

**MINUTES
of the
FIRST MEETING
of the
RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE**

**May 18, 2018
State Capitol, Room 307
Santa Fe**

The first meeting of the Radioactive and Hazardous Materials Committee was called to order by Senator Jeff Steinborn, chair, on Friday, May 18, 2018, at 1:10 p.m. in Room 307 of the State Capitol.

Present

Sen. Jeff Steinborn, Chair
Rep. Cathrynn N. Brown
Sen. Carlos R. Cisneros
Sen. Ron Griggs
Sen. Richard C. Martinez
Rep. Debra M. Sariñana
Rep. Larry R. Scott

Absent

Rep. Carl Trujillo, Vice Chair
Rep. David M. Gallegos
Sen. Gay G. Kernan
Sen. Carroll H. Leavell
Rep. Angelica Rubio

Advisory Members

Rep. Kelly K. Fajardo
Rep. Stephanie Garcia Richard
Sen. Nancy Rodriguez
Sen. Clemente Sanchez

Sen. Gregory A. Baca
Sen. William F. Burt
Sen. William H. Payne
Rep. Jane E. Powdrell-Culbert
Rep. Nick L. Salazar
Rep. Jim R. Trujillo

Staff

Shawna Casebier, Staff Attorney, Legislative Council Service (LCS)
Diego Jimenez, Research Assistant, LCS

Guests

The guest list is in the meeting file.

Handouts

Handouts and other written materials are in the meeting file.

Friday, May 18

Call to Order and Introductions

Senator Steinborn welcomed members of the committee and guests to the meeting. Committee members and staff introduced themselves.

2018 Interim Work Plan and Meeting Schedule

Ms. Casebier reviewed the proposed work plan and meeting schedule, and the committee discussed additional topics and potential meeting locations. The committee discussed the need for a different July meeting date than the one proposed because of member conflicts with the National Conference of State Legislatures' Nuclear Legislative Working Group. The committee discussed holding its July meeting in Hobbs and its August meeting in Los Alamos and adding an update on the Gold King Mine spill to the work plan. The committee approved the work plan and meeting schedule as discussed, without objection.

Update on Holtec International's Application for Consolidated Interim Storage in Lea County

Dr. Stefan Anton, vice president, engineering and licensing, Holtec International (Holtec), discussed the need for an interim storage facility for used nuclear fuel (UNF) in the United States and described Holtec's plan to address that need with a facility on the border of Lea and Eddy counties. The facility would consolidate UNF from numerous sites around the country, specifically from shut-down reactor sites, into a temporary location until a permanent repository is operational.

Dr. Anton discussed two distinctly different aspects of any UNF consolidated storage project: UNF storage and UNF transport. He explained that each aspect has different agencies and organizations for regulation and execution. He said that in the storage aspect, Holtec's role is to be the licensee and operator of the facility, which will be regulated by the federal Nuclear Regulatory Commission (NRC). As to the transport aspect, Dr. Anton explained that Holtec's role is limited to manufacturing the casks, which are then transported by a shipping company. The casks are regulated by the NRC, and transportation operations are regulated by the United States Department of Transportation (DOT). During both storage and transport stages, state and local authorities are responsible for emergency response operations.

Dr. Anton reviewed the time line for Holtec's proposed plan, indicating that the NRC is slated to complete its review in July 2020. The current state of the project is focused on licensing the storage facility, and no substantial detail on transportation of UNF to the storage site has been developed. He told the committee that utilizing and extending existing rail lines is probable.

Explaining the specific details of Holtec's proposal, Dr. Anton informed the committee that the proposed site is located on 1,000 acres of dry and stable land between Carlsbad and Hobbs, approximately 35 miles from the nearest town. Infrastructure at the site is developed, including electricity, water, roads and rail, which is expected to be extended to the site. Due to

the facility's proximity to the Waste Isolation Pilot Plant and URENCO, Dr. Anton described the local workforce as robust with scientific and nuclear experience. The site layout includes a security perimeter, cask transfer station, an administrative building and the underground storage chambers where the casks are stored. Dr. Anton said operations could commence by 2023.

In discussion of the technical safety aspects of storing UNF, Dr. Anton described Holtec's multipurpose canister, stating that the seal-welded stainless steel structures are suitable for storage, transport and final repository without reopening the canister. Canisters are transported inside specifically designed transport casks using specially designed railcars. Dr. Anton told the committee that transport casks are designed and fabricated to safely confine UNF and shield workers and the public from radiation and that they are approved by the NRC.

As to the emergency planning zone, Dr. Anton stated that it extends as far as the property boundary and that under normal or accident conditions, no radiological effects would reach beyond the property boundary. He assured the committee that the parameters of this zone are consistent with emergency planning zones at other spent fuel facilities. Lastly, he provided a brief overview of the nuclear plant sites in the United States and rail routes on which the UNF could potentially be transported.

Don Hancock, director, Nuclear Waste Program, Southwest Research and Information Center, shared his concerns with the committee regarding Holtec's proposal. Mr. Hancock told the committee that 94% of operating reactors and 92% of UNF are located east of the one hundredth meridian. He expressed concern that the proposal is to house highly radioactive UNF and questioned the need for the proposed facility. Mr. Hancock discussed an already existing private fuel storage facility in Tooele County, Utah, that was granted a 20-year license in 2006 by the NRC. He told the committee that the storage facility in Utah is not used because of public and state opposition to the proposal; however, he remarked that the Utah facility was granted a license by the NRC despite objections from the governor of Utah, the Utah congressional delegation, nearby tribal members, the Utah State Legislature and Utah citizens. Mr. Hancock encouraged constituents and legislators to make their voices heard and to perform as much research on the project as possible.

Disputing the findings and remarks in Holtec's environmental report for the proposed facility, Mr. Hancock asserted that the federal Nuclear Waste Policy Act of 1982 allocates primary responsibility for storage of UNF to the generators and owners of the waste. Mr. Hancock also disputed the legality of the United States Department of Energy (DOE) entering into a contract for interim storage; the authority of the DOE to be responsible for transportation of UNF; and the responsibility and funding requirements for the DOE to provide emergency training along transportation routes. Mr. Hancock expressed concern regarding Holtec's plan to reject and return canisters that have unacceptable external contamination. Mr. Hancock alleged that railroads in New Mexico are not capable of carrying the weight of Holtec's transport casks and questioned who would pay for upgrades and maintenance of railroads that transport UNF.

In response to Mr. Hancock's disputation of the legality of Holtec's plan, Dr. Anton told the committee that the legal infrastructure for the DOE to take title to waste being stored on an interim basis is not currently in place and that laws, rules and regulations may need to be changed depending on the level of involvement of the DOE in the Holtec project.

Mr. Hancock discussed past NRC forums regarding Holtec's proposal and told the committee that opponents to the project have outnumbered support at each of the four meetings.

In response to questioning by members, Dr. Anton explained that:

- the 40-year license requested by Holtec is consistent with standard NRC technical licensing periods;
- the UNF could remain in New Mexico for a period exceeding 40 years;
- the benefit of having a consolidated location in New Mexico is for shorter and safer transportation to Nevada if the Yucca Mountain facility opens;
- for the first stage of storing 500 casks from decommissioned sites, approximately 100 shipments would be conducted over several years;
- the routes for transporting the UNF will be decided on a case-by-case basis when a shipment is due;
- while 40 years is a substantial amount of time, the final repository will store the materials for thousands of years;
- the facility has been planned to be large enough to hold all current waste in addition to waste that will be produced in coming years;
- many of the documents submitted by Holtec to the NRC contain proprietary information and proprietary secrets, and other redactions from the public record are normal practice in nuclear-related work;
- Holtec would prefer to use rail systems for transportation but, in theory, could use roads by taking extra precautions due to the weight and size of the containers being transported;
- while most interim storage systems are considered safe, Holtec's proposal for subsurface storage provides better protection for security;
- all of Holtec's casks are designed to NRC standards and to survive a 30-foot drop, much higher than any drop to which they would realistically be exposed; and
- Holtec can take title to the waste, and the project does not rely on the DOE taking title.

Upon further questioning, Mr. Hancock expressed concern that without a plan in place for a final repository, the waste could remain in New Mexico much longer than suggested, and he told the committee that the NRC is not supposed to issue interim storage permits in the absence of a permanent site selection.

In response to a question from the committee, Mr. Hancock explained that the Holtec proposal is currently in an NRC public comment period, adding that written comment will be accepted until July 30.

Dr. Anton told the committee that Holtec does not currently operate a facility like the one being proposed but that it owns licenses and provides canisters and support for clients that operate similar facilities. Currently, there are more than 1,000 Holtec-manufactured canisters in operation in the United States.

A legislator assured the committee that this will be an essential topic for the committee's July meeting in Hobbs and stressed the importance of input from the community on this proposal.

Community Perspectives on Consolidated Interim Storage in Lea County

John Heaton, chair, Eddy-Lea Energy Alliance LLC, discussed the background of the Eddy-Lea Energy Alliance, stating that it was formed under a joint powers agreement in 2006 to develop joint economic development projects between the cities of Carlsbad and Hobbs and Eddy and Lea counties. Mr. Heaton told the committee that following the recommendation of the Blue Ribbon Commission on America's Nuclear Future, the alliance board began to vet options for consolidated interim storage for safety and security.

Mr. Heaton told the committee that the proposed consolidated interim storage site is 1,000 acres of geologically stable, dry and elevated land with no nearby potable aquifers. There is also developed electric, water, road and rail infrastructure in this remote location between Hobbs and Carlsbad and a preestablished robust scientific and nuclear workforce.

Mr. Heaton addressed why there is a need for consolidated interim storage: by 2025, there will be 23 decommissioned facilities, with demands for a place to store UNF away from rivers, lakes, oceans, dense populations or seismically active areas. Currently, one-third of the United States population lives within 50 miles of UNF. The UNF can be stored and transported to New Mexico in the safest possible conditions with oversight from the NRC, DOT and Federal Railroad Administration. Acknowledging that some nuclear facility sites have no storage capabilities, Mr. Heaton noted that 64 interim facilities already exist in the United States and that the Holtec facility would be unique in that it would be a stand-alone storage facility not paired with a reactor. According to a 2016 study, establishing consolidated interim storage in the absence of a permanent repository will result in an economic savings of up to \$54 billion by 2060.

Mr. Heaton discussed the method used by the Eddy-Lea Energy Alliance to select Holtec as its partner to execute the proposal. He told the committee that a request for information was sent to major nuclear storage companies, from which the alliance received several presentations. Ultimately, a request for proposals was developed, and Holtec was chosen for various reasons,

including its financial stability, record for safety and utilization of a below-grade system for added security.

Mr. Heaton told the committee that benefits from executing the project with Holtec would include state and local area incentive payments, a \$2.4 billion capital investment and 240 total jobs. He told the committee that a consolidated interim storage facility will be built either in New Mexico or Texas. He said that the proposed location in Texas is geographically closer to New Mexico cities, which would leave New Mexico with emergency response obligations but none of the benefits.

Jimmy D. Carlile, health, safety and environment and regulatory supervisor, Fasken Oil and Ranch Ltd. (Fasken), shared the concerns of his employer as a company and landowner. He told the committee that Fasken is one of the largest private landowners in Texas, with ownership of approximately 200,000 acres. As a major surface owner, Fasken closely monitors vegetation, soil conditions and surface use of its properties and operates oil and gas leases in southeast New Mexico, including four that operate within five miles of the proposed Holtec site.

Mr. Carlile told the committee that the New Mexico state engineer's ground water monitoring system does not have enough data to adequately identify where ground water occurs and that the proposed site will pose significant threats of permanently contaminating ground water. He told the committee that Fasken has secured opposition letters from numerous historic ranching operations in the region that express concern for their businesses, lands and culture.

Mr. Carlile shared concerns that any release of high-level radioactive materials into the air, soil and/or ground water could have severe repercussions on oil and gas activities in the Permian Basin and that such repercussions would have a substantial effect on the regional economy. Mr. Carlile also discussed the workforce in the Permian Basin, telling the committee that Fasken and other companies struggle to attract needed talent. He said that the addition of a high-level nuclear disposal site will not be a positive attraction for individuals considering a move to the region for work.

In response to questions from the committee, Mr. Heaton explained the following reasons that a short-term storage solution is needed: (1) current interim storage is located at production plant facilities near rivers and waterways; (2) some production plants may not have the facilities to store old and new UNF; and (3) the proposed interim storage facility would bring economic benefits to New Mexico.

Mr. Heaton also noted that hazardous materials pass through New Mexico daily using transportation containers that are less safe than the ones Holtec designed and will use for this project.

In response to a question, Mr. Carlile expressed concern that if there were a leak of radioactive materials that reached as far as a large oil reserve, it could be up to 100,000 years before it would be considered safe to pump from the oil reserve.

Mr. Heaton advised that Holtec's full 2,000-page license application is available on the Holtec website.

Public Comment

Jose Villegas, board member, Southwest Inter-Tribal Emergency Managers Coalition, shared his concerns relating to the Holtec application for consolidated interim storage in Lea County. He told the committee that the most likely transportation routes for UNF will include going directly through the lands of more than a dozen federally recognized Indian tribes, exposing them to potential severe negative consequences; that the most risk-averse option for UNF storage would be for the materials to remain stored on-site; and that he believes that the eastern United States populations are given greater consideration than those of the southwestern United States and those of tribal nations in particular. Mr. Villegas recommended that if the Lea County storage plan is executed, the operating company be held responsible for ensuring a robust core capability for emergency response to a nuclear accident or spill along transportation routes, as well as at the storage site. He said that, currently, emergency response capabilities for a radioactive accident do not exist in Indian country and that first responders will have to be specially trained, equipped and prepared to execute an emergency response.

Thomas Jennings presented letters he wrote to the DOE and NRC in opposition to the proposed Lea County storage site. Mr. Jennings asked the committee to take into consideration the individuals or entities in support of the plan, noting that they are commonly students of nuclear engineering or individuals with special interest in the project.

Linda Squire, family dairy operator, discussed the dairy industry in the region, noting that it has had significant trouble finding employees with the recent success of the oil industry. She said that the dairy industry contributes an estimated \$5 billion to the New Mexico economy and provides 17,000 jobs indirectly related to dairy. Ms. Squire opposed the Holtec proposal and recommended that the committee members read two books on the subject of nuclear weapons and radiation: *The Woman Who Knew Too Much* by Gayle Greene and *Nuclear Wastelands: A Global Guide to Nuclear Weapons Production and Its Health and Environmental Effects* edited by Arjun Makhijani, Howard Hu and Katherine Yih.

Nick Maxwell, a Lea County resident, approached the committee to discuss the conduct of the Eddy-Lea Energy Alliance. He told the committee that the alliance has been unwilling or unable to provide documentation that he believes is subject to public inspection. He informed the committee that minutes from meetings of the alliance between the years 2006 and 2009 have not been made available or have gone missing. His concern for these years is because the alliance public body was making policy decisions and acquiring land for the Holtec proposal without obeying the Open Meetings Act. He told the committee that the Office of the Attorney

General is investigating the alliance following complaints that it has violated the Open Meetings Act and the Inspection of Public Records Act.

Jossi Jennings, a Roswell resident, told the committee that through her higher education experience, she has had the opportunity to visit the now-defunct San Onofre Nuclear Generating Station (SONGS). She told the committee that SONGS uses the same Holtec canisters that are proposed to be used at the New Mexico site and that she does not consider SONGS to be the example of success for UNF storage that Holtec touts it to be. Ms. Jennings told the committee that the Holtec-designed canisters are subject to damage and cracks and that there is no current method to inspect the internal canisters. Ms. Jennings said that she is concerned by the proposal because the canisters currently housed at SONGS would be sent to the proposed site for interim storage and may be leaking or cracked prior to shipment. Ms. Jennings opposes the Holtec proposal, noting that even under circumstances of minimal risk, accidents do happen, and an accident involving this project at any stage could be catastrophic or fatal for many New Mexicans.

Patricia Cardona, a representative of the Sierra Club, told the committee that the Sierra Club opposes the proposed Lea County facility. She told the committee that the Sierra Club's position is for UNF to remain in place until a permanent storage facility becomes available.

Scott Kobach, Nuclear Watch New Mexico, told the committee that Holtec's proposal is a regional development issue. He asked the committee to take into consideration that New Mexico residents will face risk while out-of-state entities will profit from this project.

Susan Gordon, Multicultural Alliance for a Safe Environment, told the committee about her experience working with waste storage projects. She told the committee that generally safe principles indicate that UNF should be stored as safely and as close as possible to the generation site.

Leona Morgan, Nuclear Issues Study Group, told the committee of her background studying uranium mining issues for over a decade. Ms. Morgan notified the committee that although Holtec's application is on its website, sections of the document have been redacted. She expressed to the committee that UNF is safest in its current location and that if facilities reach their own storage capacities, they should stop creating new waste.

Cody Slama, Nuclear Issues Study Group, discussed environmental justice and his belief that this project is being executed due to the high number of Hispanics and Native Americans in the region. He discussed a 1987 report from the United Church of Christ stating that race is a large determinant in deciding locations for toxic waste storage.

Karen Hadden, Sustainable Energy and Economic Development Coalition, shared her concerns regarding the path that UNF would take en route to the interim storage facility. Ms.

Hadden is from Texas and told the committee that much of the route would pass through areas that have subsurface water as close as 35 feet below the surface.

Steve Zappe told the committee that he has known Mr. Heaton and Mr. Hancock for two decades. He believes that the license will be granted for the Holtec facility but warned the committee that other license holders have had to sue the DOE to secure payments. Mr. Zappe also requested that the committee take into consideration the economics of the project, including who pays for shipping and decommissioning of the site after the facility is no longer needed.

Theresa Seamster, a concerned citizen, told the committee that she has been conducting health impact assessments on communities near the San Juan Basin and that she could provide information to the committee on ailments and radioactive exposure of residents and employees. Ms. Seamster asked how waste is handled on site where fuels are used, and she discussed Japanese and Chinese examples where various methods are used for on-site recycling.

Adjournment

There being no further business before the committee, the committee adjourned at 5:40 p.m.