

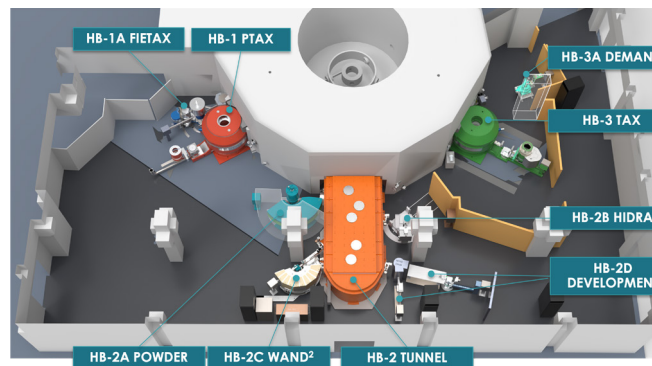
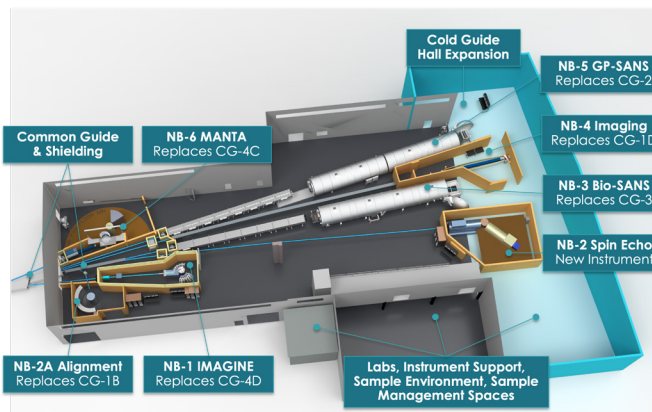
Securing the Next Century of Science at the High Flux Isotope Reactor

High Flux Isotope Reactor Beryllium Reflector Replacement (HBRR)

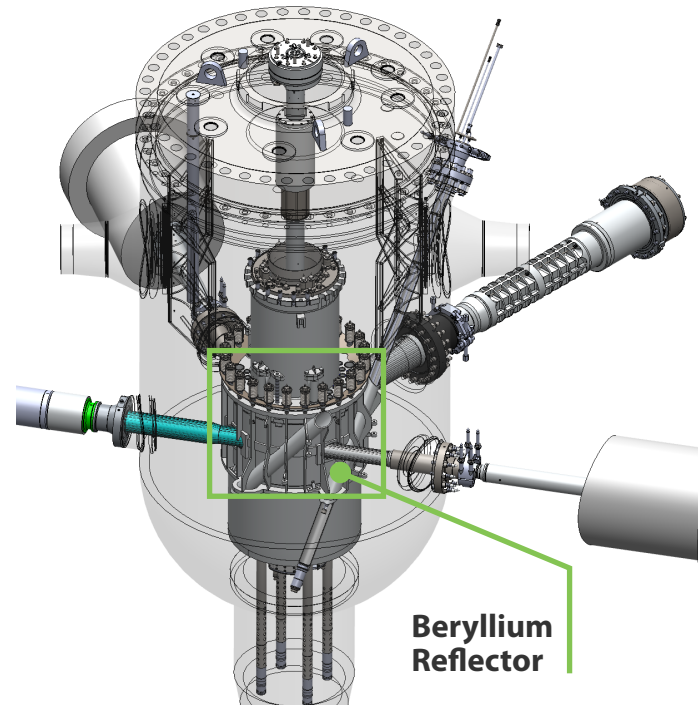
Beryllium Reflector: Helps drive neutron production by reflecting neutrons back into the fuel core.

SCOPE:

- Redesign and replace the reflector and some vessel components
- Remove and replace 4 beam tubes
- Disassemble and reinstall Beam Room instruments
- Replace the cold neutron guide network
- Make opportunistic infrastructure and instrument enhancements
- Extend the Cold Guide Hall, plus reconfigure and optimize cold neutron instruments to improve performance and make room for future new instruments and capabilities



HFIR Pressure Vessel



HFIR Pressure Vessel Replacement (PVR)

Pressure Vessel: Contains the reactor, which runs at 85 megawatts thermal energy and is cooled with a flow of 16,000 gallons of water per minute.

SCOPE:

- Remove and dispose of the current pressure vessel
- Install the new reactor pressure vessel and vessel core components
- Enable return to 100MW operation