

Urenco & Accident Tolerant Fuel – RIC, March 2021, Steve Cowne, CNO, LES



- Accident Tolerant Fuel (ATF) requires > 5 wt% U235
- ATF improves safety
- Urenco started project in 2020 for LEU+ at two sites: UUSA/LES and UUK/Capenhurst
- 5 wt% $<$ LEU+ $<$ 10 wt% U235
- Separate project approved for advancing next generation of nuclear fuels
- Minor changes needed to core technology for gaseous centrifuge plants to produce LEU+. Primarily a licensing and analysis effort
- We anticipate some IROFS will need to be changed

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- Currently competitive environment for nuclear engineering, criticality safety and licensing resources.
- NRC needs to be ready to review and support concurrent licensing amendments from utilities, fabricators and enricher.
- More detail needed from utilities providing quantity and assays of material along with target reload dates.
- Urenco is working with Daher to potentially modify 30B cylinder and DN30 overpack for use with LEU+. Also looking for solution to use existing 30B.
- United industry effort needed to address transportation package solution.