

**NUCLEAR REGULATORY COMMISSION**

**[Docket No. 70-3103; NRC-2026-1156]**

**Louisiana Energy Services, LLC, dba Urenco USA;**

**National Enrichment Facility;**

**Exemption**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Notice; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) issued an exemption to Louisiana Energy Services, LLC doing business as (dba) Urenco USA (UUSA), permitting UUSA, a general licensee and certificate of compliance (CoC) user, to use a vendors' transportation package design (i.e., CoC No. 9362, Revision No. 5) for domestic transport of uranium hexafluoride (UF<sub>6</sub>) of up to 10 weight (wt.) percent enrichment of uranium-235 (U-235) in approximately 40 to 50 30B cylinders of UF<sub>6</sub> in calendar years 2026 through 2027 to a single customer, where the terms and conditions in CoC No. 9362, Revision No. 5, are not met. No physical or design changes to the DN30 transportation package (i.e., CoC No. 9362, Revision No. 5) are proposed in this exemption.

**DATES:** The exemption was issued on May 29, 2026.

**ADDRESSES:** Please refer to Docket ID NRC-2026-1156 when contacting the NRC about the availability of information regarding this document. You may obtain publicly available information related to this document using any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and search for Docket ID NRC-2026-1156. Address questions about Docket IDs in Regulations.gov to Bridget Curran; telephone: 301-415-1003; email:

Bridget.Curran@nrc.gov. For technical questions, contact the individual listed in the “For Further Information Contact” section of this document.

- **NRC’s Agencywide Documents Access and Management System**

**(ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select “Begin ADAMS Public Search.” For problems with ADAMS, please contact the NRC’s Public Document Room (PDR) reference staff at 1-800-397-4209, at 301-415-4737, or by email to [PDR.Resource@nrc.gov](mailto:PDR.Resource@nrc.gov). For the convenience of the reader, instructions about obtaining materials referenced in this document are provided in the “Availability of Documents” section.

- **NRC’s PDR:** The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to [PDR.Resource@nrc.gov](mailto:PDR.Resource@nrc.gov) or call 1-800-397-4209 or 301-415-4737, between 8 a.m. and 4 p.m. eastern time (ET), Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Daneira Meléndez-Colón, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555; telephone: 301-415-7295; email: [Daneira.Melendez-Colon@nrc.gov](mailto:Daneira.Melendez-Colon@nrc.gov).

**SUPPLEMENTARY INFORMATION:** The text of the exemption is attached.

**I. Availability of Documents**

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

<b>DOCUMENT DESCRIPTION</b>	<b>ADAMS ACCESSION NO. / WEB LINK / FEDERAL REGISTER CITATION</b>
Louisiana Energy Services, LLC, also dba Urenco USA, exemption request, dated October 8, 2025.	ML25281A317
Supplements to request for exemption, dated December 16, 2025, February 4, 2026, and April 22, 2026.	ML25350C350 ML26035A335 ML26114A114
Certificate of Compliance No. 9362, Revision No. 5, dated June 11, 2024.	ML24159A018 (Package)
NUREG-2216, "Standard Review Plan for Transportation Packages for Spent Fuel and Radioactive Material: Final Report," dated August 2020.	ML20234A651
Dominion Energy Support for Urenco's Exemption Request for LEU+ UF6 Transportation in 30B Cylinders, dated October 21, 2025.	ML25295A488
R. Hall, W. J. Marshall, and W. A. Wieselquist, "Assessment of Existing Transportation Packages for Use with HALEU," ORNL/TM-2020/1725, Oak Ridge National Laboratory, Oak Ridge, Tennessee, dated September 2020.	ML21055A030
E. Saylor, A. Lang, W. J. Marshall, and R. Hall, "Analysis of the 30B UF <sub>6</sub> Container for Use with Increased Enrichment," ORNL/TM-2021/2043, Oak Ridge National Laboratory, Oak Ridge, Tennessee, dated May 2021.	<a href="https://info.ornl.gov/sites/publications/Files/Pub158475.pdf">https://info.ornl.gov/sites/publications/Files/Pub158475.pdf</a> )
Environmental Assessment and Finding of No Significant Impact LES, LLC, also dba UUSA, Exemption Request to 10 CFR 71.17	91 FR 20180
Revised Environmental Assessment and Finding of No Significant Impact LES, LLC, also dba UUSA, Exemption Request to 10 CFR 71.17	91 FR 30733

Authority: 42 U.S.C. 2011 *et seq.*

Dated: June 2, 2026.

For the Nuclear Regulatory Commission.

***/RA/***

Shana Helton, Director,  
Division of Fuel Management,  
Office of Nuclear Material Safety,  
and Safeguards.

**Attachment** – Exemption.

**NUCLEAR REGULATORY COMMISSION**  
**Docket No. 70-3103**  
**Louisiana Energy Services, LLC dba Urenco USA**  
**National Enrichment Facility**

**I. Background**

Louisiana Energy Services, LLC doing business as (dba) Urenco USA (UUSA), is the holder of Special Nuclear Material (SNM) License 2010 (SNM-2010) for UUSA's gas centrifuge uranium enrichment facility, pursuant to title 10 of the *Code of Federal Regulations* part 70 (10 CFR part 70), "Domestic Licensing of Special Nuclear Material." The license provides, among other things, that the facility is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC) now or hereafter in effect.

The nuclear industry is currently pursuing fuels with slightly increased enrichments for reactors to support industry initiatives, such as Accident Tolerant Fuel and Extended Fuel Cycle fuel. Urenco USA and other nuclear facilities are pursuing advancements in fuel and enrichment in concert with reactor designs that utilize high-assay low-enriched uranium (HALEU)(i.e., greater than 5 weight [wt.] percent uranium-235 [U-235] and less than 20 wt. percent U-235) fuel to support these initiatives.

On November 30, 2023 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML23334A122), UUSA requested the NRC approval of a license amendment request (LAR) to increase the enrichment limit in SNM license SNM-2010, License Condition 6B, from 5.5 wt. percent U-235 to less than 10.0 wt. percent U-235. On December 11, 2024 (ADAMS Accession No. ML24318C241), the NRC staff approved the LAR to increase the enrichment limit in materials license SNM-2010 from 5.5 wt. percent U-235 to less than 10.0 wt. percent U-235.

While UUSA Material License SNM-2010 allows for enrichment up to less than 10 wt. percent U-235, the material must still be packaged for transport to the fuel fabricators and reactor operators. Currently, there is only one approved uranium hexafluoride (UF<sub>6</sub>) transportation package for the transport of commercial quantities of HALEU fuel, which is Certificate of Compliance (CoC) No. 9388, the Orano NCS GmbH Model No. DN30-X. Under CoC No. 9388, the DN30-X transportation package consists of the DN30 packaging and the 30B-X UF<sub>6</sub> cylinder. The “X” in DN30-X and 30B-X is either replaced by “10” or by “20” to refer to a specific design for a maximum enrichment of 10 or 20 percent by weight U-235, respectively.

While UUSA, through the Urenco Group, has actively supported prototype testing and placed an order for procuring an initial batch of 30B-10 cylinders, they are not yet ready for use. Manufacturing, incorporation of the new design into ANSI (American National Standards Institute) N14.1, and facility implementation is still required before the 30B-10 cylinders, which are approved for HALEU fuel, will be available. Because UUSA has current contracts for the higher-enriched UF<sub>6</sub> and CoC No. 9388 will not be ready for use to meet the current need, UUSA requested an exemption to allow shipment of the higher enriched UF<sub>6</sub> under the existing CoC No. 9362 (i.e., Model No. DN30), Revision No. 5, which limits contents to UF<sub>6</sub> enriched to no more than 5 wt. percent U-235.

In support of their exemption request, UUSA submitted for approval proposed revisions to the UUSA 10 CFR part 71 Subpart H, “Quality Assurance Program for Packaging and Transportation of Radioactive Materials” (ADAMS Accession No. ML25280A232). The NRC approved the revision to the Quality Assurance Program on January 29, 2026 (ADAMS Accession No. ML26022A108).

## II. Request/Action

By letter dated October 8, 2025 (ADAMS Accession No. ML25281A317), as supplemented on December 16, 2025 (ADAMS Accession No. ML25350C350), February 4, 2026 (ADAMS Accession No. ML26035A335), and April 22, 2026 (ADAMS Accession No. ML26114A114), UUSA requested an exemption, pursuant to section 71.12 of 10 CFR, from the conditions and requirements that currently limit the use of CoC No. 9362 transportation packages for domestic transportation of up to 5 wt. percent U-235. Specifically, UUSA requested an exemption from paragraphs 71.17(c)(2) and 71.17(c)(3) that require UUSA to comply with the terms and conditions of CoC No. 9362, Revision No. 5, and submit information in writing before the first use of the package under the exemption.

The exemption would allow UUSA to use CoC No. 9362 for domestic transport of approximately 40 to 50 30B cylinders of UF<sub>6</sub> enriched to greater than 5, but less than 10 wt. percent U-235 in calendar years 2026 through 2027 to a single customer. UUSA is currently a registered user of the DN30 transportation package (i.e., CoC No. 9362). No physical or design changes to CoC No. 9362 are proposed in this exemption.

The CoC is the NRC approved design for each transportation package system. The proposed action would exempt the applicant from the requirements of 10 CFR 71.17(c)(2) and 71.17(c)(3) only as these requirements pertain to the enrichment level of the UF<sub>6</sub> authorized in the 30B cylinder within the DN30 transportation package, and the requirement to submit information before first use of the package under the exemption. The exemption would allow UUSA to transport UF<sub>6</sub> enrichments of greater than 5 wt. percent U-235 but less than 10 wt. percent U-235, despite conditions in CoC No. 9362, Revision No. 5, including conditions 4 and 5(b), which would limit UF<sub>6</sub> enrichments to no more than 5 wt. percent U-235. This exemption is limited to the use of the 30B cylinder

within the DN30 transportation package only (CoC No. 9362) for domestic UF<sub>6</sub> delivery and specific near-term planned transportation of approximately 40 to 50 cylinders in calendar years 2026–2027 to a single customer.

This safety evaluation and exemption analysis documents the NRC staff's review and evaluation of the exemption request. The staff's evaluation is based on a review of the application and whether it meets the applicable requirements in 10 CFR part 71, "Packaging and Transportation of Radioactive Material." The staff's evaluation focused only on information already publicly available and UUSA proprietary calculations and analyses submitted with the application, as supplemented. The staff reviewed the exemption request using the guidance in NUREG-2216, "Standard Review Plan for Transportation Packages for Spent Fuel and Radioactive Material: Final Report" (ADAMS Accession No. ML20234A651).

### **III. Safety Evaluation and Exemption Analysis**

Pursuant to 10 CFR 71.12, "Specific exemptions," the Commission may, upon application by any interested person or upon its own initiative, grant any exemption from the requirements of the regulations of 10 CFR part 71 as it determines is authorized by law and will not endanger life or property nor the common defense and security.

#### **A. The Exemption is Authorized by Law**

Section 71.12 of 10 CFR allows the NRC to grant exemptions from the requirements of 10 CFR part 71. Issuance of this exemption is consistent with the Atomic Energy Act of 1954, as amended, and is not otherwise inconsistent with NRC's regulations or other applicable laws. Therefore, the NRC concludes that there is no statutory prohibition on the issuance of the requested exemption, and the NRC is authorized to grant the exemption by law.

#### **B. The Exemption Will Not Endanger Life or Property**

UUSA seeks an exemption that would allow them to transport UF<sub>6</sub> enrichments of greater than 5 wt. percent U-235 but less than 10 wt. percent U-235, using CoC No. 9362, despite terms and conditions in CoC No. 9362, Revision No. 5, that would limit UF<sub>6</sub> enrichments to no more than 5 wt. percent U-235. Specifically, Condition 5(b) limits contents of the package to UF<sub>6</sub> with “a U-235 mass percentage not to exceed 5 weight percent.” Additionally, Condition 4 of the CoC notes that the conditions in the CoC are in addition to the requirements of Part 71. Part 71 includes general requirements for fissile material packages including 71.55(b)(2) and 71.55(e)(2), which require packages to remain subcritical when moderated by water; and 71.55(g)(4), which excepts UF<sub>6</sub> packages containing less than 5 wt. percent U-235 from the requirement to consider water in-leakage in 10 CFR 71.55(b)(2). UUSA also seeks an exemption from the requirement to submit information on first use of the package under this exemption as no physical changes are being made to the package and the package has been in use already for shipments of up to 5 wt. percent U-235.

As explained in the application, while the areas of safety reviews for CoC No. 9362, and specifically, utilization of the 30B cylinder within the DN30 transportation package, originally included structural analysis, thermal analysis, and containment design, those areas are not impacted by the change in enrichment levels. According to UUSA, the only areas impacted by the change from 5 wt. percent U-235 to less than 10 wt. percent U-235 are the areas of external dose rate analysis (i.e., shielding analysis) and criticality safety analysis. The staff agrees with this assessment because there are no physical or design changes to the package, and because the maximum quantity of material per 30B cylinder is within the contents allowed per CoC No. 9362, Revision No. 5, and ANSI N14.1 for the 30B cylinder. Therefore, the staff’s evaluation focused on

impacts of the exemption request in the areas of criticality safety and external radiation dose rate.

In support of this exemption request, UUSA asserts that issuance of the exemption would not endanger life or property because UUSA has determined, based on criticality and external dose rate analyses (i.e., shielding analysis), that CoC No. 9362, and specifically, the 30B cylinders in the DN30 transportation package, with contents greater than 5 wt. percent U-235 but less than 10 wt. percent U-235, continue to meet the 10 CFR part 71 requirements. Additionally, UUSA is only seeking the exemption to apply for the domestic transport of approximately 40 to 50 30B cylinders of UF<sub>6</sub> enriched to greater than 5, but less than 10 wt. percent U-235 in calendar years 2026 through 2027 to a single customer. UUSA's application indicates that, under the exemption, the UF<sub>6</sub> mass per 30B cylinder would be limited to 2,277 kg UF<sub>6</sub>; the CSI for shipment under this exemption would be 16.6.

#### **Shielding Evaluation (i.e. External Dose Rate Evaluation)**

The staff reviewed the shielding (i.e., external dose rate) evaluation submitted by UUSA in support of its request for the exemption. The applicant seeks authorization to use CoC No. 9362, and specifically, to use the 30B cylinder within the certified DN30 transportation package for domestic transport of UF<sub>6</sub> enriched to greater than 5 but less than 10 wt. percent U-235. Currently, the terms and conditions of CoC No. 9362, Revision No. 5, limit the contents of the transportation package to UF<sub>6</sub> enriched to no more than 5 wt. percent U-235.

To support the request, the applicant performed a conservative external dose analysis assuming an enrichment of higher than 10 wt. percent U-235. This is considered conservative because the exemption request is limited to UF<sub>6</sub> enriched up to 10 wt. percent U-235. The staff's review evaluated whether the package meets the

acceptance criteria outlined in section 5 (Shielding Evaluation) of NUREG-2216, “Standard Review Plan for Transportation Packages for Spent Fuel and Radioactive Material: Final Report.”

Relying on the existing CoC No. 9362 package design, the applicant performed the external dose rate evaluation using MCNP6, a general-purpose, three-dimensional, continuous-energy Monte Carlo N-Particle code verified for radiation transport applications. The calculations employed the F5 point detector tally for dose rate estimation, and fluxes calculated by MCNP6 were converted to dose rates using the American National Standards Institute (ANSI)/ American Nuclear Society (ANS) 6.1.1, “Neutron and Gamma-Ray Flux-to-Dose-Rate Factors,” 1977. The staff found the use of the F5 tally acceptable because it calculates fluence (or flux) at a specific point in space using a next-event estimator, which determines the contribution to the tally from each interaction point based on the particle’s weight rather than averaging over a volume.

The applicant calculated neutron and gamma source terms using 2,277 kilograms (kg) of UF<sub>6</sub>, representing the maximum fill limit for a 30B cylinder per ANSI N14.1-2019, “For Nuclear Materials – Uranium Hexafluoride – Packagings For Transport,” and included 11.3 kg of heel material for photon contribution only, which is the maximum allowable heel amount per ANSI N14.1-2019. Source term calculations were performed using the SCALE/ORIGEN-S code for uranium enriched to higher than 10 wt. percent U-235. The 30B cylinder configuration was modeled in accordance with ANSI N14.1 specifications. The staff reviewed multiple sets of calculations for both filled and heeled 30B cylinders under normal conditions of transport (NCT) and hypothetical accident conditions (HAC).

For NCT, the applicant modeled the radiation source using a conservative modeling approach. Photon and neutron dose rates were calculated at the package

surface and at a distance of 1 meter (m) from the package, assuming a fully filled 30B cylinder containing 2,277 kg of UF<sub>6</sub> enriched to higher than 10 wt. percent U-235. For HAC calculations, the applicant did not credit the shielding provided by the 30B cylinder or the overpack materials. Instead, the source was modeled as unshielded UF<sub>6</sub> in a conservative arrangement.

The applicant calculated maximum external radiation levels under routine transport conditions, as presented in table 10 of the shielding evaluation in the application. Dose rates were evaluated at the package surface and at a distance of 1 m for UF<sub>6</sub> enriched to higher than 10 wt. percent U-235, to present a conservative calculation as the exemption request is limited to UF<sub>6</sub> enriched up to 10 wt. percent U-235. Even when calculated using a UF<sub>6</sub> enriched to higher than 10 wt. percent U-235, all calculated dose rates comply with the limits specified in 10 CFR 71.47. Specifically, calculations concluded that the maximum dose rate at the package surface was less than 15 millirem per hour (mrem/hr), which is below the regulatory limit of 200 mrem/hr, and the maximum dose rate at 1 m was less than 8 mrem/hr, which is below the regulatory limit of 10 mrem/hr.

Based on its review, the staff has determined that the shielding evaluation is acceptable and demonstrates that the exemption does not result in external radiation levels that exceed regulatory limits under normal or hypothetical accident conditions. The applicant's evaluation, and the staff's review were based on information already publicly available on the existing CoC No. 9362, Revision No. 5, which includes the DN30 transportation package design and the existing 30B cylinder. As a result of this fact, a condition has been added to the exemption requiring that there be no physical or design modifications made to the package. The staff concludes that the exemption, with the addition of a condition ensuring no physical or design changes are made to the

package, demonstrates compliance with the applicable regulatory requirements in 10 CFR part 71.

### **Criticality Evaluation**

The staff reviewed the applicant's criticality analysis for the DN30 transportation package (i.e., CoC No. 9362) containing ANSI N14.1 certified UF<sub>6</sub> cylinders (i.e., 30B cylinders) with UF<sub>6</sub> enriched up to 10 wt. percent U-235 provided in UUSA calculation CALC-S-00166, "Criticality Safety Calculation in Support of 30B Cylinder Domestic Transportation Exemption Request." The applicant evaluated single packages and package arrays under NCT and HAC, consistent with the transportation criticality safety requirements of 10 CFR 71.55 and 10 CFR 71.59.

For the single package analyses under 10 CFR 71.55, the applicant considered a conservative representation of a 30B cylinder, containing UF<sub>6</sub> enriched to 10 wt. percent U-235, under NCT and HAC. The applicant incorporated a similar approach used by Oak Ridge National Laboratory (ORNL) to model the 30B cylinder in ORNL/TM-2020/1725, "Assessment of Existing Transportation Packages for Use with HALEU," and ORNL/TM-2021/2043, "Analysis of the 30B UF<sub>6</sub> Container for Use with Increased Enrichment."

For the package array analysis under NCT (10 CFR 71.59), the applicant considered varying arrays of multiple packages, using the most reactive configuration of the package from the single package analysis. The applicant evaluated varying low water densities in between packages, consistent with rain or snow. Additionally, the applicant evaluated the presence of a maximum credible amount of hydrogenated uranium residues (HUR).

For the package array analysis under HAC (10 CFR 71.59), the applicant considered varying arrays of multiple damaged packages, using the most reactive configuration of the package from the single package analysis. The applicant

conservatively assumed that the DN30 transportation package overpack is not present after accident conditions. The applicant evaluated varying water density between packages to determine the most reactive interstitial moderator density and assumed full water reflection of the array. The applicant also evaluated the presence of a credible amount of HUR.

For all criticality calculations, the applicant modeled the package using the MCNP6 Monte Carlo N-Particle transport code, with the continuous-energy ENDF/B-VII nuclear data library. The MCNP6 code with ENDF/B-VII nuclear data is a standard in the nuclear industry for performing Monte Carlo criticality safety and radiation shielding calculations.

Section 6.0 of CALC-S-00166 shows results of the applicant's criticality calculations for single packages and arrays of packages under NCT and HAC. The results demonstrate that neutron multiplication (i.e.,  $k_{eff}$ ) values are maintained below the applicant's calculated upper subcritical limit (USL) for the single package under NCT and HAC and arrays of packages under NCT, when limited to the maximum certified capacity of the 30B cylinder of 2,277 kg and a maximum uranium enrichment of 10 wt. percent U-235. For arrays of packages under HAC, the applicant's results demonstrate that the maximum system  $k_{eff}$  remains below the USL, as shown in table 8 of CALC-S-00166. NRC staff, with support from contractors at Oak Ridge National Laboratory, performed confirmatory analyses based on the applicant's calculation, and on the analyses previously performed by ORNL in ORNL/TM-2020/1725 and ORNL/TM-2021/2043. These confirmatory analyses indicate a criticality safety index (CSI) of 16.6, calculated in accordance with the requirements of 10 CFR 71.59 for package arrays.

The applicant benchmarked the MCNP6 code with the continuous-energy ENDF/B-VII nuclear data library for their analysis in UUSA report NCS-REP-002-06,

“Urenco USA (UUSA) MCNP6 Validation.” Although this validation report is for benchmarking of fuel facility analyses, the applicant applied the USL determined in this report with an additional administrative margin to UF<sub>6</sub> cylinders in transport. The transportation scenarios evaluated by the applicant are within the area of applicability of the benchmarking analysis, in terms of enrichment and hydrogen-to-uranium ratio. The USL cited in NCS-REP-002-06 was based on the smallest  $k_{eff}$  value of the evaluated critical experiments, consistent with the recommendations for non-normal benchmarking  $k_{eff}$  values in NUREG/CR-6698, “Guide for Validation of Nuclear Criticality Safety Calculational Methodology.” Oak Ridge National Laboratory performed confirmatory sensitivity/uncertainty analyses of the applicant’s selected critical benchmark experiments using the TSUNAMI/IP sequence of the SCALE computer code system. This analysis demonstrated that: 1) none of the selected critical benchmark experiments had similarity coefficients ( $C_k$ ) greater than 0.8; and 2) the estimated nuclear data induced uncertainty, was greater than 1 percent (%) in  $k_{eff}$ . For staff confirmatory analyses, the staff increased this uncertainty to 2%, to determine a new USL.

The staff evaluated the applicant’s calculated  $k_{eff}$  values by comparison to similar analyses conducted by ORNL in ORNL/TM-2021/2043. In this report, ORNL evaluated single 30B cylinders and arrays of cylinders containing UF<sub>6</sub> with uranium enrichments up to 20 wt. percent, with internal and external moderation conditions like those considered by the applicant. Oak Ridge National Laboratory’s analyses resulted in higher  $k_{eff}$  values than those determined by the applicant for similar systems, and maximum  $k_{eff}$  values higher than the revised USL cited above. However, subsequent confirmatory analyses by ORNL and NRC staff for HAC arrays smaller than evaluated by the applicant, considering actual UF<sub>6</sub> fill mass in the cylinder and actual expected UF<sub>6</sub> density, demonstrated that the HAC array resulted in  $k_{eff}$  values below the revised USL.

The staff reviewed the applicant's exemption request, including criticality analyses of the DN30 transportation package containing ANSI N14.1 – certified 30B cylinders with UF<sub>6</sub> enrichments up to 10 wt. percent U-235. The staff's review was based on information already publicly available on the existing CoC No. 9362, Revision No. 5, which includes the DN30 transportation package design and the existing 30B cylinder. The staff confirmed that the applicant's analysis, supplemented by additional ORNL and staff analyses, demonstrates that single DN30 transportation packages and arrays of packages containing 30B cylinders with UF<sub>6</sub> enrichments up to 10 wt. percent U-235 will be adequately subcritical. This determination is based, in part, on the applicant's analysis and the conservatism present in ORNL and staff confirmatory analyses, and the limited duration and number of shipments for this exemption. Because the staff's determination is based, in part, on these limitations, they are imposed as conditions of the staff's approval of this exemption. Additionally, the staff agrees that the calculated CSI of 16.6, based on the applicant's NCT and HAC package array analysis supplemented by ORNL and staff analyses, is acceptable, and is therefore also included as a condition to this exemption. With the analysis provided, and the conditions as noted, the staff finds the application provides reasonable assurance that the package, with the requested contents, will meet the criticality safety requirements of 10 CFR part 71.

#### **Information Submission on First Use**

Urenco USA also requested an exemption from 10 CFR 71.13(c), which requires the submission of information upon first use of a transportation package. Because there are no physical or design changes to CoC No. 9362 as part of this exemption request, and because UUSA has already submitted the information necessary as part of the first

use of CoC No. 9362, the staff approves of the applicant's request to be relieved from this requirement.

### **Conclusion**

The staff reviewed UUSA's exemption request and concludes that, with the conditions provided in the application, and imposed as conditions of approval of this exemption, the use of CoC No. 9362, Revision No. 5, with UF<sub>6</sub> contents greater than 5 wt. percent U-235 but less than 10 wt. percent U-235 will not affect the ability of the transportation package to meet the criticality or shielding safety requirements of 10 CFR part 71. The staff's evaluation focused only on information already publicly available on the existing CoC No. 9362, Revision No. 5. Based on these evaluations, the staff has concluded that granting this exemption will be consistent with the requirements of 10 CFR part 71 and will not endanger life or property.

### **C. The Exemption Will Not Endanger the Common Defense and Security**

In addition, UUSA asserts that issuance of the exemption would not endanger the common defense and security because the authorized limit for the 30B cylinder within the DN30 transportation package proposed by the exemption request would be less than 10 wt. percent U-235 enrichment. At a maximum authorized enrichment of less than 10 wt. percent U-235 enrichment, the low enriched uranium remains classified as Category III, the lowest risk category with the lowest security provisions. Therefore, according to UUSA, because of the low risk of theft or unauthorized diversion of the low enriched uranium, the contents of the package as approved under this exemption would not present a challenge to the common defense and security.

The staff reviewed UUSA's exemption request and determined that issuance of the exemption authorizing use of CoC No. 9362 for transport of UF<sub>6</sub> enriched to less than 10 wt. percent U-235, does not impact the current classification of the material for security

requirement purposes. The contents of the package under the exemption will be less than 10 wt. percent U-235, and thus, will be subject to, and continue to, meet the same security requirements currently in place. The NRC staff has determined that application of these requirements will provide adequate protection and is not inimical to the common defense and security. Therefore, the NRC staff finds that the proposed exemption does not endanger the common defense and security, as required by 10 CFR 71.12.

#### **IV. Environmental Consideration**

The NRC staff also considered in the review of this exemption request whether there would be any significant environmental impacts associated with the exemption. For this proposed action, the NRC staff prepared an environmental assessment pursuant to 10 CFR 51.30. The environmental assessment concluded that the proposed action would not significantly impact the quality of the human environment.

Accordingly, the NRC determined that a finding of no significant impact is appropriate, and an environmental impact statement is not warranted. The environmental assessment and finding of no significant impact was published on April 15, 2026 (91 FR 20180). A revised environmental assessment and finding of no significant impact was published on May 26, 2026 (91 FR 30733), to account for a change in the exemption that did not result in changes to the potential environmental impacts.

#### **V. Conditions**

The following conditions apply to the exemption request:

1. No physical or design changes to the DN30 transportation package (CoC No. 9362, Revision No. 5) are authorized by this exemption.
2. The exemption is limited to the domestic transport of approximately 40 to 50 30B cylinders of UF<sub>6</sub> enriched to greater than 5, but less than 10 wt. percent U-235 in calendar years 2026 through 2027 to a single customer.
3. The UF<sub>6</sub> mass limit per 30B cylinder is limited to 2,277 kg UF<sub>6</sub>.

4. The CSI for shipment under this exemption is 16.6.

## **VI. Conclusion**

Based on the foregoing considerations, the NRC staff has determined that, pursuant to 10 CFR 71.12, the exemption is authorized by law and will not endanger life or property or the common defense and security. Therefore, the NRC grants the applicant an exemption from the requirements of 10 CFR 71.17(c)(2) and 71.17(c)(3), which will allow for the use of CoC No. 9362 for limited domestic shipments of UF<sub>6</sub> enriched to greater than 5 wt. percent U-235 but less than 10 wt. percent U-235, in the 30B cylinder within the DN30 transportation package, despite not being in compliance with certain terms and conditions in CoC No. 9362, Revision No. 5; and will relieve the applicant from submitting information on first use of the package.

No physical or design changes to the DN30 transportation package (i.e., CoC No. 9362) are authorized by this exemption. This exemption is limited to the transport of UF<sub>6</sub> enriched to greater than 5, but less than 10 wt. percent U-235, in 30B cylinders within the DN30 transportation package (CoC No. 9362) only for domestic delivery of UF<sub>6</sub> and specific near-term planned transportation of approximately 40 to 50 cylinders in calendar years 2026–2027 to a single customer. Also, the UF<sub>6</sub> mass limit per 30B cylinder is limited to 2,277 kg UF<sub>6</sub>. The CSI for shipment under this exemption is 16.6.

Based on the statements contained in the application, and the conditions listed above, the staff concludes that the changes indicated do not affect the ability of the package to meet the requirements of 10 CFR part 71.

This exemption is effective upon issuance.

Dated: May 29, 2026  
For the Nuclear Regulatory Commission.

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Shana Helton, Director,  
Division of Fuel Management,  
Office of Nuclear Material Safety,  
and Safeguards.