

To: Jim Mehl, ERU Supervisor  
From: Zack Clayton, Rad Coordinator  
Subject: September Monthly Report  
Date: October 1 , 2013

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## Beans

Training: 1  
Drills: 0  
Meetings: 3  
Technical Assistance: 1  
Public Assistance: 1

Web Page Views: There were 27 page views in September.

## Coming Attractions

10/1 Working Group  
10/2 VR13-2 After Action review  
10/3 RAT training at Groveport  
10/7 URSB  
10/24 NEPAC  
11/6 Working Group

## Facility updates

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

Davis-Besse operated at full power for September.

The electronic version of the DBNPS mid-cycle assessment report has been received. Based on a greater than green security finding last fall the plant has been placed in Column 2 and a 95001 inspection will be conducted in addition to the baseline inspections. See Adams Accession Number ML 13246A207.

Davis-Besse inspections of the 2011 subsurface cracking detected in portions of the power station's shield building have revealed three new cracks thru the use of a high resolution camera. The core boreholes are inspected on a regular basis. The Davis-Besse staff have completed inspecting approximately ½ of the core bores. Additionally it was observed that three existing cracks have propagated less than two feet. All cracks are less than .005 inches wide. All of the cracks are in areas where cracking was previously identified in the shield building. The shield building is still structurally sound and is capable of performing its intended purpose. The plant notified the Nuclear

Regulatory Commission and will be issued a press release. The NRC anticipates issuing a Preliminary Notification about this situation in the near future. See ADAMS Accession Number ML13263A410.

### **Perry Nuclear Power Plant**

Perry operated at full power until September 6 when it powered down for maintenance on a transformer and other plant systems that required a plant shutdown. Perry returned to full power September 13.

### **Beaver Valley Power Station**

#### **Beaver Valley Unit I**

Unit I began operation at full power and started to coast down on September 9.

#### **Beaver Valley Unit II**

Unit II operated for September at 100% power.

### **DTE**

#### **Fermi II**

Fermi II operated at 68 per cent power until September 9 when it powered down for two weeks for unspecified maintenance. Fermi started increasing power on Sept 23.

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#### **Fermi III**

Fermi III continues as a documentation evaluation.

### **Portsmouth Enrichment Plant**

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

There was an Event of Potential Public interest (EPPI) when three electrical contractors reported itching on their faces while working in the same area. No cause was discovered on medical examination or radiological survey of the area.

Activity

- 9/4 Working Group – Agency reports and review of the snapshots for group activity. Midas has been delayed pending certification for Davis-Besse. When the program works properly for all plants it will be released for state use under the licensing agreement.
- 9/6 ER VR13-2 After Action Review - The OEPA internal review generated about 3 pages of commentary and suggestions. The main issues were exercise artifacts, communication, and a first serious attempt at ICS process.
- 9/19 Dose Assessment VR13-2 – Dose Assessment worked off of the ER document. Most of the OEPA comments were echoed by ODH and OEMA. A few additional issues that did not impact OEPA were added.
- 9/26 Sharepoint contributors training at OEMA.

## Office Issues

Centerline Plume sampling considerations are being formulated for the REP Plan. Specific items for an IND SOP are being developed.

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

### Operating Power Levels

September

Date	BV1	BV2	DB	Perry	Fermi2	
1	100	100	100	100	68	
2	100	100	100	100	68	
6	100	100	100	48	68	Perry repairing a transformer affecting plant systems
7	100	100	100	0	68	
9	99	100	100	24	0	
10	99	100	100	67	0	
11	99	100	100	88	0	
12	98	100	100	60	0	
13	99	100	100	100	0	
16	98	100	100	100	0	
23	96	100	100	100	3	
24	95	100	100	100	32	
25	95	100	100	100	69	
28	94	100	100	100	98	
29	51	100	100	100	65	
30	0	100	100	100	90	BV1 Entered refueling outage.

## **Plant Reports**

NRC will be holding a public meeting in Perrysburg, OH, Thursday, October 15 to discuss the new environmental impact statement related to waste confidence.

## **Public Meetings Scheduled**

The NRC has scheduled twelve public meetings to receive comments on the **Waste Confidence Draft Generic Environmental Impact Statement (DGEIS)** and proposed rule. The NRC Waste Confidence Directorate staff will present a short overview of the DGEIS and proposed rule, after which interested parties and members of the public are invited to present oral comments on the documents. All twelve meetings will be transcribed, and transcripts will be added to the official record for consideration in preparing the final GEIS and rule.

Please see the following website for additional information and to see the list of upcoming public meetings. Please contact me if you any questions about this information.

<http://www.nrc.gov/waste/spent-fuel-storage/wcd/pub-involve.html>

Thank you for your attention

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### **PUBLIC MEETINGS TO DISCUSS**

#### **PRELIMINARY DRAFT CHANGES TO NUREG-0654/FEMA-REP-1**

Tuesday, October 29, 2013, 10:00 a.m. – 5:00 p.m. EDT

Wednesday, October 30, 2013, 10:00 a.m. – 5:00 p.m. EDT

Thursday, October 31, 2013, 1:00 p.m. – 5:00 p.m. EDT

LOCATION: U.S. Nuclear Regulatory Commission

Two White Flint North

ACRS Hearing Room, T-2B3

11545 Rockville Pike

Rockville, MD 20852

The purpose of this meeting is for staff from the Nuclear Regulatory Commission (NRC), the Federal Emergency Management Agency (FEMA) and organizational stakeholders, as well as the public, to discuss preliminary draft changes to NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants."

This is a Category 3 meeting.<sup>1</sup> Public participation is actively sought at this type of meeting, which has the widest participation opportunities and is specifically tailored for the public to comment and ask questions throughout the meeting.

Participants will include members of the NRC's Office of Nuclear Security and Incident Response, staff from FEMA, other organizational participants, representatives from external stakeholder groups, and the public.

The NRC provides reasonable accommodation to individuals with disabilities where appropriate. If you need a reasonable accommodation to participate in this meeting, or need this meeting notice or the material to be reviewed during the meeting in another format (e.g. Braille, large print), please notify the NRC's meeting contact (Carolyn Kahler) by October 17, 2013. Determinations on requests for reasonable accommodation will be made on a case-by-case basis.

Interested members of the public who are unable to travel to the meeting may view the meeting by webconference and/or participate by telephone via a toll-free teleconference.

Those interested in participating in this meeting by webconference or teleconference should contact Carolyn Kahler at [EmergencyPreparedness.Resource@nrc.gov](mailto:EmergencyPreparedness.Resource@nrc.gov) by

**October 17, 2013**, for registration and instructions.

Carolyn Kahler, NSIR (301) 287-3722 [EmergencyPreparedness.Resource@nrc.gov](mailto:EmergencyPreparedness.Resource@nrc.gov)

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Power Reactor	Event Number: 49369
Facility: DAVIS BESSE Region: 3 State: OH Unit: [1] [ ] [ ] RX Type: [1] B&W-R-LP NRC Notified By: TOM COBBLEDICK HQ OPS Officer: CHARLES TEAL	Notification Date: 09/20/2013 Notification Time: 13:28 [ET] Event Date: 09/20/2013 Event Time: 14:00 [EDT] Last Update Date: 09/20/2013
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(2)(xi) - OFFSITE NOTIFICATION	Person (Organization): KENNETH RIEMER (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**

PRESS RELEASE NOTIFICATION

"A press release is being made today by the FirstEnergy Nuclear Operating Company regarding routine inspections of the Davis-Besse Nuclear Power Station's concrete shield building.

"These routine inspections of the Davis-Besse Nuclear Power Station's concrete shield building conducted to date have confirmed that the building continues to maintain its structural integrity and ability to safely perform its functions."

The NRC Resident Inspector has been informed.

\* \* \* UPDATE FROM GERALD WOLF TO CHARLES TEAL AT 1623 EDT ON 9/20/13 \* \* \*

"The press release originally provided to the NRC was revised prior to release to the public to update the inspections completed to date."

The NRC Resident Inspector has been informed. Notified R3DO (Riemer).

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Part 21	Event Number: 49370
Rep Org: ROSEMOUNT NUCLEAR Licensee: ROSEMOUNT NUCLEAR Region: 3 City: CHANHASSEN State: MN County: License #: Agreement: Y Docket:	Notification Date: 09/20/2013 Notification Time: 12:54 [ET] Event Date: 09/20/2013 Event Time: [CDT] Last Update Date: 09/20/2013

NRC Notified By: DUYEN HAM HQ OPS Officer: HOWIE CROUCH	
Emergency Class: NON EMERGENCY 10 CFR Section: 21.21(d)(3)(i) - DEFECTS AND NONCOMPLIANCE	Person (Organization): DON JACKSON (R1DO) DEBORAH SEYMOUR (R2DO) KENNETH RIEMER (R3DO) RICK DEESE (R4DO) PART 21 GROUP (EMAI)

**Event Text**

**PART 21 ISSUE ON ROSEMOUNT MODEL 710DU TRIP UNITS**

The following is a summary of the information received from Rosemount Nuclear Instruments, Inc. (RNII) via facsimile:

In August 2013, Rosemount conducted normal, transient and accident radiation testing on a sample of Model 710DU Trip Units (master and slave) to verify radiation performance of some commercial grade semiconductor components. The results indicated that post-exposure radiation performance may not meet the criteria established in their previously published Qualification Report D8200037. This affects all transmitters shipped from RNII since June 1983.

Per RNII's Model 710 Trip/Calibration System Discontinuance Letter dated September 14, 2011, RNII stopped accepting purchase orders as of December 31, 2012. At this time RNII is no longer accepting orders and no corrective actions are being taken.

These transmitters were purchased by:

Carolina Power and Light/Duke Energy, Commonwealth Edison Co., Constellation Energy Group, Inc., **DTE Energy Services, Inc.**, Energy Northwest, Entergy Nuclear, LLC, Exelon Generation Co., LLC, Gavial, General Physics Corp., GE Nuclear Energy, Georgia Power Co./Southern Nuclear Operating Co., Harlo Corp., Knolls Atomic Power Lab, Long Island Lighting Co., Mercury Co. of Norwood, Inc., Mississippi Power & Light Co., Nebraska Public Power District, NextEra Energy/FPL Energy, Northern States Power/XCEL Energy, Inc., NuTherm International, Inc., PPL Susquehanna, LLC, Progress Energy Carolinas, LLC/Duke Energy, PSEG Nuclear, LLC, Public Service Electric & Gas, Singer Co., Tennessee Valley Authority, Texas Municipal Power Agency, United Controls and Westinghouse Electric Corporation.

Name and address of the individual providing the information:

Mr. Marc D. Bumgarner  
Vice President & General Manager  
Rosemount Nuclear Instruments, Inc.  
8200 Market Boulevard  
Chanhassen, MN 55317

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Part 21	Event Number: 49372
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Rep Org: ABB, INC. Licensee: ABB, INC. Region: 1 City: CORAL SPRINGS State: FL County: License #: Agreement: Y Docket: NRC Notified By: DENNIS BATOVSKY HQ OPS Officer: HOWIE CROUCH	Notification Date: 09/20/2013 Notification Time: 16:35 [ET] Event Date: 07/23/2013 Event Time: [EDT] Last Update Date: 09/20/2013
Emergency Class: NON EMERGENCY 10 CFR Section: 21.21(d)(3)(i) - DEFECTS AND NONCOMPLIANCE	Person (Organization): DON JACKSON (R1DO) DEBORAH SEYMOUR (R2DO) KENNETH RIEMER (R3DO) RICK DEESE (R4DO) PART 21 GROUP (EMAI)

**Event Text**

ABB SOLID STATE CIRCUIT SHIELD AND POWER SHIELD RELAYS SHIPPED WITH INCORRECT CERTIFICATES OF CONFORMANCE

The following information was obtained from ABB, Inc. via facsimile:

"This notification is submitted in accordance with 10 CFR 21.21(d)(3)(ii). Solid State Circuit Shield Relays (27, 40, 47, 60, 81, 25V, 27/59, 27D, 27H, 27N, 46D, 46Q, 47H, 50H, 59G, 87M) and Power Shield (K-Line) Relays containing CMOS technology Integrated Circuits (IC's) have been shipped with Certificates of Conformance (CoC's) that incorrectly state that they are qualified to 100,000 rads.

"On July 23, 2013, ABB discovered that the above radiation tolerance value had been incorrectly communicated to customers due to a reference to an incorrect document. ABB failed to update the reference document following the Part 21 notification dated July 28, 1994. ABB's investigation showed that this issue dates back to the beginning of production of solid state relays in the Coral Springs facility in 2009 when the CoC format changed to include this information. As such, the CoC's that ABB provided incorrectly identified the radiation tolerance as 100,000 rads rather than 1,000 rads.

"All qualification documents and future CoC's will be reviewed to ensure proper record of radiation tolerance is maintained. This review is to be completed by Dec 31, 2013

"ABB will notify the affected customers for the listed relays that they should review their applications which require total radiation tolerance greater than 1,000 rads to determine the effects of a possible device malfunctioning on the system.

"ABB does not have the capability to perform an evaluation to determine if a defect exists, and therefore in accordance with 10 CFR 21.21(b), we are making this notification simultaneously to our customers so they may evaluate this issue, pursuant to 10 CFR 21(a).

"Any customers finding that [ABB's] qualification level is insufficient will be advised to contact [ABB's] customer support line at 1-800-222-1946 or 1-954-752-6700 for discussion of

remedial action.

"This information was provided by:

Dennis Batovsky  
Managing Director  
ABB, Inc.  
4300 Coral Ridge Drive  
Coral Springs, FL 33065"

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## News

Columbus Dispatch

Environment

### Japanese nuke plant may dump tainted water into ocean

By

Jacob Adelman, Takashi Hirokawa and Yuriy Humber

BLOOMBERG NEWS

Tuesday September 3, 2013 7:05 AM

TOKYO

—

Tokyo Electric Power Co.'s plan to manage radioactive water at its wrecked Fukushima plant might include a controlled discharge into the ocean once its toxicity is brought within legal limits, Japan's nuclear regulator said.

Nuclear Regulation Authority Chairman Shunichi Tanaka said yesterday that the ocean dump could be necessary as the country's government prepares to present its plan for handling the site's stored tainted water that's increasing by 400 tons a day.

Managing the water used to cool melted fuel at the Fukushima plant's reactors has become a fundamental challenge for the utility known as TEPCO, which has struggled to contain a series of leaks including the loss of about 300 tons of contaminated water that it reported two weeks ago.

"It is important for us to understand the need to make difficult judgments in order to a void larger problems in the future," Tanaka said of the possible ocean discharge during a speech to reporters in Tokyo.

Contaminant levels must be brought below accepted limits through filtration or other treatments before the water is discharged, he said.

Japan's Nuclear Emergency Response Headquarters might present its response to the water -management crisis as early as today, Katsunobu Kato, deputy chief cabinet secretary, said yesterday, relaying comments made by Chief Cabinet Secretary Yoshihide Suga to lawmakers earlier.

The government wants to present a "complete package" of steps to tackle the water problem, Suga said, according to Kato.

TEPCO's challenge was further illustrated on Sunday when the utility said it had found a new radioactive leak, capping its worst month since the March 2011 earthquake and tsunami caused reactor meltdowns.

The company said it had stopped the contaminated water leaking from a pipe near an area of high radiation levels. Of the hot spots found over the weekend, one recorded radiation of 1,800 millisieverts per hour around the bottom of a tank storing water used to cool melted reactor cores. That's 18 times the level reported at the same spot on Aug. 22, TEPCO said. The weekend's findings probably reflect TEPCO's beefed-up monitoring crews finding contamination that was missed earlier, former nuclear engineer Michael Friedlander said in a phone interview.

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## **Aging Ohio plant can operate for 20 more years -- NRC staff**

Hannah Northey, E&E reporter

Published: Friday, September 6, 2013

An aging nuclear reactor in northwestern Ohio that has drawn the ire of anti-nuclear groups and some lawmakers can safely operate for another two decades, staff at the Nuclear Regulatory Commission said today.

NRC staff released a report that found there are "no issues" that should preclude the commission from granting FirstEnergy an additional 20 years to use its license to operate the Davis-Besse Nuclear Power Station in Oak Harbor, 20 miles east of Toledo. The current operating license expires April 22, 2017, and FirstEnergy Nuclear Operating Co. submitted its license renewal application to NRC in August 2010. NRC staff said a review of the plant shows that FirstEnergy has identified ways to combat aging of the plant.

The nuclear commission, however, has said it will not decide whether to issue FirstEnergy a license until the agency completes its waste confidence rulemaking in September 2014.

The facility was shuttered in June after crews found a leak when a power cable shorted out. FirstEnergy said no radioactive coolant escaped the containment building and the reactor was powered up a month later ([Greenwire](#), July 16).

Davis-Besse also attracted attention when inspectors discovered cracks in the outer shield building of the plant in Ohio, prompting former Rep. Dennis Kucinich (D-Ohio) to call on NRC to delay the license renewal ([Greenwire](#), June 22, 2012).

Source: <http://www.eenews.net/eenewspm/2013/09/06/stories/1059986850>

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## **FirstEnergy finds more cracks in Ohio reactor building**

Published: Monday, September 23, 2013

FirstEnergy Corp. on Friday said it has found more cracks in the reinforced concrete structure that houses its Davis-Besse nuclear reactor in Oak Harbor, Ohio.

A new high-definition camera inserted into a 2.5-foot-thick concrete building through drilled holes found cracks not seen before and also found that cracks discovered in previous inspections had grown.

The company said it does not believe the cracks are a safety concern, and the plant will remain online.

"Analysis of all inspection results to date confirms the 2011 conclusion that the shield building's structural integrity is not impacted by the presence of these tight cracks," said

Ray Lieb, Davis-Besse site vice president, in a statement. "The robust building continues to function safely and reliably."

The purpose of the concrete building, which acts a shield, is to protect the public in the event of a disaster at the plant and to protect the reactor from storms or terrorist attacks (John Funk, [Cleveland Plain Dealer](#), Sept. 20). -- **LBL**

SOURCE: <http://www.eenews.net/greenwire/2013/09/23/stories/1059987671>

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## Columbus Dispatch

More cracks found at Davis-Besse nuclear plant

NRC says they pose no threat

Sunday September 22, 2013 5:32 AM

TOLEDO (AP)

—

The operator of an Ohio nuclear plant along Lake Erie has found several more cracks in the concrete building housing the nuclear reactor and says some cracks found earlier have grown a bit. But the findings do not mean the structure shielding the nuclear reactor at the Davis-Besse plant near Toledo is unsafe, FirstEnergy Nuclear Operating Corp. said on Friday.

"The robust building continues to function safely and reliably," site Vice President Ray Lieb said in a statement.

The reinforced concrete building surrounds a 11/2-inch-thick carbon steel vessel containing the reactor and is intended to protect the plant from events such as storms or terrorist attacks, and protect the public from a catastrophe.

The company said high-definition cameras used for inspecting core samples identified cracks not visible with previous inspection equipment.

Several hairline cracks were found in the structure's 21/2-foot-thick concrete two years ago. FirstEnergy determined they were caused by wind-blown moisture seeping into the concrete and freezing during a blizzard, and that the structural integrity wasn't affected. At that time, the Nuclear Regulatory Commission accepted a company proposal to weatherproof the concrete and set up a monitoring and testing program to make sure the building remains sound. The agency said on Friday that it was aware of the latest findings.

"Based on the current information, this issue does not compromise the safety of the plant or the public," the agency said in a statement.

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## For aging nuclear reactors, a coming surge of shutdowns

By [Kevin Gray](#) | September 23, 2013, 1:59 AM PDT

When it first fired up its twin reactors in 1973, the Zion nuclear power plant in Illinois — roughly 40 miles north of Chicago — was the largest in the world. It was a stunning work of technology that supplied electricity to some two million homes. And it could have easily lived on into the new century. But in 1998, its parent company, the energy giant Exelon Corp, turned off its lights and shuttered the facility rather than face some costly upgrades.

For 12 years, Zion sat dormant on prime Lake Michigan shorefront as Exelon shelled out \$10 million a year to maintain it and protect it with round-the-clock patrols of armed guards. By 2010, the facility had become home to drifting weeds and nesting falcons. But that year, the federal government — in an arrangement never tried before — agreed to allow Exelon to transfer custody of the plant to EnergySolutions, a nuclear-waste storage outfit. The deal was worth a potential \$1 billion in clean-up fees to EnergySolutions. It would be the largest nuclear power plant decommissioning ever undertaken in the United States. And it pledged to return the 375-acre site back to Exelon as grass and local shrubbery at the end of 10 years. From there it could be used for a park, condos or commercial purposes.

Following fears of meltdowns at Japan's tsunami-ravaged Fukushima reactors in 2011, governments, utilities and private industry are eager to see the results of the deal. The storage of spent nuclear fuel and the dismantling and transportation of the reactor buildings takes technical skill and an innovative business plan, which could become a model for dozens of other nuclear plants being mothballed across the United States and around the world. And because President Obama refused in 2008 to re-open the Yucca Mountain Nuclear Waste Repository, the toxic byproducts in facilities need commercial resting places.

Today, despite some financial setbacks, EnergySolutions is ahead of its decommission schedule. And this October, it will begin the trickiest phase of its operation: moving the spent nuclear fuel from the wet storage pools in the reactor buildings to large concrete casks several yards away, where they will sit on a raised pad and remain indefinitely. "The project is 42 percent complete," says John Christian, head of logistics, processing and disposal at EnergySolutions and the man who has overseen the project from the start. "We've completed all the site prep and started to make waste shipment from the site."

### **Ripping and shipping**

Rows of ominous-looking concrete casks now rise on the gravel site. They stand 18 feet, 9 inches high, measure more than 11 feet in diameter and, when loaded, will weigh 157 tons each. They can withstand a tornado with winds up to 360 miles per hour, 4,000-pound wind-blown projectiles hurtling at speeds of 126 miles per hour, flooding, fire and even accidental tipping over. And they will soon house all 2.2 million pounds of spent nuclear fuel — and another 80,000 pounds of radioactive material — from the site.

In a process known as "rip and ship," the company will next tear down sections of the plant and move them by rail to its radioactive waste facility in Clive, Utah, where they will be dumped wholesale and entombed beneath rock and clay. EnergySolutions expects to ship some 500,000 cubic feet of material — enough to fill 80 rail cars — everything from concrete walls, pipes, wiring, machinery, desks and chairs, much of it contaminated with low-level radiation. But the hottest stuff — the spent fuel — will remain right where it is.

EnergySolutions has spent the past year removing Zion's fuel rods from a cooling pool and putting them into the canisters and casks for dry storage. The fuel, which is still about 400 degrees, can now be air cooled. Christian expects the company to begin moving the casks, via a heavy-haul rail, 100 yards south of the reactors by mid-October.

They will remain there until the feds come up with an alternative to Yucca Mountain. “Until we have a national repository open, this spent fuel has to stay where it is,” says Lawrence Boing, a nuclear decommissioning specialist at Argonne National Laboratory’s nuclear engineering division. “The big question now is what do we do with this stuff?”

That question comes at a time when the entire global decommissioning market is about to expand like at no other time during our nuclear era. In the past three years since the tsunami wreaked havoc on the Fukushima plants, more than 20 reactors have been ordered closed at a potential cost of \$26 billion to the industry. That’s a boon to businesses like EnergySolutions that can lead to decades-long contracts for tear-downs.

“A lot of plants are approaching 40 years old, and at some point the owners are going to look around and either build a new one or say ‘This no longer makes economic sense,’” says Margaret Harding, a nuclear industry consultant based in Wilmington, Del. She adds that the rise of cheap natural gas from shale fracking has put nuclear power on alert. On Aug. 27, energy company Entergy shocked both supporters and long-time opponents, who had fought for the closure of its 41-year-old Vermont Yankee nuclear reactor, among the oldest in the country. The company said it would do so, but not because of opposition. In the face of cheap gas, it was “no longer financially viable,” an Entergy executive said.

While Entergy said it could take decades to decommission the reactor, which it plans to shut down next year, other nuclear sites are moving to decommission at a faster pace. The global trends publisher *Research and Markets* reported last year that it expects the decommissioning market to surge as more than half the world’s reactors are expected to shut down by 2030, including 150 reactors across Europe, accounting for the bulk of them.

### **A financial challenge**

In the United States, the people paying for these tear-downs are usually the electric utility’s ratepayers. The Nuclear Regulatory Commission requires each power plant operator to set aside a fund to dismantle or permanently encase its reactors. When Zion powered up, ratepayers began paying pennies on every bill to go into its fund. It stands at \$1 billion.

The Zion project has been a financial challenge for EnergySolutions. In March 2012, it revealed it had underestimated the costs by about \$100 million — an enormous amount considering the size of the decommissioning fund. A month later, it replaced its CEO for the second time in two years. The company’s new president, David Lockwood, told analysts it had intentionally underbid the project, hoping the publicity would help it land other teardowns around the world, including in Germany, which hopes to shutter all of its plants by 2022. “We undertook Zion for strategic, not financial, reasons,” Lockwood said.

Indeed, EnergySolutions has enormous technical skills. It helped tear down the Maine Yankee and Connecticut Yankee plants, and it is contracted to clean up roughly 53 million gallons of residual radioactive and chemical waste stored in 177 aging tanks at the nation’s Hanford weapons site, home to the nuclear bomb dropped on Hiroshima. It is also currently decommissioning 18 reactors in the United Kingdom and is designing and installing the system that will decontaminate water from the Fukushima plants down

to safe level. “EnergySolutions has remarkable experience dealing with far higher contamination, and in far more complicated processes at sites like Hanford, than you are going to see at a commercial nuclear site,” says Harding, who has worked in this field for 30 years.

It also has the financial advantage of owning its own waste facilities. Its Utah site, where lower-level radioactive waste from Zion will be shipped, charges between \$25 to \$100 per cubic foot for waste storage. About 4 million cubic feet of Zion waste will be shipped there, monitored by 30 air-sampling stations, 90 ground-monitoring wells and 60 soil-sampling stations. This might cost another firm \$400 million, a budget-breaking figure on a typical lump-sum project, but it’s one that should pay off for EnergySolutions.

This past January, in a sign of its financial struggles, a \$7 billion private equity firm, Energy Capital Partners, bought the company for \$1.1 billion and took it private, paying a 20-percent premium at \$3.75 per share, over the company’s average closing share price. “For our company, this transaction enables us to continue to execute on our strategic plan by providing the investment capital to expand and to grow our business,” said Lockwood, indicating a desire to see the company grow into the expanding market here and overseas.

The fate of Zion’s dry storage casks is less certain. EnergySolutions will turn the casks and the Zion site as greenfield back to Exelon once it has completed decommissioning. Exelon could turn the area into a park. The casks are licensed for 20 years, with up to four year extensions. The NRC believes the fuel can be safely stored for at least 100 in casks. But the radioactive half life is 16 million years, with a defined hazardous life of 160 million years. The world will soon be dotted with these ad-hoc radioactive dumps.

Source: [http://www.smartplanet.com/blog/big-story/for-aging-nuclear-reactors-a-coming-surge-of-shutdowns/632?tag=nl.e662&s\\_cid=e662&ttag=e662&ftag=TRE383a915](http://www.smartplanet.com/blog/big-story/for-aging-nuclear-reactors-a-coming-surge-of-shutdowns/632?tag=nl.e662&s_cid=e662&ttag=e662&ftag=TRE383a915)

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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

Information Notice 2013-14, Potential Design Deficiency in Motor-Operated Valve Control Circuitry, dated August 23, 2013

ML13144A834

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Information Notice 2013-15, Willful Misconduct/Record Falsification and Nuclear Safety Culture, dated August 23, 2013  
ML13142A437  
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FENOC (Beaver Valley, Perry, and Davis-Besse Nuclear Generating Stations) - Notice of Public Meeting on 9/24/13  
ADAMS Accession No. ML13252A171  
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Information Notice 2013-17, Significant Plant Transient Induced by Safety-Related Direct Current Bus Maintenance at Plant, dated September 6, 2013  
ML13193A009  
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RIS 2013-14, Reporting Transactions Involving Temporary Jobsites to the National Source Tracking System, dated September 11, 2013  
ML13210A235  
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RIS 2013-11, Resolution of Licensing Process Expectations for Pressurized Water Reactor Fuel Assemblies Susceptible to Top Nozzle Stress Corrosion Cracking in Dry Cask Spent Fuel Storage and Transportation, dated September 4, 2013  
ML13081A125  
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Information Notice 2013-18, Refueling Water Storage Tank Degradation, dated September 13, 2013  
ML13128A118  
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Beaver Valley, Units 1 & 2, Davis-Besse & Perry, Response to NRC Request for Information Pursuant to 10 CFS 50.54(f) Regarding Seismic Aspects of Recommendation 2.1 of Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident.  
ML13254A312  
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## **Davis-Besse**

Davis-Besse Nuclear Power Station, Unit No. 1 - Request for Additional Information Related to Relief Request RP-3  
Accession Number: ML13227A367  
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Davis-Besse Nuclear Power Station, Unit No. 1 - Request for Additional Information Related to Steam Generator Inventory Change  
Accession Number: ML13234390  
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SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON AUGUST 22, 2013, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND FIRSTENERGY NUCLEAR OPERATING COMPANY, CONCERNING LICENSE CONDITIONS PERTAINING TO THE DAVIS BESSE NUCLEAR POWER STATION LICENSE RENEWAL APPLICATION (TAC NO. ME4640)  
ADAMS Accession No. ML13240A070  
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MID-CYCLE ASSESSMENT LETTER FOR DAVIS-BESSE NUCLEAR POWER STATION  
(REPORT 05000346/2013006)

Adams Accession Number ML 13246A207

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Davis-Besse Nuclear Power Station, Unit No. 1 - Correction Letter For Safety Evaluation for  
Relief Request RP-6 and RV-1

Accession Number: ML13228A039

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Davis-Besse Nuclear Power Station, Unit No. 1 - safety Evaluation for Relief Request RR-A37  
(TAC No. MF0752) (L-13-076)

Accession Number: ML13255A421

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Davis-Besse Nuclear Power Station - NRC Problem Identification And Resolution Inspection  
Report 05000346/2013007

ADAMS Accession No. ML13266A431

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PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-III-13-007

ADAMS Accession Number: ML13263A410

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Davis-Besse Nuclear Power Station - NRC Problem Identification And Resolution Inspection  
Report 05000346/2013007

ADAMS Accession No. ML13266A431

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Safety Evaluation Report Related to the License Renewal of Davis-Besse Nuclear Power  
Station.

ML13248A267

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Enclosures A & B: Decommissioning Cost Analysis for the Davis-Besse Nuclear Power Station  
and Financial Escalation Analysis for the Decommissioning of Davis-Besse Nuclear Power  
Station.

ML13247A055

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Davis-Besse Nuclear Power Station, Unit No. 1 - Request for Additional Information Related to  
Inservice Pump and Valve Testing (TAC No. MF0537)(L-13-067)

Accession Number: ML13261A344

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## **Perry**

PERRY NUCLEAR POWER PLANT - NRC MATERIAL CONTROL AND ACCOUNTING  
PROGRAM INSPECTION REPORT 05000440/2013403 (COVER LETTER ONLY)

ADAMS ACCESSION NO. ML13248A032

\*\*\*\*\*

MID-CYCLE ASSESSMENT LETTER FOR PERRY NUCLEAR POWER PLANT (REPORT  
0500440/2013006)

ADAMS ACCESSION NO. ML13246A237

\*\*\*\*\*

Beaver Valley Power Station, Unit No. 1, and Perry Nuclear Power Plant, Unit No. 1 –  
Replacement of Parent Company Guarantee (TAC Nos. MF0401, and MF0403)

ADAMS Accession No.: ML13254A138

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2013 Perry Nuclear Power Plant Mid-Cycle Letter Combined.  
ML13246A237  
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## **Beaver Valley**

Beaver Valley Power Station - Mid-Cycle Performance Review and Inspection Plan (Report 05000334/2013006 and 05000412/2013006)  
ADAMS Accession No.: ML13246A229  
\*\*\*\*\*

Beaver Valley Power Station, Unit Nos. 1 and 2 - Project Manager Reassignments  
ADAMS Accession No.: ML13248A366  
\*\*\*\*\*

Beaver Valley Power Station, Unit 1 - Acceptance Review for License Amendment Request to Implement 10CFR50.61 a. "Alternate Fracture Toughness Requirements for Protection Against Pressurized Thermal Shock Events" (TAC No. MF2505)  
ADAMS Accession No.: ML13241A317  
\*\*\*\*\*

Beaver Valley Power Station, Units 1 and 2 – Request for Withholding Information From Public Disclosure (TAC Nos. ME9144 and ME9145)  
ADAMS Accession No.: ML13241A275  
\*\*\*\*\*

Beaver Valley Power Station, Unit No. 1, and Perry Nuclear Power Plant, Unit No. 1 – Replacement of Parent Company Guarantee (TAC Nos. MF0401, and MF0403)  
ADAMS Accession No.: ML13254A138  
\*\*\*\*\*

Beaver Valley Power Station, Unit Nos. 1 and 2 - Request for Additional Information Regarding End-of-Life Moderator Temperature Coefficient Testing (TAC Nos. ME9144 and ME9145)  
ADAMS Accession No.: ML13252A258  
\*\*\*\*\*

Beaver Valley - Discharge Monitoring Report (NPDES) Permit No. PA0025615.  
ML13241A343  
\*\*\*\*\*

Beaver Valley Power Station, Unit No. 2 - Staff Evaluation Regarding the 2012 Steam Generator Inspection Reports (TAC Nos. ME3998)  
ADAMS Accession No.: ML13233A427  
\*\*\*\*\*

## **Portsmouth Facilities**

NUREG-1350 Vol 25, Information Digest 2013-2014.  
ML13241A207  
\*\*\*\*\*

American Centrifuge Plant, Submittal of Description of Change and Changed Pages to the Security Program - Security-Related Information, Official Use Only, and Export Controlled Information.  
ML13247A681  
\*\*\*\*\*

2013 Report to Congress on the on the Health, Safety, and Environmental Conditions of the GDPs.

ML13253A160

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AREVA Design Control Document Rev. 5 - Tier 2 Chapter 11 - Radioactive Waste Management  
- Section 11.2 Liquid Waste Management System

ML13220A884

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## **Fermi 2**

FERMI OPERATOR LICENSING EXAMINATION APPROVAL LETTER

ADAMS ACCESSION NO# ML13246A436

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MID-CYCLE ASSESSMENT LETTER FOR FERMI POWER PLANT UNIT 2 (REPORT  
05000341/2013006)

ADAMS ACCESSION NO. ML13246A223

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## **Fermi 3**

NRC Staff Pre-Filed Evidentiary Hearing Exhibit NRC E21, "Prefiled Direct Testimony Of J.  
Peyton Doub And David A. Weeks Regarding Contention 8."

ML13263A205

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Attachment 1 to NRC3-13-0032, Response to RAI Letter No. 79 (eRAI Tracking No 6605) RAI  
Question No. 03.07.02-9.

ML13259A244

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Attachment 9 to NRC3-13-0032, FSAR Markups.

ML13259A245

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Intervenor Pre-Filed Hearing Exhibit INTS 010 - Detroit Edison Reply to a Notice of Violation  
05200033-09-201-01, 02, and 03.

ML13270A002

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Intervenor Pre-Filed Hearing Exhibit INTS 001 - NRC Inspection Report 05200033/2009-201  
and Notice of Violation to Detroit Edison Company.

ML13270A006

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