



LOAN GUARANTEE

DOE, USEC agree to delay of ACP final review

IN A STARE down between the Department of Energy and USEC Inc. over a request for a \$2-billion loan guarantee for the American Centrifuge Plant (ACP) project in Piketon, Ohio, the DOE may have blinked first. A joint statement issued on August 4 by the DOE and USEC said that the two sides have reached an agreement that the DOE will delay by six months its final review of the company's loan guarantee application.

The joint statement followed a July 27 request by the DOE that USEC withdraw its loan application and focus its attention on further research. The company refused to withdraw the application, and instead, the company's president and chief executive officer, John Welch, sent a July 29 letter to President Barack Obama asking him to "review the benefits of a federal loan guarantee for the American Centrifuge Project. This review should consider the full scope of the domestic, economic stimulus, national security, nonproliferation, energy security, environmental, international trade, and technology leadership benefits of the project."

USEC needs the loan guarantee to complete the ACP, which will use a gas centrifuge technology to enrich uranium for fuel to be used in nuclear power plants. The Nuclear Regulatory Commission issued a construction and operating license for the ACP in April 2007, and construction began in May 2007. USEC has invested \$1.5 billion in the project, which the company says has already created more than 5000 new jobs. The full-scale deployment of the plant would support 8000 jobs, directly and indirectly, according to the company.

The DOE has agreed to a six-month delay in making a final decision on USEC's request for a \$2-billion loan guarantee.

The six-month extension is expected to allow USEC to address the DOE's concerns about the readiness of the enrichment technology. The joint statement said that the DOE "sees promise in the ACP technology," but that a review of the application would come only after a series of specific technological and financial milestones have been met. The milestones are in line with the criteria and legal requirements of the Energy Policy Act of 2005 and the subsequent Title 17 loan guarantee regulations.

"This agreement gives USEC the time it needs to more fully test its technology and develop additional financial support for the project," said Energy Secretary Steven Chu.

USEC submitted its loan guarantee application in two parts last year, in July and September, but had not been updated by the DOE about its status along the way, according to USEC spokesperson Elizabeth Stuckle. "We were discouraged at the inaction," she said. "Over 10 months is a long time. If you think about it, many of the applicants that filed for loan guarantees are for nuclear power plants that haven't even been licensed or are to be built way out in the future. But here we are, well into

construction, and we need the money now."

In addition to the DOE's concerns about the project's technical readiness, there are questions about USEC's financial resources. Stuckle said, however, that the company is financially strong enough to qualify for a loan guarantee, and she noted the following:

- The \$1.5 billion that USEC has spent on the project came from its own cash flow from operations and from money that it raised in the capital markets in 2007.

- USEC offered the DOE \$1 billion in collateral from its own assets.

- In the second quarter of this year, the company had \$78 million in cash on hand.

- USEC has secured \$6 billion in sales contracts for future deliveries.

- The company has secured commitments in excess of \$3.5 billion for more than half of the initial planned output of the ACP.

USEC's core business is very strong, Stuckle said, in that its Paducah Gaseous Diffusion Plant is running at its highest efficiency ever. The plant, in Kentucky, is the only uranium enrichment facility in the United States.

After testing centrifuge components and individual full-size prototype machines in test facilities in Oak Ridge, Tenn., USEC in August 2007 started a demonstration phase in Piketon where multiple full-size prototype machines were connected in a closed-loop cascade configuration, referred to as a



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lead cascade. Stuckle said that since the startup of the lead cascade, more than 235 000 machine-hours of testing have been performed. "The technology is well established," she said. "Risks have been mitigated. We feel it's ready to deploy today."

The DOE is not yet sure. Steven Koonin, the DOE's undersecretary for science, commented, "USEC's operating experience on its lead cascade must demonstrate high confidence that machine reliability is commensurate with its facility operating plan. We have discussed with USEC specific test results that would give such confidence, and we look forward to working with them to that end."

The six-month extension of the DOE's review period would also allow an independent engineering firm to complete a report (expected in August) that would provide input and guidance on technical issues. In this regard, USEC appears to have argued a strong case, because, Stuckle said, when USEC first learned that the

DOE would not proceed with its review of the application, the engineering firm had worked on its review for only 12 days, spending some time in Piketon, where the lead cascade is located and where the ACP is being built, and some time in Oak Ridge, where the ACP's development work is being done and which is the hub of USEC's manufacturing processes. "That's a cursory review," she said. "No engineering team could review a robust technology in 12 days. There is no way. That was too short a time."

Even with the six-month extension for the loan application review, Stuckle said, construction on the ACP was "essentially stopping" until a loan guarantee is issued, and manufacturing would be scaled back. Some manufacturing will continue, however, in order to support the work at the lead cascade test facility and to add more centrifuge machines to the lead cascade. Engineering work is also continuing at Oak Ridge. Stuckle said that USEC had not yet

decided whether it would accept \$45 million offered by the DOE to support the ACP's development activities.

Stuckle added that the company was appreciative of the political support that the project has received, including from Sen. George Voinovich (R., Ohio) and Reps. Jean Schmidt and Steven LaTourette (both R., Ohio).

In related news, the DOE on July 28 announced that it would invest \$150 million—\$200 million per year for the next four years to expand and accelerate the cleanup of Cold War-era contamination at the non-operating Portsmouth uranium enrichment facility, adjacent to the ACP in Piketon. USEC ceased uranium enrichment operations at the Portsmouth plant in May 2001 and consolidated operations in Paducah. The funding is expected to create 800–1000 new jobs at the Portsmouth site, according to the DOE.