To: Jim Mehl, ERU Supervisor

From: Zack Clayton, Rad Coord

Subject: June Monthly Report

Date: July 6, 2009

Beans:

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

Web Page Hits: There were 55 RAD hits in June.

Coming Attractions:

RAT Training	7/1
Working Group	7/2
URSB	7/7
IZRRAG	7/21
Working Group	8/6
After Action	8/6
MMRS Group	8/20

Facility Updates:

Davis Besse Nuclear Power Station

Davis Besse operated for June at full power.

The Davis-Besse Nuclear Power Station conducted scheduled sampling of ground water wells on April 22, 2009. Sample analysis from one construction well indicated tritium at 2352 picocuries per liter (the level for notification to Ohio is 2000 picocuries per liter). Sixteen monitoring wells and ten construction wells are sampled twice a year. The October 2008 sample results for this well indicated tritium at 695 picocuries per liter. This construction well is within 15 feet of the site of a leaking underground pipe discovered on October 22, 2008 by an

excavation crew. The 2008 analysis conducted at the time of the leakage from that pipe indicated tritium at 37,500 picocuries per liter. The pipe was repaired and clean-up of any contamination completed. Davis-Besse intends to sample the same well again next week and have results available by the end of June. Groundwater flow at this location is toward Lake Erie and there is no anticipated impact on the health and safety of Ohio citizens or any drinking water supplies.

At 0049 hrs on June 25, Davis-Besse control room received indications that one of two switch-yard buses was de-energized. Investigation revealed a fire in the switch-yard. Carroll Township Fire, EMS, and police were requested to respond at 0400 hrs. No offsite assistance was actually required because the fire had been extinguished by plant personnel.
Investigation after sunrise revealed that a small transformer used to monitor voltage had exploded and caused Bus J to be de-energized. Bus J provides power to one of two start-up transformers used to provide offsite power if needed. The plant is required to have two independent sources of off-site power; therefore, the plant entered a LCO (Limiting Condition of Operation) of 72 hours to re-energize Bus J or begin plant shut-down.
In addition, had all the information been available at 0049, an Alert would have been declared due to an onsite explosion. The information regarding the explosion was not known until morning when debris was discovered in the switchyard (from the transformer). Therefore, the state was informed of a "Transitory Event". A Transitory Event is an event which is classifiable in accordance with EAL's, but becomes a lower classification or non-classifiable event before being declared.
The NRC was informed of the event. See Event number 45162.
The plant continued to operated at 100% power.

Perry Nuclear Power Plant

Perry NPP operated at full power until June 12. Perry reduced reactor power to 20% to repair a main transformer bushing. Perry reduced reactor power again on June 16 to adjust control rods.

The Perry Nuclear Power Plant had an automatic reactor shutdown at 1750 on Sunday, June 21 due to an main turbine

trip from an automatic reactor scram signal sent due to high moisture in the moisture separators. The root cause may be a controller on a heater installed during the last outage. The Plant is expected to be down for approximately 36 hours. The NRC was informed. See Event number 45147.

Beaver Valley Power Station

The Beaver Valley Power Station declared a Notification of Unusual Event (NOUE) at 2139 on Thursday June 18. An alarm for a CO2 discharge system actuated and plant personnel were dispatched to the Emergency Response Facility (ERF) Substation to investigate. Plant personnel observed that the CO2 discharge system had actuated by observing CO2 exiting the room under the door.

Due to this actuation, they are required to wait 20 minutes prior entering the space. Their procedures also direct them to declare a NOUE if they have a fire in plant spaces that cannot be extinguished within 15 minutes. Since they were unable to enter the space to verify either the fire was out or there was no actual fire, they had to declare a NOUE.

When appropriate, the on-site fire personnel entered the space and determined that there was no actual fire. Plant personnel are currently investigating the cause for the actuation of the CO2 discharge system. The NOUE was exited at 2236 last night.

The ERF substation provides power to the plants Technical Support Center and the Emergency Operations Facility, which could be compared to our EOC operations room. These facilities, as well as both Beaver Valley units, are fully operational and power remains at 100%. There were no injuries reported or offsite assistance requested. There are no concerns for public health and safety as a result of this event.

(This notice quoted from Ohio EMA.)

See Event Number 45143

Beaver Valley Unit I

Beaver Valley Unit I operated at full power for June.

Beaver Valley Unit II

Beaver Valley Unit II operated at full power for June.

Fermi II

Fermi operated at full power until June 13. It was at zero power for two days and then returned to full power for the rest of the month.

Portsmouth Gaseous Diffusion Plant

There were no reports for Portsmouth in June.

Activity:

6/9 Working Group updates and the rest of this meeting was devoted to a teleconference on the proposed changes in the REP program covering new and existing nuclear power plants. This meeting was co-hosted by NRC and FEMA.

6/17 The IZRRAG agencies met to discuss possible changes to the procedures and advisories as a result of lessons learned and existing REP requirements.

Office Issues:

Filed equipment for the RAT Team has been recieved. This includes 5 44-38 probes for the Ludlum 22241-3 meters, 3 Canberra MCB2 contamination meters, and 10 UltraRadiac personal dosimeters.

NRC Reports and Statistics:

June operating power levels

Date	BV1	BV2	DB	Fermi2	Perry
1	100	100	100	100	100
8	100	100	100	100	100

13	100	100	100	0	20	Perry – repair of main transformer
14	100	100	100	0	37	
15	100	100	100	10	91	
16	100	100	100	100	86	Perry – control rod adjustment
17	100	100	100	100	95	
18	100	100	100	100	100	
22	100	100	100	100	0	Automatic scram from turbine trip
25	100	100	100	100	5	
26	100	100	100	100	15	
27	100	100	100	100	58	
28	100	100	100	100	95	
29	100	100	100	100	84	
30	100	100	100	100	100	

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Relaxation of Order for Compensatory Measures Related to Fitness - for - Duty Enhancements. The document is 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 .
To access this document use Adams Accession No. ML091060582

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Perry, Unit 1 - Branch Chief Reassignment. The document is 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 .
To access this document use the ADAMS Accession no. ML091390681

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Davis-Besse Nuclear Power Station - Branch Chief Reassignment. The document is 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.
To access this document use ADAMS Accession no. ML091390585

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Davis-Besse Nuclear Power Station, Unit No. 1 - Request for additional information related to relief requests for Alternative Dissimilar Metal Weld Repair Methods for reactor vessel nozzles, reactor coolant pump nozzles, and reactor coolant piping. The document is 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.
To access this document use ADAMS Accession no. ML091530151

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Davis-Besse Nuclear Power Station, Unit No.1 - Request For Additional Information Related To Relief Requests For Alternative Dissimilar Metal Weld Repair Methods For Reactor Vessel Nozzles, Reactor Coolant Pump Nozzles, And Reactor Coolant Piping (RR-A32 AND RR-A33) (TAC Nos. ME0477 and ME0478). The document is 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 .
To access this document use Accession No. ML091550423

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PDF version of RIS 2009-06, Importance of Giving NRC Advance Notice of Intent to Pursue License Renewal, dated June 15, 2009, (ML090540789), 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/2009/.

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Firstenergy Nuclear Operating Company Status of Decommissioning Funding Assurance for Beaver Valley Power Station, Unit No. 1(TAC NO. ME0487)
The document is 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 .
To access this document use Adams Accession: ML091690470

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PDF version of Information Notice 2009-09, Improper Flow Controller Settings Renders Injection Systems Inoperable and Surveillance did not Identify, dated June 19, 2009 (ML091050027), 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/2009/.

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FERMI 2 - ISSUANCE OF AMENDMENT RE: REMOVAL OF STATEMENTS RELATED TO NUCLEAR POWER PLANT STAFF WORKING HOURS IN TECHNICAL SPECIFICATIONS (TAC NO. MD9620)
The document is 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 .
To access this document use ADAMS Accession No. ML091390646

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Branch Chief Assignment-Beaver Valley Power Station, Unit Nos. 1 And 2
The document is 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 .
To access this document use ADAMS Accession: ML091550550

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Beaver Valley Power Station, Unit No.2-Acceptance Of Requested Licensing Action RE: Spent Fuel Pool Rerack (TAC No. ME1079)
The document is 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 .
To access this document use ADAMS Accession: ML091751067

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Fermi: Request for Withholding Information from Public Disclosure for Fermi 2 (TAC No. MD9169)
The document is 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 .
To access this document use ADAMS Accession Number: ML091740317

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Power Reactor	Event Number: 45143
Facility: BEAVER VALLEY Region: 1 State: PA Unit: [1] [2] [ ] RX Type: [1] W-3-LP,[2] W-3-LP NRC Notified By: GREG LOOSE HQ OPS Officer: VINCE KLCO	Notification Date: 06/18/2009 Notification Time: 22:04 [ET] Event Date: 06/18/2009 Event Time: 21:39 [EDT] Last Update Date: 06/19/2009
Emergency Class: UNUSUAL EVENT 10 CFR Section: 50.72(a) (1) (i) - EMERGENCY DECLARED	Person (Organization): ART BURRITT (R1DO) COLLINS (RAR1) LEEDS (ET) FREDERICK BROWN (NRR) ANTHONY McMURTRAY (IRD) WIGGINS (NRR) KETTLES (DHS) CANUPP (FEMA)

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

Event Text

EMERGENCY DECLARED DUE TO INDICATED FIRE IN EMERGENCY RESPONSE FACILITY SUBSTATION

At 2139, the licensee declared a Notification of Unusual Event in response to a fire alarm and CO2 activation in the emergency response facility (ERF) substation. The licensee entered emergency action level (EAL) 4.1. The fire brigade responded to assess for damage. No damage was found. The incident was attributed to a spurious activation of the CO2 system. The licensee terminated the unusual event at 2236.

The licensee notified the NRC Resident Inspector. The NRC did not change agency response mode for this event.

* * * UPDATE FROM JAMES DAUGHTERY TO HOWIE CROUCH @ 0135 EDT ON 6/19/08 * * *

The CO2 discharge was isolated to the Emergency Response Facility Substation Building, and the building has been ventilated. Investigation into the cause of the spurious CO2 actuation is ongoing.

Notified the R1DO (Burritt) via email.

* * * * *

Power Reactor	Event Number: 45147
Facility: PERRY Region: 3 State: OH Unit: [1] [ ] [ ] RX Type: [1] GE-6 NRC Notified By: DAVID O'DONNELL HQ OPS Officer: VINCE KLCO	Notification Date: 06/21/2009 Notification Time: 20:58 [ET] Event Date: 06/21/2009 Event Time: 17:50 [EDT] Last Update Date: 06/21/2009
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(2)(iv)(B) - RPS ACTUATION - CRITICAL	Person (Organization): CHRISTINE LIPA (R3DO)

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	A/R	Y	100	Power Operation	0	Hot Shutdown

Event Text

AUTOMATIC REACTOR SCRAM RELATED TO A MAIN TURBINE TRIP

"On June 21, 2009, at approximately 1750 hours, an automatic Reactor Protection System (RPS) actuation occurred at the Perry Nuclear Power Plant, Unit 1. At the time of the event, the plant was in Mode 1 at 100% power. All control rods are inserted into the core and the plant is currently stable, in Mode 3 (Hot Shutdown) with reactor pressure at approximately 930 psig. No Emergency Core Cooling Systems were required or utilized to
respond to the event and there were no other reportable actuations. Reactor coolant level is being

maintained in its normal band by the feedwater system and decay heat is being removed by the condenser. The plant is in a normal electrical line-up with all three Emergency Diesel Generators operable and available if needed.

"The cause of the reactor scram is currently under investigation. Preliminary indications are that the cause of the RPS actuation is related to a main turbine trip. The NRC Resident Inspector has been notified."

No safety relief valves lifted during the event and a reactor cooldown is in progress.

* * * * *

!!!!! THIS EVENT HAS BEEN RETRACTED. THIS EVENT HAS BEEN RETRACTED !!!!!	
Power Reactor	Event Number: 45025
Facility: PERRY Region: 3 State: OH Unit: [1] [ ] [ ] RX Type: [1] GE-6 NRC Notified By: THOMAS MORSE HQ OPS Officer: VINCE KLCO	Notification Date: 04/28/2009 Notification Time: 00:55 [ET] Event Date: 04/27/2009 Event Time: 17:30 [EDT] Last Update Date: 06/25/2009
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(3)(v)(B) - POT RHR INOP	Person (Organization): DAVID HILLS (R3DO)

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

Event Text

RESIDUAL HEAT REMOVAL (RHR) PUMP TRIPPED WHILE IN OPERATION FOR SHUTDOWN COOLING

"On April 27, 2009, at approximately 1730 hours, with the plant in Mode 5 during refueling outage (RFO) 12, RHR 'A' pump tripped while operating in shutdown cooling. RHR 'A' was the primary decay heat removal shutdown cooling system. RHR 'B' was the backup decay heat removal shutdown cooling system. Preliminary investigation shows that jumper installation activities associated with plant testing resulted in a blown fuse and closure of the RHR shutdown cooling outboard common suction isolation valve (1E12F008). Closure of the 1E12F008 valve tripped the RHR 'A' pump and prevented the RHR 'B' pump from being used to initiate shutdown cooling from the control room. Operators were preparing to manually open 1E12F008 in parallel with activities to restore control from the control room.

"The plant entered Technical Specification 3.9.9, 'RHR - Low Water Level', Conditions A and C due to 1E12F008 isolating causing the loss of shutdown cooling. Action A.1 calls for verification of an alternate method of decay heat removal available for each inoperable RHR shutdown cooling subsystem in 1 hour and once per 24 hours thereafter. This was completed with the fuel pool cooling and cleanup system's two pumps and two heat exchangers cooled by NCC [Nuclear Closed Cooling System] (available due to the ability to reflood the upper pools with a hotwell pump through normal cavity reflood path) being one alternate system. A second alternate system was the utilization of the low pressure core spray to flood the vessel, returning to the suppression pool through safety relief valves, and a loop of RHR in suppression pool cooling. Actions for Condition C, to verify reactor coolant circulation by an alternate method and to monitor reactor coolant temperature were not met due to no reactor coolant flow past a valid temperature monitoring point. Approximate reactor coolant temperature was being trended using the reactor water cleanup

system.

"The blown fuse was identified and replaced at approximately 1816 hours. The RHR 'B' pump was started at approximately 1834 hours. From the time that the RHR 'A' pump tripped (approximately 1730), until the RHR 'B' pump was started, the reactor temperature increased from 94 degrees F to 97 degrees F. Pre-determined time to boil had been calculated to be 9 hours. At approximately 1835 hours, TS 3.9.9 Condition C was exited due to the RHR 'B' shutdown cooling loop being placed in operation.

"This event is being reported as an event or condition that at the time of discovery could have prevented fulfillment of a safely function of structures or systems that are needed to remove residual heat under 10 CFR 50.72 (b)(3)(v)(B).

"The NRC Resident Inspector has been notified."

* * * RETRACTION FROM C. ELBERFELD TO P. SNYDER AT 1727 ON 6/25/09 * * *

"The purpose of this call is to retract Event Number 45025. On April 28, 2009, at 0055 hours, notification was made to the NRC Operations Center by the Perry Nuclear Power Plant (PNPP) reporting a condition that at the time of discovery could have prevented the fulfillment of the safety function of a system that is needed to remove residual heat [10 CFR 50.72(b)(3)(v)(B)]. Jumper installation activities associated with plant testing resulted in a blown fuse and closure of the Residual Heat Removal (RHR) shutdown cooling outboard common suction isolation valve. Closure of the valve resulted in the RHR A pump tripping, as designed. The blown fuse was replaced and the valve reopened. The RHR B subsystem was then started as the primary decay heat removal shutdown cooling system. Additionally, it was initially questioned whether Technical Specification Limiting Condition for Operation 3.9.9 Required Actions were met to verify reactor coolant circulation by an alternate method and to monitor reactor coolant temperature.

"Based on further evaluation, it was determined that there was not a reasonable expectation of the loss of safety function of a system needed to remove residual heat (i.e., the RHR System). The redundant RHR B subsystem was manually aligned and operated in a timely manner to continue to meet the system requirements to fulfill the safety function. Since the condition reported in Event Number 45025 would not have prevented the fulfillment of the safety function of a system that is needed to remove residual heat, the condition is not reportable, and this notification is retracted.

Additionally, it was determined that verification of reactor coolant circulation by an alternate method (i.e., Reactor Water Cleanup System) was performed and that monitoring of reactor coolant temperature was appropriate. Therefore, based on not meeting any 10 CFR 50.73 reporting criteria, no Licensee Event Report is required. The evaluations (i.e., Reportability Reviews) for this condition are documented in Condition Report 09-58110 and Condition Report 09-58123."

The licensee notified the NRC Resident Inspector.

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Power Reactor	Event Number: 45162
Facility: DAVIS BESSE Region: 3 State: OH Unit: [1] [ ] [ ] RX Type: [1] B&W-R-LP NRC Notified By: ERIC HORVATH HQ OPS Officer: BILL HUFFMAN	Notification Date: 06/25/2009 Notification Time: 11:44 [ET] Event Date: 06/25/2009 Event Time: 00:49 [EDT] Last Update Date: 06/25/2009
Emergency Class: ALERT 10 CFR Section: 50.72(a) (1) (i) - EMERGENCY DECLARED	Person (Organization): ANN MARIE STONE (R3DO) MARK SATORIUS (R3 D)

	FREDERICK BROWN (NRR) JIM WIGGINS (NRR) JEFFERY GRANT (IRD)

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

DISCOVERY OF AN AFTER-THE-FACT ALERT DUE TO CATASTROPHIC FAILURE OF CCPD

"A transitory ALERT [condition was determined to have existed] based on Emergency Action Level 7.D.2 - 'Onsite Explosion Affecting Plant Operation'. At time 0049 on 06/25/09 a catastrophic failure-explosion of the Constant Current Potential Device (CCPD) on 'J' Bus near Air Circuit Breaker (ACB) 34563 resulted in a loss of switchyard 345 KV Bus 'J'. This event de-energized Startup Transformer 01 which is a tie from offsite sources to the Unit 13.8 KV Busses. The unit entered [Technical Specification] LCO 3.8.1, Condition A [due to the loss of one offsite power source]. The Unit remains stable and in operation at 100% RTP [reactor thermal power]. A problem solving decision making team is working on [the] troubleshooting/repair/restoration activities. This event did not impact any plant safety systems or result in any release of radioactive material."

Failure of the CCPD caused automatic opening of the breakers on both sides of the 'J' bus which was configured as part of a switchyard ring bus at the time of the event. This resulted in the loss of one of the offsite power ties. However, startup Transformer 02 is still energized from offsite power and remains available for plant operations. Other than the de-energized startup transformer, onsite electrical configurations are normal including availability of emergency diesel generators. The licensee is in a 72 hour LCO per Tech Spec 3.8.1, Condition A, to restore the lost offsite power source. The licensee is inspecting the switchyard for collateral damage to other equipment from the failure of the CCPD. The licensee believes the CCPD failure is likely a result of equipment failure and not the result of any equipment tampering.

The licensee stated that initially, the severity of the CCPD failure was not recognized because of the night time conditions and minimal lighting in the area. After daylight examination of the location of the event, it was determined that the failure of the CCPD should have been classified as an explosion affecting plant operation under EAL 7.D.2. Consequently, the licensee made the after-the-fact declaration.

Licensee has notified the NRC Resident Inspector, and will be notifying State and local authorities.

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NUCLEAR POWER: Company calls new small reactor a 'game changer' *(06/10/2009)*

Katherine Ling, E&E reporter

Correction appended.

A major manufacturer of power-generation equipment announced plans today to build a small nuclear reactor that company officials touted as a "potential game changer for the global nuclear market."

Babcock & Wilcox Co.'s 125-megawatt reactor would be significantly smaller than the average 1,000-megawatt

nuclear reactor and is aimed at plugging a major "market gap," CEO Brandon Bethards said at a Washington press conference. The new reactor might come online as early as 2018.

What the company calls its "mPower" reactor would be used for smaller grids or limited electricity-demand areas, such as those of municipal districts or for individual industrial use. Demand has been rising for such reactors in developing countries whose transmission systems cannot handle large reactors. Other nuclear companies have explored scalable or "grid appropriate" reactors before but could not overcome issues of cost.

"Several technical and manufacturing innovations make this reactor a potential game changer for the global clean energy market," said Christofer Mowry, president and CEO at Babcock & Wilcox Modular Nuclear Energy LLC, the new unit in charge of the small reactor.

The mPower reactor would include independent "modular" units that could be manufactured on an assembly line, thus cutting manufacturing and construction costs, said John Fees, CEO of McDermott International, the parent company of Babcock & Wilcox. Units could be built and come online even as others are being built, he said, allowing power companies to start earning revenue faster.

"This brings not only lower installation base cost but also brings greater cost certainty" compared to the $6 billion to $8 billion large-reactor option, Fees said. He declined to name a price for mPower, but said it would be "under the $5,000 per kilowatt" price that the industry has estimated for large reactors.

Babcock & Wilcox plans to submit engineering designs to the Nuclear Regulatory Commission for certification by 2011.

The new reactor has attracted "early and broad customer interest," Mowry said. A consortium of regional municipal and cooperative utilities -- which he declined to name -- has signed a "memorandum of understanding" to explore the construction of reactors, he said.

The Tennessee Valley Authority is evaluating a potential site near the Clinch River in Roane County, Tenn., for the reactor and is a industrial consultant for Babcock & Wilcox, said Jack Bailey, TVA's vice president of nuclear generation development. TVA has not made any decisions about building a small reactor plant, however, Bailey

added. Exelon Corp. is also advising the company on the design and licensing process but has not made any decisions about purchasing the mPower or examining any sites, said Craig Lambert, Exelon's director of engineering of New Business Generation.

NRC consideration

The mPower reactor is largely based on Generation III reactor technology that NRC is currently reviewing for certification, which should make the small reactor's licensing "conform to existing licensing protocol" and shorten the review time, Mowry said.

The company said it hopes to have a customer submit a combined construction and operating license for a small-scale plant by 2012, with construction beginning in 2015, Bethards said.

Oak Ridge National Laboratory is working on a small-scale reactor, and Westinghouse has been working on an advanced Generation IV small reactor, the International Reactor Innovative and Secure, which is under review at NRC. Westinghouse hopes to have the design certified by 2010, according to the company.

The mPower reactor would be contained below ground and will have passive safety systems, taking advantage of current Generation III technologies. It will have a five-year refueling cycle, and the spent fuel could be stored underground with the unit for up to 60 years, Babcock & Wilcox said.

The company plans to manufacture all mPower components in Virginia, Ohio and Indiana and other North American sites.

Joining Babcock & Wilcox executives at the press conference were Tennessee Sens. Lamar Alexander (R) and Bob Corker (R) and Reps. Lincoln Davis (D) and Zach Wamp (R), as well as Ohio Sen. George Voinovich (R).

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NUCLEAR POWER: NRC to finalize airplane-impact rule *(06/11/2009)*

Katherine Ling, E&E reporter

New nuclear reactors must incorporate design features allowing them to withstand airplane crashes with minimal operator response under a Nuclear Regulatory

Commission rule scheduled for publication in tomorrow's *Federal Register*.

Nuclear-plant designers' plans must show that the reactor core and spent fuel pool would remain cool or that their containment would remain intact after the aircraft hits, the **final rule** says.

"This final rule to address the capability of new nuclear power reactors relative to an aircraft impact is based both on enhanced public health and safety and enhanced common defense and security, but is not necessary for adequate protection," as there are already rules pertaining to fire and explosions preparedness, NRC wrote. "Rather, this rule's goal is to enhance the facility's inherent robustness at the design stage."

The rule will apply to construction permits or operating licenses for new reactors, including new standard design certifications and manufacturing licenses. It will include the four standard designs recently certified by NRC: the Advanced Boiling Water Reactor by General Electric Co. and the AP 600, AP 1000 and System 80+ by Westinghouse.

It won't apply to current or future operating license applications that have construction permits before the rule's effective date, July 13. NRC said existing construction permits are complete and already comply with rules addressing large fires and explosions. The final rule could "result in an unwarranted financial burden to change a design for a plant that is partially constructed" and complies with the other safety rules, the rule said.

Ed Lyman, a senior scientist at the Union of Concerned Scientists, said the final rule is an improvement on previous versions of the rule, which were too flexible, but it still does not go far enough, as it allows the option to either have a cool reactor or show no damage to the reactor container.

"You have to prevent core damage no matter what happens to the containment," Lyman said. "You could have a Three Mile Island type of event with this rule. ... The bottom-line level of protection is, you shouldn't be able to cause a core meltdown accident with an airplane crash. Period."

Lyman added that NRC should also prepare a cost-benefit analysis of reinforcing current reactors against aircraft impacts.

Click here to view the final rule.

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NUCLEAR POWER: Senate Energy bill may lend 'strong statement' of support *(06/12/2009)*

Katherine Ling, E&E reporter

Senate Republicans may finally get a nuclear amendment in the comprehensive energy bill, albeit without the substance they had aimed for.

Energy and Natural Resources Committee ranking member Lisa Murkowski (R-Alaska) said she and Chairman Jeff Bingaman (D-N.M.) are working on an amendment to be introduced at Tuesday's markup stating the support of Congress for nuclear energy. This comes after Republicans failed in several attempts to garner committee support for more incentives and policy certainty for the power source.

"It won't have meat in it like I had included in several of my amendments, which were rejected, and those of some of my other colleagues," Murkowski said. "But we felt it was important, and the chairman agreed that a statement on nuclear, as an important component of our energy policy, would be a welcome piece to the energy package we are building."

The possible language would be similar to the first part of an amendment offered by Murkowski that failed in an 11-11 vote when the committee marked up the nuclear waste title last month, she said. That section included a sense of Congress that said "an expanded contribution from nuclear energy in the United States" must be part of a program to reduce greenhouse gas emissions, and nuclear energy has "strategic value" in the nation's electricity supply.

Bingaman said the nuclear amendment was among "a bunch" of amendments the committee is working to clear before Tuesday. "I think most of us on the committee do support nuclear energy, at least I certainly do, and the question is what the nature of the research that we want to encourage and that is the issue that we are fine tuning," he said.

While Bingaman did not go into what specific technology the two sides are negotiating, one area of research where

he has been cautious is reprocessing technology. "I don't believe we should commit the nation to reprocessing at this stage," Bingaman said during the committee nuclear waste title markup. The nation's previous attempt at reprocessing in the 1960s and 1970s "proved to be an economical and technical failure. Let's not start down that path again without appropriate study."

Bingaman said he believes the committee energy bill already helps nuclear energy significantly through loan guarantees provided by a renovated Energy Department loan guarantee program that will become an independent DOE agency under the new measure.

"I think the most significant thing in this bill that is helpful to the nuclear power industry is the Clean Energy Deployment Administration," Bingaman said during the renewable electricity standard markup when Republicans complained that the bill excluded nuclear energy. "That is a substantial, makes substantially more likely loan guarantees will be available to new nuclear as well as other projects. It will benefit a whole range of projects."

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NUCLEAR ENERGY: House panel to explore research, technology options for fuel reprocessing

(06/15/2009)

Katherine Ling, E&E reporter

The House Science and Technology Committee will consider the development and ramifications of several different techniques to reprocess used nuclear fuel at a hearing Wednesday.

Reprocessing is a technology that takes the uranium and plutonium out of spent nuclear fuel, which makes up about 94 percent of a fuel rod. The substances can be reused to power another reactor, and supporters say the process reduces the amount of repository volume needed to bury the waste in. It is the separation of the uranium and plutonium that also makes reprocessing a proliferation threat, as those components can be modified and used in a nuclear weapon or in combination with a conventional explosive device to disperse the radioactive elements, known as a dirty bomb. There is also serious criticisms about the amount of hazardous waste the

process produces compared with just burying the spent nuclear fuel after its first use.

Energy Secretary Steven Chu has said several times that reprocessing is a long-range technology that could be useful but that it is not ready yet to be commercialized in the United States. But many Republicans, including a majority of those in the Senate, are pushing for reprocessing to be commercialized within the next decade.

While much of the debate about reprocessing rages on a macro level and focuses on concerns about whether the process should be done or not, there is not much discussion about the various methods industry and governments are developing or have developed to perform the task.

A leader on reprocessing technology is the French-owned company Areva Inc., which operates the largest reprocessing center in the world at La Hague, France. At that facility, the company, which is sending a representative to speak at the hearing, uses a process known as PUREX, which takes out the plutonium and uranium separately, making it more prone to proliferation. EnergySolutions -- which will not have a representative testifying at the hearing -- holds the rights to PUREX in the United States and has also developed another process that separates uranium out and then separates the plutonium and transuranic elements together, according to the World Nuclear Association.

The French have also developed an advanced form of reprocessing known as COEX, which extracts the plutonium and uranium together so plutonium is never separated by itself. A reprocessing facility that uses this type of combined extraction has already started to come on-line in Japan this year.

But critics still say co-extraction is very vulnerable to proliferation as the plutonium can be extracted through a relatively accessible chemical process.

The Energy Department's Argonne National Laboratory has been researching more advanced theories of reprocessing. This includes light water reactors with multiple plutonium recycle, gas-cooled reactors that will burn up more of the plutonium fuels, the recycling of minor radioactive components known as actinides in thermal reactors and transuranic recycling in fast

reactors. The laboratory is also researching different ways to separate plutonium and uranium based on pyrochemical and aqueous approaches for current spent nuclear fuel, aiming specifically at lowering costs and using as much of the materials as possible to decrease the waste stream. This includes UREX+ that separates the plutonium out with other radioactive elements instead of the uranium.

General Electric Hitachi Nuclear Energy Co. is working in parallel with Argonne on the pyroprocessing technique, which does not use liquid acidic chemical solutions to separate but rather a form of salts and electricity. It could only be used for fast reactors that are envisioned as part of next-generation reactors.

Regardless of what technology is used, reprocessing is not worth the time and research investment, let alone the investment in technology, many environmentalists and proliferation experts contend.

Charles Ferguson, a fellow at the Council on Foreign Relations, who is scheduled to testify at the hearing, has expressed his concern about the processes as well as the lack of resources of the International Atomic Energy Agency to properly monitor current facilities and their materials.

Other critics say the economics of reprocessing do not add up to the proliferation and environmental risks.

"We've known all along that none of these processes have any merit" as true proliferation-resistant technology, said Ed Lyman, a senior scientist at the Union of Concerned Scientists.

"It is a pointless technology. It's dirty dangerous and expensive. The problem is if the U.S. changes its policy it's a huge signal to the rest of the world that this is OK to be doing it," Lyman said.

Schedule: The hearing is Wednesday, June 17, at 10 a.m. in 2318 Rayburn.

Witnesses: Mark Peters, deputy associate laboratory director, Argonne National Laboratory; Alan Hanson, executive vice president for technology and used fuel management, Areva Inc.; Lisa Price, senior vice president, GE-Hitachi Nuclear Energy, and CEO, Global Nuclear Fuel; and Charles Ferguson, the Philip D. Reed senior fellow for science and technology at the Council on Foreign Relations.

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Portsmouth Daily Times
Nuclear Power Plant Coming

By FRANK LEWIS
PDT Staff Writer
Governor Ted Strickland will be in Piketon Thursday to make a major announcement concerning a project that will result in the future development of property at the current Department of Energy's site in Pike County.
The move comes on the heels of an article in a national online publication that says Piketon will be the site of a nuclear power plant. At press time, the Columbus Dispatch had also carried a similar report on their Web site.
"The Governor is looking forward to having an announcement in Piketon on Thursday, and will offer some positive news about the future of the site," Strickland spokeswoman Amanda Wurst told the Portsmouth Daily Times Tuesday.
"The Governor has long advocated for the redevelopment of the former nuclear facility at Piketon, both as a member of Congress and as Governor."
A media advisory from USEC Tuesday said, "Ohio Governor Ted Strickland, U.S. Senator George Voinovich, and U.S. Representative Jean Schmidt will join CEOs from several national and international energy companies as they make a major announcement about the future use of the U.S. Department of Energy's Piketon site. The announcement will highlight a large-scale effort to transition a portion of the site into a 21st century clean energy production center."
Bruce Pfaff of Congresswoman Jean Schmidt's office says Schmidt is behind the project for a lot of reasons.
"She has always been a supporter of trying to bring jobs to the region, and she feels this will be an important addition and job creator for the area as well as important to the energy needs of the area," Pfaff said.
Online publication Weapons Complex Monitor recently carried a story with a headline that reads "Duke, AREVA and USEC to build new nuke plant at Portsmouth" and says the project is to be the work of those three entities.

In the article's opening statement, Rebecca Cooper writes: "Duke Power Corporation, French-owned nuclear reactor vendor AREVA and USEC Inc. are poised to announce plans for a new nuclear power plant at the Department of Energy's Portsmouth site in Piketon, Ohio on June 18, WC Monitor has learned."

The article says the site is home to USEC's former Portsmouth Gaseous Diffusion Plant, as well as the future location for the company's planned American Centrifuge Uranium Enrichment Plant.

"The Department of Energy, which is cleaning up environmental liabilities at the site, will soon have an operating nuclear facility at the site as well when the depleted uranium hexafluoride conversion plant comes online in 2010," Cooper writes.

The article says the proposed plant marks the first new nuclear plant in Ohio, and says it would be one of a larger fleet of AREVA's Evolutionary Power Reactors (EPRs) planned for the United States.

"AREVA is hoping to break ground on the first U.S. EPR at Calvert Cliffs in Maryland by the end of this year," Cooper writes.

Pfaff was asked if Schmidt feels nuclear energy is a safe, viable source of power.

"Where it can be done safely, and where it is needed, especially in a place such as Ohio which is so reliant on coal and natural gas, it's a good addition to that mix," Pfaff said. "Especially if the Democrats are going to be pushing Greenhouse Gas emmission cap and trade issues."

Pfaff cited two members of congress he says are in opposition to nuclear usage.

"Congressman (Henry) Waxman of California, and Congressman (Edward) Markey (of Massachussetts) intentionally have not put nuclear power on the table. It has been proven to be very safe when done appropriately and properly, that it can be a safe and clean source of energy. She (Schmidt) certainly believes that, where appropriate, it should be in the mix as an alternative."

Pfaff said the U.S. is still, "on the all-of-the-above...but today we have to go with what we've got — coal, natural gas, oil, and nuclear."

The involvement of the French company AREVA goes back to last year, when, in an exclusive interview in the Feb.

23, 2008, edition of the Portsmouth Daily Times, Strickland said his office had been vying with several other states for a $2 billion uranium enrichment plant he (Strickland) would like to see built in Piketon.

“AREVA is the largest producer of nuclear power in France,” Strickland said at the time. “I think about 80 percent of France’s electricity comes from nuclear power, so it’s a huge company.”

However, within months, AREVA announced they would pass up Piketon and build the facility near Idaho Falls, Idaho, after winning tax concessions from the Idaho state legislature.

That did not keep Strickland from working to see a facility built on that property.

The publication says the project will not be a lone project by AREVA, but is to be created by their partnership with Duke Energy and USEC Inc.

Elizabeth Stuckle, director of corporate communications with USEC was asked by the Times if the location of a nuclear plant at Piketon occurred, would it have any effect on the Centrifuge project already under consideration. Stuckle said Tuesday she could not confirm the “rumor” about the announcement on Thursday, but said it would have no effect on the other project if it did occur.

“If such a situation were to exist, it would have no effect,” Stuckle said. “But I cannot confirm.” Stuckle then repeated her response to the hypothetical question. “If such a situation were to transpire, the two projects would not interfere with each other,” Stuckle said.

On its Web site, AREVA is also talking about another project in the works.

According to AREVA, they are also in partnership with Korean contractor, Daelim Industrial Co. Ltd., and have been awarded a contract by Korea Hydro & Nuclear Power Co., Ltd., South Korean nuclear power plants operator to replace the six steam generators on the Ulchin 1 & 2 Nuclear Power Plants during outages planned for 2011 and 2012.

Duke Energy was named one of Corporate Responsibility Officer (CRO) magazine’s 100 Best Corporate Citizens in March of this year.

“The Governor is looking forward to being in Piketon on Thursday,” Wurst said.

FRANK LEWIS may be reached at (740) 353-3101, ext. 232.

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Columbus Dispatch

Nuclear plant planned for state

Building Piketon facility could take 4,000 workers 10 years

Wednesday, June 17, 2009 3:07 AM

By Jonathan Riskind and Randy Ludlow The power plant is to be built on the grounds of the former uranium-enrichment plant shown in this 2001 photo.

A multibillion-dollar nuclear power plant proposed for southern Ohio would be the first started in the U.S. since before the Three Mile Island accident.

"I'm a big cheerleader for nuclear power, and I always have been," Gov. Ted Strickland told *The Dispatch*. "I'm excited about it."

Strickland and representatives from an alliance of energy companies will be in Piketon Thursday morning for the formal announcement by Duke Energy and the French nuclear energy company Areva. Sen. George V. Voinovich, R-Ohio, and Rep. Jean Schmidt, R-Loveland, also will be on hand.

The plant, to be located on the sprawling grounds of a former uranium-enrichment plant, could take a decade or more to build and employ about 4,000 construction workers during the construction phase alone, assuming the project gains the necessary financing and federal approval. If that reactor is a success, officials say the site is large enough to hold a second nuclear plant.

The facility would be built near a planned advanced-technology uranium-enrichment plant operated by USEC Inc., which ran the old enrichment plant, too, until it closed several years ago.

Strickland said he is intrigued by the prospect of generating power at Piketon and producing the power rods for its reactor at the same site.

Noting that he has three brothers who are cement masons and other relatives who are electricians and pipe fitters, Strickland said with a broad smile, "How do you think I feel about 4,000 construction jobs?"

Mark Shanahan, Strickland's energy adviser, said he couldn't discuss the announcement but noted that the governor insisted that nuclear power be part of a 2007 requirement that 25 percent of Ohio's electricity come from advanced energy sources by 2025.

"He clearly believes that with the challenge of climate change facing us, it's not responsible to not talk about the one source of electricity seven days a week, 24 hours a day, that has no carbon emissions," Shanahan said.

The governor's office is referring to the site as a "21st century clean energy production center."

President Barack Obama has indicated support for nuclear energy as one way to reduce greenhouse-gas emissions, but he also has indicated that building new plants should be approached with caution.

Nuclear power has been pushed for years by many power companies as a green alternative to coal-fired power plants. Supporters, including officials with Columbus-based research giant Battelle, say nuclear plants emit none of the pollutants that help form smog, soot and acid rain.

They also don't spew millions of tons of carbon dioxide, which climatologists consider the leading cause of global warming. Coal-fired power plants also emit mercury, a neurotoxin found in fish in most Ohio lakes and streams.

Environmentalists say nuclear plants' biggest liability remains the thousands of tons of cancer-causing radioactive wastes they produce. That makes them a "dirtier" option than other green sources of energy, which include solar and wind power, they say.

"Where do you safely store the waste?" said Jack Shaner, lobbyist with the Ohio Environmental Council.

"It's not green energy."

A Washington source said there will be no direct federal funding for construction, but there will be requests for money to cover land use and site studies.

The last U.S. reactor built was the River Bend plant in Louisiana, where construction began in 1977 -- two years before Unit 2 at Three Mile Island sustained a partial core meltdown -- according to the U.S. Department of Energy.

A new commercial nuclear reactor has not come on line since Feb. 7, 1996, when the second unit at the Tennessee Valley Authority-operated Watts Bar plant near Spring City, Tenn., began operating. A rebuilt TVA plant

reopened in 2007 near Athens, Ala.
Ohio has two operating nuclear power plants, both in northern Ohio: Davis-Besse near Oak Harbor (which began operating in 1978) and Perry in Lake County east of Cleveland (which came online in 1987).
But the last attempt at building a nuclear power plant in Ohio ended up as a costly misadventure. In 1984, the three Ohio utilities building the William H. Zimmer nuclear power plant along the Ohio River east of Cincinnati abandoned the project when it reached 96 percent completion and a cost of $1.7 billion.
The plant's safety-related construction was seriously flawed and there were no guarantees it would receive federal approval to operate without more huge expenditures. The plant eventually was converted to burn coal at an added cost of nearly $2 billion.
The nuclear industry has fed a lot of families in southern Ohio and Pike County over the decades, but it also has created heartbreak.
For nearly 50 years, southern Ohioans labored at a government uranium-enrichment plant at Piketon, churning out the stuff of nuclear warheads and power-plant fuel rods.
The Portsmouth Gaseous Diffusion Plant left a Cold War legacy of workers sick or dead from radiation related cancers and other illnesses.
More than 3,700 sick Piketon uranium-plant workers and their survivors have collected $324.7 million in compensation and payment of $40.8 million in medical bills through a special federal program since 2001.
Piketon is viewed as highly desirable for a nuclear plant because it has high-capacity transmission lines and huge water resources.
This project does not appear to be what Strickland was referring to last week when he said that a foreign company planned to locate its North American headquarters in Ohio.
Dispatch reporters Mark Niquette and Spencer Hunt contributed to this story.

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Piketon residents cautiously optimistic about nuclear plant proposal

Wednesday, June 17, 2009 12:07 PM
By Ashley Lutz
The Columbus Dispatch

WAVERLY, Ohio -- Pike County residents know something about the dangers of nuclear energy, but they also understand the need for jobs in Appalachia.

So feelings were a little mixed today as word began to spread through the county seat of plans to build a multibillion-dollar nuclear power plant.

The plant, a collaboration between Duke Energy and the French nuclear energy company Areva, would be located on the sprawling grounds of a former uranium-enrichment plant. It could take a decade or more to build, and would employ about 4,000 workers during the construction phase alone, assuming the project gains the necessary financing and federal approval. If that reactor is a success, officials say the site is large enough to hold a second nuclear plant.

"I think it's for the greater good, but I hope they are stringent about safety protocols," said Piketon resident Kevin McClary. "I've seen smiles on people's faces because of the jobs it will bring on in."

Pike County has the third highest unemployment rate in the state at 15.1 percent.

For nearly 50 years, southern Ohioans worked at a government uranium-enrichment plant at Piketon for nuclear warheads and power-plant fuel rods.

The Portsmouth Gaseous Diffusion Plant left a Cold War legacy of workers sick or dead from radiation-related cancers and other illnesses.

More than 3,700 sick Piketon uranium-plant workers and their survivors have collected $324.7 million in compensation and payment of $40.8 million in medical bills through a special federal program since 2001.

"It's kind of scary," said town resident Marshia Alexander. "But people around here are used to it. If the radiation don't kill you, the coal dust will."

All three Pike County commissioners refused to comment on the plans, citing confidentiality agreements.

Gov. Ted Strickland and company officials plan to release full details Thursday.

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NUCLEAR ENERGY: Panelists support research 'roadmap,' question reprocessing policy
(06/18/2009)

Katherine Ling, E&E reporter
The Energy Department should create a nuclear energy science and technology development roadmap to better understand the options and costs to close the nuclear fuel cycle, witnesses told the House Science and Technology Committee yesterday.
Creating such a roadmap will help the United States better support nuclear energy in the long term and efficiently invest the several hundred million dollars per year necessary for a sustained nuclear energy research and development program, said Mark Peters, deputy associate directory at Argonne National Laboratory. He said such a roadmap would take stakeholders six months to a year to create.
"There is no urgent need to deploy recycling today, but as nuclear energy expands, a once-through fuel cycle will not be sustainable," Peters said.
"It is imperative to begin now to build the R&D infrastructure that is needed for science and technology development, which must include advances in theory, modeling and simulation, new separations, fuel and waste management technologies, and advanced reactor concepts," he said.
Chairman Bart Gordon (D-Tenn.) asked the witness panel to submit suggestions for such an R&D roadmap and what the government and private industry roles should be. He also said he supported the idea of doing a survey of uranium resources currently available.
Peters added that since the United States has not invested in reprocessing yet, it has a chance to "leapfrog" into advanced technologies including fast reactors that eliminate more nuclear components, including the plutonium that is a proliferation risk, rather than rushing to use the current reprocessing and recycling technology that "is only part way there."
But Alan Hanson, executive vice president for technology and used fuel management for Areva NC Inc. -- whose parent company, Areva, runs the largest reprocessing and recycling facilities in the world -- said the United States

should not wait any longer.
"The problem with leapfrogging is you don't know where you are going to land, so you may drown," Hanson said. Scientists have said fast reactors are only 20 years away for the last 30 years, he noted. "I don't think we can wait for revolutionary changes that may never come to fruition."
But Lisa Price, senior vice president of GE Hitachi Nuclear Energy Americas LLC, said resources are better spent on researching and developing advanced technology that can eliminate 98 percent of the waste and create more flexibility in disposal sites. GE Hitachi is currently working on a "Generation IV" sodium cooled reactor with pyroprocessing, as opposed to the light water reactor and aqueous chemical reprocessing that Areva focuses on.
Regardless of technology, more research is necessary to determine what additional safeguards any reprocessing and recycling technology would need to guard against the plutonium and radioactive material from being stolen or unaccounted for, said Charles Ferguson, a senior fellow for science and technology at the Council on Foreign Relations. While he agreed with the rest of the panel that a completely proliferation-proof reprocessing technology does not exist, significantly more work and resources are needed to boost the proliferation resistance of the technology if the nation decides to take this path, he said.
The United States must also keep in mind that reversing the nation's policy against reprocessing will have an effect on the rest of the world's view of the technology. "The U.S. policy has been effective in limiting the spread of reprocessing," Ferguson said.
But if the United States decides to commercialize reprocessing now, it could further inflame South Korea's interest in the technology and could enable the United Arab Emirates to pursue the technology if another country in its region obtains it under an "equal terms and conditions for cooperation" clause of its civilian nuclear energy agreement with the United States, Ferguson said.
But Hanson said by not deciding to reprocess soon, the United States would not be able to be an effective leader on nonproliferation issues.
"The U.S. should step to the forefront and build a recycling complex to make it unnecessary and uneconomical for developing countries" to pursue

reprocessing and recycling technology, Hanson said.

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NUCLEAR POWER: Duke to build 'clean energy park' in Ohio *(06/18/2009)*

Duke Energy said today that it plans build a multibillion dollar "clean energy park" that could eventually house a nuclear plant at the federal government's uranium enrichment facility in Piketon, Ohio, about 80 miles east of Cincinnati.

Duke is part of the Southern Ohio Clean Energy Park Alliance, which includes French nuclear giant Areva, Baltimore-based UniStar Nuclear Energy and USEC Inc., which manages the 3,700-acre government site. The consortium has not finalized its site or design details, but estimates that the plant would create 1,400 to 1,800 initial jobs and potentially 400 to 700 permanent jobs (Mike Boyer, *Cincinnati Enquirer*, June 18).

Duke currently gets 86 percent of its electricity in the Midwest from coal plants, but the company's CEO, Jim Rogers, said last month that given a choice between coal and nuclear, "I'm betting on nuclear."

Ohio Gov. Ted Strickland (D), who has advocated the use of clean energy technologies as a way to boost the state's economy, joined the company at this morning's announcement.

Advocates of nuclear in Ohio say the state will need all the generation it can get to satisfy rising energy demand. But Ohio Sierra Club said data from the U.S. Energy Information Administration shows electricity sales in the state have been on the decline since 2000.

"The Sierra Club seeks the fastest, cheapest, and cleanest climate change and energy solutions, and the construction of new nuclear power generation does not qualify," the environmental group said in a statement yesterday (Mike Boyer, *Cincinnati Inquirer*, June 17). **-- PT**

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NUCLEAR POWER: Ohio reactor would use French technology, power 1.5M homes *(06/18/2009)*

Katie Howell, E&E reporter

A proposed nuclear power plant in southern Ohio would use French technology and power 1.5 million homes, companies involved with the project announced today.

The plant would be built at the former Energy Department uranium-enrichment facility in Piketon. Duke Energy Corp., Areva SA, UniStar Nuclear Energy, USEC Inc. and the Southern Ohio Diversification Initiative would be involved with the public-private project known as the Southern Ohio Clean Energy Park (*Greenwire*, June 18).

"The time is right to put the question of nuclear power squarely on the American energy agenda," Ohio Gov. Ted Strickland (D) said in a statement. He called the proposed energy park "an engine to revitalize this region's economy."

The new plant would be built on a 3,700-acre reservation, site of a former gaseous diffusion uranium-enrichment plant that operated from 1954 to 2001. USEC is already building a new advanced uranium-enrichment plant at the site, which should begin operating next year.

Duke Energy would own and operate any reactor built at the site. Areva CEO Anne Lauvergeon suggested the reactor would likely be the company's 1,600-megawatt EPR, its most advanced pressurized water reactor (*ClimateWire*, May 18).

"EPR is a fortress. ... Nothing can get out. Nothing can get in," Lauvergeon said. "This is the safest nuclear plant on the planet, and it will provide reliable electricity for 1.5 million Midwestern households."

UniStar would provide licensing support, and USEC would be responsible for infrastructure support, utilities and environmental site data.

The group is requesting funds from DOE for the first stage of the project, officials said.

Duke Energy CEO Jim Rogers said reactor construction could generate 1,400 to 1,800 jobs and employ 400 to 700 workers after the plant starts running. The plant could generate $20 million a year in state and local tax revenue and up to $75 million a year in federal tax money.

"It is my judgment that as we modernize and decarbonize our energy fleet in Ohio and the United States, we will make our communities the most energy efficient in the

world," Rogers said. "But job one is to supply power that is affordable and reliable. We cannot meet that obligation without new nuclear generation. Only baseload nuclear generation can provide power around the clock with zero greenhouse gas emissions."

Advocates of the new plant say the region needs more energy generation. This morning, Strickland said only 18 nations use more energy than Ohio on a yearly basis.

But not everyone agrees.

Jennifer Miller, a conservation coordinator for the Ohio Chapter of the Sierra Club, said, "The bottom line is that energy use in the state of Ohio is at a record low. There isn't a market for new power right now, let alone the very expensive and very dangerous power that would come out of a new nuclear facility."

She added, "Ultimately, it's still unsafe technology."

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NUCLEAR WASTE: NRC finds 18 plants lack funds for decommissioning *(06/19/2009)*

Katherine Ling, E&E reporter

The Nuclear Regulatory Commission said today that 18 nuclear power plants were not on track to meet the necessary funding to clean up the sites after the reactors are out of operation.

NRC contacted the power plants "to clarify how the companies will address the recent economic downturn's effects on funds to decommission reactors in the future," the agency said in a statement. The commission discovered the shortfall after reviewing the companies' latest reports on the decommissioning funding.

"We'll discuss this with the plants over the next few weeks so they can explain to us how they'll get the funds back on track to account for their decommissioning cost estimates," said Tim McGinty, director of policy and rulemaking in NRC's Office of Nuclear Reactor Regulation. "This is not a current safety issue, but the plants do have to prove to us they're setting aside money appropriately."

The list includes power plants owned and operated by Exelon Corp., the Tennessee Valley Authority, Constellation Energy Group Inc., Entergy Corp., Florida Power & Light Co. and FirstEnergy Corp.

Over the past two years, estimates for dismantling the U.S. nuclear industry have jumped by more than $4.6 billion due to increased energy and labor costs, while the funds took a $4.4 billion hit in the recent financial crisis, according to an analysis by the Associated Press (*Greenwire*, June 17).

If companies do not have enough cash to dismantle a reactor, it could sit idle, raising the risk of an accident from corrosion, critics say. NRC has already granted waivers for 19 power plants to sit idle for as long as 60 years.

One factor that could help mitigate these losses is that more than half of the nation's 104-reactor fleet has already obtained 20-year license extensions from NRC.

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