of Contention No. 6.

ADAMS Accession No.: ML14136A486

\*\*\*\*\*

NRC Staff's Answer to Motion for Admission of Contention No. 6 on Shield Building Concrete Void, Cracking and Broken Rebar Problems.

ADAMS Accession No.: ML14136A327

\*\*\*\*\*

Comment (11) Of Joseph R. DeMare, On Behalf Of The Ohio Green Party, Opposing Draft Generic Environmental Impact Statement (DGEIS), Report Number NUREG-1437, Supplement 52, In Regards To The Davis-Besse Relicensing Application.

ADAMS Accession No.: ML14122A019

\*\*\*\*\*

Comment (22) of Kevin Kamps on License Renewal Application for Davis-Besse Nuclear Power Station, Unit 1; Draft Supplemental Generic Environmental Impact Statement.

ADAMS Accession No.: ML14122A030

\*\*\*\*\*

Comment (23) of Kevin Kamps on License Renewal Application for Davis-Besse Nuclear Power Station, Unit 1; Draft Supplemental Generic Environmental Impact Statement.

ADAMS Accession No.: ML14122A031

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Comment (21) of Keven Kamps on License Renewal Application for Davis-Besse Nuclear Power Station, Unit 1; Draft Supplemental Generic Environmental Impact Statement.

ADAMS Accession No.: ML14122A029

\*\*\*\*\*

Davis-Besse Nuclear Power Station - Program for Management of Irradiated Fuel.

ADAMS Accession No.: ML14115A301

\*\*\*\*\*

Comment (10) of Steven Dort on behalf of FirstEnergy Nuclear Operating Co., on Draft Plant-Specific Supplement 52 to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Davis-Besse, Unit 1.

ADAMS Accession No.: ML14113A214

\*\*\*\*\*

## **Perry**

PERRY NUCLEAR POWER PLANT – NRC INTEGRATED INSPECTION REPORT  
05000440/2014002

ADAMS Accession Number ML14132A192

\*\*\*\*\*

Perry Nuclear Power Plant, Unit No. 1 - Acceptance Review Concerning Notice of Impracticality Concerning Vessel Skirt (TAC No. MF3666)(L-14-105)

ADAMS Accession No.: : ML14120A459

\*\*\*\*\*

Perry Nuclear Power Plant, Annual Environmental and Effluent Release Report.

ADAMS Accession No.: ML14122A325

\*\*\*\*\*

## **Beaver Valley**

Beaver Valley Power Station, Units 1 and 2 - National Fire Protection Association Standard 805 License Amendment Application Online Reference Portal (Tac Nos. MF3301 and MF3302)

ADAMS Accession No.: ML14122A106

\*\*\*\*\*

Beaver Valley Power Station - NRC Integrated Inspection Report 05000334/2014002 and 05000412/2014002

ADAMS Accession No.: ML14135A317

\*\*\*\*\*

Beaver Valley Power Station, Unit 1 - Relaxation of the Schedule Requirements for Order EA-12-049 "Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond Design Basis External Events" (TAC No. MF0841)

ADAMS Accession No.: ML14120A049

\*\*\*\*\*

Beaver Valley, Unit 1 and 2 Pressure and Temperature Limits Reports and Unit No. 2 Cycle 18 Core Operating Limits Report.

ADAMS Accession No.: ML14133A107

\*\*\*\*\*

Beaver Valley Power Station - Discharge Monitoring Report (NPDES) Permit No. PA0025615.

ADAMS Accession No.: ML14121A256

\*\*\*\*\*

## **Portsmouth Facilities**

Compliance Evaluation Report on PGDP's Authorized Uses and Part 171 Fee Downgrading.

ADAMS Accession No.: ML14135A444

\*\*\*\*\*

Withdrawal of Request for U.S. Nuclear Regulatory Commission Foreign Ownership, Control, or Influence Determination for Quality Inspection Services, Inc. - Technical Assignment Control Number L34270.

ADAMS Accession No.: ML14136A110

\*\*\*\*\*

AREVA Design Control Document Rev. 6 - Tier 2 Chapter 11 - Radioactive Waste Management - Section 11.2 Liquid Waste Management System

ADAMS Accession No.: ML14104B473

\*\*\*\*\*

FOIA/PA-2011-0118/FOIA/PA-2011-0119/FOIA/PA-2011-0120 - Resp 202 - Partial - Group FV. Part 2 of 2.

ADAMS Accession No.: ML14132A010

\*\*\*\*\*

Enclosure 3, National Enrichment Facility REMP 2008 (ML090970289, 2006 - 2008).

ADAMS Accession No.: ML13198A419

\*\*\*\*\*

Enclosure 4, 2009 NEF REMP Report (ML100900468, 2009).  
ADAMS Accession No.: ML13198A421

\*\*\*\*\*

Regulatory Guide 1.138, Revision 1, Laboratory Investigations of Soils and Rocks for  
Engineering Analysis and Design of Nuclear Power Plants (Draft issued as DG-1109).  
ADAMS Accession No.: ML.32510581

\*\*\*\*\*

## Fermi 1

Fermi, Unit 1 - Decommissioning Funding Status Report  
ADAMS Accession No.: ML14090A328

\*\*\*\*\*

## Fermi 2

Fermi Nuclear Plant, Unit 2 - Staff Assessment of the Seismic Walkdown Report Supporting  
Implementation of Near-Term Task Force Recommendation 2.3 Related to the Fukushima Dai-  
Ichi Nuclear Power Plant Accident (TAC No. MF0124)

ADAMS Accession No.: ML14093A766

\*\*\*\*\*

Public Meeting/Open House To Review The 2013 End-Of-Cycle Performance Assessment For  
Fermi Power Plant, Unit 2

ADAMS Accession No. ML14122A235

\*\*\*\*\*

FERMI FIRE PROTECTION REQUEST FOR INFORMATION

ADAMS Accession No.: ML14121A271.

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[View ADAMS P8 Properties ML14107A309](#)

[Open ADAMS P8 Package \(Fermi, Unit 2, License Renewal Application; Notice of Receipt and  
Availability.\)](#)

\*\*\*\*\*

Fermi 2 - Alternative Request PRR-110 Concerning the Third 10-year Inservice Testing  
Program (TAC NO. MF2557)

ADAMS Accession No.: ML14128A299

\*\*\*\*\*

Fermi Baseline EP Biennial Exercise Inspection Report 05000341/2014502

ADAMS ACCESSION NO# ML14141A010

\*\*\*\*\*

Fermi, Unit 1 - Decommissioning Funding Status Report

ADAMS Accession No.: ML14118A275

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ADAMS Accession No.: ML14101A118

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Fermi 2, License Renewal Application, Cover through Page 3.3-1.

ADAMS Accession No.: ML14121A535

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Fermi 2, License Renewal Application, Appendix D through Appendix E, Page 3-169.  
ADAMS Accession No.: ML14121A538

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Fermi 2, License Renewal Application, Page 3.3-2 through Appendix C, Page C-13  
ADAMS Accession No.: ML14121A536

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Fermi 2, License Renewal Application, Appendix E, Page 10-1 through End  
ADAMS Accession No.: ML14121A540

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Fermi 2, License Renewal Application, Appendix E, Page 3-170 through Page 9-23  
ADAMS Accession No.: ML14121A539

\*\*\*\*\*

Fermi 2 - Annual Radioactive Effluent Release Report and Radiological Environmental  
Operating Report.

ADAMS Accession No.: ML14118A247

\*\*\*\*\*

Fermi 2 - License Amendment Request to Revise Technical Specification Surveillance  
Requirements for Direct Current Batteries

ADAMS Accession No.: ML14113A445

\*\*\*\*\*

### **Fermi 3**

Fermi 3, Safety Evaluation Report, 13.6, Phase 2.

ADAMS Accession No.: ML12340A283

\*\*\*\*\*

Fermi, Unit 3, Combined License Application Advanced Final Safety Evaluation With No Open  
Items For Chapter 2.5, "Geology, Seismology, Geotechnical Engineering."

ADAMS Accession No.: ML14101A417

\*\*\*\*\*

Partial Initial Decision (Ruling on Contentions 8 and 15)

ADAMS Accession No.: ML14143A323

\*\*\*\*\*

Fermi, Unit 3, Chapter 8 Section 8 2 SER

ADAMS Accession No.: ML14051A415

\*\*\*\*\*

DTE Electric Co., Submittal of COLA Markups Associated with Inspections, Tests, Analyses,  
and Acceptance Criteria for the Fermi 3 Turbine Building, Radwaste Building, Service Building,  
and Ancillary Diesel Building

ADAMS Accession No.: ML14129A360

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