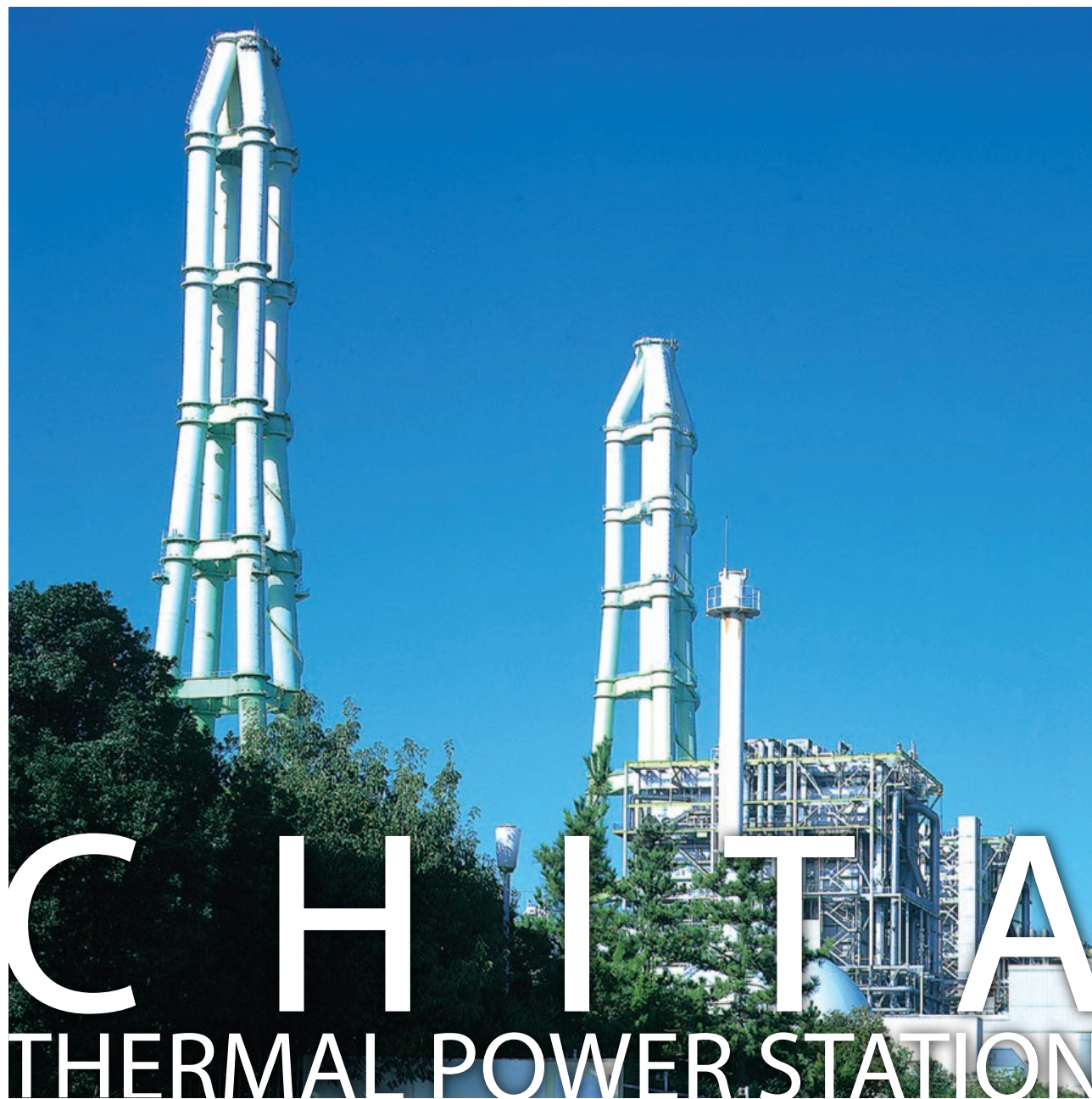


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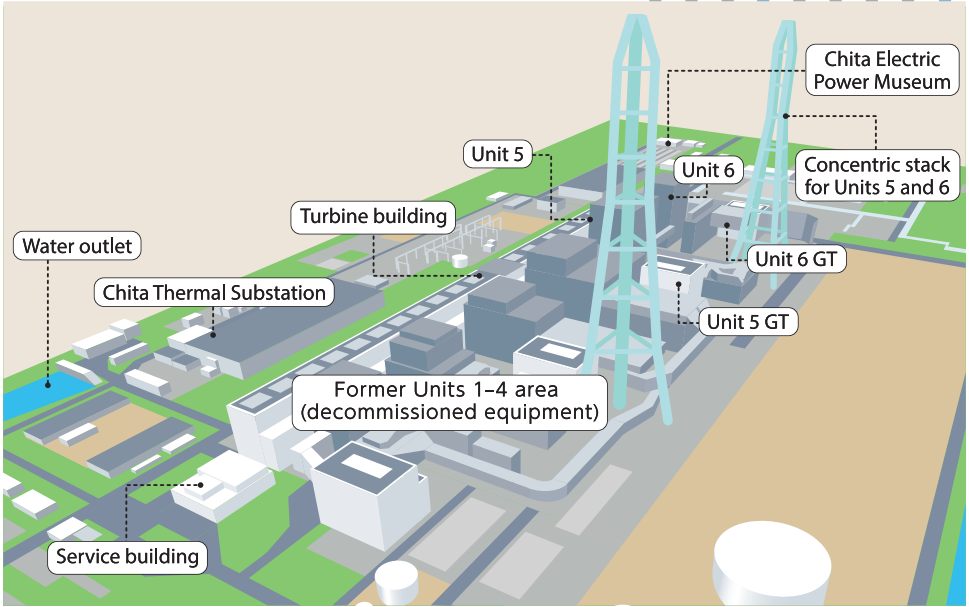
WELCOME TO CHITA THERMAL POWER STATION!

Managing LNG efficiently and stably by means of exhaust gas re-firing combined-cycle power generation

The Chita Thermal Power Station is located in the Nagoya South Coastal Industrial Zone, which was developed by coastal reclamation in the north of Chita Peninsula. Since commencing commercial operation in 1966, it has played a key role as one of Japan's large-capacity thermal power stations (total output of Units 1 to 6: 3,960 MW), providing a stable supply of electricity to the coastal industrial zone where many companies are located, including steelmakers, housing equipment manufacturers, mills, and oil refineries, as well as to the Chubu region and other areas. Since the decommissioning of Units 1 to 4, the current total output is about 1,708 MW. Units 5 and 6 currently in operation have an exhaust gas re-firing combined-cycle gas turbine generator. Both are fueled by LNG, which is a clean energy source. The station also operates an LNG terminal jointly with Toho Gas Co., Ltd. to manage LNG efficiently and stably.



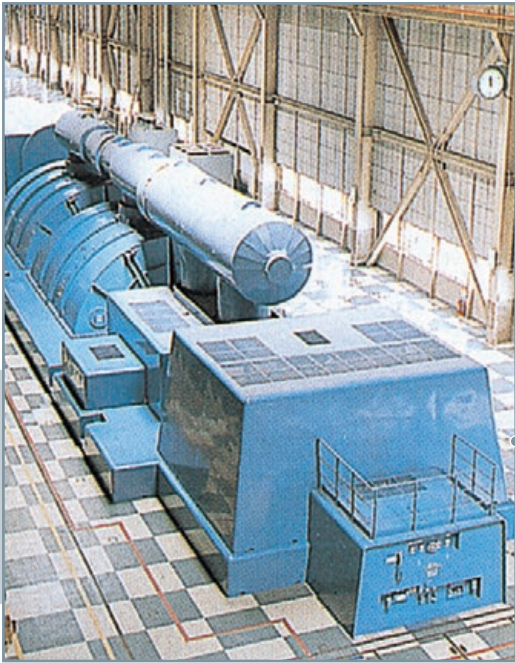
Overall layout of the power station



Outline of facilities

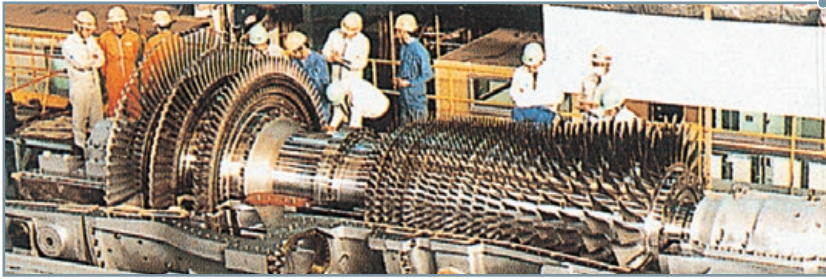
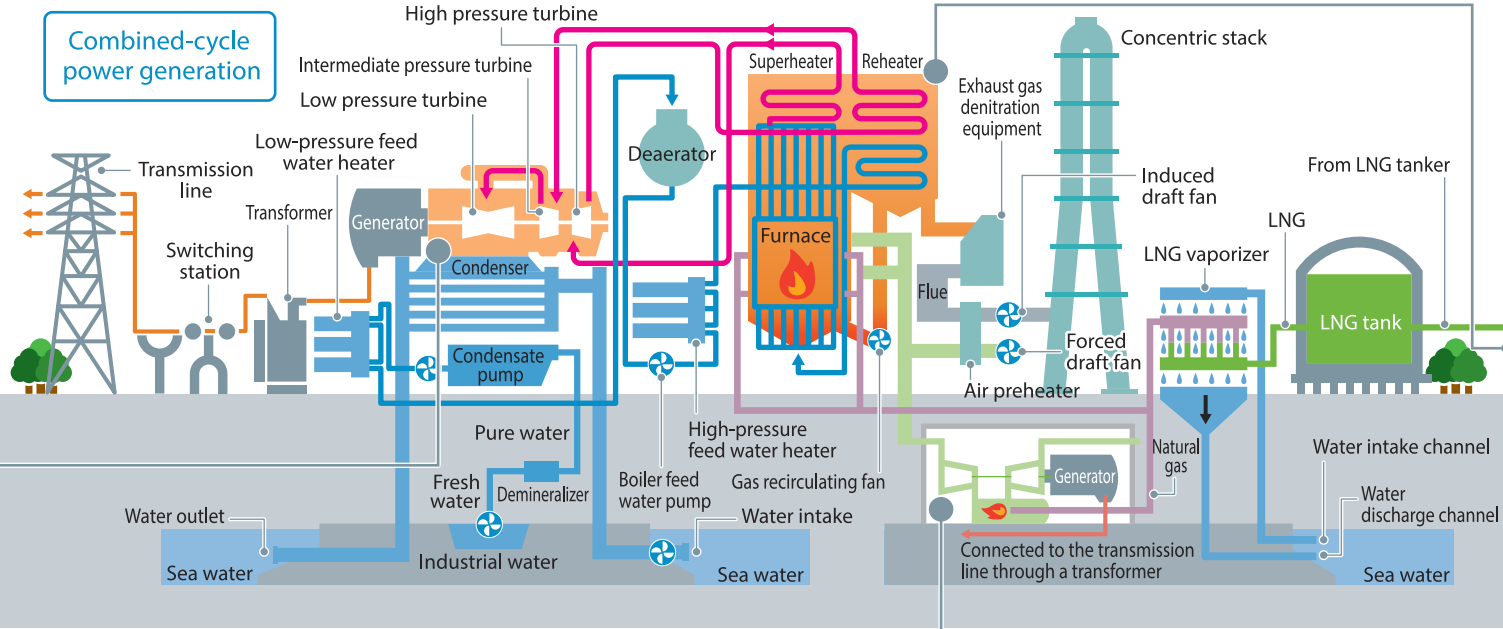
| Unit No. | Output (MW) | Fuel | COD | GT combustion temperature (°C) | Power generation type |
|----------|-------------|------|----------------|--------------------------------|-----------------------------|
| Unit 5 | 700 | LNG | March 1978 | — | Combined cycle (repowering) |
| 5GT | 154 | | June 1995 | 1,300 | |
| Unit 6 | 700 | | April 1978 | — | |
| 6GT | 154 | | September 1994 | 1,300 | |

Name: Chita Thermal Power Station Location: Chita City, Aichi Prefecture Site area: Approximately 560,000 m²



Turbine (steam) generator

The high-temperature, high-pressure steam generated by the boiler drives a turbine. A generator directly connected to this turbine operates at high speed (3,600 rpm). Units 5 and 6 generate 700 MW of electricity.



Gas turbine

The gas produced by the combustion of LNG (1,300°C, 1.47 MPa) drives a turbine. A generator directly connected to this turbine operates at 3,600 rpm to generate electricity of 154 MW.



Boiler (LNG-fueled)

LNG sent from the storage facility is burned in a boiler. The temperature in the boiler reaches approximately 1,300°C, and this heat is used to turn the boiler water into high-temperature, high-pressure steam, which is then sent to a turbine.

Environmental Initiatives

Preventing air pollution

The power station is fueled with LNG and therefore does not discharge the sulfur oxides which are the cause of particulate matter and acid rain. The use of low-NOx burners and exhaust gas denitration equipment has also reduced the discharge of nitrogen oxides. The white smoke rising from the plant stacks on cool days is steam.

Keeping the oceans clean

The equipment cleaning water and general waste water generated at the power station undergoes pre-processing such as oil separation and neutralization. It is then purified by means of condensation, sedimentation, filtration and neutralization, and the water quality is checked before it is discharged.

Protecting the global environment

Since power stations make use of the earth's enriched resources, it is important to achieve high level of thermal efficiency when generating electricity due to preservation of the global environment. In addition, greater generating efficiency means that less carbon dioxide, which causes global warming, is produced. We are committed to conserve the earth's finite resources and curb global warming by leveraging the technical capabilities we have accumulated over the years and by introducing highly efficient power generating equipment.



Installation of NOx reduction systems

To reduce nitrogen oxides in the exhaust gas we have implemented a various of NOx reduction systems such as exhaust gas denitration equipment.



Greening

Trees are planted on approximately a quarter of the site area, and a green belt on the side facing the residential area harmonizes with nature and helps conserve the environment. There is a pond inhabited by ricefish(medaka) next to the Electric Power Museum. A nature observation zone on the site area was designed to be like the walkway in Oze National Park.



LNG storage tanks

LNG is transported from Indonesia, Australia, and other countries, and is stored at the receiving terminal constructed jointly with Toho Gas Co., Ltd. and at the Chita terminal of Chita LNG Co., Ltd. LNG is gasified at these terminals, which are located 3 km south of the station, and then sent to the station through a gas pipeline.



JERA Co., Inc. Chita Thermal Power Station

23 Kitahama-cho, Chita City, Aichi Prefecture 478-0046, Japan

Tel: +81-562-55-1181

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Jera