

To: Jim Mehl, ERU Supervisor
From: Zack Clayton, Rad Coordinator
Subject: November Monthly Report
Date: December 7, 2011

Beans

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

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

Coming Attractions

12/8 Working Group
1/4 Working group
1/17 URSB
1/26 NEPAC

Facility updates

Davis-Besse Nuclear Power Station

Davis-Besse started November in a planned maintenance shutdown to replace the reactor head. The plant did not resume power operations in November

Davis-Besse has finished their review of the cracking found in the shield building and presented their findings to the NRC November 9 for evaluation. This meeting was regulatory and limited to the NRC and Davis-Besse/FENOC participation. Davis-Besse will not be permitted to resume operation until NRC is satisfied the shield building will protect public health and safety. There is no projected timeline from the NRC on when the plant will resume operation.

Davis-Besse sent this update on Monday 11/21.

Last Night 11/20 DBNPS completed the Shield Building concrete pour. The concrete is in its cure period and will take ~56 hours to cure to a hardness of 4000 psi. 4000 psi is required to declare the Shield Building operational.

Today staff should closeout the CTMT, complete the Mode 3/4 Checklist and close Mode 4 restraints.

Operations increased RCS temperature to 165 deg F and pressure to 240 psi in preparation for Mode 4 entry scheduled for Wednesday.

As of this morning 11/21 the current schedule projects an ability to return to 100% power sometime on 11/30.

At 0222 November 16, water sprayed onto an electrical bus which caused the bus to short circuit and caused an explosion and fire. Davis-Besse declared an Alert because the event affected the control room emergency ventilation system, which is a safety related system. Core cooling and electrical power supplies were unaffected. The plant was not operating due to the maintenance shutdown and there was no danger of a release. The state activated the Dose Assessment Annex but the event was terminated before it could be staffed. The plant exited the Alert at 0443 and the plant is in a stable condition. The water spray was from an overhead valve which leaked demineralized water onto the electrical bus. The valve has been repaired and root cause of the leakage is being evaluated. The NRC was notified, see Event No. 47443

Outage update as of November 28. NRC Region III and FENOC have been working together over the weekend to evaluate the DBNPS shield building cracking issue. The NRC has requested that FENOC provide them with some revised information that explains and refines the calculations being used to evaluate the cracking effects on the shield building. FENOC will provide the new information to the NRC this week for evaluation. The plant remains in cold shutdown (Mode 5) at this time.

Perry Nuclear Power Plant

Perry started November at full power.

On Friday Nov. 11 Perry tested the modifications made to the replacement transformer the Plant received from Davis-Besse. This testing process was to evaluate the adequacy of the transformer modifications. Perry does not plan to put the transformer into service at this time. The NRC will be present to oversee the testing activities.

As of Monday Nov. 28 Perry continues to test the modified replacement transformer. The plant has placed a partial electrical load on it and testing is expected to continue this week. The plant is still operating using the alternate equipment pathway the NRC approved on a temporary basis. This alternate equipment path can be used until December 12, 2011. Perry expects the replacement transformer will be operational before that date.

Beaver Valley Power Station

Beaver Valley Unit I

Unit I operated at full power for November.

During a Nov. 2 field inspection of Unit 1 it was discovered that a fire barrier did not conform to flame retardant requirements. A manned fire watch was established and there was no immediate risk. Unit 1 remains operational at 100% power. See Event Number 47403.

Beaver Valley Unit II

Unit II operated at full power for November.

Fermi II

Fermi II operated at full power for November.

On Thursday afternoon, Oct 27, a security officer shot himself in the foot while cleaning his weapon. See Event Report 47383.

Fermi III

The draft EIS for Unit 3 has been submitted and has no obvious concerns that would prevent construction. The plant proposed for construction is an economic simplified boiling water reactor (ESBWR) design by GE-Hitachi Nuclear Energy Americas LLC, which NRC approved in March.

Portsmouth Enrichment Plant

There were no reports for Portsmouth for November.

Activity

- 11/8 NRC/FEMA Video Conference regarding the REP Program Manual and related documentation. The main thrust of the presentation was a walkthrough of what each of the presenters would be looking for in terms of implementation. The interesting question that was asked is when the explanatory documents disagree with the manual, which takes precedence and what will FEMA do to bring the two into alignment?
- 11/16 Working Group - Agency and plant updates, discussion of the FEMA/NRC video conference, and the IZRRAG training. In response to a question at the last exercise ODH has drafted a process for changing the dose limits for lifesaving activities. Due to confusion over DRL and DIL samples from OEPA the sample designation for drinking water is now W with a different

numbering sequence. The Environmental samples will continue as E 2xxxx numbering.

Office Issues

Dose Assessment, IZRRAG, and Field Team SOP review and revision continues. NAS-T TTX evaluation received and corrective recommendations are being implemented in procedures.

News, NRC Reports, and Statistics

Operating Power Levels

October

Date	BV1	BV2	DB	Perry	Fermi2
1	100	100	0	100	100
7	100	100	0	100	100
14	100	100	0	100	100
21	100	100	0	100	100
28	100	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> or to access generic communications files on the NRC Homepage: <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/reg-issues/2010/>.

To access these documents use the ADAMS Accession number listed with the title. This is in the format of : ML #####

Davis-Besse: Schedule Revision For The Environmental And Safety Review Of The Davis-Besse Nuclear Power Station, Unit No. 1, License Renewal Application
ADAMS Accession No. ML11256A164

RIS 2011-11, Regarding Long-Term Surveillance Charge for Conventional or Heat Leach Uranium Recovery Facilities Licensed Under 10 CFR Pat 40, dated September 29, 2011.

Adams Accession # ML111290381

Perry Nuclear Power Plant, Unit 1 - Withdrawal of license amendment request –
ADAMS Accession # ML112920127

Perry Nuclear Power Plant NRC Integrated Inspection Report 05000440/2011004 –
ADAMS Accession # ML113050625

Beaver Valley Power Station: NRC Integrated Inspection Report 05000334/2011004
and 05000412/2011004

ADAMS Accession No: ML11306A204

Davis-Besse Nuclear Power Station, Unit 1 - Request for additional information related
to Relief Request-A35 (RR-A35), Proposed Alternative to System Leakage
Requirements –

ADAMS Accession no. ML113060557

FERMI: NRC SECURITY BASELINE INSPECTION REPORT
05000341/2011405(DRS) – Cover Letter Only

ADAMS Accession No. ML11312A169

DAVIS-BESSE NUCLEAR POWER STATION 11/4/11 Confirmation of Operator
License Exam

ADAMS ACCESSION# ML11311A292

Beaver Valley Power Station, Unit Nos. 1 and 2 – Correction Letter to the Adoption of
Technical Specifications Task Force Change Traveler-513 Amendment Nos. 288 and
175 (TAC Nos. ME6120 and ME6121)

ADAMS Accession No.: ML113080050

DAVIS-BESSE: Request for Additional Information for the Review of the Davis-Besse
Nuclear Power Station License Renewal Application

ADAMS Accession No. ML11306A141

2.206 Petition Regarding Boiling Water Reactors with Mark I and Mark II Containment
Designs

ADAMS Accession No.: ML112800606

Fermi Power Plant Unit 2 Problem Identification and Resolution Inspection Report
05000341/2011008 –

ADAMS Accession No. ML113191310

Information Request to Support Upcoming Problem Identification and Resolution
Inspection at the Perry Nuclear Power Plant –

ADAMS Accession No. ML113202583

PERRY CONFIRMATION OF OPERATOR LICENSE EXAM

ADAMS ACCESSION# ML11325325

Beaver Valley Power Station, Unit Nos. 1 and 2 – Relief Request VRR5 Regarding Turbine Driven Auxiliary Feedwater Valve Test Frequency for the 10-Year Inservice Testing Program Interval (TAC Nos. ME5781 and ME5782)
ADAMS Accession No.: ML113130428

Davis-Besse: Summary of Telephone Conference Call Held on October 26, 2011, between the U.S. Nuclear Regulatory Commission and FirstEnergy Nuclear Operating Company, Concerning Requests for Additional Information Pertaining to the Davis-Besse, License Renewal Application
ADAMS Accession No. ML11308A697

Acknowledgement Letter to Mr. Lochbaum 11/23/11.
ADAMS ACCESSION# ML11329A085

PERRY HEAT SINK REQUEST FOR INFORMATION LETTER
ADAMS ACCESSION# ML11329A049

Fermi, Unit 2 - Request for Additional Information Regarding 60-Day Response to Bulletin 2011-01, "Mitigating Strategies"
ADAMS Accession Number: ML113202098

Beaver Valley Power Station, Unit Nos. 1 and 2 – Request for Additional Information Regarding 60-Day Response to Bulletin 2011-01, "Mitigating Strategies" (TAC Nos. ME6400 and ME6401)
ADAMS Accession No.: ML113260278

Holders of Licenses for Operating Power Reactors: Rescission or Partial Rescission of Certain Power Reactor Security Orders Applicable to Nuclear Power Plants
ADAMS Accession Number: ML111220447

Beaver Valley Power Station Unit 1: Senior Reactor and Reactor Operator Initial License Examinations
ADAMS ACCESSION NO. ML11334A008

Information Notice 2011-20, Concrete Degradation by Alkali-Silica Reaction
ADAMS Accession No. ML112241029

Perry Nuclear Power Plant, Unit No. 1 - Request for additional information regarding 60-day response to NRC Bulletin 2011-11, "Mitigating Strategies" –
ADAMS Accession no. ML113330268

Davis-Besse Nuclear Power Station, Unit No. 1 - Request for additional information regarding 60-day response to NRC Bulletin 2011-11, "Mitigating Strategies" –
ADAMS Accession no. ML113330322

News

USEC extends uranium-plant agreement

Company, seeking \$2 billion loan guarantee from U.S., renews pact with investors

By Jessica Wehrman

The Columbus Dispatch

Tuesday November 1, 2011 4:20 AM

WASHINGTON — The company that wants to launch a uranium enrichment plant in southern Ohio says it will extend an agreement with investors for the fourth time to give the Department of Energy more time to offer a \$2 billion loan guarantee.

USEC, the Maryland-based company that hopes to create its American Centrifuge Project in Piketon, Ohio, also announced that, rather than reducing investment by 30 percent starting Nov. 1, it will evaluate whether to do so on a day-to-day basis. And though the company has sent out notices warning employees of potential layoffs, it now says it will evaluate whether to do so on a day-to-day basis.

USEC had entered an agreement with two key investors — Toshiba and Babcock & Wilcox — that if it had not received the \$2 billion loan guarantee by yesterday, the investors could walk away from promised future investments. Yesterday's announcement extended that agreement until Jan. 15.

The announcement came on the same day that both of Ohio's U.S. senators spoke with Energy Secretary Steven Chu in an effort to push the Energy Department to support USEC's plan.

Sen. Rob Portman, R-Ohio, met with Chu at around noon, according to a spokesman.

Sen. Sherrod Brown, D-Ohio, spoke with Chu via telephone later in the afternoon.

In his meeting with Chu, Portman said he was disappointed that the company has not received a loan guarantee after three years.

"While I am frustrated, it is too important to the economic well-being of southern Ohio and America's national and energy security to allow this important project to fail," he said.

Brown, meanwhile, urged Chu to release money that the department already has to the Piketon project. In 2009, the department invested \$45 million in the American Centrifuge Project. Brown urged the department to invest additional money to keep jobs while USEC satisfies any remaining concerns about the loan guarantee application.

"The Department of Energy should use its existing resources to help sustain the American Centrifuge Plant," Brown said. "We have an obligation to work together to realize the thousands of jobs that would be created through (the American Centrifuge Project)."

USEC applied for a \$2 billion loan guarantee for the project three years ago but has not yet succeeded in securing the financing. Without the financing, company officials said, they cannot secure key investments that they'll need to proceed with the project.

Last month, the Department of Energy announced that though it had not yet approved the loan guarantee, it would invest up to \$300 million for research and development in the plant if Congress agreed to the funding.

Energy Department officials have indicated they support the technology and would like to see it commercialized and said the investment would help satisfy technological concerns about the plant.

Local lawmakers say though they appreciate the investment, the Department of Energy's decision to request up to \$300 million adds an extra hurdle — congressional approval — to the quest to get the American Centrifuge Project off the ground.

If completed, the project could be an economic boon to a part of the state plagued by high unemployment. USEC officials say the project could bring 4,000 construction jobs and 400 permanent jobs to the state.

Currently, the plant employs 264.

jwehrman@dispatch.com

More cracks are found in Davis-Besse building

Tuesday, November 01, 2011

blade staff

PORT CLINTON — More cracks were found in the concrete “shield building” at the Davis-Besse Nuclear Generating Station, including two areas of subsurface cracks “not associated” with cracks in the structure’s architectural features, FirstEnergy said Monday in a letter to investors.

The newly discovered “indications” of cracks were identified during electronic testing and concrete sampling stemming from an initial discovery of a 30-foot hairline crack in the shield building that appeared after utility contractors cut a hole through its concrete for access to install a new reactor head. Davis-Besse has been shut down since Oct. 1 for that procedure.

The testing has revealed “similar subsurface hairline cracks in most of the building’s architectural elements,” which protrude up to 18 inches beyond the main structure of 2½-foot-thick reinforced concrete, according to the letter. But the two areas of subsurface cracking deemed “not associated” with that cracking are being investigated “as a separate issue,” the letter said.

“Our overall investigation and analysis continues. We currently expect Davis-Besse to return to service around the end of November,” wrote Ronald Seeholzer, FirstEnergy’s vice president of investor relations. Nuclear Regulatory Commission inspectors remain at the plant and are observing the cracks’ assessment, he added.

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USEC moving day-by-day

November 2, 2011

By FRANK LEWIS

PDT Staff Writer

Now that the target date for potential layoffs at the American Centrifuge project in Piketon has come and gone, company officials say they are looking at the situation day by day.

On Sept. 30, USEC Inc. mailed Worker Adjustment and Retraining Notification (WARN) Act notices to all of the approximately 450 USEC American Centrifuge workers at the Piketon plant, as well as those in Tennessee and Maryland, informing them of a potential layoff in the first half of November. For three years, the company has been waiting for the U.S. Department of Energy to authorize a \$2 billion loan guarantee. In addition, investors Babcock & Wilcox Investment Company and Toshiba Corporation have agreed in principle to further extend a standstill agreement related to their investment agreement through Jan. 15, 2012.

USEC announced Monday discussions are ongoing between the company, DOE and Congress, regarding the ACP.

According to Paul Jacobson, vice president of communications for USEC, the American Centrifuge project seeks to deploy an innovative technology developed by DOE and improved by USEC in recent years. DOE and USEC have been in discussions to work together through a Research, Development and Demonstration (RD&D) program to further reduce technical project execution and financial risks for commercializing the technology. The RD&D program is expected to involve manufacturing and operating additional production design machines so key systems can be tested as they would actually operate at the scale necessary for full commercialization. USEC is working together with DOE and Congress on support for the RD&D program.

Meanwhile, during a phone call Monday with Energy Secretary Steven Chu, U.S. Sen. Sherrod Brown urged the Energy Department to further invest in Piketon's American Centrifuge Plant (ACP) by immediately releasing existing resources DOE has available for Research Development and Demonstration (RD&D). In 2009, the Department of Energy (DOE) made a \$45 million investment to further advance ACP. Brown urged an additional investment to retain jobs while USEC works to ensure ACP is in the strongest technical and financial position to secure a conditional loan guarantee.

"The Department of Energy should use its existing resources to help sustain the American Centrifuge Plant," Brown said. "We have an obligation to work together to realize the thousands of jobs that would be created through ACP. That means USEC working to ensure that the project is in the strongest financial and technical position to secure a conditional guarantee. And that means DOE being a good partner in retaining and creating jobs in Southern Ohio."

Brown told CHU USEC's application for a government loan guarantee would help build state-of-the-art uranium enrichment technology at the former Gaseous Diffusion Plant in Piketon. If successful, the ACP could bring as many as 4,000 construction jobs and 400 long-term, full time jobs to Piketon.

USEC officials said any decision regarding continued spending or demobilizing the project will be evaluated on a day-to-day basis. However, if an agreement between USEC and DOE is not reached, actions to demobilize the project, including worker layoffs, could take effect.

Read more: Portsmouth Daily Times - USEC moving day by day

Japanese reactors plagued by fission bursts

Thursday November 3, 2011 5:45 AM

TOKYO — Workers at the crippled Fukushima nuclear plant raced to inject boric acid into the No. 2 reactor early yesterday after telltale radioactive elements were detected there, and the plant's owner admitted for the first time that fuel deep inside three stricken plants probably was continuing to experience bursts of fission.

The unexpected bursts — something akin to flare-ups after a major fire — are extremely unlikely to result in a big nuclear reaction with the accompanying large-scale production of heat and radiation. But they threaten to increase the amount of dangerous radioactive elements leaking from the complex and complicate cleanup efforts.

The Japanese government has said that it aims to bring the reactors to a stable state known as a "cold shutdown" by the end of the year.

Columbus Dispatch

New trouble reported at Japan nuclear plant

November 2, 2011

The Herald-Star

TOKYO (AP) - Officials detected a radioactive gas associated with nuclear fission at Japan's tsunami damaged atomic power plant today, indicating there could be a new problem at one of its reactors. They injected a substance that neutralizes nuclear reactions as a precaution.

Gas from inside the reactor indicated the presence of radioactive xenon, which could be the byproduct of unexpected nuclear fission. Boric acid was being injected through a cooling pipe as a countermeasure because it can counteract nuclear reactions.

The Tokyo Electric Power Co., or TEPCO, said there was no rise in the reactor's temperature, pressure or radiation levels. The company said the radioactive materials inside the reactor had not reached criticality — the point when nuclear reactions are self-sustaining — and the detection of the xenon would have no major impact on their efforts to keep the reactor cool and stable.

"We have confirmed that the reactor is stable and we don't believe this will have any impact on our future work," said TEPCO spokesman Osamu Yokokura. He said no radiation leaks outside the plant were detected.

Hiroyuki Imari, a spokesman with the Nuclear Industrial Safety Agency, said the detection of the gas was not believed to indicate a major problem, but its cause was being investigated.

The plant was the site of the worst nuclear disaster since Chernobyl in 1986.

A 12-mile (20-kilometer) exclusion zone has been in effect since the earthquake and tsunami on March 11 crippled the facility north of Tokyo, sending three of its reactors into meltdowns, touching off fires and triggering several explosions.

The latest setback comes as TEPCO had reported significant progress toward stabilizing the plant. TEPCO says it has essentially reached a "cold shutdown" of the plant, meaning the temperatures at the reactors are constant and under control.

Even so, a Japanese government panel says it will take at least 30 years to safely decommission the facility.

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November 8, 2011

Ohio: Scientists Sound Alarm on Nuclear Plant

By THE ASSOCIATED PRESS

A watchdog group is questioning the soundness of a nuclear plant where a 30-foot hairline crack was recently discovered. The crack was found in the thick concrete on the outside of the reactor containment building at the Davis-Besse plant outside Toledo. Further inspections found numerous, tiny cracks on the building's facade.

The Union of Concerned Scientists has written the Nuclear Regulatory Commission asking whether the concrete walls were built to adequate engineering specifications. The plant's owner, the FirstEnergy Corporation, says that the walls were designed properly and that the building has been inspected thoroughly.

The plant has been shut down for installation of a new 82-ton reactor head, replacing one that cracked.

Minor fire reported at Davis-Besse

Wednesday, November 16, 2011

BLADE STAFF

OAK HARBOR, Ohio — A minor fire early Wednesday damaged an electrical panel for a sump pump at the idle Davis-Besse Nuclear Generating Station, the plant's owner reported.

Jennifer Young, a spokesman for FirstEnergy Nuclear Operating Co., said the fire burnt itself out after about 15 minutes and was caused by an electrical arc resulting from a water leak above the electrical panel. The leak came from a valve on a water-supply line to offices at the plant, she said.

"It did not affect safety equipment," the spokesman said.

According to a report to the Nuclear Regulatory Commission, an alert was declared at Davis-Besse at 2:22 a.m. because of the fire, and the alert was terminated at 4:43 a.m. The plant has been shut down since Oct. 1 for replacement of its reactor head, a shutdown during which hairline cracks have been found in the reactor building's outer containment/protection structure. The cracks remain under investigation.

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Davis-Besse to stay shut until probe ends

Thursday, November 17, 2011

By DAVID PATCH

BLADE STAFF WRITER

OAK HARBOR, Ohio -- Crews are expected to pour concrete later this week to patch an access portal that was cut into the outer shield building at Davis-Besse nuclear plant to replace the plant's reactor head, a FirstEnergy spokesman said Wednesday.

But a Nuclear Regulatory Commission spokesman said the agency won't let the plant resume operation until the probe of hairline cracks found in the shield building's concrete after that hole was cut in October is complete. "Until we have confidence that the cracks in the Shield Building don't have any safety implications, the plant won't go back online," Viktoria Mytling, spokesman at the NRC's regional office in Chicago, said.

She said a minor electrical fire that FirstEnergy Nuclear Operating Co. reported early Wednesday morning at the plant "is not a safety concern," but the federal agency expects FirstEnergy to investigate why a valve leak blamed for the fire occurred and will review the utility's findings.

NRC inspectors at the plant were "monitoring the situation as it happened," the spokesman said.

An alert was declared at Davis-Besse at 2:22 a.m. because of the fire, which affected an electrical panel in the plant's auxiliary building. The fire burned itself out within about 15 minutes, FirstEnergy spokesman Jennifer Young said. The alert was terminated at 4:43 a.m.

Water leaking from a valve on a pipe supplying water to offices in the building leaked onto the electrical panel, which supported a sump pump in the building, Ms. Young said. The water caused an electric arc that started the fire, she said.

The plant was shut down Oct. 1 for the reactor head replacement and thus was not operating when the fire occurred.

The reactor is contained and protected by separate 1 1/2-inch steel and 2-foot concrete structures through which a large hole was cut to provide external access for replacing the reactor head.

After the concrete was cut, workers discovered an "indication" of a 30-foot hairline crack, and subsequent tests revealed similar "indications" throughout the structure. FirstEnergy later said most such cracks were in decorative "architectural" concrete attached to the building's exterior to give it texture, but also disclosed that it was investigating several "indications" of cracks of a different nature in the concrete.

Ms. Young said Wednesday the reactor head replacement had been completed and that the steel removed to create the access hole had been welded back into place and pressure tested. The shield building hole should be patched by week's end, she said.

Ms. Mytling said such patching would not affect the NRC investigation, and no timetable is in place for restarting the plant.

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NRC finalizes post-9/11 safety rule

Hannah Northey, E&E reporter

Published: Tuesday, November 22, 2011

The Nuclear Regulatory Commission finalized a rule today to close safety gaps that were identified at nuclear power plants after the Sept. 11, 2001, terrorist attacks.

NRC began crafting the measure about nine years ago and held a series of public meetings and comment periods.

The rule addresses a series of safety "enhancements" for U.S. reactors identified in a 2002 NRC report following the terrorist attacks, as well as a review conducted in 2004.

The rule will take effect in late December and is aimed at helping plant workers safeguard reactors during emergencies such as hostage situations, fires and loss of off-site power.

Plant operators must conduct at least one "hostile action drill" by 2015, a mock scenario in which attackers use force to destroy plant equipment or take hostages. Operators currently conduct biennial exercises that address plant malfunctions, but the new drills would address a wider range of hypothetical attacks.

Operators must also ensure workers can quickly and easily respond to emergencies without ignoring other duties. NRC said workers overwhelmed during past emergencies failed to respond quickly, namely during fires and when the plants lost power.

NRC is also requiring operators to review the time it takes to evacuate core emergency areas surrounding nuclear reactors and determine whether population shifts over the years would delay current plans. The commission does not currently require operators to update evacuation times.

"There was no specific [requirement] as far as how often you had to revise the plans," said Martin Hug, a senior project manager in emergency preparedness at the Nuclear Energy Institute. "So now the rule ties certain population change sizes to when you have to review the evacuation time estimate."

The commission will also hold a series of national workshops with the Federal Emergency Management Agency in the coming months to give industry and local respondents, including police and fire departments, the chance to ask questions about the rule.

NRC crafted the rules with input from FEMA, which also updates its regulations.

[Click here](#) for NRC's review.

Source: <http://www.eenews.net/eenewspm/2011/11/22/3>

Sandusky Register

Kucinich urges public hearing on Davis-Besse's planned restart

MELISSA TOPEY

05:00 AM

NOV 23, 2011

CARROLL TWP.

U.S Rep. Dennis Kucinich has asked the Nuclear Regulatory Commission to host a public hearing so Ohioans can ask questions about FirstEnergy's plans to repower Davis-Besse.

In a letter he sent this week to the regulatory commission's chairman, Kucinich said FirstEnergy has a history of placing profit ahead of safety at Davis-Besse Nuclear Power Station. "A public hearing is necessary because FirstEnergy has been characterizing the situation at Davis-Besse in ways that I believe are misleading," Kucinich wrote.

The facility has been shut down since last month, when workers started replacing the nuclear reactor head.

During that process, they discovered 30-foot cracks in the shield building, which houses the containment building. Inside the containment building is the nuclear reactor.

FirstEnergy has said it plans to power the facility back up by the end of this month.

Plant Reports

Power Reactor	Event Number: 47403
Facility: BEAVER VALLEY Region: 1 State: PA Unit: [1] [] [] RX Type: [1] W-3-LP,[2] W-3-LP NRC Notified By: DAVID GIBSON HQ OPS Officer: VINCE KLCO	Notification Date: 11/02/2011 Notification Time: 20:41 [ET] Event Date: 11/02/2011 Event Time: 14:30 [EDT] Last Update Date: 11/02/2011
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(ii)(B) - UNANALYZED CONDITION	Person (Organization): NEIL PERRY (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

Event Text

UNANALYZED CONDITION CAUSED BY NON-CONFORMING FIRE BARRIERS

"Ongoing field inspections as a result of Industry Operating Experience have identified certain fire barriers that are not in conformance with required tested configurations. Specifically, some of the flexible conduit that penetrates these barriers has a coating that does not exhibit flame retardant characteristics and therefore does not meet the requirements for fire barriers at Beaver Valley Power Station, Unit 1.

"In the event of a postulated fire, this non-conformance has the potential to affect fire barriers separating the two independent trains required for post fire Safe Shutdown equipment. This issue is being reported per 10CFR 50.72(b)(3)(ii)(B).

"Compensatory actions have been established in accordance with the approved Fire Protection Program.

"The NRC Resident Inspector has been notified."

Power Reactor	Event Number: 47443
Facility: DAVIS-BESSE Region: 3 State: OH Unit: [1] [] [] RX Type: [1] B&W-R-LP NRC Notified By: TOM COBBLEDICK HQ OPS Officer: JOHN KNOKE	Notification Date: 11/16/2011 Notification Time: 03:04 [ET] Event Date: 11/16/2011 Event Time: 02:22 [EST] Last Update Date: 11/16/2011
Emergency Class: ALERT 10 CFR Section: 50.72(a) (1) (i) - EMERGENCY DECLARED	Person (Organization): DAVID HILLS (R3DO) JANE MARSHALL (IRD) CINDY PEDERSON (RA) BRUCE BOGER (ET) JENNIFER UHLE (DRA) MICHAEL INZER (DHS) DAVID BARDON (FEMA) DANIEL GUNN (DOE) ART WOOD (USDA) DANIEL CONNALLY (HHS)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	N	N	0	Cold Shutdown	0	Cold Shutdown

Event Text

ALERT DUE TO FIRE IN ELECTRICAL BUS AFFECTING SAFETY RELATED EQUIPMENT

At 0222 EST on November 16, 2011, an ALERT was declared due to an electrical fire in the auxiliary building which houses safety related equipment. The apparent cause of the fire was due to an unknown source of water leaking on a breaker, thus causing an arc. The electrical fire is out. The plant was at 0% power and will remain shutdown in Mode 5. There was no impact on core cooling, or emergency power supplies.

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

* * * UPDATE FROM JANE MALLERNEE TO JOHN KNOKE AT 0449 EST ON 11/16/11 * * *

At 0443 EST on November 16, 2011, Davis Besse, Unit 1 exited their ALERT. The electrical short affected the Control Room Emergency Ventilation Fan #1 Damper.

The licensee has notified the NRC Resident Inspector. Notified R3DO (Hills) and Canada Nuclear Safety Commission (Jim Sandlef).

Update on Fukushima Daiichi

A new chronology documents 'hell on earth' for Fukushima crews

Peter Behr, E&E reporter

Published: Monday, November 14, 2011

A new account of the Fukushima Daiichi nuclear disaster provides more detail of utility crews' desperate battle to head off reactor meltdowns amid a maelstrom of darkness, aftershocks, explosions, radiation exposure and mortal danger. But the report by the U.S. industry performance monitor still does not resolve why some critical valves and controls failed at the stricken plant.

The matter-of-fact language of the Institute of Nuclear Power Operations (INPO) report describes workers' frantic, makeshift efforts at operating crucial valves and instrumentation with truck batteries; hauling massive emergency cables across flooded passageways where manhole covers were dislodged; wading through irradiated water; being driven back from reactor chambers by bursts of steam and sudden spikes in radiation; and subsisting each day on just biscuits and a bowl or two of noodles because of food shortages.

"Because of the tsunami and earthquake damage to the surrounding communities, little outside assistance was initially available. Some workers lost their homes and families to the earthquake and tsunami, yet continued to work," the authors wrote.

Two workers were trapped inside a plant turbine building and killed by floodwaters. Sixteen workers and Japan Self-Defense Force members were injured by explosions. Two were treated for high exposure, and others were exposed to radiation beyond emergency limits.

"The report reinforced that it was hell on earth for those operators. You could hardly write a scenario that was more horrific than what they were facing," said Lake Barrett, former head of the Energy Department's Office of Civilian Nuclear Waste Management and site manager for the stabilization and cleanup at the Three Mile Island reactor after the 1979 accident there.

The INPO chronology of the accident's first four days does not offer recommendations for new safety regulations for U.S. reactors. "Most of the information in the report has been previously released, but in a piecemeal fashion," the industry's Nuclear Energy Institute said in releasing the report.

NEI Senior Vice President and Chief Nuclear Officer Tony Pietrangelo said, "It is important that we all work from the same set of facts in determining the appropriate response. It is of paramount importance that we learn from it and take our facilities to even higher levels of safety and preparedness."

The report is likely to add to the debate about how U.S. reactor regulation and practices should be changed in light of the Fukushima disaster. The Nuclear Regulatory Commission, after concluding that U.S. plants remain safe, has begun initial regulatory actions to strengthen safety defenses and reevaluate worst-case earthquake threats to

U.S. reactors. Any remedial action based on the earthquake review could take years to be ordered and completed, industry officials say.

Planners missed the worst case

The plant operator, Tokyo Electric Power Co. (TEPCO), and Japanese regulators failed to anticipate the impact of a worst-ever tsunami on the plant's defensive systems, INPO's report notes.

"The tsunami design basis for Fukushima Daiichi [based on the maximum anticipated threat] considered only the inundation and static water pressures, and not the impact force of the wave or the impact of debris associated with the wave," INPO reported. Flooding and debris disabled water intakes that were essential to cool the reactor and emergency generators.

In 2002, TEPCO voluntarily reassessed the plant's defenses against tsunamis, concluding that the risk of higher tsunamis had to be considered. The defenses included a breakwater barrier that ranged in height from 18 to 33 feet.

"The breakwater was not modified when the new tsunami height was implemented because it was not intended to provide tsunami protection, but rather to minimize wave action in the harbor," INPO said. At least one of the tsunami waves that struck on March 11 was above 46 feet in height, five times greater than officials anticipated. It swamped the facility, disabling backup diesel generators that were essential to maintain cooling of the reactors, which shut down automatically following the quake.

A still-unresolved issue for U.S. nuclear operators and the NRC is how to strengthen plants in this country against the prolonged power loss that Fukushima suffered.

Without alternating-current power and backup battery reserves, the Fukushima crews were in a race against time as they labored to maintain water cover over the reactor fuel assemblies with jury-rigged attempts. The report outlines how that race was lost, leading to the buildup of explosive hydrogen gas. Steam and gas pressure soared to double normal levels, effectively blocking lower-pressure water from fire trucks and emergency pumps from reaching the core. Some pressure relief valves that could have opened automatically failed to do so, a failure that is still under study.

The core in Unit 1 may have become uncovered three hours after the earthquake, and fuel damage might have commenced approximately 1.5 hours later. The first hydrogen explosion, at Unit 1, occurred a day after the earthquake. Workers had been just six minutes away from reconnecting power to Unit 2 when the massive blast blew the top off Unit 1, damaging Unit 2 and littering the area with radioactive debris. "The explosion significantly altered the response to the event and contributed to complications in stabilizing the units," INPO said.

"One of the things that is really important in lessons learned -- we knew it before, but this really reinforces it -- high containment pressures are a real problem in this design to get low-pressure water in," Barrett said. "They realized later in the [first] day that they weren't getting core cooling because the radiation levels were so high." But with all power supply lost, the improvised water supply remedies did not work in time to prevent the fuel rods from becoming uncovered and melting down.

Failure of basic emergency instruments

A key focus of the NRC's Near Term Task Force report on the Fukushima accident was the need to strengthen emergency equipment that could overcome the loss of outside and internal power and increase training for coping with extreme emergencies.

The INPO report cites critical shortages of emergency equipment at Fukushima. Portable generators were located. "However, damaged roads and congested traffic prevented the generators from reaching the site quickly," INPO says.

"Helicopters were considered, but the generators were too large and heavy to carry." Some mobile generators began arriving late on March 11, but could not immediately be connected because of the damage and debris. From the generators to connect to the plant, workers had to lay electric cables, each of them 656 feet long, weighing 1 ton, across flooded spaces. "The force of the tsunami had blown manhole covers off, resulting in unmarked openings in the ground" that could have swallowed up a worker, INPO said.

The failure of crucial instrumentation because of the power outage -- another issue before the NRC -- left operators unable to verify critical water, temperature, pressure and radiation levels. "The lack of available containment pressure indications early in the event may have prevented the operators from recognizing the increasing pressure trend and taking action earlier in the event," the report says.

But even more basically, workers didn't have enough portable radios to communicate with command centers or enough dosimeters to measure individual workers' radiation exposures.

Operators were sent into Unit 2 to check the condition of an emergency cooling system, but were slowed by the breathing equipment they had to wear. Water in the building came nearly to the top of their protective boots, and they had to retreat. Lacking radios, they had to return to the control room to report the situation.

Delaying a decision to vent Unit 1

The INPO report describes an extended and complex decisionmaking process that unfolded before orders were given to vent the reactor containment structures to relieve dangerous pressures. The adequacy of emergency planning at U.S. reactor sites is another issue awaiting NRC action.

A decision to vent Unit 1 was made at 1:30 a.m. on the second day, March 12. But since venting would release radioactivity into the environment, the action was delayed to assure that public evacuation plans had been completed, INPO said.

At 6:50 a.m. on March 12, the Ministry of Economy, Trade and Industry ordered TEPCO to vent Unit 1. Prime Minister Naoto Kan arrived at the plant shortly after 7 a.m. in the midst of the venting decisionmaking. The established procedure said that a venting decision "should be coordinated with local governments and that the station should be knowledgeable about the status of evacuations. These statements had been interpreted as providing guidance to verify evacuations were completed before venting," INPO said. The decisions framework wasn't clear, Barrett said, and the Japanese culture of decisionmaking by consensus slows action further. "I think it exacerbated the situation." But once the venting go-ahead was given, crews were unable to begin venting until 2:30 p.m., almost 24 hours after the accident began, and by that time, it was too late to prevent hydrogen from escaping the containment through some still-unconfirmed breach, and gather at the top of Unit 1. The explosion occurred one hour later.

Source: <http://www.eenews.net/climatewire/2011/11/14/2>