

Table 22 · Advanced Modular Reactor Designs in Advanced Regulatory Stages in UK and US

Vendor/Design	Gross Capacity (in MWe)	Design Features	Projects	Regulatory Stages
TerraPower Natrium, SFR	345	Includes molten salt heat storage allowing an extra 100 MW of power. Uses HALEU. Fuel enrichment 5–20%.	Kemmerer (US)	UK 2 out of 3 tiers of preliminary design review completed. Begin of GDA in June 2026. US Kemmerer construction permit applied for.
Newcleo	200	–	–	UK chose not to carry out the GDA. US began first stages of design review in 2026.
X-energy Xe-100, HTGR	80	Designed to be built as 4–12 units. Uses HALEU. Enrichment up to 15.5% (weight).	Hartlepool (UK) Long Mott (US)	UK 2 out of 3 tiers of preliminary design review completed. Applied for GDA 2023 but failed ‘readiness’ assessment. Re-applied for GDA in 2026. US pre-application activities started 2018.
Kairos Power Fluoride salt-cooled High-temperature Reactors (KP-FHRs)	75	Designed to be built in pairs of reactors. Uses HALEU. Enrichment up to 19.75%.	–	–

Sources: Various, compiled by WNISR, 2026

Note: **HALEU**: High-Assay Low-Enriched Uranium; **HTGR**: High Temperature Gas-Cooled Reactor; **GDA**: Generic Design Assessment; **SFR**: Sodium-cooled Fast Reactor.