

To: Jim Mehl, ERU Supervisor
From: Zack Clayton, Rad Coord
Subject: October Monthly Report
Date: November 12, 2008

Beans:

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

Web Page Hits: There were 86 RAD hits in October.

Coming Attractions:

Working Group 11/5
After Action 11/5
IZRRAG Training 11/7
Hostile Action Drill 11/13
REP Planning 11/18-21

Facility Updates:

Davis Besse Nuclear Power Station

Davis Besse operated at full power for October

As of 0900 on Thursday, October 23, Davis-Besse Nuclear Power Station informed the State of Ohio, Lucas, and Ottawa County of a tritium leak on-site.

The leak was discovered while conducting excavation for repair of a fire water line. The leak is from a 3-inch iron pipe that carries water from a sump in the turbine building to a settling basin. It may have been caused by disturbance during the excavation of the fire water line.

The settling basin is lined with clay and is for removal of particulate matter. This basin drains into a collection box that feeds into a monitored NPDES outfall 2IB00011HD011 discharging to Lake Erie. Monitoring shows no detectable radioactivity in the outfall.

The estimated amount of tritium is 37,500 picocuries per liter. By

agreement, Davis-Besse must contact us in the case of leakage with a tritium concentration of 2,000 picocuries per liter or greater.

Davis-Besse has isolated the area and continues to conduct sampling. The leak and excavated soil is in the protected area of the plant property. Currently the plant is working to isolate the source and stop the leak. Additional information will be made available after results are obtained from sampling of the area.

The leakage pathway is in an aquifer flow that exits the plant property directly to the lake. There is no indication of this leak in the monitoring well 25 feet down gradient of the leak from the last quarters monitoring results.

Perry Nuclear Power Plant

Perry plant operated at full power for October.

At approximately 0020 October 30, Perry experienced a loss of ventilation to their computer room which lead to high temperature (80 F) and resulted in a loss of 120 VAC non-essential electrical power. The loss of power resulted in the Integrated Computer System, Safety Parameter Display System, and the automatic mode of the Computer Aided Dose Assessment Program (CADAP) being out of service. Back-up ventilation was placed in service 8 minutes later and temperatures were returned to 72 F by 0217. The computer systems above were in the process of being restored to service shortly after and returned to normal on dayshift. There were no plant safety concerns or operational issues

Beaver Valley Unit I

Beaver Valley Unit I operated at full power for October.

Beaver Valley Unit II

On October 20 Unit 2 entered a Limited Condition of Operation (LCO) for the availability of the Alpha low head safety injection pump. The pump was taken out of service for maintenance. After disassembling the pump, areas of wear were identified. The plant was unable to service the pump and place the pump back in service within the 72 hours as stipulated in the LCO.

Beaver Valley contacted the NRC and requested a discretionary enforcement exemption for an additional 36 hours. NRC granted the exemption and the LCO has been extended to 11:26 a.m. on October 24. The plant expressed reasonable assurance that the A pump could be serviced, reassembled and placed back in operations before

October 24.

The Bravo low head safety injection pump was available and protected to ensure its availability. Unit 2 remained at 100% power until 6:00 pm on Thursday, October 23. The Station entered an LCO (Limited Condition of Operation) for the unavailability of Alpha Low Head Safety Injection Pump (1 of 2 low head pumps) that required the Pump to be placed back in operation by 11:26 pm on Friday, October 24. The Pump was taken out of operation for maintenance. The Pump was repaired and re-assembled for return to operation, but the repairs were not adequate. The Pump was dis-assembled a second time and it was determined that the additional repairs, re-assembly and return to operable status could not be completed by 11:26 on October 24. The Station made the decision (conservative) to shut Unit 2 down. The Unit shut down until October 28 to complete the pump repairs and conduct any other maintenance activities needed with the unit in shutdown.

Fermi II

Fermi operated at full power for October.

Portsmouth Gaseous Diffusion Plant

There were no reported incidents in October.

Activity:

10/1 Working Group at Ohio EMA. Discussion to get ready for the Perry exercise. Preparation for the Tour and URSB meeting at Davis-Besse. Scope of activity for the Davis-Besse Hostile Action Table Top exercise.

10/7 Full Scale Evaluated exercise for Perry Nuclear Power Plant. This went well inspite of not having a coordinated dry run due to the high wind event at the end of September. Rick Smith from the Ohio EPA NEDO filled in as the Monitoring Team Controller at the County EOC. Bart Ray of the NEDO was able to fill all the EPA rolls during the Exercise.

10/14 Jim Mehl, Shannon Nabors (NWDO), and Zack Clayton attended the Davis-Besse plant tour and the URSB meeting held at the plant site.

10/23 Davis-Besse notified the State under the EPPI agreement of a Tritium leak that was discovered. The plant kept the State updated over the next week as to the status of the investigation and mitigation of the leak.

Office Issues:

NRC Reports and Statistics:

October operating power levels

Date	BV1	BV2	DB	Fermi2	Perry	
1	100	100	100	100	100	
6	100	100	100	100	100	
13	100	100	100	100	100	
20	100	100	100	100	100	
24	100	19	100	100	100	DOWNPOWER TO MODE 3
27	100	0	100	100	100	SHUTDOWN TO REPAIR SI PUMP
28	100	36	100	100	100	
31	100	100	100	100	100	

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PDF version of NRC Information Notice 2008-17, Construction Experience With Concrete Placement, dated October 22, 2008 (ML081850581), that has been posted to the NRR GCC Web, along with the URL for Web access to generic communications files on the NRC Homepage:
http://www.nrc.gov/reading_rm/doc_collections/gen_comm/info_notices/2008/.

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PDF version of RIS 2008-24, Security Responsibilities of Service Providers and Client Licensees, dated October 3, 2008 (ML082200597), that has been posted to the NRR GCC Web, along with the URL for Web access to generic communications files on the NRC Homepage:
http://www.nrc.gov/reading_rm/doc_collections/gen_comm/reg_issues/2008/

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PDF version of RIS 2008-23, The Global Threat Reduction Initiative (GTRI) Domestic Threat Reduction Program & Federally Funded Voluntary Security Enhancements For High-Risk Radiological Material, dated October 3, 2008 (ML082540256), that has been posted to the NRR GCC Web, along with the URL for Web access to generic communications files on the NRC Homepage:
http://www.nrc.gov/reading_rm/doc_collections/gen_comm/reg_issues/2008/

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NUCLEAR POWER: 17 apply for DOE loan guarantees, far exceeding available cash (10/02/2008)

Katherine Ling, *Greenwire* reporter

The Energy Department announced today that it has received 19 applications from power companies seeking federal loan guarantees to build nuclear power plants -- a number much higher than current funding could support.

The total assistance requested by the 17 electric power companies adds up to \$122 billion, surpassing by far the \$18.5 billion Congress made available in loan support.

The number of projects the \$18.5 billion can support is also dwindling as input costs continue to escalate, David Frantz, director of DOE's loan program office, said in a teleconference last week. He said loan guarantees could probably accommodate only about two power plants.

The applications are for construction of 21 new reactors at 14 different U.S. power plants. The estimated total construction costs for all of the projects is \$188 billion and the plants would add 28,800 megawatts of generating capacity, according to DOE. The Nuclear Regulatory Commission has received 15 applications for new nuclear power plants in the past year.

Two companies applied for the \$2 billion in loan guarantees for the front end of the nuclear fuel cycle, DOE said. The requests combined total \$4 billion, according to DOE.

The loan guarantee applications are only the first part of a two-step application process DOE implemented for the nuclear loan guarantees. DOE will assess the applications from the first round and initially rank the applications on chances of getting the guarantee. This will allow companies to decide if they want to invest an estimated \$600,000 to put together the second round of applications. Part two applications are due Dec. 19.

DOE said it will judge the applications based on a project's ability to avoid, reduce or sequester air pollutants or greenhouse gas emissions; the length of time to commercialization; chances of repayment of the debt; and "long-lasting success" in the marketplace.

DOE has issued three rounds of solicitations for \$42.5 billion in federal loan guarantees for early commercial use of advanced energy technologies that decrease greenhouse gas emissions and improve efficiency as authorized by the 2005 energy law. Congress has mandated that \$38.5 billion of the guarantees must be awarded by the end of fiscal 2009, although DOE is trying to extend the timeline through 2011 for nuclear projects and 2010 for others.

DOE has yet to award any loan guarantees, despite having begun the process in 2006.

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NUCLEAR POWER: New plants could be stunted by credit crisis
(10/02/2008)

A global lack of available credit could slow nuclear development plans worldwide, pushing energy development toward short-term projects such as oil drilling, U.S. Energy Secretary Samuel Bodman said yesterday.

Long-term projects like building a nuclear power plant "are the ones that are going to be the most difficult to finance," he said while attending an international nuclear energy conference in Paris.

The United States has 104 commercial reactors that supply about 20 percent of its power. If national electricity demand meets the projected 45 percent growth by 2030, 35 to 50 new nuclear plants would be needed to maintain nuclear's share of the energy market (Greg Keller, *Anchorage Daily News*, Oct. 1). -- PR

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NUCLEAR WASTE: Proposed NRC rule assumes no repository by 2025
(10/09/2008)
Katherine Ling, *Greenwire* reporter

The Nuclear Regulatory Commission proposed today eliminating a deadline when the Yucca Mountain, Nev., nuclear waste repository could be operational, opting instead to outline a 50 to 60 year timeline when repository capacity can be "reasonably expected."

A repository could be available within 50 to 60 years after the life of a nuclear power plant and spent fuel can be stored for "at least" 60 years beyond the licensed life of current nuclear power plants, according to a proposed revision of NRC's waste confidence rule published in today's *Federal Register*.

The NRC timeline includes the 20-year license extensions the agency has granted or is reviewing for a majority of the fleet of nuclear power plants that now may operate into the 2030s.

The previous NRC waste confidence findings said a geologic repository would be available by 2025.

"Eliminating the 2025 timeframe is not intended to signal a lack of confidence that a repository will be available by that date," said NRC in a statement. Rather, the agency said, it is intended to remove any prejudgment that the proposed repository will be approved by NRC, which is currently reviewing the Energy Department's Yucca Mountain license application.

The proposed rule also says NRC has confidence that waste can be safely stored on-site at the power plants through 2100.

"Revising its findings on the period for safe storage of spent fuel reflects the NRC's confidence in the safety and security of spent fuel storage in pools and dry casks," the agency said.

The proposed rule also increases the amount of repository capacity available to current reactors for another 50 to 60 years beyond the licensed operating life of the plant. But under current DOE estimates, the Yucca repository's capacity would be filled by 2010 if a statutory cap of 70,000 metric tons is not lifted. DOE says experts suggest that the repository could hold at least 140,000 metric tons.

Scott Burnell, an NRC spokesman, said it is DOE's responsibility to figure out the theoretical capacity and the statutory limitations. But, he added, the rule "doesn't put a ... geographical marker where that capacity would be." "It simply says we do feel that that capacity would be available," Burnell said.

[Click here](#) to view the proposed rule.

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NUCLEAR POWER: Cost of building new plants will soar given labor, material shortages -- report (10/15/2008)

Katherine Ling, E&ENews PM reporter

Construction costs for new nuclear power plants will soar because of shortfalls of material and labor and inexperience with new technology, analyst Standard & Poor's said in a report today.

Commodity prices and labor costs are growing for all new power plants, but nuclear's specialized labor and component needs make the cost increases particularly acute, the report says. Nuclear projects require experienced project managers, as well as high-quality technical skills.

Current estimates for a building a new nuclear plant range from \$3,000 to \$5,000 per kilowatt, the report says.

The cost to build a nuclear power plant has risen 173 percent since 2000, according to the Cambridge Energy Research Associates.

Even the recent downturn in commodity prices does not have significant meaning for new nuclear plants, said Swaminathan Venkataraman, director of S&P's Utilities & Infrastructure Ratings and a co-author of the report.

"Even for the first few plants, these costs will be fixed only over the next 2-3 years and it is impossible to say where commodity costs will be," Venkataraman said in an e-mail. "Nevertheless, construction risks for new nuclear plants will remain high owing to other issues."

Costs of new nuclear plants will still be higher because of a limited ability to manage cost overruns in construction contracts, a tight manufacturing supply chain and a limited track record in recent construction of nuclear plants, the report says.

There are few companies capable of managing engineering, material procurement and plant construction, and demand for their services has created a backlog. The high demand enables the companies to be "selective in their willingness to accept risk," the report says.

None of the new nuclear reactor contracts are expected to have a set timeline or an overall fixed construction cost, the report says. Instead, the contracts will likely include an evolving price scheme based on changing inputs -- except for large equipment -- resulting in high estimated project contingencies for labor and materials, the report says.

There is additional uncertainty in construction and contracts, given the small number of new nuclear reactors constructed since the 1990s, according to the report. Only a few companies -- General Electric Co., Hitachi, Areva and Toshiba -- have gone through the process, and the only advanced reactor technology that would be used in the United States is the ABWR design by Toshiba.

There are also a limited number of companies that manufacture the larger components of a nuclear reactor, including ultra-heavy forgings made in Japan, as well as condensers and reactor coolant pumps.

"Purely from a supply chain perspective, the first several U.S. nuclear plant orders are likely to be less risky than those that immediately follow them," the report says.

The untested Nuclear Regulatory Commission review of the combined construction and operating license adds additional cost uncertainty, the report says.

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NUCLEAR WASTE: Reprocessing fuel is preferred alternative -- DOE
(10/20/2008)

Katherine Ling, *Greenwire* reporter

Reprocessing spent nuclear fuel under the Global Nuclear Energy Partnership will reduce the volume and toxicity of high-level radioactive waste that must be dumped in a geologic repository, but the effort will create more low-level waste and affect transportation and human health more than an open fuel cycle, the Energy Department says in a draft assessment of the program.

The draft **programmatic environmental impact statement** examines six potential pathways for the research and development side of the GNEP program: no action (uranium used once), fast reactors, thermal/fast reactors, thermal reactors and heavy water/high temperature gas-cooled reactors. Although the report does not examine the international partnership of GNEP, it does analyze two potential international initiatives, grid-appropriate reactors and reliable fuel services.

The report, which was released Friday, concludes that DOE prefers a closed fuel cycle alternative, either a fast reactor or a combined thermal/fast reactor. For a scenario of 200 gigawatts of electricity, the closed fuel cycle option generates about half the amount -- 18,000 to 55,000 cubic meters -- of high-level waste that would need deep geologic disposal when compared with an open fuel cycle, according to the statement.

Fast reactors have the potential to burn up both uranium and transuranic materials as fuel, whereas the current once-through cycle consumes less than 10 percent of the enriched uranium. The thermal/fast reactor includes using current technology of "mixed oxide" fuel -- a combination of uranium and plutonium -- that can be used in some current reactors.

But fast reactors would create more toxic waste, known as "greater-than-Class-C low level waste" and other low-level waste, that is not as toxic as spent nuclear fuel but still requires specialized disposal, the report says. The closed fuel cycle could generate between 9,700 and 416,500 cubic meters of greater-than-class-C low-level waste as compared to 5,600 cubic meters from the no action alternative, the report says.

The report also found that closed fuel cycle alternatives caused nearly 10 times the latent cancer fatalities and seven times the collision fatalities from handling and transportation than the no action base line and most of the open cycle alternatives. But the draft emphasizes that those higher impacts would still be "within established regulatory limits."

The fast reactor also needs additional research and development of fuel fabrication and reprocessing to create an effective technology, which DOE estimates will take five to 10 years. It would also be difficult to balance a transition from current light water reactors to fast reactors, a balance that would require 60 percent current reactors and 40 percent fast reactors, the report says.

The thermal/fast reactor alternative could begin a transition much faster, as the balance would only have to be a 70 percent light water reactor and 30 percent fast reactors, and current technology could begin to use the recycled fuel as further technology is developed to use the other parts of the fuel stream later, the statement says.

DOE says it will chose a particular closed fuel cycle alternative in a later final statement. All alternatives would require a repository bigger than Yucca Mountain's current statutory limit of 70,000 metric tons, the statement says.

[Click here](#) to view the statement.

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ENERGY MARKETS: Exelon bids \$6.2B for NRG (10/20/2008)

Exelon Corp. has offered \$6.2 billion for power generator NRG Energy Inc., attempting to snap up a company whose share prices are down \$20 from last spring.

Exelon, the largest nuclear operator in the U.S., would pay a 37 percent premium for NRG stock, but its \$6.2 billion offer likely is considerably less than the value of NRG's Texas nuclear plant.

Both companies are planning to build a nuclear plant in Texas. By acquiring NRG's plant, which is farther along in the construction process, Exelon could improve its balance sheet, making it easier to finance the remaining construction on its own plant.

The agreement remains unsecured, Exelon officials reported (Rebecca Smith, *Wall Street Journal*, Oct. 20). -- **PR**

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Lake Erie nuclear plant leaks radioactive material

Liquid in ground no threat, officials say
Saturday, October 25, 2008 3:25 AM

TOLEDO (AP) -- Operators of a nuclear plant along Lake Erie found and shut off a pipe that had been leaking a low-level radioactive material into the ground, the company said yesterday. The leak at the Davis-Besse plant near Toledo wasn't a threat to drinking water or the public, according to the Nuclear Regulatory Commission. Samples show the radioactive material hasn't seeped into the groundwater or off the site, the agency said. Workers digging Wednesday found the leak, said Todd Schneider, a spokesman for Akron-based FirstEnergy Corp., which owns the plant.

The leaking liquid contained tritium, a normal product of a nuclear reactor that can cause cancer with significant exposure. The plant was the site of the worst corrosion ever found at a U.S. reactor. Inspectors in 2001 discovered an acid leak, and the plant was closed for two years and underwent extensive repairs.

The latest leak does not appear to be as worrisome.

At least eight tritium leaks with levels well below health standards have been found in the U.S. in the past few years, including one in December at the Millstone Power Station in Waterford, Conn. The nuclear industry took steps two years ago to examine the releases and why they were happening after three Illinois power plants reported leaks of tritium into groundwater, including one case in which 6 million gallons was released into soil outside the plant boundary.

It's not known how long the 3-inch pipe at Davis-Besse had been leaking or how much got into the ground, Schneider said. The pipeline leads to a retention pond, where water is stored and does not go outside the plant property, he said.

The acid leak found in 2001 nearly ate through the reactor's 6-inch-thick steel cap. It led to sweeping changes at the plant: The NRC beefed up inspections and training and began requiring detailed records of its discussions with plant operators. FirstEnergy paid a record \$28 million in fines a year ago while avoiding federal charges. It also spent \$600 million making repairs and buying replacement power while the plant was closed from early 2002 until 2004.

Two company employees were convicted of concealing the leak from the government. Lawyers for the men said they were set up as scapegoats.

The Columbus Dispatch

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Back to: <http://www.toledoblade.com/apps/pbcs.dll/article?>

AID=/20081025/NEWS16/810250355/-1/ARCHIVES30

Article published October 25, 2008

Davis-Besse radioactive leak is fixed

NRC says water in area is safe to use and drink

By TOM HENRY

BLADE STAFF WRITER

OAK HARBOR, Ohio - Radioactive tritium was found leaking from a drainage pipe at FirstEnergy Corp.'s Davis-Besse nuclear plant north of Oak Harbor, the Nuclear Regulatory Commission said yesterday.

Businesses and homeowners near the plant, though, can continue using their water, Viktoria Mitlyng, an agency spokesman, said.

FirstEnergy rerouted the drainage pipe, and the utility is in the process of pinpointing the leak and fixing it, she said.

Monitoring wells show the radioactive, watery material has not migrated off the Davis-Besse complex, she said. Davis-Besse is 30 miles east of Toledo and along State Rt. 2 in Ottawa County, west of Port Clinton.

It was not clear how the leak occurred.

The agency was notified of the leak shortly before midnight Thursday by FirstEnergy, 32 hours after a utility crew discovered the problem at 4 p.m. Wednesday. The state of Ohio and officials from Lucas and Ottawa counties were notified at 9 a.m. Thursday, according to a report FirstEnergy filed with the NRC.

U.S. Rep. Marcy Kaptur (D., Toledo) is asking the NRC to provide her details "on what risk might be presented by this leak," said Steve Fought, a spokesman for her Toledo office.

He said the congressman also wants to know if the agency believes anything was unusual about the amount of time taken for notification.

"We don't want to cause anybody alarm if there is no cause for alarm," Mr. Fought said. "[But] if there ever was an opportunity to err on the side of caution, it would be with nuclear power."

The NRC has no problem with the time it took to be notified, Ms. Mitlyng said.

The carbon steel drainage pipe carries liquid waste that is a byproduct of the nuclear generating process from Davis-Besse's turbine/water-treatment building to the power station's settling basins.

From there, it is diluted in standing water and eventually is discharged into Lake Erie's drainage basin, which is monitored, according to FirstEnergy. Vapor from Davis-Besse nuclear power plant emanates from steam used in the process of generating electricity.

Monitors at the plant have not picked up any detectable levels of tritium entering Lake Erie, probably because the concentration of the leak is heavily diluted by water in the settling basins, Ms. Mitlyng said.

The leak was discovered during fire-protection equipment inspections. It is not known how long the pipe has been leaking.

FirstEnergy's report, based largely on the condition of the pipe, said the volume of leakage is "conservatively assumed to be more than 100 gallons, but this cannot be quantified at this time."

Recent laboratory tests on samples from 30 monitoring wells at the complex are being expedited to see whether it can be determined when the leak began. Additional sampling is planned, the utility said. The tritium was leaking at a rate nearly twice the level the U.S. Environmental Protection Agency considers a safe limit for drinking water.

The NRC has its two resident inspectors watching the situation. The leak will become the focus of the plant's annual environmental assessment next month, Ms. Mitlyng said.

NRC records show there have been at least seven other nuclear plants that have had tritium releases in recent years - none of which endangered public health, the agency said.

The nuclear industry and the NRC have been focusing on the possibility of large water leaks, David Lochbaum, nuclear safety engineer for the Union of Concerned Scientists, said. But he added that they need to pay more attention to small leaks that are likely to occur with greater frequency. His group and others petitioned the NRC nearly two years ago to become more aggressive at detecting small leaks of radioactive liquids at nuclear plants. The NRC did not act on it.

Instead, the agency yielded to a voluntary monitoring and reporting program at the request of the Nuclear Energy Institute, the industry's lobbying group on Capitol Hill.

Mr. Lochbaum said it was a fluke Davis-Besse's radioactive water was discovered because workers only happened to stumble upon it while inspecting fire-protection equipment.

Contact Tom Henry at:
thenry@theblade.com
or 419-724-6079.

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(THE BLADE)

WHAT IS TRITIUM?

Tritium, according to the U.S. EPA, is one of the least dangerous radioactive materials.

It emits low-energy radiation and leaves the body relatively quickly, although it goes directly into soft tissues and organs because it almost always binds to water molecules, the agency said.

"As with all ionizing radiation, exposure to tritium increases the risk of developing cancer," the agency said.

Tritium exists naturally in the atmosphere and is one of several radioactive byproducts of a nuclear plant. It also is a standard component of fluorescent exit signs, aircraft dials, gauges, luminous paints, and some wristwatches.

Toledo Blade

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Back to: <http://www.toledoblade.com/apps/pbcs.dll/article?>

AID=/20081101/NEWS16/811010381

Article published November 1, 2008

6 monitors at Davis-Besse find leaks below threshold

By TOM HENRY

BLADE STAFF WRITER

OAK HARBOR, Ohio - Six of 11 groundwater-monitoring wells on FirstEnergy Corp.'s Davis-Besse nuclear complex are well below the government's threshold for radioactive tritium, according to results the utility released yesterday. Results on the other five wells are expected next week, spokesman Todd Schneider said. The six wells on which FirstEnergy has data are ones most prone to leak radioactive tritium, which the company found on Oct. 22, Mr. Schneider said.

Tritium is a water-based, radioactive material that is a by-product of nuclear fission and a natural substance in the environment. Though one of the least toxic radioactive substances, it is easily absorbed by soft tissue and organs because of the way it binds to water molecules.

The U.S. Environmental Protection Agency has established 20,000 picocuries of tritium per liter as the threshold for safe drinking water. The six wells had levels ranging from 155 to 1,612 picocuries per liter. The samples were drawn after the leak was discovered. They mirror results from samples taken earlier in October, Mr. Schneider said, although he did not provide those numbers.

The Nuclear Regulatory Commission is beginning a broader environmental assessment of the complex next week, an annual inspection that was scheduled before the leak was discovered. Circumstances surrounding the leak have become the focus of it, NRC spokesman Viktoria Mitlyng said.

The leak has been traced to a drainage pipe that ran 8 feet underground, from the north side of Davis-Besse's turbine building to the site's settling basin, Mr. Schneider said. The pipe was rusty and might have been weeping trace amounts of tritium.

Workers likely disturbed it as they were digging up soil to inspect nearby

fire-suppression equipment, he said.

"The water's been rerouted, and we're in the process of replacing the pipe," Mr. Schneider said.
Toledo Blade

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NUCLEAR SAFETY: Advocacy groups criticize EPA proposals for power plants, transportation (10/31/2008)

Katherine Boyle, E&ENews PM reporter

Sixty advocacy groups say a U.S. EPA proposal would weaken public protections against the release of radioactive material from nuclear power plant and transportation accidents.

Proposed revisions to the EPA guidelines would permit long-term contamination of areas, without cleanup, at levels higher than those allowed by EPA in the past, permit larger radiation doses without taking action to reduce public exposure and increase acceptable exposure levels, the groups wrote in a [letter](#) to the agency yesterday.

EPA's proposal also would raise the concentration of radioactive elements like cesium-197, strontium-90 and nickel-63 allowed in drinking water after a release, the groups wrote.

The groups are concerned EPA might release a final version of the guidelines before the Bush administration leaves office. They based their comments on a 2007 draft of the guidelines obtained by the trade publication *Inside EPA*.

"If revisions have resolved these problems, we congratulate the agency," the groups wrote. "But if the problems remain, we strongly urge that you not approve release of the draft [protective action guides], as they will produce a firestorm of controversy and would contradict decades of EPA policy on protection of the public and the environment."

Organizations signing the letter include Greenpeace and Environment America, a coalition of state-based groups.

A spokeswoman for EPA said the agency would review the letter and respond appropriately.

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

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NUCLEAR WASTE: DOE finalizes standard contract for new reactors (10/31/2008)

Katherine Ling, E&ENews PM reporter

The Energy Department said today that it is ready to sign contracts detailing how it will remove spent nuclear fuel from new reactors. Federal law requires companies to sign a DOE waste contract allowing the department to take responsibility for the spent fuel before the Nuclear Regulatory Commission will consider granting an operating

license.

"These contracts are essential to advancing the commercial nuclear renaissance," said Energy Secretary Samuel Bodman in a statement. Details for the new standard contracts will not be revealed until the first contract is signed, DOE spokesman Allen Benson said.

The contracts had to be rewritten because current arrangements say DOE will assume responsibility for the waste in 1998. Those contracts have been the subject of numerous lawsuits that make taxpayers liable for \$11 billion if the nuclear waste repository at Yucca Mountain, Nev., opens in 2020, DOE said.

Earlier, Edward Sproat, director of DOE's Office of Civilian Radioactive Waste Management, said the new contracts might include a provision that would specify that DOE's deadline for taking the waste would be several years after the closure of the reactors.

The new contracts might also include a clause that would require the companies to place the waste in a DOE-designated canister, a core component of transporting the spent fuel to Yucca Mountain. The transportation casks are still being designed.

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General Information or Other	Event Number: 44559
Rep Org: OHIO BUREAU OF RADIATION PROTECTION Licensee: WAL-MART Region: 3 City: CINCINNATI State: OH County: License #: GL Agreement: Y Docket: NRC Notified By: STEPHEN JAMES HQ OPS Officer: JASON KOZAL	Notification Date: 10/10/2008 Notification Time: 17:40 [ET] Event Date: 10/09/2008 Event Time: 13:45 [EDT] Last Update Date: 10/10/2008
Emergency Class: NON EMERGENCY 10 CFR Section: AGREEMENT STATE	Person (Organization): JULIO LARA (R3) MARK DELLIGATTI (FSME) ILTAB VIA EMAIL ()

This material event contains a "Less than Cat 3" level of radioactive material.

Event Text

AGREEMENT STATE REPORT - LOST TRITIUM EXIT SIGNS

The following was provided by the state via e-mail:

"Wal-Mart Corporate Office reported a total of 8 tritium exit signs missing from various stores in Ohio. These signs were removed from service and were being held pending return to the manufacturer for disposal. The signs were discovered missing on or about October 8, 2008 at each store. Store management and maintenance personnel have conducted a search at each store and have determined that the signs are not on the premises. Wal-Mart is declaring these signs to be missing.

"Wal-Mart Corporate office notified the Ohio department of health by phone at approximately 1:45 PM on October 9, 2008, and followed with a written description of the signs on October 10, 2008."

The device information is as follows:

1. Location: Store number 01495 Huber Heights, Manufacturer - Isolite, Serial number - 272778, Curie content -

11.5.

2. Location: Store number 01724 Millersburg, Manufacturer - Isolite, Serial number - 260634, Curie content - 20.

3. Location: Store number 02441 Hamilton, Manufacturer - Isolite, Serial number - Unknown, Curie content - 11.5.

4. Location: Store number 02441 Hamilton, Manufacturer - Isolite, Serial number - 338664, Curie content - 11.5.

5. Location: Store number 02441 Hamilton, Manufacturer - Isolite, Serial number - 365140, Curie content - 11.5.

6. Location: Store number 03656 Cincinnati, Manufacturer - Isolite, Serial number - Unknown, Curie content - 11.5.

7. Location: Store number 03656 Cincinnati, Manufacturer - Isolite, Serial number - 362582, Curie content - 11.5.

8. Location: Store number 6327 Warren, Manufacturer - Isolite, Serial number - Unknown, Curie content - 11.5.

Ohio report number - OH080007

THIS MATERIAL EVENT CONTAINS A "LESS THAN CAT 3" LEVEL OF RADIOACTIVE MATERIAL

Sources that are "Less than IAEA Category 3 sources," are either sources that are very unlikely to cause permanent injury to individuals or contain a very small amount of radioactive material that would not cause any permanent injury. Some of these sources, such as moisture density gauges or thickness gauges that are Category 4, the amount of unshielded radioactive material, if not safely managed or securely protected, could possibly - although it is unlikely - temporarily injure someone who handled it or were otherwise in contact with it, or who were close to it for a period of many weeks.

This source is not amongst those sources or devices identified by the IAEA Code of Conduct for the Safety & Security of Radioactive Sources to be of concern from a radiological standpoint. Therefore is it being categorized as a less than Category 3 source

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Power Reactor	Event Number: 44565
Facility: FERMI Region: 3 State: MI Unit: [2] [] [] RX Type: [2] GE-4 NRC Notified By: DAVID DUNCAN HQ OPS Officer: HOWIE CROUCH	Notification Date: 10/14/2008 Notification Time: 05:12 [ET] Event Date: 10/14/2008 Event Time: 05:00 [EDT] Last Update Date: 10/14/2008
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(xiii) - LOSS COMM/ASMT/RESPONSE	Person (Organization): JULIO LARA (R3)

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

TECHNICAL SUPPORT CENTER REMOVED FROM OPERATION FOR MAINTENANCE

"Fermi 2 is removing, on October 14, 2008, the Technical Support Center (TSC) heating, ventilation, and air conditioning system from operation to facilitate maintenance activities. During this work, the facility will not be available for emergency use. Fermi is making this notification in accordance with 10CFR 50.72(b)(3)(xiii). In the event TSC activation is necessary, the Emergency Offsite Facility (EOF) will be utilized. Activation and use of the EOF as a backup for the TSC is included in Fermi's Radiological Emergency Response Preparedness Plan, and drills have been held performing both the TSC and EOF functions from the EOF. Fermi will notify the NRC upon completion of this work which is expected to be approximately one day. The Licensee will notify the NRC Resident Inspector."

* * * UPDATE FROM G. MILLER TO JOE O'HARA AT 1616 EDT ON 10/14/08 * * *

"Preventative Maintenance Activities on the TSC HVAC system have been completed. The TSC is now available for use."

The licensee will notify the NRC Resident Inspector.

Notified R3DO(Phillips).

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Power Reactor	Event Number: 44596
Facility: DAVIS BESSE Region: 3 State: OH Unit: [1] [] [] RX Type: [1] B&W-R-LP NRC Notified By: ERIC HORVATH HQ OPS Officer: HOWIE CROUCH	Notification Date: 10/23/2008 Notification Time: 11:59 [ET] Event Date: 10/23/2008 Event Time: 09:00 [EDT] Last Update Date: 10/23/2008
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(2)(xi) - OFFSITE NOTIFICATION	Person (Organization): HIRONORI PETERSON (R3)

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

OFFSITE NOTIFICATION DUE TO SUMP DISCHARGE LINE LEAKAGE

"This is a report of a situation, related to the protection of the environment, for which a notification to other government agencies is being made, as described in 10 CFR 50.72(b)(2)(xi).

"On October 22, 2008, excavation within the Protected Area was ongoing to identify a leak in the Fire Protection System. At approximately 1600 hours, the Turbine and Water Treatment Building sump discharge line was identified as leaking. This three-inch carbon steel pipe routes the sump discharge to the settling basins, where it is eventually discharged via a monitored outfall to the environment.

"The cause of the leakage is unknown, but due to the condition of the piping, it is believed to have existed prior to the excavation activities. The amount of leakage is therefore conservatively assumed to be more than 100 gallons, but this cannot be quantified at this time. Analysis of a water sample from the sump discharge line leak determined that the water leaking from the pipe contains approximately 37,500 picocuries per liter (pCi/l) tritium. These tritium levels are consistent with tritium levels in the Condensate/Feedwater Systems in the Turbine Building.

"Actions are underway to remove the piping from service and re-route the sump pump discharge. Analysis of routine groundwater well samples taken earlier this month is being expedited, and additional well samples are being planned.

"The State of Ohio, Lucas County and Ottawa County government agencies were contacted regarding the above information at 0900 on October 23, 2008. The Resident Inspector has also been briefed on the issue."

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Power Reactor	Event Number: 44597
Facility: BEAVER VALLEY Region: 1 State: PA Unit: [] [2] [] RX Type: [1] W-3-LP, [2] W-3-LP NRC Notified By: KEN TIEFENTHAL HQ OPS Officer: JEFF ROTTON	Notification Date: 10/23/2008 Notification Time: 18:25 [ET] Event Date: 10/23/2008 Event Time: 18:00 [EDT] Last Update Date: 10/23/2008

Emergency Class: NON EMERGENCY
10 CFR Section:
INFORMATION ONLY

Person (Organization):
CHRISTOPHER CAHILL (R1)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
2	N	Y	100	Power Operation	99	Power Operation

Event Text

INFORMATION ONLY NOTIFICATION REGARDING PLANT SHUTDOWN

"This is an information only notification that Beaver Valley Power Station Unit No. 2 has initiated a plant shutdown as of 1800 on 10/23/08, a proactive measure, to complete repairs on the Train 'A' Low Head Safety Injection (LHSI) Pump 2SIS-P21A. On 10/19/08 at 2326, Beaver Valley Power Station Unit No. 2 removed 2SIS-P21A from service for routine preventive maintenance. Technical Specification 3.5.2, Condition A was entered during this maintenance activity with the Required Action A.1 to restore 2SIS-P21A to operable status within 72 hours (2326 on 10/22/08). On 10/20/08, during this maintenance; the pump shaft was unable to be rotated by hand after approximately 3/4 revolution. The pump was then disassembled and the apparent cause was determined to be that the pump rotating assembly was not centralized in the casing bore resulting in minimal clearance between the pump wear rings. On 10/22/08, First Energy Nuclear Operating Company (FENOC) requested enforcement discretion from the NRC to permit an additional 36 hours of time to complete repairs on the pump. The NRC verbally granted FENOC's request for enforcement discretion on 10/22/08 at 1105. The enforcement discretion period will expire on 10/24/08 at 1126. Since unexpected difficulties have delayed the reassembly of the pump, FENOC management decided to proactively shutdown Beaver Valley Power Station Unit No.2 beginning at 1800 on 10/23/08. While pump reassembly and testing to restore operability may still be completed by the end of the enforcement discretion period, FENOC management determined that it was more prudent to shutdown the unit at this time so that the Operations crews are not placed under undue time pressure to reach Mode 3 conditions.

"The licensee notified the NRC Resident Inspector."

* * * UPDATE PROVIDED BY DANIEL SCHWER TO JASON KOZAL ON 10/24/08 AT 0922 * * *

"This 4-hour notification is to report that Beaver Valley Power Station Unit No. 2 has initiated a manual reactor shutdown at 0600 on 10/24/08 in accordance with Technical Specification 3.5.2, 'ECCS - Operating'. On 10/19/08 at 2326 Beaver Valley Power Station Unit No. 2 removed 2SIS-P21A (Train 'A' Low Head Safety Injection [LHSI] Pump) from service for routine preventive maintenance. Technical Specification 3.5.2 was not met during this maintenance activity for two operable trains of Emergency Core Cooling System and Condition A was entered with the Required Action A.1 to restore 2SIS-P21A to operable status within 72 hours (2326 on 10/22/08). Problems were unexpectedly encountered during this maintenance; the pump shaft was unable to be rotated by hand after approximately 3/4 revolution. The pump was disassembled and the apparent cause was determined to be that the pump rotating assembly was not centralized in the casing bore resulting in minimal clearance between the pump wear rings. On 10/22/08 FirstEnergy Nuclear Operating Company requested enforcement discretion from the NRC to permit an additional 36 hours of time to complete reassembly of the pump. The NRC verbally granted FENOC's request for enforcement discretion on 10/22/08 at 1105. The enforcement discretion period would have expired on 10/24/08 at 1126. Since unexpected difficulties have delayed the reassembly of the pump, FENOC management decided to proactively shutdown Beaver Valley Power Station Unit No.2 beginning at 1800 on 10/23/08 (reference Information Only EN#44597). Beaver Valley Power Station Unit No. 2 entered Mode 3 at 0519 on 10/24/08 as part of the planned controlled shutdown. On 10/24/08 at 0600, Technical Specification 3.5.2, Condition B was entered based on a determination that the projected work completion time for restoring 2SIS-P21A to operable status would not meet the conditions of the enforcement discretion. Technical Specification 3.5.2, Required Action B.1 was met since the plant was in Mode 3, the plant is continuing the cooldown to be in Mode 4 within 12 hours per Required Action B.2. This event is being reported as a Technical Specification required shutdown pursuant to 10CFR50.72(b)(2)(i).

"No radiological release occurred due to this event.

"The licensee notified the NRC Resident Inspector."

Notified R1DO (Cahill).

Power Reactor	Event Number: 44610
Facility: FERMI Region: 3 State: MI	Notification Date: 10/29/2008 Notification Time: 17:03 [ET]

Unit: [2] [] [] RX Type: [2] GE-4 NRC Notified By: MICHAEL HIMEBAUCH HQ OPS Officer: JOE O'HARA	Event Date: 10/29/2008 Event Time: 15:00 [EDT] Last Update Date: 10/29/2008
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(2)(xi) - OFFSITE NOTIFICATION	Person (Organization): LAURA KOZAK (R3)

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

OFFSITE NOTIFICATION DUE TO HYDRAULIC FLUID SPILL

"On October 29, 2008 at 1500 EDT, eight ounces of biodegradable hydraulic fluid (product name EnviroLogic 132) was spilled into the water outside the General Service Water (GSW) intake from Lake Erie. Cleanup activities were initiated immediately, and the spill was cleaned up within 20 minutes. All of the fluid was cleaned up. Reports were made to the Michigan Department of Environmental Quality (MDEQ) Pollution Emergency Alert System and the Primary Public Safety Answering Point (9-1-1). Media interest may be expected. The NRC Resident Inspector has been notified."

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Power Reactor	Event Number: 44613
Facility: PERRY Region: 3 State: OH Unit: [1] [] [] RX Type: [1] GE-6 NRC Notified By: ANTHONY JARDINE HQ OPS Officer: VINCE KLCO	Notification Date: 10/30/2008 Notification Time: 05:10 [ET] Event Date: 10/30/2008 Event Time: [EDT] Last Update Date: 10/30/2008
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(xiii) - LOSS COMM/ASMT/RESPONSE	Person (Organization): LAURA KOZAK (R3)

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

EMERGENCY RESPONSE DATA SYSTEM (ERDS) OUT OF SERVICE

"This event is being reported in accordance with 10 CFR 50.72(b)(3)(xiii) as a condition that results in a major loss of emergency offsite communications capability. On October 30, 2008, at approximately 0020 hours EDT, 120 VAC non-essential electrical power was lost to the plant computer due to high temperature in the computer room (approximately 80 degrees F). This resulted in the Integrated Computer System (ICS), the Safety Parameter Display System (SPDS), and the automatic mode calculation of the Computer Aided Dose Assessment Program (CADAP) being out of service.

"At 0028 hours, back-up computer room ventilation equipment was placed in service, and at 0040 hours, the electrical system high temperature shutdown was reset with the computer room temperature at 77 degrees F. At 0217 hours, the computer room high temperature alarm was reset with the room at 72 degrees F. The 120 VAC electrical power was restored to the plant computer room at approximately 0245 hours. The ICS, SPDS, and CADAP equipment functions are in process of restoration. Restoration is expected during dayshift hrs on 10/30/08. A follow up to this notification will be made when ERDS is restored.

"The NRC Resident Inspector has been notified."

