

MEETING SUMMARY
PRE-APPLICATION MEETING WITH THE UNIVERSITY OF TENNESSEE

Date and Time: 2:00 p.m., April 16, 2018

Participants:	Dr. Wes Hines	Vladimir Sobes	Nick Baker
	Tom Pham	Suzanne Ani	Oleg Bukharin
	Chris Tripp	Ty Naquin	

In February of this year, the Department Head of the Nuclear Engineering Department for the University of Tennessee (UTENN) contacted the Branch Chief for the Fuel Manufacturing Branch regarding a potential license application for special nuclear material. He wanted to engage staff and meet to discuss licensing requirements for the prospective plan. This meeting was scheduled in office concurrent with a scheduled visit UTENN was making to the U.S. Department of Energy regarding the same topic. He was accompanied by a representative from Oak Ridge National Laboratories, who is involved in the development of the project.

Dr. Hines provided general discussion of the project being pursued, to include the type and enrichment of uranium desired. In general terms, the project would use uranium, with an enrichment that is below ten percent, in a subcritical pile for the purposes of reducing uncertainties in the nuclear reaction cross sections of materials proposed for use in fast reactor applications and design. The quantity and enrichment of material discussed would be Category III material as defined in Section 70.4 of Title 10 of the *Code of Federal Regulations*. Dr. Hines stated that long term project funding is still being discussed. He also stated a certain amount of research needs to be conducted to demonstrate the value of the planned research in diminishing the uncertainties associated with fast neutron interactions. The building that will house the project is anticipated to open in 2021.

Ty Naquin described the process required to formally engage the Agency in support of application review. The general contents of a Letter of Intent were described, to include materials, purpose, facility name and location, as well as proprietary or security concerns. A formal Letter of Intent is required for Agency planning and engagement. Nick Baker described the Agency budgeting planning, which forecasts 2 years ahead. Upon receipt of the formal letter, the Agency can begin budgeting for a specific project, a review team can be assembled, and more specific commitments can be made.

Other staff offered questions and discussion regarding material enrichment, material production, and criticality concerns. Dr. Hines was able to provide responses in each of these areas and asked other licensing questions regarding decommissioning funding and licensing fees. These are issues that will be answered upon consultation with other staff not available at this meeting. In addition, other materials were committed to be supplied to UTENN, in the form of the Standard Review Plan – 1520, Standard Review Plan for Fuel Cycle Facilities License Applications, which would be used as the basis of an application. Ty Naquin also committed to supply publicly available examples of applications and Safety Evaluation Reports for similar facilities.

PRINCIPAL CONTRIBUTOR
T. D. Naquin