


Heat Storage for Gen IV Reactors for Variable Electricity from Base-load Reactors



The workshop will examine heat storage coupled to Generation-IV reactors (helium, sodium/lead and salt coolant) to enable variable electricity output while the reactor operates at base-load. The electricity market is changing because of (1) the large-scale addition of wind and solar and (2) the goal of a low-carbon electricity grid. The result is an electricity market where there are times of low and sometimes negative wholesale electricity prices and other times of high electricity prices. In such a market, a nuclear reactor that produces base-load electricity is at an economic disadvantage. Nuclear reactors have been designed primarily for base-load electricity production. That base-load market is disappearing. A new direction for GenIV reactor systems is required that addresses the changing market.