URENCO USA License Amendment Request 18-05 Safety Evaluation Report (SER)

Change to Liability Insurance Amount

BACKGROUND

By letter dated December 18, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML181360A180), as supplemented by letter dated March 13, 2020 (ADAMS Accession No. ML20078J155), Louisiana Energy Services (LES), doing business as URENCO USA (UUSA), requested a license amendment to reduce the amount of liability insurance required under Title 10 of the *Code of Federal Regulations*, (10 CFR) Paragraph 140.13b, "Amount of liability insurance required for uranium enrichment facilities." from \$300 million to \$200 million.

DISCUSSION

Regulatory Requirements

Paragraph 140.13b of 10 CFR states that each holder of a license issued under Parts 40 or 70 of this chapter for a uranium enrichment facility that involves the use of source material or special nuclear material is required to have and maintain liability insurance. The liability insurance must be the type and in the amounts the Commission considers appropriate to cover liability claims arising out of any occurrence within the United States that causes, within or outside the United States, bodily injury, sickness, disease, death, loss of or damage to property, or loss of use of property arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of chemical compounds containing source material or special nuclear material.

Materials License SNM-2010 contains the following license condition:

- 15. a. The licensee shall provide proof of \$5 million liability insurance, as required under 10 CFR Paragraph 140.13b, at least 30 days prior to the planned date for obtaining possession of test material (less than or equal to 50 kg) of depleted or natural UF₆.
 - b. The licensee shall provide proof of full liability insurance, as required under 10 CFR Paragraph 140.13b, at least 30 days prior to the planned date for obtaining feed material (greater than 50 kg UF₆). If the licensee is proposing to provide less than \$300 million of liability insurance coverage, the licensee shall provide, to the NRC for review and approval, an evaluation supporting liability insurance coverage in amounts less than \$300 million, at least 120 days prior to the planned date for obtaining feed material.

Testing under License Condition 15.a has been completed. Current LES operations are subject to the provisions of License Condition 15.b.

Evaluation

In its original license application, LES proposed obtaining liability insurance for \$300 million. This was the maximum amount of liability insurance available at the time for reactor licensees. In the Safety Evaluation Report for the original license (ADAMS Accession No. ML051780290), the NRC staff found that the proposal met the liability insurance requirements of 10 CFR 140.13b.

During its review of this amendment application, the NRC staff conducted a call with American Nuclear Insurers (ANI). A summary of the call is available at ADAMS Accession No. ML19252A010. ANI is a joint underwriting association that acts on behalf of member companies. These members consist of 23 companies who assume the risk and allow insurers to avoid cumulative, overlapping exposure from a single nuclear event, which protects their solvency. ANI serves a broad array of nuclear facilities and supplies insurance products and services to the nuclear industry.

ANI explained that for the LES facility, the ANI technical analysis demonstrated a favorable scenario as this new site was built with the latest building codes and in a favorable location. The NRC approved liability insurance for LES in the amount of \$300 million in 2008, which was the maximum amount being offered by ANI in private insurance to the nuclear industry at the time.

ANI noted that the amount of liability insurance can be influenced by claims, and not necessarily by events. In the mid 1990's, a fuel fabrication facility run by Babcock and Wilcox (B&W) in Pennsylvania began decommissioning. What ANI thought was a low risk for claims in the fuel fabrication arena was a miscalculated decision. Over the years, ANI paid out \$120 million for allegations and litigations for the B&W site. This experience resulted in ANI's decision to only offer a maximum of \$200 million for fuel facility sites in the future.

ANI's \$200 million limit in liability insurance for fuel facility sites was documented in the 2012 Safety Evaluation Report (SER) for the Global Laser Enrichment license (ADAMS Accession No. ML12060A007). The SER stated that ANI had indicated that \$200 million was the maximum amount of liability coverage it would provide because fuel manufacturing operations create a legacy exposure that restricts how much insurance capacity ANI is willing to provide.

The NRC staff finds the \$200 million amount of liability insurance acceptable because it is the maximum amount currently available through private insurance.

ENVIRONMENTAL REVIEW

A proposed action is excluded from an environmental review under 10 CFR 51.22(c)(10) if it is an amendment to a license issued under this chapter which changes surety, insurance and/or indemnity requirements. The proposed amendment is a change to liability insurance requirements. Therefore, the action is categorically excluded from the requirement to prepare a site-specific environmental assessment or an environmental impact statement.

CONCLUSIONS

Based on its review above, the NRC staff approves the licensee's amendment request. The NRC staff imposes the following License Condition:

15. The licensee shall maintain a minimum of \$200 million in liability insurance coverage.

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<u>REFERENCES</u>

ANI, "Need for Nuclear Liability Insurance," October 2013, Retrieved from the web June 14, 2019.

Emshwiller, J. R. (November 22, 2013). Waste Land: One Town's Atomic Legacy: A \$500 Million Cleanup. *Wall Street Journal*. Retrieved April 8, 2020, from https://www.wsj.com/articles/waste-land-one-town8217s-atomic-legacy-a-500-million-cleanup-1385094059

NMSS/FCSE, Memorandum from Kevin Ramsey to Jacob I. Zimmerman, "August 15, 2019, Conference Call with American Nuclear Insurers Regarding Louisiana Energy Services Request to Change its Liability Insurance," September 5, 2019. (ADAMS Package Accession No. ML ML19252A010)

NRC, "Standard Review Plan for License Applications for Fuel Cycle Facilities – Final Report," NUREG-1520, Revision 2, June 2015. (ADAMS Package Accession No. ML15176A258)

NRC, "Safety Evaluation Report for the National Enrichment Facility Plant in Lea County, New Mexico," NUREG-1827, June 2005. (ADAMS Package Accession No. ML051780290)

NRC, "Safety Evaluation Report for the American Centrifuge Plant in Piketon, Ohio," NUREG-1851, September 2006. (ADAMS Package Accession No. ML062700087)

NRC, "Safety Evaluation Report for the Eagle Rock Enrichment Facility in Bonneville County, Idaho," NUREG-1951, September 2006. (ADAMS Package Accession No. ML102710296)

NRC, "Safety Evaluation Report for the General Electric-Hitachi Global Laser Enrichment LLC Laser-Based Uranium Enrichment Plant in Wilmington, North Carolina," NUREG-2120, February 2012. (ADAMS Package Accession No. ML12060A007)

NRC, "Final Safety Evaluation Report for the Licensing Application To Possess and Use Radioactive Material at the Mixed Oxide Fuel at the Mixed Oxide Fuel Fabrication Facility in Aiken, SC," December 2010. (ADAMS Package Accession No. ML103430615)

Office of the Federal Register, Title 10 of the *Code of Federal Regulations* (10 CFR) Part 70, "Domestic Licensing of Special Nuclear Material."

Office of the Federal Register, Title 10 of the *Code of Federal Regulations* (10 CFR) Part 140, "Financial Protection Requirements and Indemnity Agreements."