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Management Issues  
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For information contact:  
[Ivana@energyca.org](mailto:Ivana@energyca.org)

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Current-Argus

**A new way to get nuclear power, reducing waste in the process**

Boston Globe

## **NRC Issues Final Supplement to Yucca Mountain Environmental Impact Statement**

NRC News

May 5, 2016

[LINK](#)

The Nuclear Regulatory Commission has published the staff's final environmental impact statement supplement on a proposed permanent repository for spent nuclear fuel and high-level radioactive waste at Yucca Mountain in Nevada. The supplement analyzes potential impacts on groundwater and surface groundwater discharges and determines all impacts would be "small."

The document supplements environmental impact statements the Department of Energy prepared on the proposed repository. DOE issued the final EIS in 2002, then supplemented it in June 2008 when it submitted a construction authorization application to the NRC. Under the Nuclear Waste Policy Act, the NRC is to adopt DOE's EIS to the extent practicable. The NRC staff recommended adoption of DOE's EISs in September 2008, but noted the need to supplement the study of groundwater effects in the Yucca Mountain aquifer beyond DOE's analyzed location at the site boundary. DOE ultimately deferred to the NRC to prepare the supplement.

The NRC published a draft of the supplement for public comment last August. During the 91-day comment period, NRC staff conducted public meetings to present the report and receive comments in Rockville, Md., and in Las Vegas and Amargosa Valley, Nev. Including comment letters and oral comments, the NRC received more than 1,200 comments on the draft supplement. The NRC staff's responses to these

Third Annual  
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Energy Summit  
Idaho Falls, ID  
[Visit website.](#)

**September 2016**

**14-15**

2016 National Cleanup Workshop  
Hilton Alexandria Mark Center  
Alexandria, VA  
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comments, and descriptions of changes made to the final report in response to comments, are in Appendix B of the supplement.

The supplement to the [Yucca Mountain EIS](#) is available on the NRC website.

### **DOE move may help Oak Ridge firm's expansion**

Knox News

May 4, 2016

[LINK](#)

OAK RIDGE — The U.S. Department of Energy has declared as excess property 19.5 acres off Bethel Valley Road, and that's the key first step in a proposal to make the land available to a nearby, landlocked company in an expansion mode.

Whether the move will lock in the Protomet Corp.'s plans to grow in place remains uncertain, and a spokesman for the company was noncommittal.

"Protomet made its desire to remain in Oak Ridge clear from the beginning of this process," company spokesman Rick Laney said in an email.

"We view this as a good first step, and as responsible business owners, we continue to explore all options and opportunities that could be advantageous to Protomet moving forward through this expansion and beyond."

The company in February announced plans for a \$30 million expansion to include a 100,000 square-foot addition and 200 new jobs over five years. The company is in Bethel Valley Industrial Park, next to the DOE property.

Company CEO and founder Jeff Bohanan said in February that his company is on a tight timetable, needs to expand to meet customer demand, and that contracts are involved. Bohanan said then other locations for the expansion have been eyed.

With the DOE decision, its excess property sought by Protomet can be conveyed to the Government Services Administration, which can then sell it to the industrial development board.

That maneuver can shave several weeks off the ultimate plan for the board to sell the property to Protomet.

An initial step, to have the property surveyed, would be undertaken by the Economic Development Initiative, a branch of the Oak Ridge Chamber of Commerce that's underwritten by the city. The survey costs would be repaid through the land sale.

Protomet doubled its Oak Ridge operation in 2013 by opening a \$7 million, 40,000 square-foot expansion. The company specializes in high-precision production manufacturing and finishing and has in recent years expanded its presence in the boating industry.

### **Department of Energy opens Paducah gaseous diffusion plant for tours**

KFVS

May 5, 2016

[LINK](#)

For the first time, the U.S. Department of Energy (DOE) is offering guided public tours of its Paducah site.

Several tours are being offered for the public to learn about the rich history of the Paducah Gaseous Diffusion Plant site.

During more than 60 years of operation that ended in 2013, the Paducah plant enriched uranium for national defense and later for commercial energy purposes. The plant has been a significant economic asset to the region and its history is a key part of the area's heritage.

The plant is currently being prepared by DOE for decontamination and decommissioning while environmental cleanup continues at the site.

Some of the participants in the inaugural tours that took place on April 23 were former plant workers, like Eugene Waggoner, who is 95 years old and started working at the plant in 1952.

“The scope of the project is amazing,” Waggoner said of the deactivation and remediation work going on at the site. “The tour was educational and it was a pleasure to come back to see the building I worked in after all of these years.”

“When we planned the community tour program, we were unsure of the interest the tours would generate,” said Jennifer Woodard, DOE Paducah Site Lead. “We have been delighted with the turnout. After the first five tours filled up in only a couple of weeks, we added three additional tours to accommodate the demand. We are pleased that the community is taking an interest in the site’s history and ongoing work.”

In addition to the added tours, additional seating has recently been added to all of the scheduled tours, said Robert “Buz” Smith from DOE’s Paducah Site Office. “There are only a few spots left, so people should hurry if they’re interested in attending a tour this year,” Smith added.

Interested participants can register on a first-come, first-served basis [here](#).

The Fluor Paducah Deactivation Project coordinates the tours, which depart by bus from West Kentucky Community and Technical College’s Emerging Technology Center and return three hours later.

### **Officials to decide on nuclear reactor site in eastern Idaho**

AP: Tri-City Herald

May 5, 2016

[LINK](#)

## IDAHO FALLS, IDAHO

A Utah energy cooperative is narrowing down its selections for a site to build a small commercial nuclear reactor in eastern Idaho.

The Post Register reports (<http://bit.ly/1X7PyEP>) in a story on Wednesday that Utah Associated Municipal Power Systems has identified four places to build what are called small modular reactors at the 890-square-mile Idaho National Laboratory site.

The cooperative's government affairs officer, Ted Rampton, said the U.S. Department of Energy is expected to weigh in on the selections in coming days.

Oregon-based NuScale Power would build the reactors that can individually produce 50 megawatts. Additional reactors could be built as power demands grow, with up to 12 reactors producing 600 megawatts.

Experts say the reactors are designed to be safer than conventional nuclear plants by being able to shut down without human involvement in the event of a disaster.

Additional steps in the process to build the reactors include an environmental analysis if the company decides to move forward. Also, the project would have to go through the licensing process with the Nuclear Regulatory Commission.

"You never know what questions might come up," said William Magwood, a former NRC commissioner and senior official with the U.S. Department of Energy.

If everything moves forward, officials say the reactors could be up and running by 2024.

NuScale officials have said the cost for 12 small modular reactors is about \$3 billion, compared with about \$15 billion for a conventional nuclear plant. Part of the cost

savings comes from building the modular reactors at a factory and then trucking them to their locations.

The city of Idaho Falls, just east of the Idaho National Laboratory, is one of the Utah energy cooperative's 45 members in eight Western states.

### **Department of Energy files motion to oppose Southern Carolina Alliance intervention in MOX lawsuit**

Aiken Standard

May 4, 2016

[LINK](#)

The U.S. Department of Energy met deadline in the Mixed Oxide Fuel Fabrication Facility, or MOX, legal battle Monday with their oppositional response to the Southern Carolina Alliance motion to intervene.

The State of South Carolina filed the lawsuit against the DOE in February to enforce penalties for non-compliance with federal statute on the part of DOE.

The federal government was required to complete construction of the MOX facility by Jan. 1, 2016 or remove 1 metric ton of weapons-grade plutonium per year from the state.

According to the statute, penalties for non-compliance amount to \$1 million per day until the cap of \$100 million per year is reached. That limit was reached April 10, but if the DOE continues to be non-compliant, the penalties will begin to add up again after the new year.

The Southern Carolina Alliance filed the motion to intervene at the end of March, asking for consideration as a benefactor of the penalties. The nonprofit group represents residents and economic development in Barnwell and Allendale counties which are host to the Savannah River Site, or SRS.

According to reports from the Aiken Standard, the Alliance said it operates an industrial park adjacent to SRS, located just a few miles from the K-reactor which it said stores some of the plutonium.

The Alliance intervened on behalf of local residents, claiming the penalties would go to the South Carolina General Fund if the State wins the suit, not to the communities impacted by the economic loss of an unfinished MOX facility.

South Carolina filed a response in opposition to the intervention April 18, and Gov. Nikki Haley's office has stood by its opposition.

In a statement released at the time, her office said, "Federal law requires the Department of Energy to make economic and impact assistance payments to the State of South Carolina.

The law is clear, these payments are due to the State alone, not other individuals or groups that may also wish to collect."

Haley's opposition is mirrored by the DOE.

In the filings, the DOE said, "The statute which [the State of South Carolina] seeks to enforce does not reference Southern Carolina Alliance, any other landowner near SRS, or any other party at all. The statute therefore does not create any right, monetary or otherwise, to which putative intervenor can claim an interest."

Both entities in the suit have asked the judge, J. Michael Childs, to deny the Alliance's intervention. It may be possible for the Alliance to file a lawsuit against the State for its claim to the economic assistance payments.

In its motion against the intervention, the DOE said the Alliance may pursue a lawsuit separate from the battle over MOX between the federal government and the State of South Carolina.

The DOE has filed a motion to dismiss the case but also has a looming deadline in coming weeks. The federal government is expected to respond to the State's motion requesting a summary judgement from the court.

### **WIPP one step closer to reopening**

Current-Argus

May 5, 2016

[LINK](#)

CARLSBAD — With the Department of Energy's approval of their newest Documented Safety Analysis, the Waste Isolation Pilot Plant finds itself one, very complicated, step closer to reopening by the end of the year.

"It is an exciting point because it is a major milestone that has been reached," said John Heaton, chair of the Mayor's Nuclear Task Force in Carlsbad. "This was, frankly, one of the long poles in the tent, no doubt about it."

The Documented Safety Analysis is a required document in which WIPP details potential scenarios, like fire or radiological releases, and the plan of action that will be taken should a situation arise.

Heaton said the document took a year and 100,000 man hours to create.

WIPP had a Documented Safety Analysis in place already, but the Department of Energy revised its standards for the document in November 2014, prompting the creation of a new one.

"It follows a new standard and the standard is much more stringent," Tim Runyon, WIPP Recovery Operations Communication manager, said.

Runyon said a combination of the new standard and the need for changes in WIPP operations after the 2014 fire led to major changes within their Documented Safety Analysis.

"I think it'd be fair to say that it pretty much got rewritten from the ground up," Runyon said.

After a fire started in the underground in February 2014, workers were unable to properly use their emergency oxygen supplies.

Also, a facility shift manager switched the ventilation system from normal to filtration mode, thinking it would clear smoke. In reality, this caused areas that were supposed to have "good" air to fill with smoke.

The approval of the document enables the team at WIPP to complete the final phase of their Independent Verification Review and begin training workers on the new safety document.

After that, cold operations begin, during which workers will conduct normal waste emplacement procedures using weighted waste containers.

Once the Department of Energy deems the workforce to be fully trained, real waste emplacement operations can begin, Runyon said.

"We reached an important milestone Friday on the way to resumption of operations," said Phil Breidenbach, president and project manager at WIPP contractor Nuclear Waste Partnership, in an email. "Getting the DSA approved was a remarkable team effort with almost every group at WIPP being involved in the development of this key document. I am very proud of this team and look forward to achieving our ultimate goal of safely resuming transuranic waste disposal operations at WIPP."

WIPP hopes to resume operations by December.

"Hopefully this makes WIPP safer and should something happen, they'll know precisely how to respond to it," Heaton said.

## A new way to get nuclear power, reducing waste in the process

Boston Globe

May 6, 2016

[LINK](#)

From an 'old fart' to millennials, this collection of doers, thinkers, and visionaries could help to shape the neighborhood, and the world, for years to come.

Leslie Dewan and Mark Massie are very patient people. They don't exactly have a choice. When you're trying to change the way the world gets its electricity, fast answers aren't really part of the equation.

Their company, Transatomic Power, is about five years into its quest to reimagine the nuclear reactor. The work probably won't pay off for many more years, as the small company navigates hardcore science and a shifting regulatory landscape. Oh, and there's that silly startup stuff like making sure it has enough money to pay for those giant, world-changing plans.

Transatomic is part of a new wave of entrepreneurial interest in rethinking nuclear power, which many experts say will be a critical way to solve the carbon conundrum that threatens the planet's climate.

"It's such an exciting time to be a nuclear engineer. There's so much interesting technological development going on; there's so much work going on on the regulatory side, and there's so many new people joining the field," said Dewan, the company's chief executive.

Transatomic Power is working on a modern version of reactor technology that dates to the 1960s. Known as a molten salt reactor, it uses a liquid chemical salt impregnated with radioactive fuel to produce the heat that generates steam and turns an electric turbine.

Most nuclear reactors today submerge their nuclear fuel in a bath of water. But that design only extracts about 4 percent of the available energy before components

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begin to break down, Transatomic says, which leaves piles of remaining radioactive waste for hundreds of thousands of years.

Transatomic says its molten salt reactor design is vastly more efficient, drawing about 96 percent of the energy from nuclear fuel. That means it could actually use today's nuclear waste as fuel, reducing its dangerous lifespan to just hundreds of years while generating huge amounts of presently untapped power.

Transatomic is currently running a long series of experiments to determine whether the materials it would use will hold up to the stresses of the reactor environment. Once it finds out the expected lifetime of the metals, ceramics, and composites that could be employed, Transatomic will be better positioned to estimate the cost of a reactor.

And cost is a big consideration, even with huge societal benefits on the line.

“Advanced reactors will only matter if you can make them cheaper than coal, cheaper than fossil fuel sources,” Dewan said. “You want to make sure people have an economic incentive as well as an environmental incentive to build this carbon-free fuel source.”

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