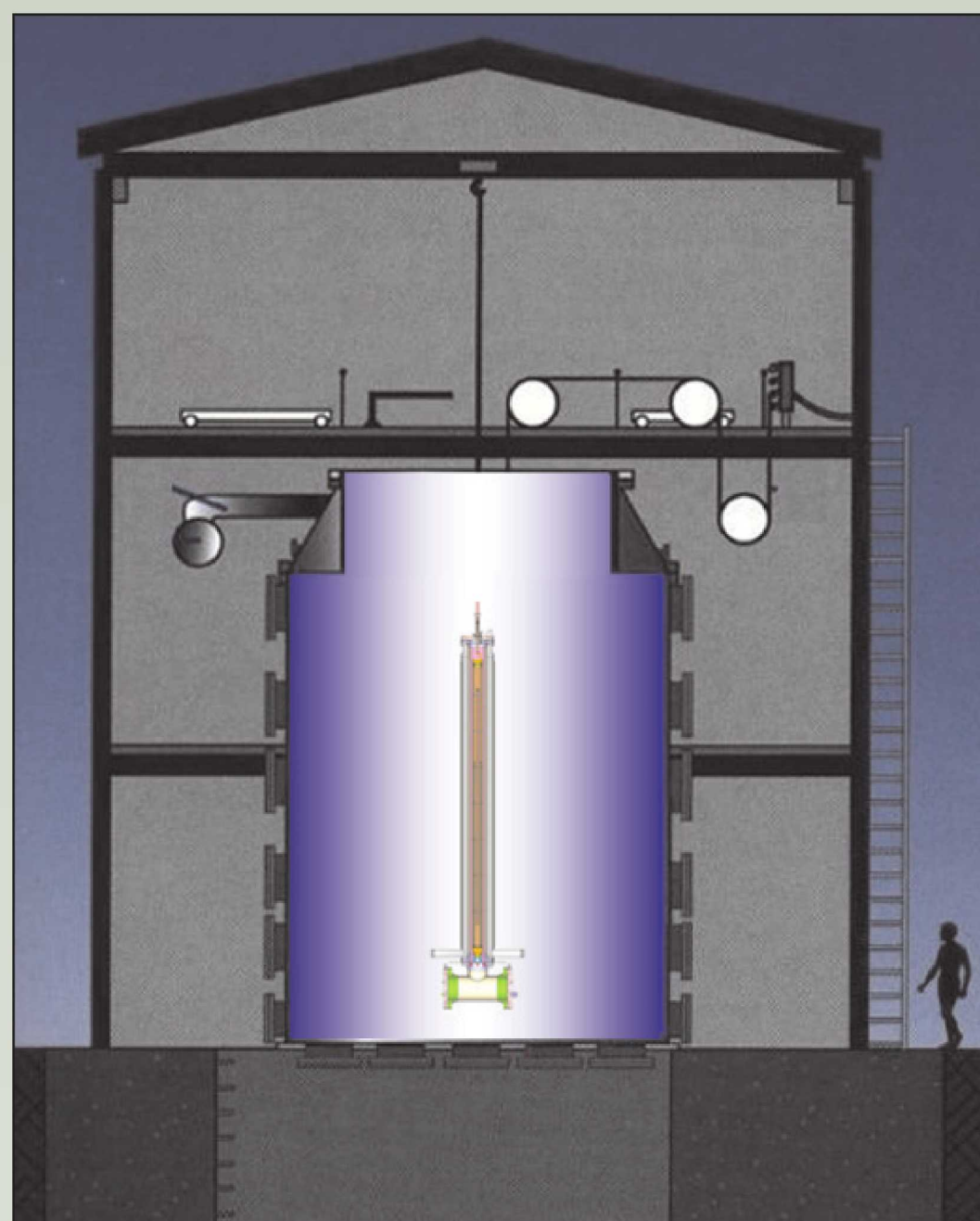


# Cylindrical Boiling Vessel (CYBL)



CYBL is a stainless steel reactor-scale facility designed for testing the flooded-cavity design for reactor accident termination. The reactor vessel cavity configuration is replicated by a tank within a tank design, the outer vessel measuring 5.1 m inner diameter and 8.4 m high, 316L. There are 51 viewing windows, ranging in size from 0.3 m to 0.6 m in diameter, on the side and bottom of the outer vessel.

## KEY ACTIVITIES

### Customers

- United States Nuclear Regulatory Commission (USNRC)
- United States Department Of Energy (USDOE)
- Organization for Economic Co-operation and Development (OECD)

### Capabilities

Thermal hydraulic investigations and fire ignition associated with safety cases for the evaluation of spent fuel in an air environment resulting from loss of water in a spent fuel pool. Thermal-hydraulic behavior of above and underground dry cask storage systems for spent nuclear fuel, using full length, highly prototypic fuel assemblies and a flexible data acquisition system.

