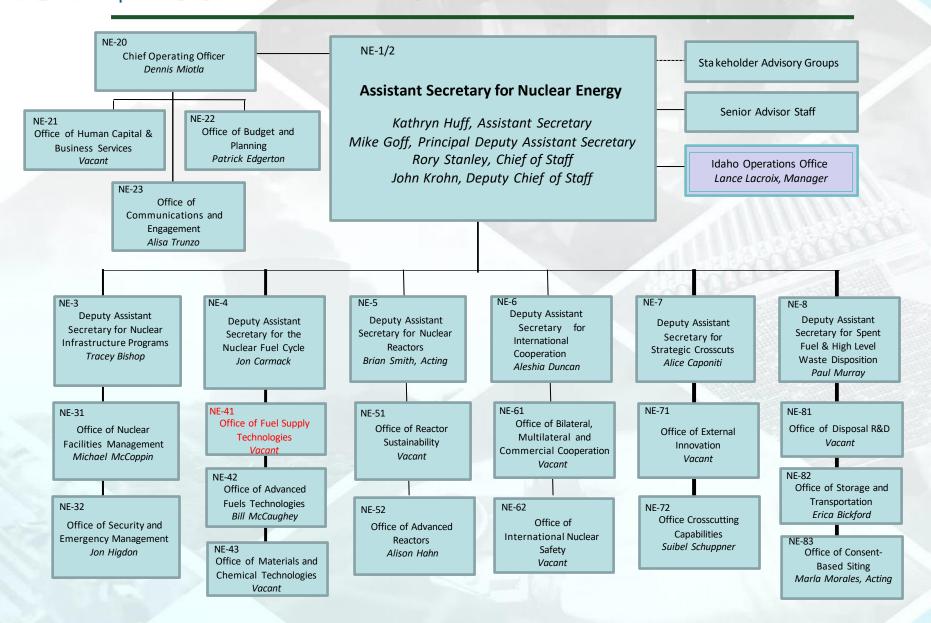


NE-41 Fuel Supply Technologies

Frank Goldner, presenting for Bill McCaughey, Acting Office Director

Office of NUCLEAR ENERGY



Addressing gaps in the domestic nuclear fuel supply chain for existing reactors

- Help assure there is an adequate supply of low enriched uranium fuel to meet the current needs of U.S. reactors to eliminate the nation's dependence on Russian fuel services.
- Congress issues ban on Russian enriched uranium (24% of U.S. reactor needs).
- The Department to establish a waiver process to ensure no supply disruptions in the near term.
- The Department to encourage expansion of domestic commercial capacity in conversion and enrichment.



Uranium oxide "yellowcake" is processed from uranium ore before enrichment.



Providing High-Assay Low-Enriched Uranium for Future Advanced Reactors

- Most future advanced reactors will use high-assay lowenriched uranium fuel. (Uranium enriched above 5% but less than 20%.)
- There are no commercial suppliers of HALEU in the U.S.
- The Department is working in the near term to provide small quantities of HALEU from recycling limited uranium inventories on hand and by leveraging the HALEU enrichment demonstration facility in Piketon, Ohio.
- In the long term, the Department will work with the private sector to establish a commercial U.S. HALEU production and supply chain.



The first and only HALEU enrichment facility licensed in the U.S.



