



SECRETARY

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

April 13, 2023

MEMORANDUM TO: Daniel H. Dorman
Executive Director for Operations

FROM: Brooke P. Clark, Secretary

SUBJECT: STAFF REQUIREMENTS – SECY-23-0001 – OPTIONS FOR
LICENSING AND REGULATING FUSION ENERGY SYSTEMS

The Commission has approved the staff's Option 2 to license and regulate fusion energy systems under the Nuclear Regulatory Commission's byproduct material framework contained in 10 C.F.R. Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material," and associated regulations. Under the limited-scope rulemaking approved under Option 2, the staff should take into account the existence of fusion systems that already have been licensed and are being regulated by the Agreement States, as well as those that may be licensed prior to the completion of the rulemaking. The staff should develop a new volume of NUREG-1556, "Consolidated Guidance About Materials Licenses," dedicated to fusion energy systems, so as to provide consistent guidance across the National Materials Program.

The staff should evaluate whether controls-by-design approaches, export controls, or other controls are necessary for near-term fusion energy systems.

If in the future, the staff, in consultation with the Agreement States, determines that an anticipated fusion design presents hazards sufficiently beyond those of near-term fusion technologies, the staff should notify the Commission and make recommendations for taking appropriate action as needed.

cc: Chair Hanson
Commissioner Baran
Commissioner Wright
Commissioner Caputo
Commissioner Crowell
OGC
CFO
OCA
OPA
ODs, RAs, ACRS, ASLBP
PDR