



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

November 1, 2021

James Warden, Director  
Office of Nuclear Energy,  
Safety & Security Affairs, Room 3320 HST  
Bureau of International Security  
& Nonproliferation  
U.S. Department of State  
2201 C Street, NW  
Washington, D.C. 20520

Dear Mr. Warden:

Enclosed is an application (XSNM3824), dated October 25, 2021, received by the U.S. Nuclear Regulatory Commission, from Edlow International Company as Agent for X Energy, LLC. The application requests the export of 0.012 kilograms (kg) of low enriched uranium contained in 0.065 kg of natural uranium in the form of uranium oxide/carbide kernels in TRISO particles. The material will be contained in a total of 8 unirradiated HALEU bearing pebbles, which will be used for irradiation testing in the Petten High Flux Reactor in the Netherlands.

X-Energy will be conducting qualification testing on the HALEU bearing pebbles in support of the Advanced Reactor Demonstration Program initiative and under a cooperative research and development agreement with Oak Ridge National Laboratory.

The items proposed for export in this application involve assistance to end-uses related to advanced reactors. Therefore, this application will require both Commission and Executive Branch review in accordance with 10 CFR 110.40(a)(3) and 110.41(a)(6), respectively. Assurances from EURATOM that the components will be subject to the terms and conditions of an agreement for cooperation are also required. As such, your assistance in obtaining the necessary Executive Branch views and assurances is kindly requested. If you have any questions or need additional information, please contact the licensing officer, Lauren Mayros at [Lauren.Mayros@nrc.gov](mailto:Lauren.Mayros@nrc.gov) and cc the licensing assistant, Joanne Savoy at [Joanne.Savoy@nrc.gov](mailto:Joanne.Savoy@nrc.gov).

Sincerely,

11/1/2021

X Peter J. Habighorst

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Peter J. Habighorst

Signed by: Peter J. Habighorst

Peter J. Habighorst, Chief  
Export Controls and Non-Proliferation Branch  
Office of International Programs