

Genkai Nuclear Power Station

Nuclear Power Training Center



Kyushu Electric Power Co., Inc.

For the Enhancement of Safety and Reliability of Nuclear Power Stations

The objective of Genkai Nuclear Power Station Nuclear Power Training Center is to foster and impart operation management and maintenance management skills to our employees and to further improve their technical capability.

Facility outline

- Structure: Steel frame construction
 - Operation Training Facility: approx 2,600m²
 - Maintenance Training Facility: approx 2,700m²
- Inaugurated: July, 1997

Main training facilities

Operations training

Training equipment	Contents of training
○2-loop simulator	○Startup and shutdown of the plant
○4-loop simulator	○Operation in the event of an abnormal condition of the components and in the event of an accident

Maintenance training (mechanical)

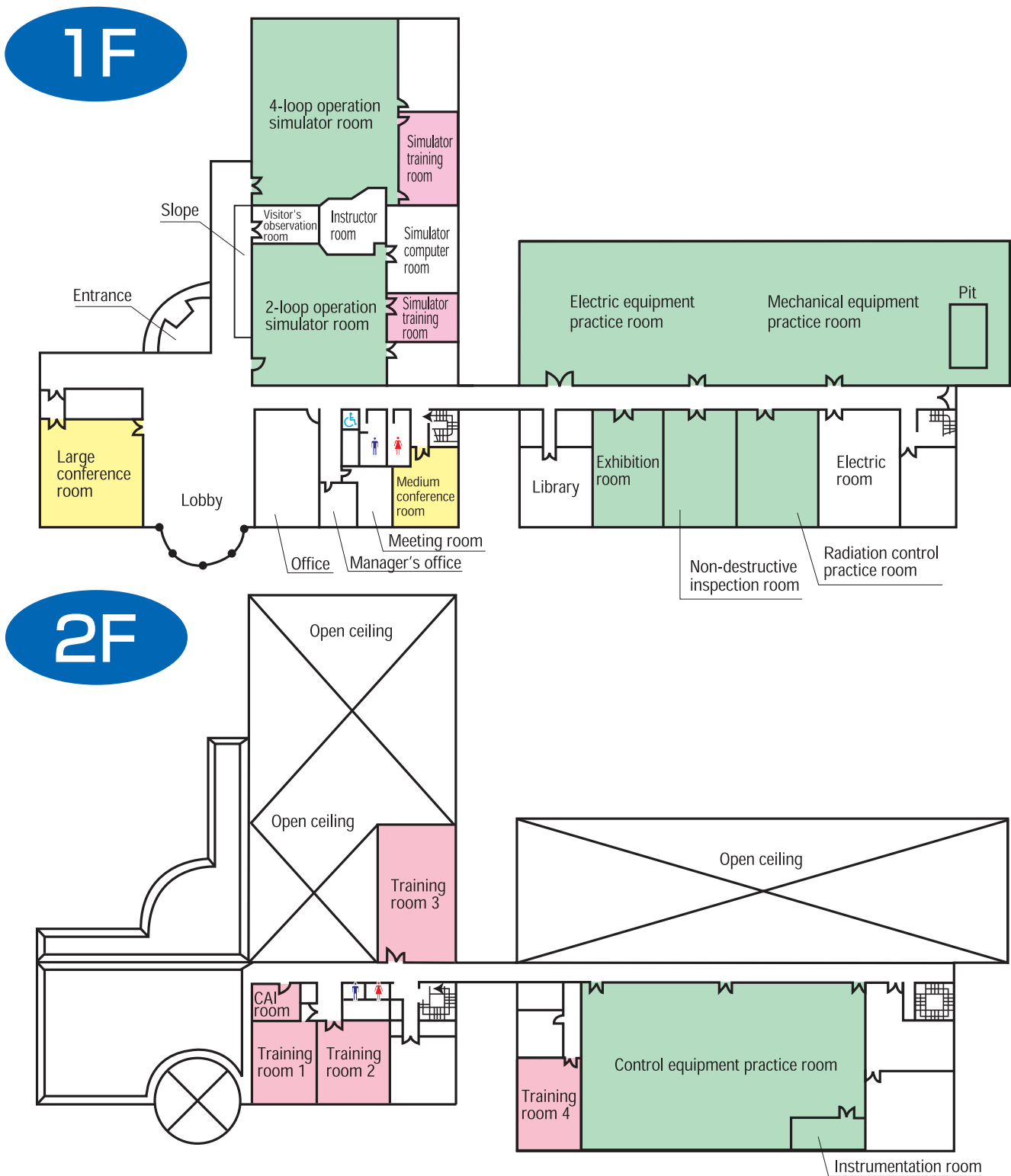
Training equipment	Contents of training
○Reactor vessel head mock-up	○Grasp of the structures and functions of the mechanical equipment
○Steam generator water chamber mock-up	○Acquisition of servicing work skills
○Primary coolant pump shaft seal mock-up	○Acquisition of overhaul inspection and adjustment skills
○Fuel handling equipment	
○Steam turbine mock-up	
○Loop equipment	

Maintenance training (electrical)

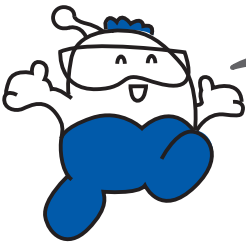
Training equipment	Contents of training
○Breakers	○Grasp of the structures and functions of the electric equipment
○Motors	○Acquisition of maintenance skills including overhaul inspection and assembling, and operation test, etc.

Maintenance training (control systems)

Training equipment	Contents of training
○Nuclear instrumentation system	○Grasp of the principles and functions of the control equipment
○Reactor control systems	○Acquisition of maintenance skills including test, adjustment, etc.
○Reactor safety systems	
○Radiation monitoring system	
○Control rod drive mechanism control system	
○Turbine control system	



Operation Training Facility



In the instructor room, it is possible to simulate a wide range of situations for the power station.

The loop simulator rooms are exact copies of the real plant from the ceiling to the floor, and equipped with switches and instruments.



Continuing training to assure safe operation of power stations.



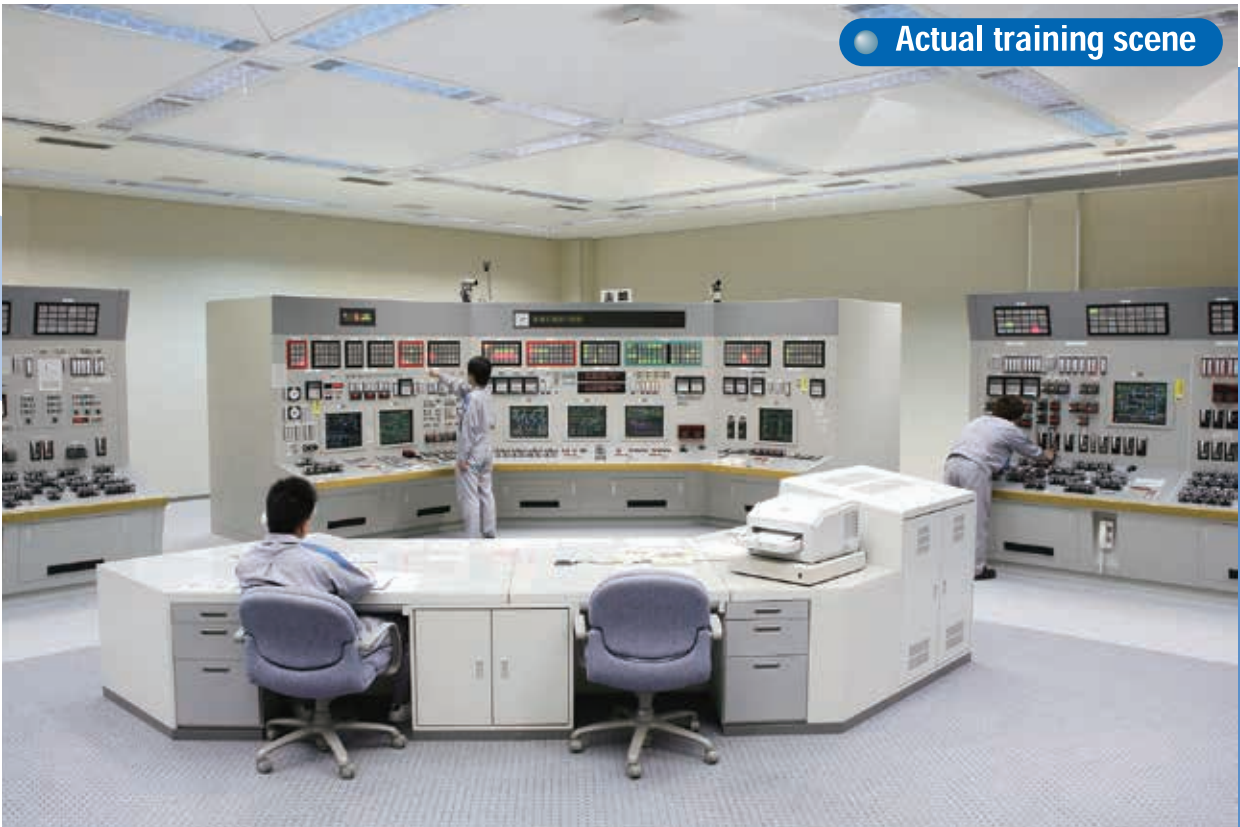
Instructor room (2-loop operation)



Simulator room (2-loop operation)



Instructor room (4-loop operation)



Simulator room (4-loop operation)

We train operators to make cool and accurate decisions, to response quickly and accurately to changing situations, and to work together as a team.



Major training items



Maintenance Training Facility



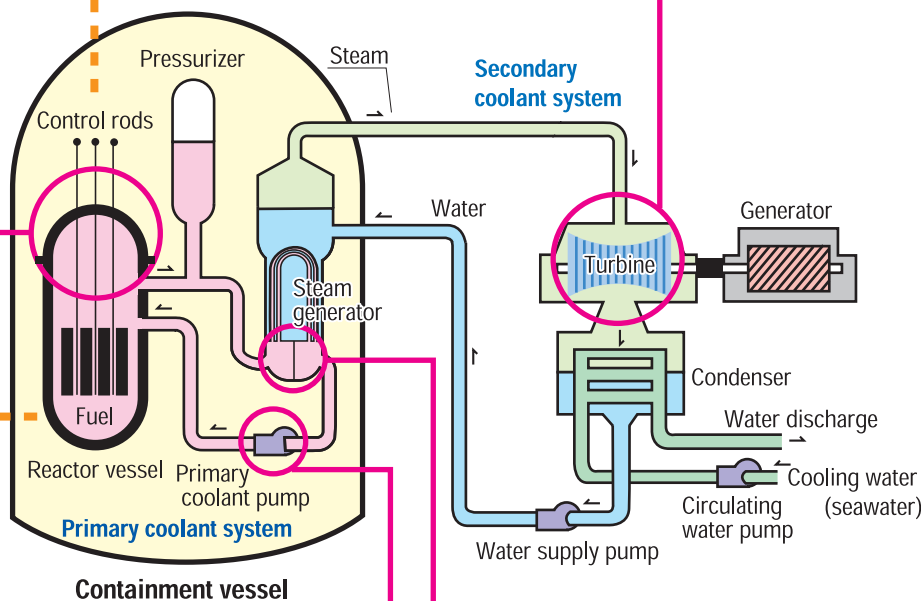
Control rod drive mechanism control system
(Training in understanding the functions of the control rod drive mechanism control system, and in maintenance and inspection.)



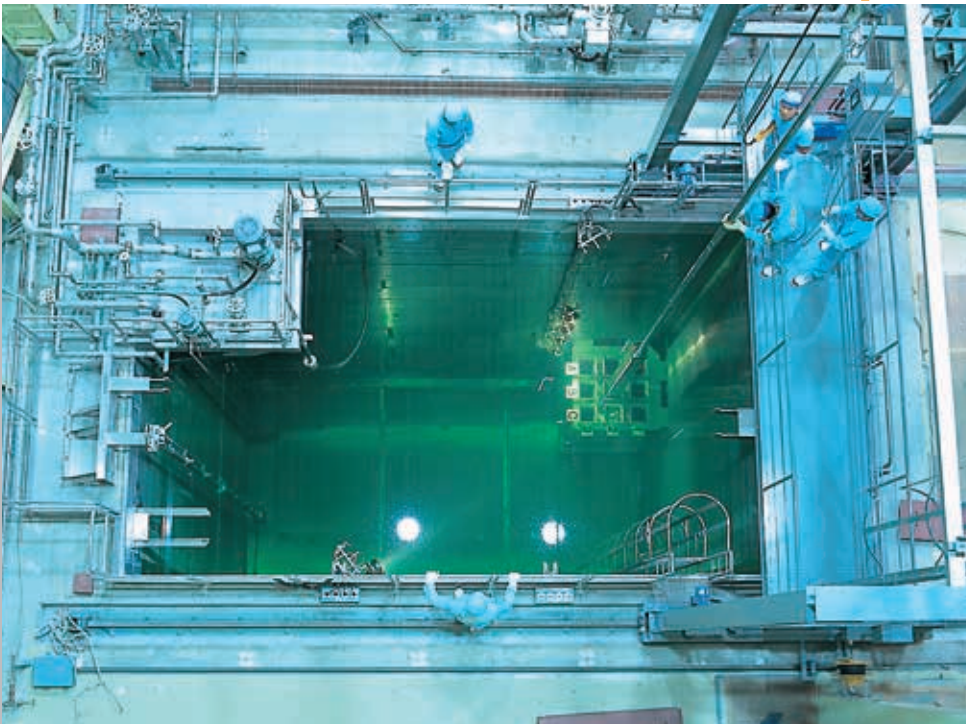
Steam turbine mock-up (1:10 scale)
(Lectures on construction and function of steam turbines)



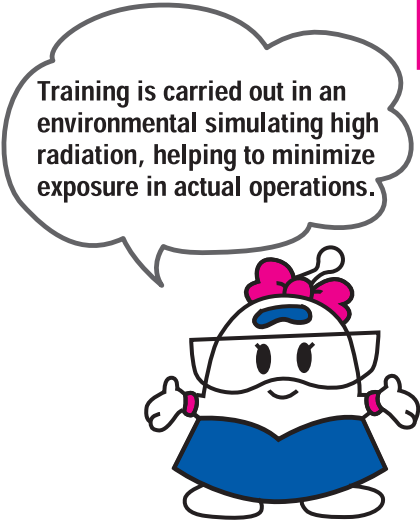
Reactor vessel head mock-up
(Training in opening, inspecting and restoring the reactor vessel head.)



Steam generator water chamber mock-up
(Training in opening, inspection and restoring the steam generator water chamber.)

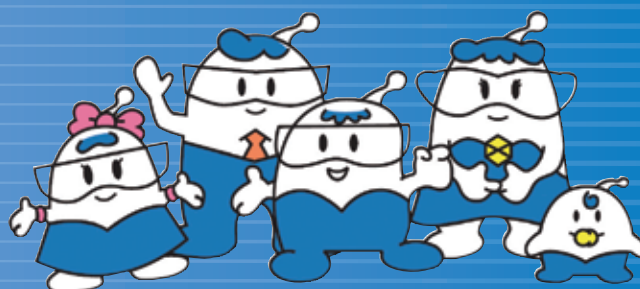
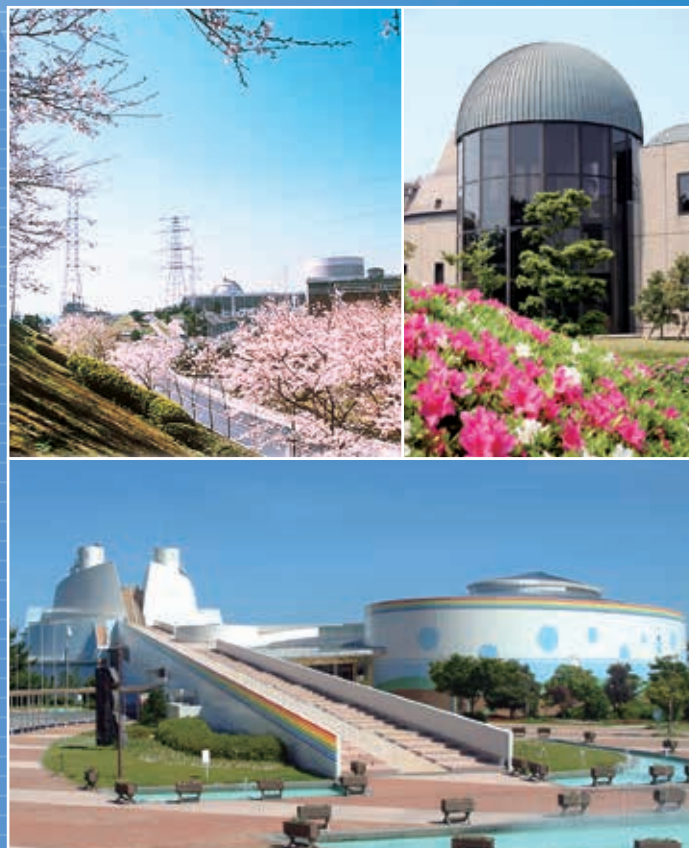


Fuel servicing equipment
(Training in using the spent fuel pit crane to handle fuel.)



Primary coolant pump shaft seal mock-up
(Training in shaft seal disassembly, inspection and assembly)





Kyushu Electric's mascot: Mirai-kun Family

Genkai Nuclear Power Station Nuclear Power Training Center

4112-1 Oaza Imamura, Genkai-Cho, Higashi Matsuura-gun, Saga 847-1441

TEL (0955) 52-3719 FAX (0955) 52-3783

URL <http://www.kyuden.co.jp>

■ Tour reservations (9 a.m. to 5 p.m.)

(Genkai Energy Park)

TEL (0955) 52-6409 FAX (0955) 52-3796

[Closed] Third Monday of every month (following day if holiday), winter holiday (Dec. 29 to Jan. 3)