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Compact Accelerator Driven Thorium Cycle Subcritical Reactor AKHDIYOR SATTAROV, PETER MCINTYRE, Texas A&M University — Thorium cycle subcritical reactor driven by 800MeV protons delivered by flux coupled superconducting stack of cyclotrons can operate as a sealed unit for up to 7 years and is stable against melt-down. Small, low power units with minimum security and small crew of operators are perfect candidates for powering remote small towns. The reactor can eat long-lived waste coming from conventional nuclear power plants and can be used as sealed waste processing unit powering at the same time remote, low power demanding objects.

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