LWVNM Proposed SNF Storage Advocacy Statement for Approval by LWVUS

The League of Women Voters of New Mexico (LWVNM) supports the disposal of spent nuclear fuel only when it is implemented in a manner that protects public health and safety and the environment. Specifically, the League supports:

- Policies for the management of civilian and military high- and low-level radioactive wastes to protect public health and air, water, and land resources;
- The establishment of processes for effective involvement of state and local governments and citizens in siting proposals for treatment, storage, disposal, and transportation of radioactive wastes;
- Full environmental review of treatment, storage, and disposal facilities for radioactive wastes; and
- Safe transport, storage, and disposal of radioactive wastes.

Therefore, during the licensing approval process for the proposed Consolidated Interim Storage Facilities (CISFs) in New Mexico (NM/Holtec) and Texas (TX/ISP), LWVNM would urge that license approval be withheld unless the Nuclear Regulatory Commission (NRC):

1. **Ensures that private ownership of Spent Nuclear Fuel (SNF), Independent Spent Fuel Storage Installations (ISFSIs) and CISFs must operate according to the safety controls required for licensing of utility-owned or government-owned SNF;**

2. **Ensures that the current Aging Management Program (AMP) for spent nuclear fuel casks (also known as Used Nuclear Fuel or UNF) in ISFSIs, some in use since 1986, is also imposed on the proposed New Mexico and Texas CISFs;**

3. **Requires that Holtec map the subsurface using modern techniques such as 3D seismic imaging to ensure no potential hazards such as faults or subsurface karsts are present: also ensures that there will be no hydraulic fracturing, or wastewater disposal wells close to the site;**

4. **Ensures that there is adequate bonding or other financial guarantees to fund operations in the event of abandonment by the companies;**

5. **Ensures that private contracting of spent nuclear fuel transportation complies with both the NRC/Department of Transportation/Agreement State requirements and with the same state and tribal notification requirements as for government transportation;**

6. **Ensures that responsibility for transporting the waste, for funding for upgrades to rail and roads (where accessed for SNF transport) and for cleanup in case of an accident are all identified prior to license approval for either proposed CISF;**

7. **Ensures that the current the NRC rulemaking process underway for Greater than Class C (GTCC) storage at the TX/ISP CISF provides adequate protection of the public and the environment until a permanent U.S. solution for SNF and GTCC disposal is approved;**

8. **Ensures that requirements for packaging SNF prior to acceptance at the proposed NM/TX CISFs will be sufficient to resist corrosion so that casks stored at these sites will be free of corrosion;**

9. **Ensures that prior NRC approval of the URENCO environmental impact statement adequately covers the risk factors prior to reducing the extent of the evaluation required for the NM/Holtec and TX/ISP proposals.**

If the NM/TX CISF license applications pending with the NRC are approved, LWVNM asks the NRC to impose a limit on the number of NRC license renewals allowed for CISFs until a permanent disposal solution for SNF is approved.

LWVNM also asks the New Mexico legislature to pass legislation to direct the NM Environment Department to oversee activities at the proposed NM CISF site to ensure compliance with environmental regulations as it does at DOE and DOD sites. The bill should include a budget for additional NMED staff as required.

Appendix

I. Why does our statement include a proposed facility in Texas?

Interim Storage Partners is a cooperative business agreement among the prior Waste Control Specialists, ORANO (formerly AREVA) and NAC. This site is located near the NM/TX border, 5 miles from Eunice, NM and 15 miles from Hobbs, NM. Due to this proximity, it is assumed that the majority of both the ISP and the emergency response workforces and impacted facilities (hospitals, fire departments, security personnel) will be located in southeastern NM.

II. Who Are They?

HOLTEC is a major nuclear industry giant with activities spanning nuclear reactor decommissioning, dry cask design and fabrication, and ownership including operation of numerous ISFSIs internationally. HOLTEC currently owns SNF at multiple ISFSIs and shutdown reactors and will purchase the ELEA site midway between Carlsbad and Hobbs, NM upon NRC license approval.

Interim Storage Partners (ISP) is a cooperative business which includes Waste Control Specialists, ORANO (formerly AREVA the French nuclear reactor operator and owner of SNF and ISFSIs internationally; and NAC, a SNF cask design, fabrication, and transport corporation.

HOLTEC and Interim Storage Partners are private corporations that are proposing storage facilities for spent nuclear fuel from all U.S. commercial nuclear power reactors. Both have decades of successful business applications in nuclear power, domestically and internationally. Both have license applications for CISFs submitted to the US Nuclear Regulatory Commission (NRC 2017-18) with anticipated approval in 2021 and subsequent SNF receipt in 2023-24, following site construction. The license applications will be valid for 20 years, but other nuclear industry practices highlight potential license renewals and questionable "interim" status.

Information from the Environmental Impact Statement (EIS) for URENCO, located in Eunice, New Mexico, 5 miles from Hobbs, will be applied for qualification of the TX/Interim Storage Partners and NM/HOLTEC CISF license applications. This is due to similarities in geology, topography, air and water resources, wildlife habitat and other assumptions.

III. Glossary

Agreement States: NRC provides assistance to states expressing interest in establishing programs to assume NRC regulatory authority under the Atomic Energy Act of 1954, as amended. Section 274 of the act provides a statutory basis under which NRC relinquishes to the states portions of its regulatory authority to license and regulate byproduct materials (radioisotopes); source materials (uranium and thorium); and certain quantities of special nuclear materials. The mechanism for the transfer of NRC's authority to a state is an agreement signed by the governor of the state and the chairman of the NRC, in accordance with section 274b of the Act.

Consolidated Interim Storage Facility: A Consolidated Interim Storage Facility would be a site to which irradiated high-level nuclear waste would be moved before being shipped to a currently non-existent permanent repository.

Corrosion: Corrosion was identified at San Onofre Nuclear Generating Station for specific materials that are used in the SNF casks stored throughout the US. Additional U.S. nuclear power plants and ISFSIs are adjacent to bodies of water, which promotes corrosion of some materials applied for SNF casks.

Greater than Class C (GTCC) waste: There are four classes of low-level radioactive waste in ascending order of hazard: Class A, B, C, and GTCC. GTCC has concentrations of certain radionuclides above the Class C limits. NRC regulations require that GTCC waste must be deposited in a deep geologic repository, unless another disposal facility has been approved by the NRC. All shutdown US reactors need to dispose of GTCC as well as SNF for restoration and reuse of the site by the community. The 2019 U.S. NRC Rulemaking covering GTCC

storage/disposal will enable the Interim Storage Partners CISF to include GTCC with SNF storage.

High level vs. low level radioactive waste: There are three types of radioactive waste produced by nuclear generating stations – low, intermediate, and high-level waste.

Low-level waste consists of industrial items (such as mops, rags, cloths, paper towels, clothing and floor sweepings) that have become contaminated with low levels of radioactivity during routine cleanup and maintenance activities at nuclear generating stations.

Intermediate-level waste is more highly radioactive and consists primarily of used reactor core components and resins and filters used to purify reactor water systems.

High-level waste is the used nuclear fuel. When used fuel bundles are removed from the reactor, they are highly radioactive, contain long-lived radioactivity and generate significant heat.

Independent Spent Fuel Storage Installation: An Independent Spent Fuel Storage Installation is a complex designed and constructed for the interim storage of spent nuclear fuel; solid, reactor-related, greater than Class C waste; and other associated radioactive materials.

Karst: Karst is a topography formed from the dissolution of soluble rocks such as limestone, dolomite, and gypsum. It is characterized by underground drainage systems with sinkholes and caves. Subterranean drainage may limit surface water, with few to no rivers or lakes. However, in regions where the dissolved bedrock is covered (perhaps by debris) or confined by one or more superimposed non-soluble rock strata, distinctive karst features may occur only at subsurface levels and can be totally missing above ground.

Spent Nuclear Fuel/Used Nuclear Fuel: Spent Nuclear Fuel (SNF), termed used nuclear fuel by the commercial nuclear power industry, is nuclear fuel that has been irradiated in a nuclear reactor.

State and tribal notifications: When shipments of irradiated reactor fuel and certain nuclear wastes pass through a state and through federally recognized tribal reservations, licensees must provide advance notification to the state governor and to tribal governments.

Safety of Spent Nuclear Fuel Storage in NM and TX – LWVNM Information

League of Women Voters of NM www.lwvnm.org

- **LWVNM Spent Nuclear Fuel Storage Advocacy Statement December 2019**

La Palabra articles **2017-20**

- **Spring 2017** "Spent Nuclear Fuel Storage Study Proposal," Karen M. Douglas, (approved May 2017 LWVNM Convention)
- **Summer 2017** "Spent Nuclear Fuel Storage in the US – Where We Are Now and Where We May be Going," Karen M. Douglas/CNM
- **Fall 2017** "Spent Nuclear Fuel Storage Committee Update," Laura Atkins/SFC
- **Spring 2018** "Spent Nuclear Fuel Transport," Karen Wentworth/CNM
- **Summer 2018** "Spent Nuclear Fuel Reprocessing," Kathy Taylor/LA
- **Winter 2019** "Spent Nuclear Fuel Storage Study Committee Progress," Karen M. Douglas/CNM
- **Spring 2019** "Spent Nuclear Fuel Research and Advocacy Group Report to 2019 LWVNM Convention," Karen M. Douglas /CNM
- **Summer 2019 "**Spent Nuclear Fuel Storage Research and Advocacy Group Report," Karen M. Douglas/CNM
- **Fall 2019** "Spent Nuclear Fuel Storage Research and Advocacy Group Report," Karen M. Douglas/CNM

American Nuclear Society to address Safety of Spent Nuclear Fuel Storage in NM and TX

Ms. Bobbi Merryman, Advocacy Officer for the American Nuclear Society, will discuss the safety of Spent Nuclear Fuel Storage (SNF) storage installations in NM and TX for receipt of SNF from 99 US operating commercial nuclear power reactors and decommissioned US nuclear facilities. There are currently two private corporations proposing to store all SNF from the nations' 99 commercial nuclear power reactors in southeast NM midway between Carlsbad and Hobbs and on the TX/NM border, 5 miles from Eunice, NM. The NM/HOLTEC Consolidated Interim Storage Facility (CISF) and TX/Interim Storage Partners (ISP) have CISF license applications pending 2021 approval by the US Nuclear Regulatory Commission. If approved, both NM/HOLTEC and TX/ISP CISF applicants anticipate SNF receipt 2023.

The LWVNM Spent Nuclear Fuel Storage Research and Advocacy Committee, chaired by Karen Douglas, LWVCNM Co-President and LWVNM Director, has been studying the adequacy of the two CISF license applications to determine the public safety and continuing environmental protection for both candidate sites since the SNF Storage study approval by the LWVNM May 2017 Convention delegates. The LWVNM SNF Storage Study background, scope, and progress has been reported in quarterly La Palabra articles since spring 2017 with 2017-18 presentations to familiarize members of the four NM local leagues. LWVNM approved the SNF Storage Advocacy Statement November 2019 (included in Winter 2019 LWVNM La Palabra newsletter) with submission to LWVUS Chief Executive Officer Virginia Kase December 6, 2019 for approval.

Bobbi Merryman is a nuclear engineer pursuing her PhD at the University of New Mexico. While her technical research focuses on developing new criticality safety code methods for loosely - coupled systems; she is active in nuclear energy public education and policy advocacy.

She is a Co-Chair for the American Nuclear Society (ANS) retention committee, the UNM ANS Advocacy Officer, and previously served on the Board of Directors for Generation Atomic. She is currently developing a working group on Spent Nuclear Fuel options for New Mexico and the greater Southwest. Ms. Alexandria Ragsdale, ANS President for UNM Chapter, will also be available for response to LWVCNM member questions.

The LWVCNM January 2020 Luncheon Unit will meet Thursday, January 9th from 11:30 to 1:15 at the Embassy Suites Hotel, 1000 Woodward Pl NE, Albuquerque, NM. Luncheon cost is $22.00 and reservations for the Luncheon Unit may be made at lunch@lwvcnm.org, by donating $22.00 at LWVCNM.org, or by calling the LWVCNM office (884-8441) before 10:00 am Monday January 6, 2020.

LWVCNM January 2020 NE Heights Unit Presentation

KAFB Spill and Cleanup Measures

Ms. Stephanie Stringer, Resource Protection Division Director (RPD) for the NM Environment Department (NMED), will address the January 27, 2020 LWVCNM NE Heights Unit meeting. Ms. Springer will discuss the Kirtland Air Force Base spill, including Background and timeline of the spill and subsequent cleanup activities. The spill included hazards impacting air, water, and the environment and Ms. Stringer will discuss the toxicity and hazardous substances involved including stakeholder outreach opportunities by NMED officials.

LWVNM adopted multiple Natural Resources positions, most recently revised 2019, including Air Quality, Water Quality and Water Supply, and the role of the NM government, NMED, in the regulation and oversight of cleanup processes (LWVNM Natural Resources Positions are included in the 2019-20 LWVCNM Member Handbook, pp.12-16).

The purpose of the RPD is to the maximum extent possible, prevent new contamination and address legacy pollution in New Mexico for the protection of public health and the environment. The Division ensures that hazardous waste is managed – from cradle to grave – and contaminated sites are cleaned up as quickly as possible to lessen the burden to communities, their health and our environment. The Division closely monitors the environment within and around U.S. Department of Defense (U.S. DOD) and U.S. Department of Energy (U.S. DOE) facilities in New Mexico, taking swift and meaningful compliance actions when warranted. Additionally, the Division ensures that petroleum storage tanks are managed to prevent releases and remediated when they occur and ensures that solid waste and recyclable materials are responsibly managed.

Stephanie Stringer has been the Director of the Resource Protection Division since March 2019. Prior to taking that appointment she was the NMED's Drinking Water Bureau Chief. She has a Bachelor of Science in Aquatic Biology and a Masters of Arts in Entomology. She has been working in the environmental management field for over 25 years with an emphasis on water quality protection.

The LWVCNM January NE Heights Unit will meet Monday, January 27, 2020 from 10:00 - 11:30 am at La Vida Llena, 10501 Lagrima de Oro NE in Albuquerque NM.