

Overview of Severe Accident Countermeasures

Chubu Electric Power has decided upon implementation of the following severe accident countermeasures.

1. Measures to prevent a large-scale discharge of radioactive materials

(1) Installation of filter vent equipment

Venting the containment vessel through a filter reduces the amount of radioactive material that is discharged in particle form (cesium, etc.) and prevents long-term soil contamination.

The vent further enables reduction of pressure in the containment vessel, and so prevents damage to the containment vessel.

2. Measures to prevent damage to the containment vessel

(2) Installation of water supply line in containment vessel pedestal

This is to cool molten reactor core that has fallen into the containment vessel pedestal (under the containment vessel), and so to prevent damage to the containment vessel.

(3) Reinforcement of alternative containment vessel spray functions

This is to cool (condense) steam generated by molten reactor core or other such material, and so to prevent damage to the containment vessel.

(4) Assurance of cooling function for containment vessel top head flange

This is to cool the containment vessel top head flange, thereby preventing damage to the vessel itself.

(It prevents leakage of hydrogen and so on from the flange area.)

(5) Deploy alternative heat exchange equipment for long-term cooling

This is to provide long-term cooling circulation for the containment vessel without using the existing seawater heat exchanger, thereby preventing damage to the vessel itself.

3. Measures for emergency direct-current power source

(6) Upgrade storage battery capacity

This is to extend the period during which critical instruments and other such equipment can be supplied with power.

(7) Deploy separate dedicated power sources for critical instruments and other such equipment

This is to enable measurement of water levels, pressure, and other such factors in the reactor using portable storage batteries and dedicated measuring instruments.

