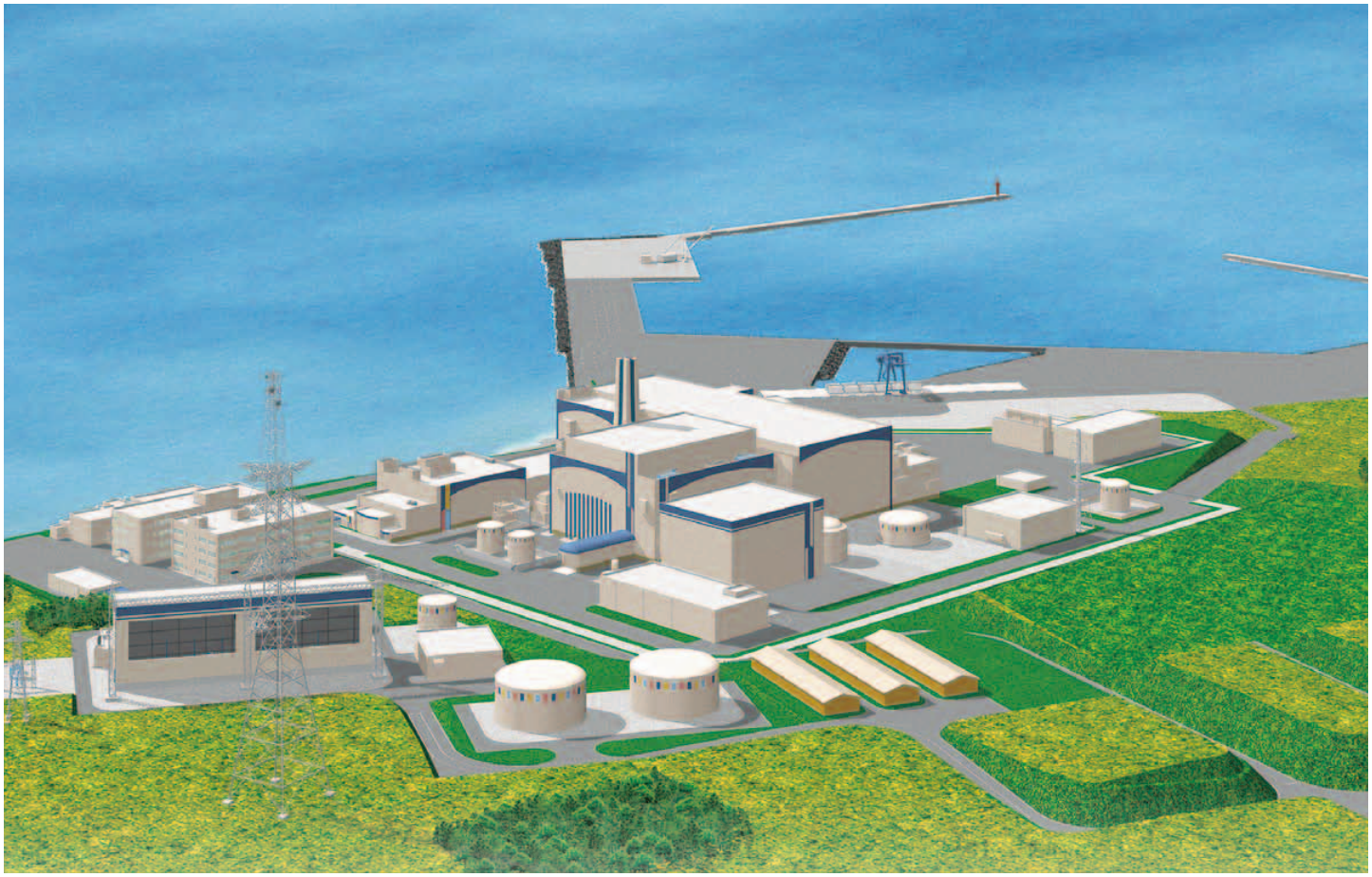


Report

The Ohma Nuclear Power Station
Seeking Trusted Power Stations

Introduction

The J-POWER Group is engaged in construction of the Ohma Nuclear Power Station in Ohma-machi, Shimokita-gun, Aomori Prefecture.

From the perspective of steady energy supply, nuclear power is an essential and indispensable source of energy for our island country with poor natural resources. It is also a source of energy that provides an effective countermeasure to global warming.

We consider it is necessary for nuclear power to continue fulfilling a constant role in Japan's electric power supply because nuclear power can be an effective source of energy with adequate safety management measures, needless to say, should be taken.

We have proceeded with the project of Ohma Nuclear Power Station in accordance with national government policy, with the understanding and cooperation of Aomori Prefecture and the local residents of Ohma-machi, Kazamaura-mura, and Sai-mura, and with the necessary permits and approvals in hand. It is a key power station with high safety and reliability achieved by leading-edge technology, and it will perform a crucial role both in the provision of a stable supply of electric power and in the provision of nuclear fuel cycle.

The J-POWER Group has taken the lessons of the accident at Fukushima Daiichi Nuclear Power Station to heart. We will proceed with steady implementation of safety measures and practices in light of the new regulatory standards, making the fullest use of the experiences and the latest technical findings. In this way, we will build power station that earns the trust of local and regional communities.

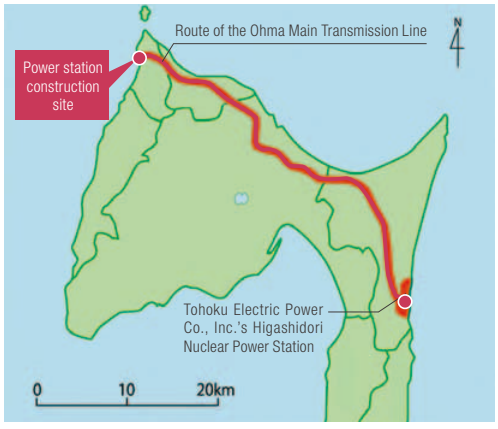


Diagram of Ohma Nuclear Power Station position (Aomori Prefecture)

Panoramic view of construction work on Ohma Nuclear Power Station (Aomori Prefecture)

Pursuing Safety Improvements

J-POWER is investigating safety enhancement measures including tsunami countermeasures, ensuring power supplies, ensuring heat removal functions, and severe accident responses at the Ohma Nuclear Power Station based on the new regulatory standards issued by the Nuclear Regulatory Authority. It is our policy to implement necessary safety measures during the construction stage. In line with this policy, we are carefully proceeding with construction while keeping in mind responses to the new safety standards within the scope of the nuclear power reactor license obtained in April 2008.

We are autonomously taking steps to improve our data on geology and tectonics in light of recent trends. Ever since we obtained permission to build this nuclear reactor in April 2008, therefore, we have been using the latest technologies and methods as needed to conduct marine terrace surface surveys,*1 airborne gravity surveys,*2 marine sonic prospecting, studies of tsunami deposits, three-dimensional subsurface structure surveys, and geological surveys of the plant site and neighboring areas.

We will continue to acquire information relating to the earthquake resistance and tsunami safety of the power station while investigating safety enhancement measures to achieve even higher levels of safety. We will also make every effort to increase trust in Ohma Nuclear Power Station.

*1 Marine Terrace Surface Survey:
Study of the altitude distribution of the surface of marine terraces and the year in which it was formed, with the purpose of ascertaining such matters as the amount of upheaval that has occurred since that time.

*2 Airborne Gravity Survey:
One method of geophysical survey that uses a helicopter to make measurements of gravity. The measurement results are then used to extrapolate subsurface density distribution.

Preparation Status of Application for the Alteration of Establishment

J-POWER is diligently conducting design operations relating to safety enhancement measures to address external accidents such as tsunami and earthquakes as well as tornadoes, volcanic eruptions, and fires in accordance with the new safety standards and the latest knowledge. We are also conducting design operations and assessments of effectiveness concerning countermeasures for the occurrence of severe accidents. In addition, we plan to submit a nuclear reactor installation modification license application in the future for specified severe accident response facilities*3 and reinforcement of permanent DC power source facilities, which are eligible for five-year interim measures.

Plan Overview

Location		Ohma-machi, Shimokita-gun, Aomori Prefecture
Construction begins		May 2008
Commercial operation begins		To be determined
Output		1.383 GW
Reactor	Type	Advanced boiling water reactor (ABWR)
	Fuel: Type	Enriched uranium and uranium-plutonium mixed oxide (MOX)
	Fuel assembly	872 elements

*3 Specified severe accident response facilities:
Facilities to restrict abnormal external emission of radioactive material due to large aircraft collision or terrorism.

Harmony with the Local Community

At the Ohma Nuclear Power Station, we are pursuing a variety of initiatives in order to ensure the understanding and trust of every member of the local community.

J-POWER issues newsletters for local residents and reports on local issues as well building plans, construction status, safety enhancement measures, and other matters.

We also participate in local festivals and other events and cooperate with schools to conduct geological formation field trips for elementary school students and junior high school students and energy education for high school students, providing continuous support for education of future generations.

In the 2013 fiscal year, we conducted a total of six geological formation field trips that included explanations based on geological formation and rock formation sample observation and testing, observation of nearby geological formations, and collection of rock samples. Going forward, we will continue to conduct a wide range of activities while placing particular importance on our relationships with local residents.

A geological formation field trip

Measures to Reinforce Safety for Ohma Nuclear Power Station (Overview)

For the Ohma Nuclear Power Plant, in addition to previous safety enhancement measures, we are complying with the New Safety Standard for Nuclear Power Stations (effective July 8, 2013), and implementing further safety enhancement measures to further improve safety of the power plant.

We are reviewing active implementation of superior safety technologies and will appropriately incorporate necessary measures towards building a safe power plant.

1. Tsunami Assessment and 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 T.P. +4.4 m (according to application document for establishment permission in 2008), and the facilities necessary for cooling the nuclear reactor are to be installed in major structure (reactor building, turbine building, etc.) built on site with an elevation of T.P. +12 m.

(2) Emergency Power Supply

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

2. Safety Enhancement Measures

In addition to the plan in 1, above, the following measures will be implemented during construction.

◯Design Basis

The following countermeasures are to be implemented to increase reliability of the nuclear power plant while ensuring functionality of the safety systems against external phenomena such as tornados, volcanic eruptions and fires as well as tsunamis and earthquakes.

(1) Facility protection in the case of a tsunami (installation of seawall, waterproofing modification of doors in exterior walls, height extension of oil fences and improvement in the watertightness of important rooms for safety purposes)

(2) Implementation of impact assessments of tornadoes and other natural phenomena on the nuclear power plant

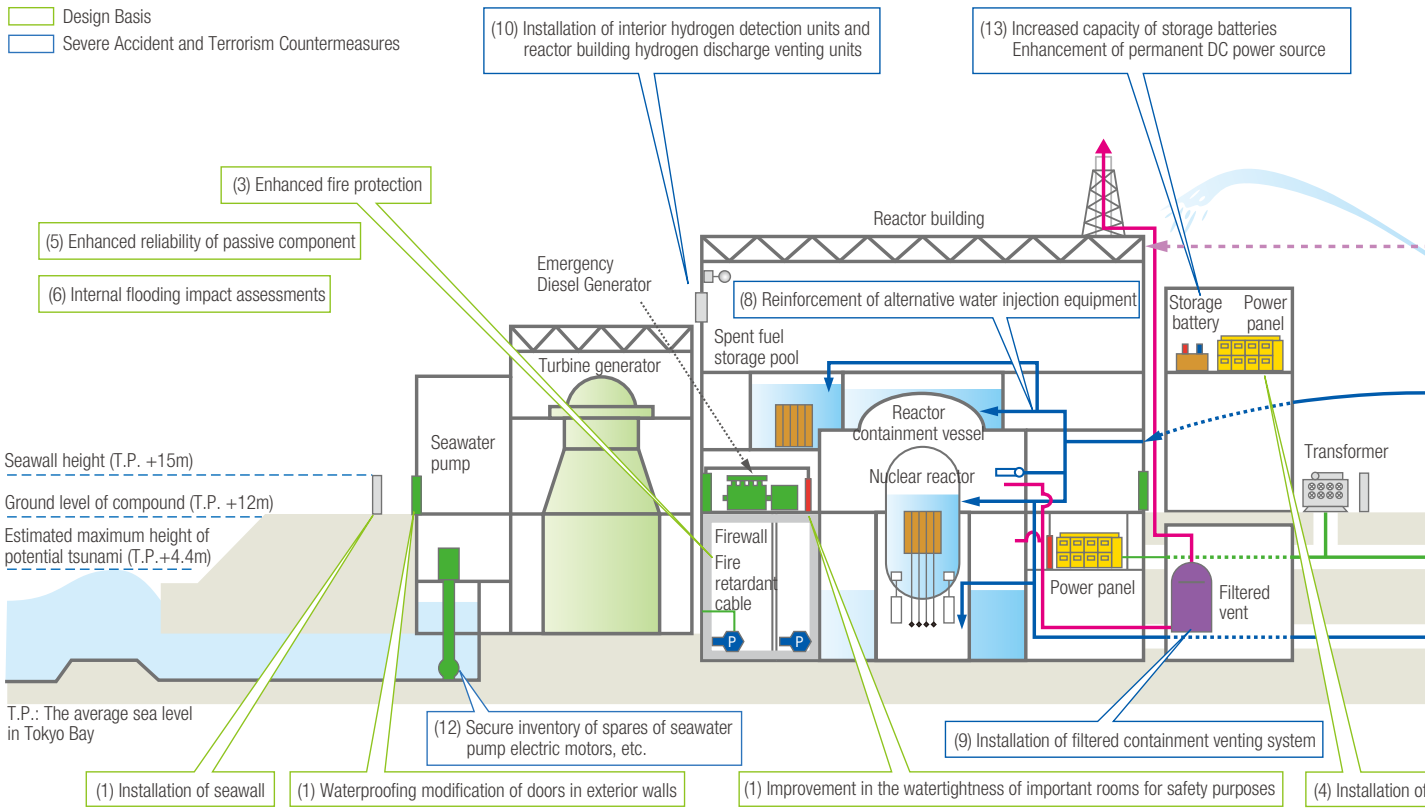
(3) Enhanced fire protection measures (use of fire retardant cables, installation of firewalls, and other measures)

(4) Installation of power panels on upper floor for locational dispersion

(5) Enhanced reliability of passive component that are crucial to safety

(6) Implementation of impact assessments of internal flooding on the safety system

Image of Measures to Reinforce Safety at Ohma Nuclear Power Station



◯Severe Accident and Terrorism Countermeasures

The following countermeasures are to be implemented to enable rapid response even in the case of a severe accident.

(7) Deployment of portable power pumps and fire engines for cooling the reactor, containment vessel and spent fuel storage pool

(8) Reinforcement of alternative water injection equipment for cooling the reactor, containment vessel and spent fuel storage pool

(9) Installation of filtered containment venting system*1 to prevent overpressurization on the containment vessel

(10) Installation of hydrogen detection units and hydrogen discharge venting units*2 to prevent hydrogen explosion at the reactor building

(11) Deployment of water spraying facilities to spray water on the reactor building and other facilities

(12) Secure inventory of spares of seawater pump electric motors, etc. and deployment of alternative seawater pumps and other equipments to ensure heat removal functionality for the reactor and containment vessel

(13) Deployment of power supply vehicles, installation of emergency power generators (fuel tanks and power cables), increased capacity of storage batteries and enhancement of permanent DC power source to secure power supply

(14) Installation of water storage tanks and reinforcement of water tanks to secure water source

(15) Installation of emergency response office to respond as necessary in an emergency

(16) Reinforcement of communications systems for making contact within and outside of the power plant in the event of an emergency

(17) Installation of materials and equipment warehouse, provision of high-level radiation protection suits and other materials and equipment, and deployment of heavy equipment for debris removal

(18) Installation of specified severe accident response facility to respond to intentional crash of aircrafts and other such events

Aside from the above measures, we will be reinforcing links and collaboration between businesses operating in Aomori prefecture* to further ensure disaster prevention.

*1 **Filtered containment venting system:**
In the event that an excessive pressure increase occurs in the nuclear reactor containment vessel due to a major accident, this system expels the air in the containment vessel to the atmosphere in order to prevent damage to the containment vessel, and it passes the air through a filter to limit the amount of radioactive material released.

*2 **Hydrogen discharge venting units:**
In the event of reactor core damage or other such damage that causes hydrogen to leak inside the nuclear reactor building, this equipment prevents the explosion of hydrogen inside the building by quickly and reliably expelling the leaked and accumulated hydrogen outside the building.

* Tohoku Electric Power Company, Tokyo Electric Power Company, Japan Nuclear Fuel Limited, Recyclable-Fuel Storage Company and J-POWER