

NUCLEAR ENERGY INSIDER

Analysis for the nuclear energy community

US waste storage development hinges on political push

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The US nuclear industry must mobilize political support on Capitol Hill for commercial consolidated interim storage facilities (CISFs) as developers look to demonstrate the stand alone value of their facilities alongside the much-delayed Yucca Mountain project, leading industry figures said.



A new legislative basis for commercial storage needs to marry differing approaches in the two Houses. (Image credit: slowgogo)

The biggest obstacle to the commercial viability of consolidated interim storage facilities in the United States is politics, Pierre Oneid, Holtec International Senior Vice President and Chief Nuclear Officer, told Nuclear Energy Insider.

“It’s not a technical issue, it’s a political issue,” Oneid said. There are people out there that don’t want us to exist. We need to get to the Hill and get them moving. That’s the strategy. We’re a trillion dollar industry, but our scorecard on the Hill is almost negative.”

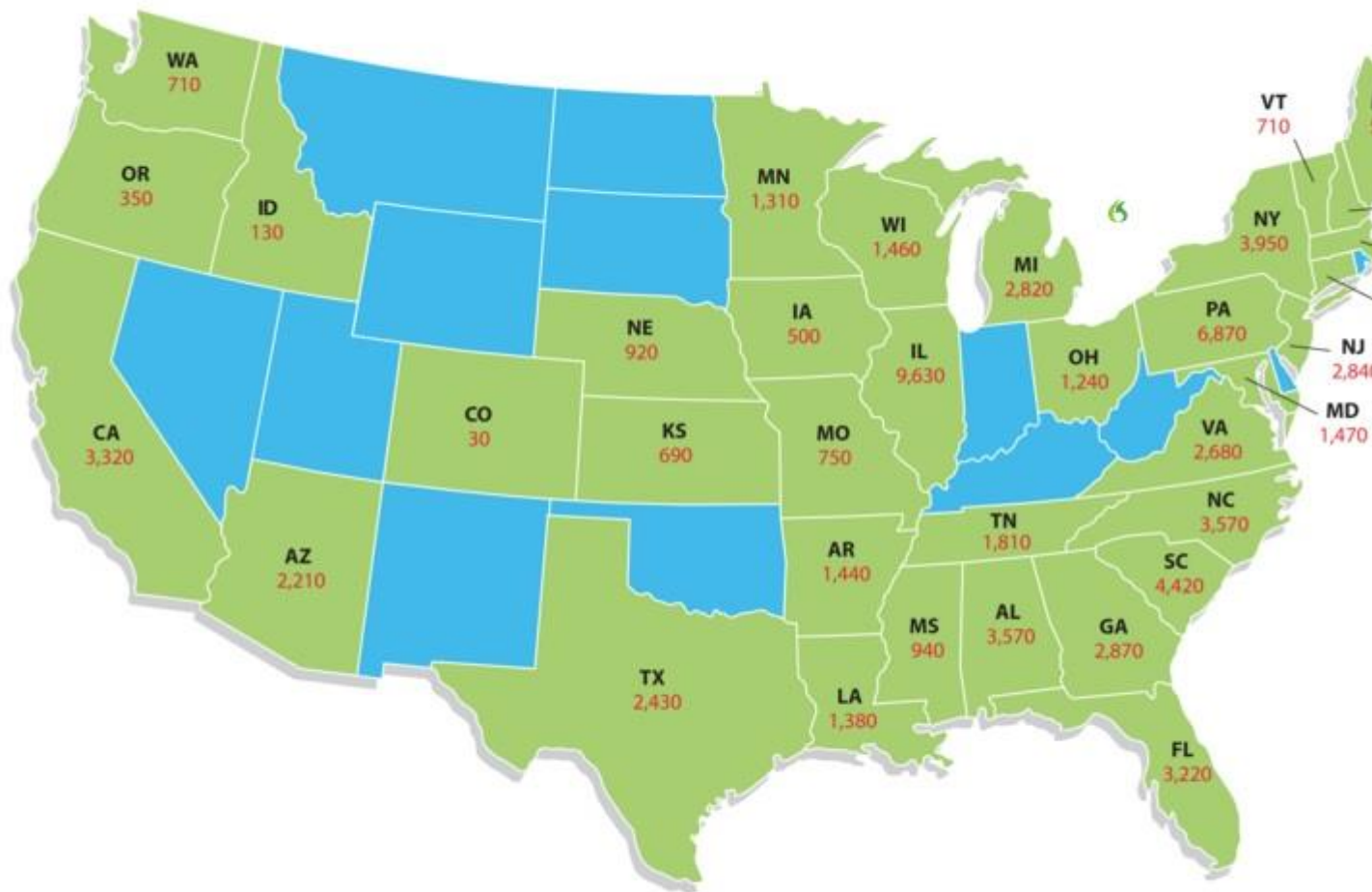
Oneid’s Holtec is one of several companies seeking cooperation from the federal government to allow commercial storage of spent nuclear fuel (SNF) and high level waste (HLW), and has partnered with the Eddy-Lea Energy Alliance (ELEA) to construct such a facility in southeastern New Mexico.

A law passed in 1987 specified that a proposed state-owned SNF and HLW repository at Nevada’s Yucca Mountain would be the first US nuclear waste repository, requiring legislative changes for other facilities to be constructed beforehand.

However, lack of progress on a centralized storage site has meant that used nuclear fuel continues to be stored on site at nuclear power plants.

Used Nuclear Fuel in Storage

(Metric Tons, end of 2014)



Source: ACI Nuclear Energy Solutions

Steve Nesbit, Duke Energy's Director of Nuclear Policy and Support, outlined recent political developments and the major sticking points in getting Washington's approval for commercial CISFs, when he spoke at Nuclear Energy Insider's 2nd [Annual Nuclear Decommissioning & Used Fuel Strategy Summit](#) in North Carolina October 5.

In May 2015, the Senate Appropriations Committee passed a bill which included no funding for the proposed Yucca Mountain long term repository, but included funding for a pilot consolidated storage program for used fuel. In the same month, the House of Representatives passed an appropriations bill allocating \$175 million for the review of the Yucca Mountain repository license application.

“The Senate has a higher level of excitement for consolidated storage, and the House is interested in the Yucca Mountain project,” Nesbit said. “They are sort of at loggerheads with each other.”

Conaway’s act

In late September, Congressman Mike Conaway (R-TX) filed the Interim Consolidated Storage Act of 2015, which would amend the existing Nuclear Waste Policy Act allowing the US Department of Energy (DOE) to take title to the nuclear waste and contract with private companies to store the waste.

Conaway’s district includes the city of Andrews, Texas, which is the proposed site for a storage facility built and operated by Waste Control Specialists (WCS). Areva is a partner in the project which would ultimately house 40,000 metric tons of heavy metal (MTHM). Based on its current timeline of acquiring licenses and approval, WCS could begin construction of the facility in the autumn of 2019 and it would come on-line at the end of 2020.

The proposed time plan for the Holtec-ELEA project in New Mexico also targets construction to start in 2019 ahead of start up in 2020.

According to a statement October 5 from Rod Baltzer, President of WCS, Congressman Conaway’s bill has “15 co-sponsors, many of whom have districts in Texas. Four cosponsors have decommissioned plants in their districts and constituents [are] anxious to move the stranded waste out of town.”

While both the WCS and Holtec-ELEA projects have strong support on the local and state levels, industry voices like Nesbit believe that without “concurrent progress at Yucca Mountain,” the prospects for Conaway’s bill to succeed are not good.

There is some frustration in the industry that the progress of CISF projects has been somewhat tied to that of the Yucca Mountain project, which has seen painfully slow progress. It is almost 30 years since Yucca Mountain was designated as a deep geological repository for SNF and HLW in 1987.

The Senate’s primary detractor of the Yucca Mountain proposal continues to be Senator Harry Reid (D-NV), who famously persuaded then-Presidential hopeful Barack Obama to oppose the long-planned site in 2008 in exchange for his support in that year’s election as well as future ones.

Reid had served as Senate Majority Leader since 2007, but Republicans won control of the Senate in the 2014 midterm elections. Republicans now hold a 54-44 seat advantage (with two independents), but Nesbit said Reid is still in position to stop any spent fuel legislation he wants to. While the Republicans have a nominal 247-188 member advantage over the Democrats, Reid’s long term as Majority Leader has earned him many cross-party alliances and allies over the past eight years. Reid, who will turn 76 in December, has announced he will not seek re-election to the Senate in 2016.

Nesbit added that he does not expect any funds to be appropriated to government studies on the feasibility or safety of CISFs in Fiscal Year (FY) 2016, and that funds for FY2017 will not be settled until after the 2016 Presidential election.

According to Oneid, CISFs should be either completely decoupled from Yucca Mountain or used as a transition to the larger government facility once it becomes operational.

“Why can’t interim storage be on the way to Yucca Mountain?” Oneid said. “It’s safer, it’s proven, and it’s a lot cheaper.”

People power

Beyond the political hurdles, developers have also had to take on board shifts in public opinion. Americans appear in favor of CISFs in principle, but opinion over nuclear power is divided.

A major driving force to build CISFs is to get SNF away from populated areas, particularly for plants that have been decommissioned and there is a plan to return the sites to greenfield status.

In a poll conducted in April by Quest Global Research, 45% surveyed said they “strongly agreed” the US should develop interim storage facilities, while only 5% “strongly disagreed.”

However, in a poll conducted in June by information and research firm Morning Consult, some 77% of registered voters said they would not live within 10 miles of a nuclear waste storage site, and 63% said they would not live within 100 miles of one.

A Gallup poll also conducted around the same time showed just 51% of Americans in favor of nuclear energy as a whole, down 11 percentage points from 62% in late 2010, which was just a few months before the Fukushima Daiichi incident in Japan in March 2011.

Speaking at the 2nd Annual Nuclear Decommissioning & Used Fuel Strategy Summit in early October, Areva Senior Vice President & Project Director, WCS Commercial Interim Storage Facility, said that success in commercializing CISFs could have a positive impact on the public’s view of the broader nuclear power sector.

“We can break that (fear), we can move this fuel forward, we can de-inventory these sites,” said McMahon.

“We can remove a significant vulnerability in terms of public acceptance of nuclear power.”

By Nick Georgandis