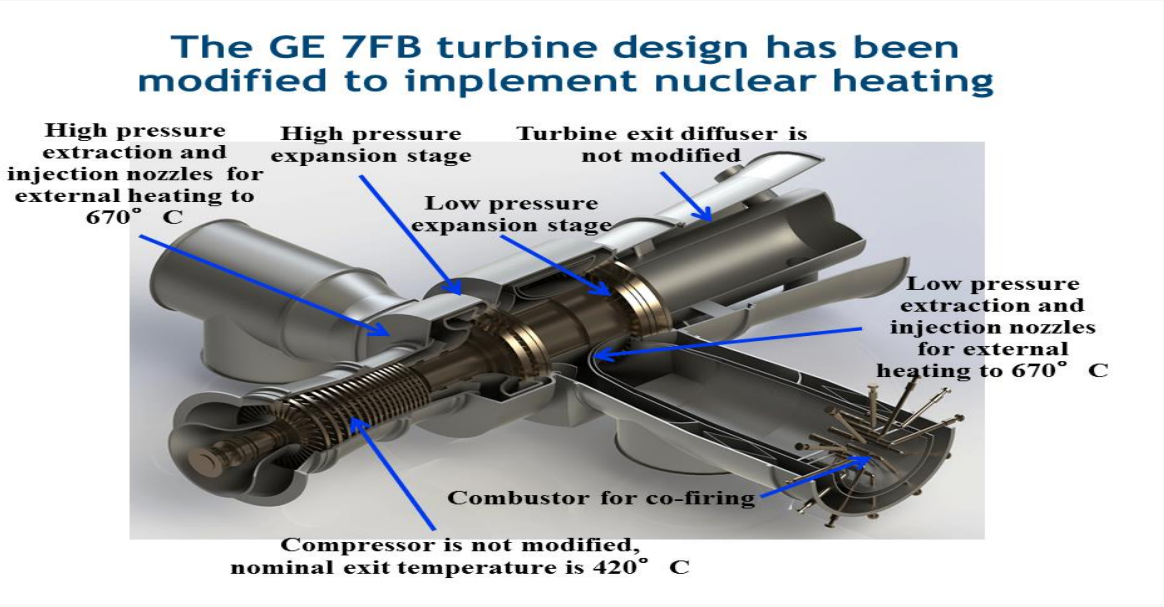
Mk1 Power Conversion

PB-FHR Power Conversion

The Mk1 PB-FHR uses a nuclear air combined cycle (NACC) for power conversion, based upon a modified General Electric (GE) 7FB gas turbine. The GE 7FB was selected because it operates at 3600 rpm and thus generates 60-Hz electricity appropriate for the U.S. power grid, and it is the largest rail-shippable gas turbine manufactured by GE. The Mk1 NACC power conversion system is described in greater detail in Chapter 5 of the Mk1 pre-conceptual design report and in two recent UCB archival journal articles [28], [29].



Section view of the modified GE 7FB GT used for power conversion in the Mk1 PB-FHR.