

December 22, 2017
The Kansai Electric Power Co., Inc.

Decision of Decommissioning of Units 1 and 2 of Ohi Nuclear Power Station

The Kansai Electric Power Co., Inc. (Code: 9503)
6-16 Nakanoshima 3-chome, Kita-ku, Osaka
(URL <http://www.kepco.co.jp>)
Company Representative: Shigeki Iwane, President and Director
Contact: Michiya Sakata, General Manager, Office of Accounting and Finance
Tel: +81-6-6441-8821

Today, we decided to decommission the Units 1 and 2 of the Ohi Nuclear Power Station and reported it to Fukui Prefecture and Ohi-cho.

From now on, we will go through various procedures* to decommission the Units 1 and 2 of Ohi Nuclear Power Station and proceed with decommissioning, making safety a top priority. For the nuclear plants in operation and the nuclear plants to be restarted, on the other hand, we will continuously strive to improve safety and reliability and devote all our efforts to them with safety as a top priority, seeking understanding from the communities where the nuclear plants are located, as well as from people in the society.

With decision of decommissioning of the Units 1 and 2 of Ohi Nuclear Power Station, we will submit application for approval for specified assets for nuclear power and application for approval for special account related to nuclear power decommissioning to the Ministry of Economy, Trade and Industry today based on the Ordinance on Accounting at Electricity Utilities.

With these applications, items such as residual book values of assets of the Units 1 and 2 of Ohi Nuclear Power Station that need to be collectively recorded as expenses when decommissioning is decided can be expensed during a certain period of time by transferring to or including in the assets, so the decision of decommissioning has just a minor influence on the performance in each year.

*: Procedures for decommissioning

1. Application for approval of decommissioning accounting system based on the Ordinance on Accounting at Electricity Utilities
(application for approval for specified assets for nuclear power and application for approval for special account related to nuclear power decommissioning)
2. Report of change of electric facilities based on the Electricity Utilities Industry Act
3. Application for approval for decommissioning plan based on the Reactor Regulation Act, etc.

Attachments:

- Contents of Report to Fukui Prefecture and Ohi-cho Concerning Decision of Decommissioning of Units 1 and 2 of Ohi Nuclear Power Station
- Overview of Units 1 and 2 of Ohi Nuclear Power Station

Contents of Report to Fukui Prefecture and Ohi-cho Concerning Decision of Decommissioning of
Units 1 and 2 of Ohi Nuclear Power Station

1. Decision of Decommissioning of Units 1 and 2 of Ohi Nuclear Power Station

○ Units 1 and 2 of Ohi Nuclear Power Station is the only power plant in Japan that has adopted an ice condenser type containment vessel* that has a very small size compared with those at other nuclear power plants.

*:A method in which block ice is put in a basket installed around the containment vessel to rapidly cool down steam generated to reduce the pressure at the time of an accident

○ We have discussed safety measures to comply with the new regulatory requirements and have found that measures such as thickening of walls of the building that covers the containment vessel are required. However, reinforcement of walls will narrow the space between the containment vessel and the wall of building that covers the containment vessel. In addition, with installation of equipment that was not required at the time of construction, the already small work area in the containment vessel will become even smaller.

○ Therefore, it will be difficult to safely and securely carry out periodical inspection, equipment inspection and maintenance work during operation, and rapid repair in the case of a trouble. We have discussed it from a technical point of view, however, we have not been able to find an effective method. So, we decided to decommission Units 1 and 2 of Ohi Nuclear Power Station, placing utmost priority on safety in facility operation and quality assurance in the future.

2. Safe and Secure Implementation of Decommissioning

○ We will utilize our knowledge and technology effectively and discuss enhancement of the dedicated management system of the Decommissioning Technology Center and power station for start of full-scale work to implement decommissioning safely and securely.

3. Efforts to Set up Interim Storage Facilities for Irradiated Nuclear Fuel outside Fukui Prefecture

○ Based on our “Irradiated Nuclear Fuel Control Promotion Plan”, we will make efforts on the assumption of transportation of irradiated nuclear fuel to Rokkasho Reprocessing Plant for basic reprocessing. In addition, we will work on setup of interim storage facilities outside Fukui Prefecture and will establish the planned location around 2020 to start operation around 2030. Before this, we will present a concrete planned location in 2018 in line with the progress of activities to enhance understanding.

4. Disposal of Radioactive Waste with Decommissioning

○ We will proceed with discussion to secure the disposal site so that decommissioning can be implemented without delay.

○ Currently, the Nuclear Regulatory Authority is preparing a concrete control standard concerning burial disposal of radioactive waste generated with decommissioning. For selection of the disposal site, etc. in the future, we will proceed with discussion based on the organized concrete control standard and will request for nation’s involvement and support

continuously.

5. Development of Local Companies and Promotion of Employment

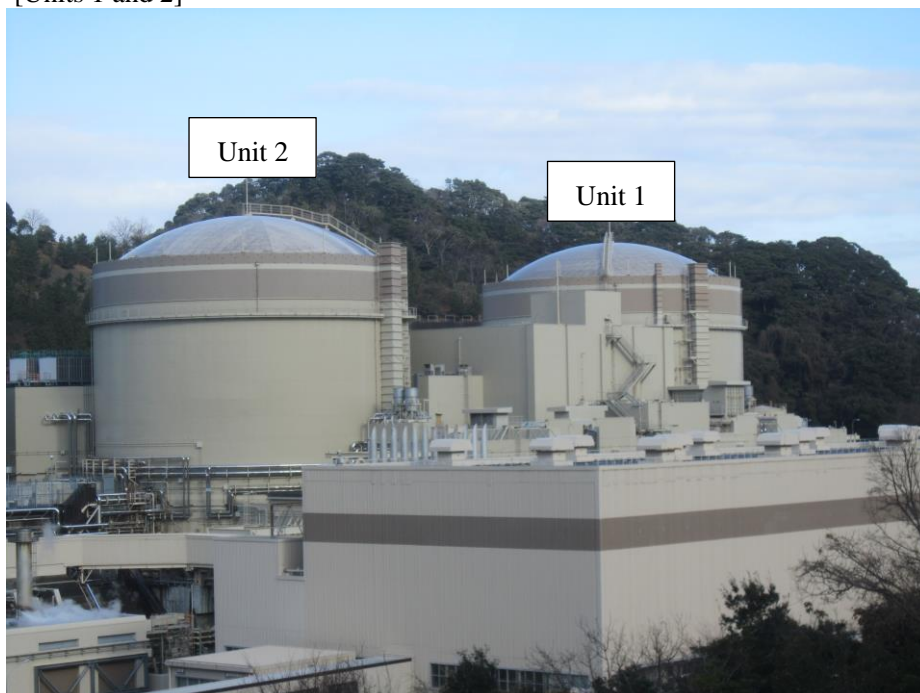
- We will expand our efforts such as briefing sessions and information exchange meetings for local companies and cooperative research with local companies based on the status of Units 1 and 2 of Ohi Nuclear Power Station so that more local companies can continuously participate in the work at the power station.

Overview of Units 1 and 2 of Ohi Nuclear Power Station

[Overview of Ohi Nuclear Power Station]

Establisher	Kansai Electric Power Co., Inc.	
Location	Oshima, Ohi-cho, Ohi-gun, Fukui Prefecture	
Plant site area (total)	Approx. 1.88 million m ²	
	Units 1 and 2 of Ohi Nuclear Power Station	Units 3 and 4 of Ohi Nuclear Power Station
Type of reactor	Pressurized water reactor	
Rated output	1,175 MW	1,180 MW
Start of commercial operation	Unit 1: March 27, 1979 Unit 2: December 5, 1979	Unit 3: December 18, 1991 Unit 4: February 2, 1993
Number of fuel assembly loading bodies	193	
Number of steam generators	4	
Major contractor	Westinghouse Electric Company LLC. Mitsubishi Corporation	Mitsubishi Heavy Industries, Ltd.

[Units 1 and 2]



[Power generation results of Units 1 and 2 of Ohi Nuclear Power Station]

	Unit 1 of Ohi Nuclear Power Station	Unit 2 of Ohi Nuclear Power Station
Generated energy	221.73 billion kWh (Equivalent to energy for approx. 71 million general households/year)	240.795 billion kWh (Equivalent to energy for 77.2 million general households/year)
Number of days for power generation	8,018 days	8,645 days
	Under the 24th periodical inspection (December 10, 2010–)	Under the 24th periodical inspection (December 16, 2011–)

[History (Unit 1 of Ohi Nuclear Power Station)]

Date	Content
January 23, 1971	Made an application for a reactor installation license
July 4, 1972	Obtained the reactor installation license
October 21, 1972	Started construction
December 2, 1977	First critical state
December 23, 1977	First power transmission
March 27, 1979	Started commercial operation
June 10, 2003	Started constant rated thermal power operation *
March 14, 2008	Made an application to the nation for approval for change of safety regulations concerning the long-term maintenance management policy based on evaluation of aging management technology in the 30th year
July 25, 2008	Obtained approval for change of safety regulations
July 30, 2008	Reported the future operation policy to Fukui Prefecture and Ohi-cho

* Changed from constant rated electric power operation to constant rated thermal power operation

<Major trouble>

September 1981, October 1988	Manual stop of the reactor due to leakage of the heat transfer pipe of a steam generator (twice)
---------------------------------	--

<Major replacement work>

12th periodical inspection (September 1994–May 1995)	Replacement of steam generators
16th periodical inspection (July 2000–November 2000)	Replacement of the lid of the reactor pressure vessel

[History (Unit 2 of Ohi Nuclear Power Station)]

Date	Content
January 23, 1971	Made an application for a reactor installation license
July 4, 1972	Obtained the reactor installation license
November 14, 1972	Started construction
September 14, 1978	First critical state
October 11, 1978	First power transmission
December 5, 1979	Started commercial operation
December 25, 2002	Started constant rated thermal power operation *
March 14, 2008	Made an application to the nation for approval for change of safety regulations concerning the long-term maintenance management policy based on evaluation of aging management technology in the 30th year
October 27, 2008	Obtained approval for change of safety regulations
November 17, 2008	Reported the future operation policy to Fukui Prefecture and Ohi-cho

* Changed from constant rated electric power operation to constant rated thermal power operation

<Major trouble>

February 1995	Manual stop of the reactor due to leakage of the heat transfer pipe of a steam generator (once)
---------------	---

<Major replacement work>

13th periodical inspection (February 1997–August 1997)	Replacement of the steam generators
14th periodical inspection (August 1998–August 1999)	Replacement of the lid of the reactor pressure vessel