

Measures for Reinforcing Safety at the Ohma Nuclear Power Plant

On the basis of the accident at the Fukushima Daiichi Nuclear Power Plant complex, J-POWER is implementing the measures listed below to reinforce safety at the Ohma Nuclear Power Plant.

I Tsunami Assessment and Plan for Emergency Power Supply

(1) Tsunami Assessment

Based on historical records and hypothetical tsunami generating mechanisms, it is estimated that the maximum height of a potential tsunami is +4.4m, and the facilities necessary for cooling the nuclear reactor are to be installed in major structures (reactor building, turbine building, etc.) built on a compound site with an elevation of +12m.

(2) Emergency Power Supply

Three emergency diesel engine generators will be installed inside the reactor building at a site with an elevation of +12m. In addition, there are two 500kV lines and a 66kV line capable of supplying electric power to emergency facilities.

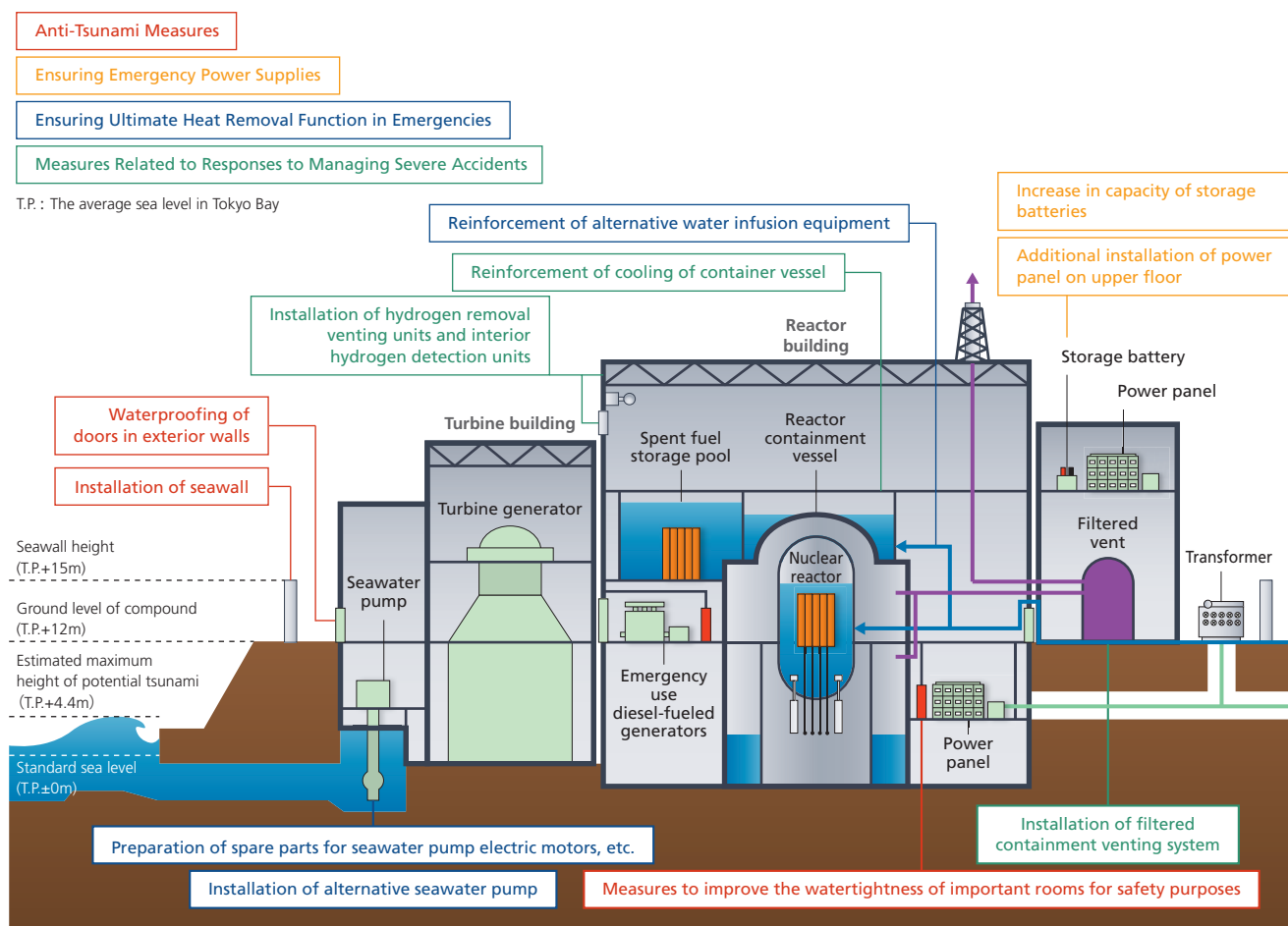
II Measures to Reinforce Safety

In addition to the above plan, the following measures will be implemented during construction.

(1) Anti-Tsunami Measures

The following countermeasures will be implemented to reduce the shock of potential tsunami, prevent the flooding into major structures, and protect equipment in buildings from seawater.

- Installation of seawall around major structures
- Creation of waterproof structures for doors in exterior walls
- Improvement in the watertightness of rooms housing important equipment for safety purposes
- Height extension of oil fences around the oil tanks



(2) Ensuring Emergency Power Supplies

The following countermeasures will be implemented in an emergency if power supply from external power sources is cut off and emergency diesel engine generators cannot be utilized.

- Installation of emergency power generators and fuel tanks on elevated ground that will not be affected by impact of tsunami
- Proper installation of power source cables from the emergency power generators
- Deployment of power supply vehicles
- Increase in capacity of storage batteries
- Additional installation of power panel on upper floor

(3) Ensuring Ultimate Heat Removal Function in Emergencies

The following countermeasures will be implemented in an emergency to ensure capabilities for cooling the reactor and spent fuel storage pool.

- Ensure alternative water source (reinforcement of water tanks, new installation of water storage tanks, etc.)
- Reinforcement of alternative water infusion equipment
- Deployment of portable power pumps and fire engines
- Deployment of alternative seawater pumps
- Preparation of spare parts for seawater pump electric motors, etc.

(4) Measures related to Responses to Managing Severe Accidents

The following measures will be implemented for responding rapidly and managing situations even in the event of a severe accident.

- Installation of filtered containment venting system
- Reinforcement of cooling of containment vessel
- Installation of nuclear reactor building hydrogen venting units and interior hydrogen detection units
- Ensure operating environment for central control room
- Installation of major seismic isolation building
- Installation of materials and equipment warehouse
- Reinforcement of communications systems
- Provision of supplies of such materials and equipment as protective clothing designed to cope with high level of radiation and creation of a radiation management system
- Deployment of heavy equipment for debris removal

Furthermore, in addition to promoting initiatives aimed at disaster prevention based on the reinforcement of cooperation among business operators in Aomori Prefecture, we will actively introduce more advanced safety technology and appropriately reflect necessary countermeasures properly, which will lead to the creation of a safe power plant.

