

Implementation of “On-site Practice”, training of emergency countermeasures for safety at Fukushima Daini Nuclear Power Station

Fukushima Daini Nuclear Power Station submitted the emergency countermeasures for safety to the central government on May 20, 2011. As a part of the countermeasures, we conducted the first emergency response training on May 13, 2011. **For the further improvement of the skills, we implemented “On-site Practice” on October 13, 2011 to confirm the combinations and functions among the teams.**

Objective of training

To confirm the actions that need to be taken in order to prevent the damage of reactor core and spent fuel, inhibit the discharge of radioactive substances and restore the cooling function of reactors, assuming losses of all the AC power supply functions, all the reactor cooling functions with seawater and all the spent fuel pool cooling functions due to tsunami.

Main trainings

① Securing power by power-supply cars

Training to supply necessary power using power-supply cars to maintain the water injection to and the function to remove heat from reactors and spent fuel pools in case all AC power supply is lost. (Power-supply cars are placed at Unit 1 to 4. Power cables connection was confirmed at Unit 2 and 4.)

<Materials used> 6 power-supply cars, power cable (total length: 1160m, already laid out)



Placement of power-supply car (Unit4)



Connection of power cables (Unit 2)

③ Removing heat from reactors and spent fuel pools (Transfer of a spare generator)

Training to carry a spare generator (mock) out of the storage and transport under the assumption that generators located on the ocean side are submerged and become inoperable (conducted in Unit 4)

<Materials used> 1 spare generator (mock), 1 truck for transportation



Carrying out a spare generator (mock)
(turbine building at Unit 4)



Transporting to seawater condenser
building at Unit 4

② Injecting water to reactors and spent fuel pools

Training to inject fresh water/ seawater to reactors and spent fuel pools by using fire engines

○ fresh water: the water in filtered water tanks and anti-earthquake fire fighting water tanks was transported to the 6th floor (temporary pools) of turbine buildings at Units 2 and 3.

○ seawater: the seawater was taken from the intake using fire engines and sprayed to the outside.

<Materials used> 3 fire engines, hose (total length: 500m)



Transporting the water from the anti-earthquake fire
fighting water tank



Transporting the water to the reactor building
(temporary tank) (Unit 2)

④ Removing debris etc.

Training to confirm the route for heavy machineries to remove obstacles such as concrete blocks (debris) scattered on the road by tsunami

<Materials used> wheel loader, backhoe



wheel loader



backhoe