Early Deployable Small Modular HTGR Plant with Heat Storage System

TOSHIBA

Fuji Electric

Concept

High Temperature Gas-cooled Reactor
600MWt/module

Power Plant with 4 Modules
Approximately 1000MWe

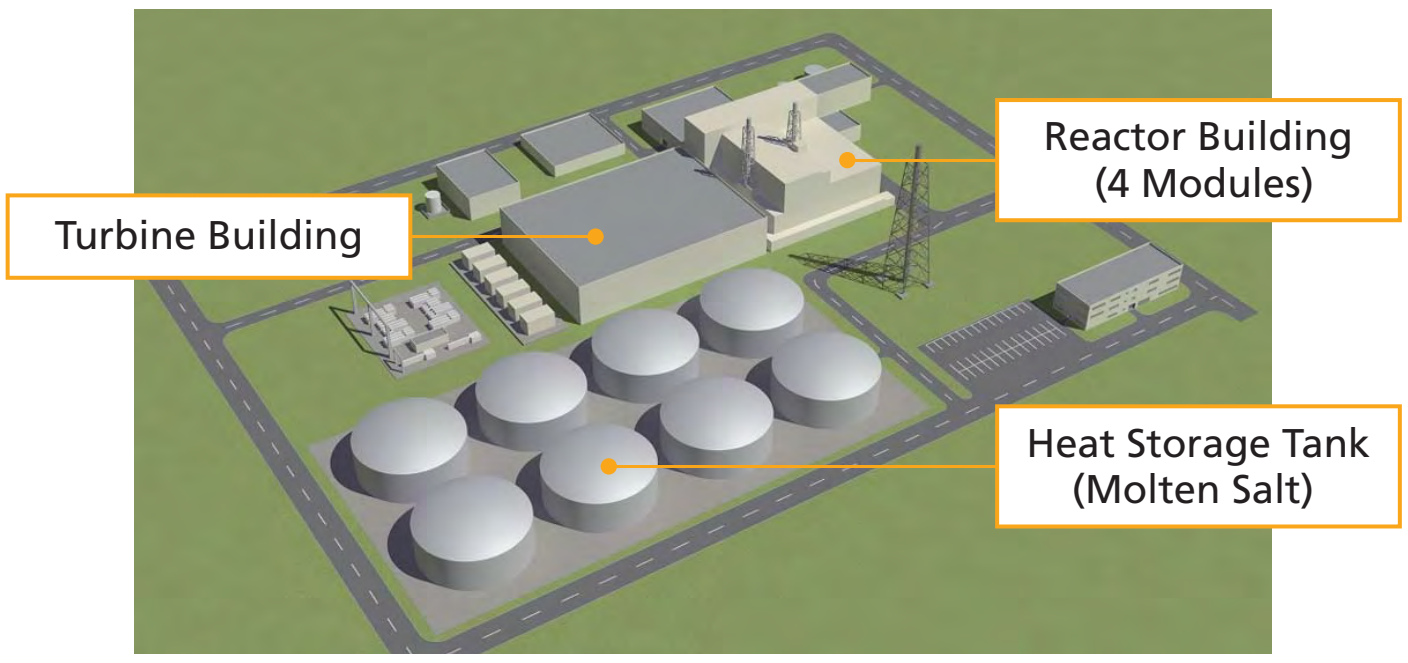
Low Development Risk
Reactor Outlet Temperature 750°C and Steam Turbine

Inherent & Passive Safety
Ceramic-coated Fuel and Passive Cooling System

Option

Load following Daily Demand
Heat Storage System

Hydrogen Production
High Temperature Electrolysis



Toshiba and Fuji Electric contribute to zero emission through Japanese HTGR technologies including construction of HTTR.

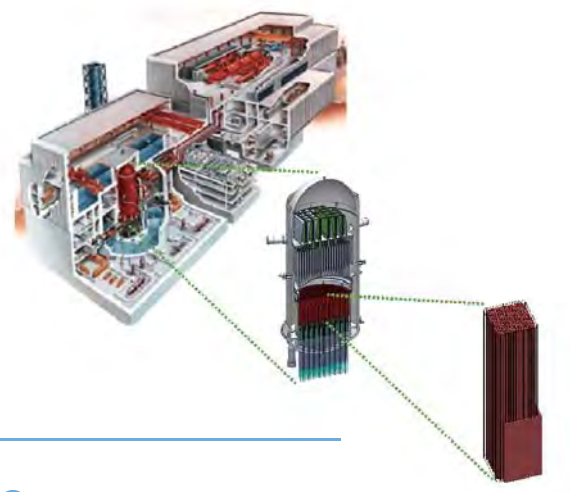
HTGR: High Temperature Gas-cooled Reactor HTTR: High Temperature engineering Test Reactor (JAEA)

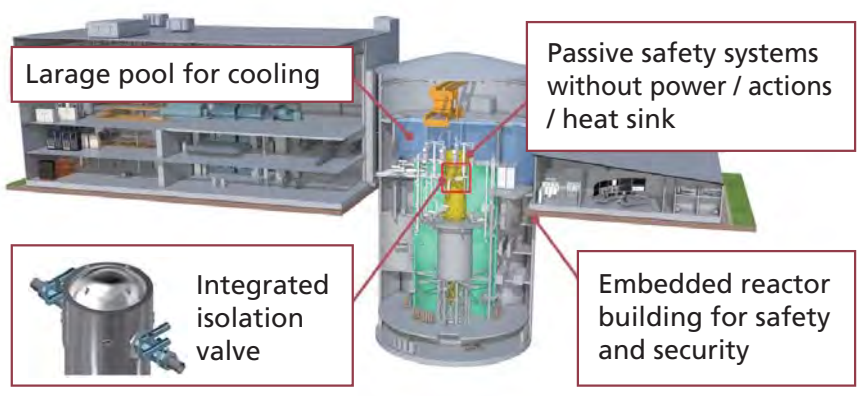
Nuclear Innovation: Hitachi-GE's Engagement in NEXIP Program

HITACHI

Light-Water Fast Reactor

Loading high density square grid MOX rods into existing BWRs and ABWRs enables efficient consumption of large amounts of plutonium utilizing existing Reprocessing and MOX Fabrication technology.





BWRX-300

A BWR SMR with 300MWe output that innovatively mitigates Loss of Coolant Accidents (LOCAs) by adopting isolation valves integral to the Reactor Pressure Vessel (RPV). Use of the integral isolation valves has been approved by the US NRC. GE Hitachi and Hitachi-GE are jointly developing the BWRX-300 and aiming for first deployment in North America.

Small Sodium Cooled Metal Fuel Fast Reactor (PRISM)

GE Hitachi, the global alliance partner of Hitachi-GE, has been developing the Sodium Cooled Metal Fuel SMR. The main features are inherent safety of the metal fuel, passive safety and short construction utilizing modular methods. These concepts are being designed into the US Versatile Test Reactor (VTR) and the Natrium reactor being developed by TerraPower.