May 16, 2011
Electric Power Development Co., Ltd.

Report on Implementation of Measures for Ensuring the Reliability of External Electric Power Supply at Nuclear Power Plants (Measures for Reinforcing Safety at Ohma Nuclear Power Plant)

On April 15, 2011 J-POWER (Electric Power Development Co., Ltd.) received the document "Ensuring the Reliability of External Electric Power Supply of Nuclear Power Plants (directive)" from the Director-General, Nuclear and Industrial Safety Agency (NISA).

In response to this directive, we compiled a report detailing the status of measures to ensure the reliability of external electric power supply at Ohma Nuclear Power Plant, and today submitted this to the NISA, together with details of safety reinforcement measures that we are implementing to mitigate the potential impact of tsunami. Summary of our report to the Director-General is presented below.

Summary of the Report

1. Status of Measures to Ensure Reliability of External Electric Power Supply

(1) Reliability of supply of the electric power system

For the supply of external electric power, Ohma Nuclear Power Plant has prepared two lines with transmission voltage of 500kV and one line with transmission voltage of 66kV.

According to the Tohoku Electric Power Company ("Tohoku Electric"), the reliability of supply to this electric power system is secure unless there is power outage of its Kamikita Substation. Nevertheless, even though adequate reliability has been already ensured under present conditions, to improve reliability Tohoku Electric is currently planning to construct a new transmission line that will not pass through the Kamikita Substation.

Furthermore, in the event the supply of electric power from an external power source is interrupted, Ohma Nuclear Power Plant will secure a reliable supply of electric power through three emergency diesel engine generators that will be installed inside the reactor building.

In addition to these measures, the reliability of the electric power supply within the plant will be further enhanced through the following measures during construction:

- Installation of emergency generators
  Emergency generators will be installed on an elevated ground immune to impact of tsunamis.
- Deployment of power supply vehicles and portable generators
  Power supply vehicles and portable generators will be deployed to

enable the flexible supply of electric power even if cables connecting from emergency generators become damaged and power panels are not working.

(2) Measures to enhance the reliability of the electric power supply inside the plant

To further contribute to enhancing the reliability of electric power supply to each unit within a nuclear power plant, the government is requiring that all transmission lines served by multiple electric power cables be connected to each unit. As for Ohma Nuclear Power Plant we have already confirmed that the configuration of the electric power system is capable of supplying electric power by connecting with all transmission lines.

(3) Aseismic resistance of the steel transmission tower, and stability of foundation at earthquakes, etc.

The steel transmission tower has been assessed as having adequate aseismic capacity according to the report of the government's Electrical equipment disaster prevention study commission (November 24, 1995).

Furthermore, stable landforms have been selected for the transmission route, and to further enhance the reliability of the electric power lines connecting to the nuclear power plant, we intend to assess risks related to embankment collapse, landslides, and sediment collapse of steep slopes in the area surrounding the tower site and to put in place appropriate measures as required.

Bearing in mind that the large number of breakages in the long-rod support insulators occurred in the recent earthquake, we will take appropriate measures including replacement of the long-rod support insulators of the 66kV transmission line superior in aseismic performance.

(4) Anti-tsunami measures at switching yards and other facilities

We will undertake the following measures to prevent the impacts of tsunami on switching yards and other electricity facilities at Ohma Nuclear Power Station. Because the 500kVswitching yard facilities, the 66kV switching yard facilities and the buck-up transformer have been installed at an elevated ground, we have determined that they do not require countermeasures.

- Installation of seawalls

  We will reduce the possibility of infiltration of seawater due to a tsunami by installing seawalls around the main buildings and by installing the major transformers and other critical equipment inside those walls.
- Waterproof structure of doors of the main buildings

  We will waterproof external doors of major buildings that house power panels.

2. Other measures for reinforced safety against tsunami

To further reinforce safety at Ohma Nuclear Power Plant, even in the event three key functions should be lost due to a tsunami (1. all functions of facilities to supply alternating-current power, 2. all functions of facilities to cool the reactor facilities by using seawater, and 3. all functions of facilities that cool the spent fuel storage pool), the following measures will be taken to prevent damage to reactor cores or spent fuels, and to restore the cooling functions of the reactor facilities while controlling the discharge of radioactive substances.

- To secure an adequate water supply, we will reinforce facilities as required to enhance the reliability of the tanks that store pure water and tap water.
- Portable power pumps and additional fire engines will be deployed as water injection measures to facilitate flexible response.
- Reserve seawater pump electric motor and other equipment needed to definitive heat removal from the reactor and the spent fuel storage pools into the ocean. To store this equipment and other emergency materials, we will also install an equipment and materials warehouse on an elevated ground unaffected by tsunami.

Attachment:
Summary of Measures to Reinforce Safety at Ohma Nuclear Power Plant

(Attachment)

Summary of Measures to Reinforce Safety at Ohma Nuclear Power Plant

1. Tsunami Assessment and Current Plan for Emergency Power Supply

(1) Tsunami Assessment

Maximum height of tsunami , +4.4m is estimated from historical records and hypothesized tsunamis. The facilities necessary for cooling the nuclear reactor will be installed in the major structures (reactor building, turbine buildings, etc.) built at sites with an elevation +12m, above sea level.

(2) Emergency Power Supply

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

2. Future Measures to Reinforce Safety

The government directed electric power companies to implement emergency safety measures for the other nuclear power stations considering the accident of Fukushima Dai-ichi and Dai-ni Nuclear Power Stations on March 30, and notified of amended regulations* in accordance with the directive to our company.

Therefore, on the basis of the amended regulations we are currently examining the following measures to reinforce safety and intend to implement them during the construction of Ohma Nuclear Power Plant.

(1) Anti-Tsunami Measures

Instllation of seawalls around the main buildings to mitigate impact of tsunami and waterproof structuring of doors of exterior walls of main buildings

(2) Ensuring Emergency Power Sources

Installation of emergency generators on elevated ground immune to the impact of tsunamis and deployment of power supply vehicles

(3) Ensuring Ultimate Heat Removal Function in Emergencies

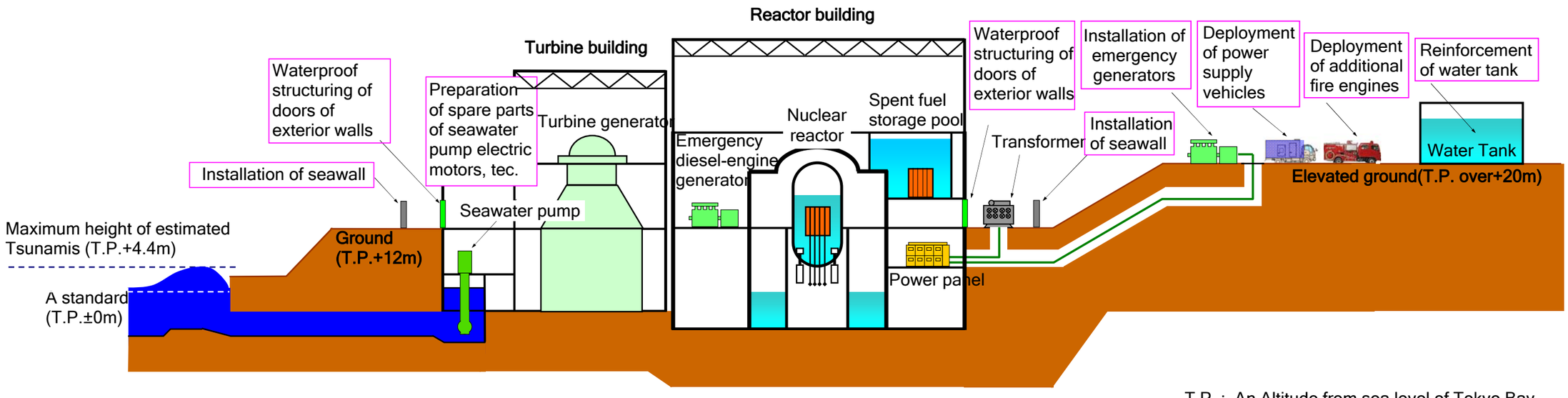
Reinforcement of water tanks to ensure water supply, and deployment of portable power pumps, preparation of spare parts of seawater pump electric motors and deployment of additional fire engines

The Future

We will continue our investigation and will take appropriate steps to implement all necessary measures to create a safe power plant that has the understanding and support by the local community.

*"The Regulations for the Installation and Operation of commercial nuclear power plant",
"Regarding the construction of the Ministorial Ordinance sets forth techinical standards concerning nuclear power plant"

(Image of measures to reinforce safety)



T.P. : An Altitude from sea level of Tokyo Bay