



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