To: Jim Mehl, ERU Supervisor

From: Zack Clayton, Rad Coordinator

Subject: September Monthly Report

Date: October 17, 2011

Beans

Training:	0
Drills:	2
Meetings:	3
Technical Assistance:	1
Public Assistance:	1

Web Page Views: There were 24 page views in September.

Coming Attractions

10/5	Working Group
10/11	URSB
10/17-10/21	IZRRAG Training and Drill
10/27	NEPAC
11/2	Working Group

Facility updates

Davis-Besse Nuclear Power Station

Davis-Besse operated at full power for September.

Perry Nuclear Power Plant

Perry operated at full power for September.
Perry is in Column Three of the Action Matrix for a White Finding and a degraded performance indicator.

Beaver Valley Power Station

Beaver Valley Unit I

Unit I operated at full power for September.

Beaver Valley Unit II

Unit II operated at full power for September.

Fermi II

Fermi II operated at full power for September.

On September 6 during surveillance testing of the High Pressure Coolant Injection (HPCI) system, the control room lost indication on the HPCI Minimum Flow Valve position. Two blown fuses were found, but the incident is under investigation. See Event no. 47242.

Portsmouth Enrichment Plant

There were no reports for Portsmouth for September but the deadline for grant approval was the 30th. It is unclear whether the funding partners will continue in the project.

GE Hitachi

GE Hitachi Nuclear Energy (GEH) has identified that engineering evaluations that support the guidance provided in SC 08-05, Revision 1, do not address the potential impact of a seismic event on the ability to scram as it relates to the channel-control blade interference issue. The scram capability is expected to be affected due to the added seismic loads at low reactor pressures in the BWR/2-5 plants. The ability to scram for the BWR/6 plants is not adversely affected by the seismic events. Fermi is potentially affected by the condition as an older reactor design. Perry is a BWR/6 design and is not expected to be adversely affected . See Event No. 46230.

Activity

9/7	Working Group. Agency and facility updates. Ohio will host the E-341 ARAAC course in March 2012 for responders at the State and county EOCs. David Lipp has been selected as the new Technical Support Supervisor at ODH. ODH will also clarify the procedures for changing a dose limit for Emergency Phase workers.
9/8	IZRRAG final procedures meeting. Most details for the EOC are complete. The field procedures need to be aligned with the new EOC procedures.
9/15	NAS-T TTX Zack Clayton and Bill Palmer participated in this Table Top Exercise as subject matter experts. We identified outreach opportunities for reporting from other agencies and education for our response abilities.

Our procedures also need improvement now that interface points are better defined.

9/29 TTX After Action This WMD table top exercise went well as agreed by all players. 15 Strengths and Accomplishments were noted, about half for PIOs but particular note was made of the State ability to do plume and deposition modeling. Under areas for improvement there were 6 for the PIO and 5 that affect the state specifically. These can be summarized as who needs to be called and when (can be addressed by training), Communicate and ask questions (can be addressed by training), and what can the State do and what does the local response want? This last is a function of both individual agency function and coordinated State response. Although the after action is specific to the CMMRS NAST-T exercise, the lessons learned will apply across the state for Ohio agencies.

Office Issues

SOP review and revision continues.

FEMA has release the final version of the REP guidance that has been on hold for the last two or three years. The working group is studying this to see what impact it has on Ohio. First impressions include an eight year exercise cycle instead of six years, which will impact the RAT and IZRRAG exercises; a requirement for a simultaneous attack on another facility for hostile actin exercises; and procedures to follow HSEEP and EEG protocol. This latter does not exempt the exercise from a FEMA “pass/fail” evaluation, but does mandate after action planning which the working group members already perform.

Comments on the After Action items from the exercise matrix were returned to OEMA for consideration.

News, NRC Reports, and Statistics

Operating Power Levels

Date	BV1	BV2	DB	Perry	Fermi2
1	100	100	100	100	100
5	100	100	100	100	100
12	100	100	100	100	100
19	100	100	100	100	100
26	100	100	100	100	100
30	100	100	100	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 #########

*****
Beaver Valley Power Station, Units 1 and 2 - Mid-Cycle Letter for Beaver Valley Power Station Units 1 and 2 (Report 05000334/2011006 and 05000412/2011006)
ADAMS Accession No. ML112420684
*****
Fermi Mid-Cycle Letter Unit 2 05000341/2011-006 –
Adams No. ML112440140
*****
Davis-Besse Mid-Cycle Letter 05000346/2011-006 –
Adams No. ML112440127
*****
Perry Mid-Cycle Letter 05000440/2011-006 –
Adams No. ML112440084
*****
RIS 2011-10, Informing Licensees About the NRC's Public Web Site For Significant Enforcement Actions When Evaluating Individuals For Employment, dated August 31, 2011,
Adams No. ML111180348
*****
Fermi 2 – Environmental Assessment and Finding of No Significant Impact
ADAMS Accession Number: ML112310875
*****
Davis-Besse: Summary Of Conference Call Held On August 4, 2011, Between The NRC And FENOC Concerning Requests For Additional Information Pertaining To The Davis-Besse License Renewal Application (TAC No. ME4640)
ADAMS Accession No. ML11242A003
*****
10/7/11 - Forthcoming Meeting With Petitioner Requesting Action Under 10 CFR 2.206 Regarding Immediate Suspension of the Operating Licenses of General Electric (GE) MARK 1 Boiling Water Reactors (BWRs)
Adams No. ML11250A171
*****
FERMI 9/13/2011 DRS OL Confirmation of Examination Letter
ADAMS ACCESSION# ML11259A242
*****
DAVIS-BESSE: NRC SECURITY BASELINE INSPECTION REPORT 05000346/2011406(DRS)

ADAMS Accession No. ML11264A083
*****
Davis-Besse: Request for Additional Information for the Review of the Davis-Besse Nuclear Power Station (TAC No. 4640)
ADAMS Accession No. ML11256A149
*****
Beaver Valley Power Station, Unit Nos. 1 and 2 – Correction Letter to the Cyber Security Plan Amendment (TAC Nos. ME4383 and ME4384)
ADAMS Accession No.: ML112620622
*****
Davis-Besse Nuclear Power Station, Unit No. 1 - Review of 30-day notification report regarding changes to an emergency core cooling system evaluation resulting in a peak cladding temperature difference in excess of 50 degrees Fahrenheit –
ADAMS Accession no. ML112580525
*****
Request for Threshold Determination under 10 CFR 50.80-Beaver Valley, Unit No. 1; Davis-Besse, Unit No. 1 and Perry, Unit No. 1 –
ADAMS ML112430556
*****
Fermi 2 – Issuance of Amendment re: Staff Augmentation Times During Radiological Emergencies
ADAMS Accession Number: ML112450464
*****
Davis-Besse: Summary Of Telephone Conference Call Held On June 7, 2011, Between The NRC And FENOC Concerning Requests For Additional Information Pertaining To The Davis-Besse License Renewal Application (TAC No. ME4640)
ADAMS Accession No. ML11242A007
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News

Data: U.S. nuke plants at greater quake risk
Ohio reactor among most vulnerable
Friday September 2, 2011 6:43 AM
By Dina Cappiello and Jeff Donn
Associated Press
WASHINGTON — The risk that an earthquake would cause a severe accident at a U.S. nuclear plant is greater than previously thought, and 24 times as high in the case of an Ohio reactor, according to an AP analysis of preliminary government data.
The nation's nuclear regulator thinks a quarter of America's reactors might need modifications to make them safer.

The threat came into focus last week, when shaking from the largest earthquake to hit Virginia in 117 years appeared to exceed what the North Anna nuclear power plant northwest of Richmond was built to sustain.

The two North Anna reactors are among 27 in the eastern and central U.S. that a preliminary Nuclear Regulatory Commission review has said might need upgrades. That's because those plants are more likely to get hit with an earthquake larger than the one their design was based on. Just how many nuclear power plants are more vulnerable won't be determined until all operators recalculate their own seismic risk based on new assessments by geologists, something the agency plans to request later this year.

The review, launched well before the East Coast quake and the Japan nuclear disaster in March, marks the first complete update to seismic risk in years for the nation's 104 existing reactors, despite research showing greater hazards.

The NRC and the industry say reactors are safe as they are, for now. But emails obtained in a more than 11,000-page records request by the Associated Press show that NRC experts were worried privately this year that plants needed stronger safeguards to account for the higher risk assessments.

The nuclear industry says last week's quake proved that reactors are robust. When the rumbling knocked out off-site power to the North Anna plant in Mineral, Va., the reactors shut down and cooled successfully, and the plant's four locomotive-sized diesel generators turned on. The quake also shifted about two dozen spent fuel containers, but Dominion Virginia Power said yesterday that all were intact.

Still, based on the AP analysis of NRC data, the plant is 38 percent more likely to suffer core damage from a rare, massive earthquake than it appeared in an analysis 20 years ago.

Federal scientists update seismic assessments every five to six years to revise building codes for some structures. But no similar system is in place for all but two of the nation's 104 reactors — even though improving earthquake science has revealed greater risks than previously realized.

The exception is Diablo Canyon in California, which has been required to review the risk of an earthquake routinely since 1985. The NRC does not require plants to re-examine their seismic risks to renew operating licenses for 20 years.

The NRC flagged the 27 plants for possible upgrades by calculating the likelihood of a severe accident based on 2008 hazard maps from the U.S. Geological Survey and comparing it to the seismic risk estimated in 1989 or 1994. Those data were used the last time existing reactors evaluated their earthquake hazards.

The AP used the NRC's data and methodology to calculate the risk increase for each of the 27 reactors.

The Perry 1 reactor in Ohio tops the list with the steepest rise in the chance of core damage: 24 times as high as thought in 1989. The four other plants with the largest increases include River Bend 1 in Louisiana, up nine times; Dresden 2-3 in Illinois, eight times; Farley 1-2 in Alabama, seven times; and Wolf Creek 1 in Kansas, also seven times. The smallest increase was the 38 percent at North Anna.

Todd Schneider, a spokesman for First Energy Corp., which operates the Perry plant, said the increase in its seismic risk estimated by the NRC is misleading. He said Perry is capable of withstanding an even larger earthquake than is typical for the region.

The average risk to U.S. reactors of core damage from a quake remains low, at one accident every 500 years, according to the AP analysis of NRC data.
The worry about earthquakes is not so much direct damage to the reactor vessel, the hardened enclosure where the nuclear reaction takes place, but to water tanks and mechanical and electrical equipment needed when disaster strikes. The failure of those systems could disable cooling needed to prevent meltdowns of radioactive fuel.
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Ohio governor, U.S. Chamber push Piketon plant in 'jobs' message
Hannah Northey, E&E reporter
Published: Thursday, September 8, 2011

The Republican governor of Ohio and the U.S. Chamber of Commerce are asking President Obama to include a uranium enrichment facility in the Buckeye State in his jobs proposal tonight before a joint session of Congress.
Gov. John Kasich and the chamber say Obama should support construction of U.S. Enrichment Corp.'s proposed $5 billion American Centrifuge Plant in Piketon, Ohio, which is currently seeking federal support.
"As you are developing your jobs plan, I remind you of a project in Ohio that stands ready to create thousands of jobs within months of your approval," Kasich wrote to Obama in a letter Tuesday.
Kasich says opening the plant will generate up to 8,000 jobs nationwide -- nearly half in southern Ohio, but the process hinges on the Energy Department's approval of $2 billion federal loan guarantee for the facility.
The agency has so far refused to grant USEC the federal loan guarantee because of concerns over the company's ability to finance and execute the project. In July, DOE was still conducting a review and said it could not comment on active negotiations (*Greenwire*, July 1).
USEC, which first applied for the loan guarantee in 2008, has already spent $2 billion on the plant and needs an additional $2.8 billion to finish construction.
DOE's failure to approve the loan guarantee prompted investors in the project to give USEC more time to secure the loan guarantee before pulling support. Japan's Toshiba Corp. and Babcock & Wilcox Co. are now giving USEC until the end of this month to finalize and enter into a conditional commitment with DOE to build the plant.
Without the loan guarantee, the entire project -- including the 2,000 people the plant currently employs -- will be at risk, Kasich said.
The project would create high-tech manufacturing and construction jobs and contribute to the country's clean energy economy but would not increase the federal deficit, the governor added.
Greg Galdabini, the chamber's director of executive communications, wrote in a blog last Thursday that the project is "low-hanging fruit" with widespread bipartisan support in Ohio. If built, the plant would create badly needed jobs, enhance energy security, bolster American manufacturing and reduce greenhouse gas emissions, he said.
Galdabini also pointed out that Obama indicated he supported the project as a presidential candidate in 2008 during a campaign stop in Ohio.
Click here to read Kasich's letter.
Source: http://www.eenews.net/EEDaily/2011/09/08/11

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NRC staff recommends immediate seismic, flood review for reactors

Hannah Northey, E&E reporter

Published: Monday, September 12, 2011

The Nuclear Regulatory Commission should order plant operators to re-evaluate their ability to withstand earthquakes and floods "without delay," the commission's staff said Friday.

NRC staff identified a handful of proposals that have the greatest potential for improving safety at America's 104 operating nuclear plants in the near term, according to a Sept. 9 staff memorandum made public today.

At issue are a dozen safety recommendations that an internal task force proposed this summer after reviewing the March 11 earthquake and tsunami in Japan. The disaster critically damaged the Fukushima Daiichi nuclear plant on the country's northeastern coast, triggering explosions, radioactive leaks and evacuations.

The five-member NRC commission ordered its staff in August to prioritize and collect stakeholder comments on the proposals, although NRC Chairman Gregory Jaczko wanted to fast-track the process and make any changes within five years (*Greenwire*, Aug. 22).

NRC staff is expected to prioritize the remaining recommendations by Oct. 3, according to Scott Burnell, a spokesman for the agency. The NRC has given staff 18 months to consider the task force's most far-reaching recommendation, which calls for an overhaul of the agency's regulatory structure.

In the short term, NRC staff said the agency should order plant operators to immediately update seismic and flooding information.

"The state of knowledge of seismic hazards within the United States has evolved to the point that it would be appropriate for licensees to reevaluate the designs of existing nuclear power reactors to ensure" the plants can withstand seismic events without losing safety functions, NRC staff said.

Data the agency is collecting about increased seismic risk in the eastern United States should be incorporated into the review, staff said.

The NRC should also issue an order requiring all boiling water reactors with Mark I and Mark II containments to have reliable, hardened vents to make sure they can operate if the plants lose power for prolonged period of time, staff said.

The agency should also order plants to better protect safety equipment put in place after the Sept. 11, 2001, terrorist attacks to ensure it can handle multi-unit events, Burnell said.

The NRC will meet Wednesday to discuss the staff recommendations and must hold a vote and reach consensus before moving forward, Burnell said.

Source: http://www.eenews.net/Greenwire/2011/09/12/10

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Piketon uranium plant's next deadline is Friday

Helpful Links

By Jessica Wehrman

The Columbus Dispatch Thursday September 29, 2011 5:47 AM

WASHINGTON — A company that wants to build a uranium centrifuge in southern Ohio is approaching a third self-imposed deadline to receive a $2 billion federal conditional loan guarantee.

Maryland-based USEC set a deadline of Sept. 30 with two investors — Toshiba America Nuclear Energy Corp. and Babcock & Wilcox Investment Co. — to receive a loan guarantee that company leaders say is crucial to their ability to build a uranium centrifuge in Piketon.

Under the agreement, the two investors have the option to walk away from the project if it does not receive the loan guarantee by Friday.

But the investors have extended the deadline twice before. It's unclear whether they will extend it again.

Toshiba and Babcock & Wilcox have promised to offer $50 million to support the project after USEC receives a loan guarantee. Originally, they gave USEC until June 30 to receive the commitment. When that deadline passed, they extended it to Aug. 15.

The USEC project promises to bring 4,000 jobs to Ohio and 8,000 jobs to the nation if it becomes a reality.

USEC operates a uranium-enrichment plant in Paducah, Ky. The company hopes to phase out that plant, and says the technology they plan to use in Piketon is more energy-efficient and cost-effective.

jwehrman@dispatch.com

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NUCLEAR CRISIS:

Japan officials to dissolve one evacuation zone near Fukushima Daiichi

Published: Thursday, September 29, 2011

For the first time since the March 11 earthquake and tsunami, the Japanese government tomorrow will dissolve one of the evacuation zones near Fukushima Daiichi.

The zone is one where evacuation was not mandatory because radiation contamination is fairly light. This would be the first attempt by the government to return some of about 114,000 people back to their homes.

It is likely to be a long process. Local officials have said they want to still decontaminate their areas inside the zone; the town of Hirono plans to give radiation counters to all of its households.

"It doesn't matter if the [evacuation zone] is lifted -- we can't tell residents to return without some guarantee they'll be safe," said Hirono Mayor Motohoshi Yamada.

The evacuation zone was one of three near the crippled nuclear plant. The first covers the area 12 miles around the plant, while the second is northwest of the plant. The zone where the evacuation order will be lifted is between 12 and 19 miles from the plant.

Most of the area's 59,000 residents left even though the order was an "evacuation preparation" one, not a mandatory order to leave. About half have not yet moved back to the area.

In tests, government officials have found radiation levels in the zone to be far less than the 20 millisievert-per-year safe level (Phred Dvorak, *Wall Street Journal*, Sept. 29). **-- AP**
Source: http://www.eenews.net/Greenwire/2011/09/29/33

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Plant Reports

Power Reactor	Event Number: 47242
Facility: FERMI Region: 3 State: MI Unit: [2] [ ] [ ] RX Type: [2] GE-4 NRC Notified By: GREG MILLER HQ OPS Officer: CHARLES TEAL	Notification Date: 09/06/2011 Notification Time: 05:54 [ET] Event Date: 09/06/2011 Event Time: 01:04 [EDT] Last Update Date: 09/06/2011
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(v)(D) - ACCIDENT MITIGATION	Person (Organization): MICHAEL KUNOWSKI (R3DO)

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

Event Text

CONTROL ROOM INDICATION OF HPCI MINIMUM FLOW VALVE POSITION LOST

"On September 6, 2011 at approximately 0104 EDT during surveillance testing of the High Pressure Coolant Injection (HPCI) system, control room position indication was lost on the HPCI Minimum Flow Valve, E4150F012 as the valve was stroking closed following shutdown of HPCI. The Minimum Flow Valve main power fuses were checked (found blown) and replaced in accordance with plant procedures. During stroke time testing of E4150F012, control room position indication was again lost when the operator depressed the open pushbutton.

"HPCI had been removed from service for quarterly surveillance testing at 2219 EDT September 5, 2011. The unplanned inoperability condition began at 0104 EDT when position indication was lost on the Minimum Flow Valve during system shutdown. The valve was locally verified closed to comply with the action of LCO 3.6.1.3 to isolate the penetration. A 14-day LCO was entered and back dated to the time that HPCI was removed from service for surveillance testing. This report is being made pursuant to 10 CFR 50.72(b)(3)(v)(D) as a condition that at the time of discovery could have prevented the fulfillment of a safety function needed to mitigate the consequences of an accident, based on loss of a single train safety system. RCIC was and has

remained operable.

"The NRC Resident Inspector has been notified. The failure is currently under investigation."

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General Information	Event Number: 46230
Rep Org: GE HITACHI NUCLEAR ENERGY Licensee: GE HITACHI NUCLEAR ENERGY Region: 1 City: WILMINGTON State: NC County: License #: Agreement: Y Docket: NRC Notified By: DALE E. PORTER HQ OPS Officer: ERIC SIMPSON	Notification Date: 09/03/2010 Notification Time: 15:23 [ET] Event Date: 09/03/2010 Event Time: [EDT] Last Update Date: 09/27/2011
Emergency Class: NON EMERGENCY 10 CFR Section: 21.21 - UNSPECIFIED PARAGRAPH	Person (Organization): RICHARD CONTE (R1DO) EUGENE GUTHRIE (R2DO) TAMARA BLOOMER (R3DO) RICK DEESE (R4DO) MIKE CHEOK (NRR) PART 21 GP via email ()

Event Text

PART 21 - FAILURE TO INCLUDE SEISMIC INPUT IN REACTOR CONTROL BLADE CUSTOMER GUIDANCE

The following is text of a facsimile submitted by the vendor:

"GE Hitachi Nuclear Energy (GEH) has identified that engineering evaluations that support the guidance provided in SC 08-05, Revision 1, do not address the potential impact of a seismic event on the ability to scram as it relates to the channel-control blade interference issue. Note that the seismic loads are not a consideration in the scram timing, but rather the ability to insert the control blades. In other words, the control blades must be capable of inserting during the seismic event, but not to the timing requirements of the Technical Specifications. GEH is evaluating the impact of the seismic loads between the fuel channel and the control blade associated with an Operating Basis Earthquake (OBE), and a Safe Shutdown Earthquake (SSE) on BWR/2-5 plants. The scram capability is expected to be affected due to the added seismic loads at low reactor pressures in the BWR/2-5 plants. The ability to scram for the BWR/6 plants is not adversely affected by the seismic events. Additional evaluation is required to determine to what extent the maximum allowable friction limits specified for the BWR/2-5 plants in SC 08-05 Revision 1 is affected by the addition of seismic loads.

"GEH issues this 60-Day Interim Report in accordance with the requirements set forth in 10 CFR 21.21 (a)(2) to allow additional time to for this evaluation to be completed."

Affected US plants previously notified by vendor and recommended for surveillance program include: Nine Mile Point, Units 1 and 2; **Fermi 2**; Columbia; FitzPatrick; Pilgrim; Vermont Yankee; Grand Gulf; River Bend; Clinton; Oyster Creek; Dresden, Units 2 and 3; LaSalle, Units 1 and 2; Limerick, Units 1 and 2; Peach Bottom, Units 2 and 3; Quad Cities, Units 1 and 2; **Perry, Unit 1**; Duane Arnold; Cooper; Monticello; Brunswick, Units 1 and 2; Hope Creek; Hatch, Units 1 and 2; and Browns Ferry, Units 1and 2.

Affected US plants previously notified by vendor and provided information include: Susquehanna, Units 1 and 2 and Browns Ferry, Unit 3.

* * * UPDATE FROM DALE PORTER TO ERIC SIMPSON AT 1556 ON 09/27/2010 * * *

The following update was received via fax:

"This letter provides a revision to the information transmitted on September 2, 2010 in MFN 10-245 concerning an evaluation being performed by GE Hitachi Nuclear Energy (GEH) regarding the failure to include seismic input in channel-control blade interference customer guidance. Two changes have been made in Revision 1:

"1) A statement was added regarding the applicability of this issue to the ABWR and ESBWR design certification documentation.

"2) The original MFN 10-245 referenced the Safety Communication SC 08-05 R1 that was transmitted to the US NRC via MFN 08-420. The references to SC 08-05 were changed to MFN 08-420 to prevent possible confusion.

"As stated herein, GEH has not concluded that this is a reportable condition in accordance with the requirements of 10CFR 21.21(d) and continued evaluation is required to determine the impact of a seismic event on the guidance contained in MFN 08-420."

Notified the R1DO (Gray), R2DO (Hopper), R3DO (Orth), R4DO (Farnholtz), NRR EO (Lee) and Part 21 Group (via email).

* * * UPDATE FROM DALE PORTER TO MARK ABRAMOVITZ AT 1723 ON 12/15/2010 * * *

The following update was received via fax:

"This letter provides information concerning an on-going evaluation being performed

by GE Hitachi Nuclear Energy (GEH) regarding the failure to include seismic loads in the guidance provided in MFN 08-420. As stated herein, GEH has not concluded that this is a reportable condition in accordance with the requirements of 10CFR21.21(d) and continued evaluation is required to determine the impact of a seismic event on the guidance contained in MFN 08-420.

"GEH has not completed the evaluation of the impact of the seismic loads between the fuel channel and the control blade associated with an Operating Basis Earthquake (OBE), and a Safe Shutdown Earthquake (SSE) on BWR/2-5 plants."

GEH expects the task to be completed by August 15, 2011.

Notified the R1DO (Holody), R2DO (Henson), R3DO (Kozak), R4DO (Werner), NRR EO (Evans) and Part 21 Group (via email).

* * * UPDATE AT 1808 EDT ON 08/11/11 FROM DALE PORTER TO JOE O'HARA * * *

The following was received via fax:

"GE Hitachi Nuclear Energy (GEH) identified, in July 2010, that engineering evaluations did not address the potential impact of a seismic event on the ability to scram as it relates to the channel-control blade interference issue. GEH provided status of the on-going evaluation in [December 2010]. GEH has not completed the evaluation of the impact of the seismic loads between the fuel channel and the control blade associated with a bounding Safe Shutdown Earthquake (SSE) on BWR/2-5 plants. The scram capability is expected to be affected due to the added seismic loads at low reactor pressures [less than 1000 psig] in the BWR/2-5 plants. Additional evaluations are required to determine to what extent the maximum allowable friction limits specified for the BWR/2-5 plants are affected by the addition of SSE seismic loads at low reactor pressures.

"GEH issues this 60-Day Interim Report in accordance with the requirements set forth in 10CFR 21.21 (a)(2) to allow additional time for this evaluation to be completed."

The following sites are noted as having channel-control blade concerns:
Region 1: Nine Mile Point, Fitzpatrick, Pilgrim, Vermont Yankee, Oyster Creek, Limerick, Peach Bottom, Susquehanna, and Hope Creek
Region 2: Browns Ferry, Brunswick, Hatch,
Region 3: **Fermi**, Clinton, Dresden, LaSalle, Quad Cities, **Perry**, Duane Arnold, Monticello
Region 4: Columbia, Grand Gulf, River Bend, Cooper.

Notified R1DO (Powell), R2DO (Hopper), R3DO (Dickson), R4DO (Farnholtz) and NRR Part 21 Grp via email.

* * * UPDATE AT 0037 EDT ON 9/27/11 FROM PORTER TO HUFFMAN VIA E-MAIL * * *

The following is a summary of information received from GE Hitachi Nuclear Energy via e-mail of a letter, Reference MFN 10-245 R4, addressed to the NRC and dated September 26, 2011:

"GE Hitachi (GEH) has determined that the scram capability of the control rod drive mechanism in BWR/2-5 plants may not be sufficient to ensure the control rod will fully insert in a cell with channel-control rod friction at or below the friction limits specified in MFN 08-420 with a concurrent Safe Shutdown Earthquake (SSE). The plant condition for which incomplete control rod insertion might occur is when the reactor is below normal operating pressure (<900 psig) and a scram occurs concurrent with the SSE, for Mark I containment plants, and for the SSE with concurrent Loss-of-Coolant Accident (LOCA) and Safety Relief Valve (SRV) events for Mark II containment plants. In this scenario a Substantial Safety Hazard results because the affected control rods might not fully insert to perform the required safety function.

"GEH has determined that when channel-control blade interference is present at reduced reactor pressure and at friction levels considered acceptable in MFN 08-420, a simultaneously occurring Safe Shutdown Earthquake (SSE) may result in control rod friction that inhibits the full insertion of the affected control rods during a reactor scram from these conditions. This scenario was not explicitly considered in MFN 08-420.

"GEH has also quantified maximum allowable control rod friction for channel-control blade interference during the SSE with reactor system pressure greater than or equal to 900 psig. The previous conclusion regarding the scram capability for the BWR/2-5 plants, last communicated in MFN 10-245 R2, was based upon a reactor system pressure of 1000 psig. The updated evaluation at 900 psig has resulted in modifications to the guidance specified in MFN 08-420.

"The GE Hitachi Letter recommends testing with new allowable friction limits that will ensure control rods fully insert at low reactor pressure concurrent with an SSE (for Mark I containment plants) and SSE with concurrent LOCA (for Mark II containment plants). The enclosure in the GEH letter provides a description of the evaluation, with surveillance recommendations for BWR/2-5 plants. The recommended surveillance is intended to augment the surveillance requirements in the plant Technical Specifications and define populations of control rods to be tested, and the method for testing, until other actions that mitigate or limit the potential for channel control blade interference can be identified and implemented.

"Based upon the evaluation, GEH has concluded that a Reportable Condition under 10CFR Part 21 exists for BWR/2-5 plants. This determination does not apply to BWR/6 or ABWR plants or the ABWR/ESBWR Design Control Document's (DCD). The information contained in this document informs the NRC of the conclusions and recommendations derived from GEH's evaluation of this issue."

The list of potentially affected plants has previously been noted in this Part 21 notification and have been previously notified by GE Hitachi of the concern.

Notified R1DO (Doerflein), R2DO (Lesser), R3DO (Passehl), R4DO (Werner) and NRR Part 21 Grp via email.

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