

Work Schedule of the Main Inspection/Restoration of the Kashiwazaki-Kariwa Nuclear Power Station in Response to the Niigata-Chuetsu-Oki Earthquake (during 4 Weeks)(1/2)

【Inspection/Restoration Status】

◆From October 25, 2009 (Sun) to November 21, 2009 (Sat)

System / Equipment	Items	October 25 (Sun) to October 31 (Sat)	November 1 (Sun) to November 7 (Sat)	November 8 (Sun) to November 14 (Sat)	November 15 (Sun) to November 21 (Sat)	Status of Inspection / Restoration	
Unit No.1	Reactor facilities	Core shroud preventive maintenance				Preventive maintenance work to be commenced on Nov. 7.	
	Turbine facilities	Turbine inspection				High-pressure turbine and low pressure turbine (A) (B) (C) detailed inspection commenced on Nov. 17, 2008.	
	Other facilities	Main transformer inspection					Carrying in and installation work commenced on Apr. 20.
		House transformer inspection					1A, 1B Carrying in and installation work commenced on Mar. 30.
		Excitation transformer inspection					Carrying in and installation work commenced on Mar. 30.
		Main generator inspection					Inspection commenced on Feb. 7, 2008.
		500kV power cable inspection					Laying cables to be conducted from Jun. 2 to Nov. 11.
		Main exhaust duct inspection / restoration					Restoration of substruction commenced on Dec. 1, 2008. Restoration work of main exhaust duct commenced on Jul. 29, 2009.
		Circulating water pipe inspection					Foundation improvement, excavating work, and inspection of pipes commenced on Aug. 6, 2008.
	Seismic reinforcement	Seismic reinforcement works such as pipe supports					Reinforcement work commenced on Jul. 16.
		Seismic reinforcement works for reactor building overhead crane					Reinforcement work completed on Oct. 15.
		Seismic reinforcement works for stack (Unit No.1 and Unit No.2)					Reinforcement work commenced on Jul. 27.
		Seismic reinforcement works for emergency intake channel					Foundation improvement work commenced on Feb. 9. Reinforcement work for the bank protection connection commenced on Oct. 5.
	Unit No.2	Turbine facilities	Turbine inspection				High-pressure turbine and low-pressure turbine (A) internal inspection completed.
Other facilities		House transformer inspection				Transportation into the factory is underway.	
		Excitation transformer inspection				Transportation into the factory is underway.	
		Main generator inspection				Inspection commenced on Mar. 19, 2008.	
		Main exhaust duct inspection / restoration				Preparation for restoration work commenced on Aug. 9, 2008. Restoration of substruction commenced on Dec. 1, 2008.	
Unit No.3	Turbine facilities	Turbine inspection				High-pressure turbine and low-pressure turbine (A) (B) (C) detailed inspection commenced on May 7, 2008. Low-pressure turbine (A) (B) restoration work of blades completed on Oct. 22, 2009.	
	Other facilities	Main transformer inspection					Carrying in and installation work commenced on Aug. 10.
		House transformer inspection					3A, 3B Installation work commenced on Nov. 18, 2008.
		Excitation transformer inspection					Installation work commenced on Nov. 18, 2008.
		Main generator inspection					Inspection commenced on Feb. 20, 2008.
		Inspection of power supply input transformer of the primary loop recirculation system adjustable speed drive					Transformer (B) carrying in and installation work commenced on May 27. Transformer (A) carrying in and installation work commenced on Jun. 3.
		500kV power cable inspection					Laying cables commenced on Jul. 17.
		Main exhaust duct inspection / restoration					Restoration work of substruction commenced on Jan. 9. Restoration work of main exhaust duct commenced on Sep. 3.
		Circulating water pipe inspection					Foundation improvement, excavating work, and inspection of pipes commenced on Jun. 16, 2008.
	Seismic reinforcement	Seismic reinforcement works for reactor building overhead crane					Preparation for reinforcement work to be commenced on Nov. 2.
		Seismic reinforcement works for stack					Reinforcement work commenced on Jul. 21
Seismic reinforcement works for the fuel handling machine						Preparation for reinforcement work commenced on Oct. 26. Reinforcement work to be commenced on Nov. 2.	
Unit No.4	Turbine facilities	Turbine inspection				High-pressure turbine and low-pressure turbine (A) (B) (C) detailed inspection commenced on Aug. 3. Low-pressure turbine (A) (B) restoration work of blades commenced on Sep. 28, 2009. (Replacement of wear and contacted blades.)	
	Other facilities	Main transformer inspection					Carrying in and installation work commenced on Aug. 28.
		House transformer inspection					Carrying in and installation work commenced on Sep. 2.
		Excitation transformer inspection					Carrying in and installation work commenced on Sep. 2.
		Main generator inspection					Inspection commenced on Jan. 15, 2008.
		Inspection of power supply input transformer of the primary loop recirculation system adjustable speed drive					Carrying in and installation work commenced on Jun. 12.
		Main exhaust duct inspection / restoration					Preparation for restoration work commenced on Jun. 23, 2008.
		Restoration work of stand-by gas treatment system piping duct substruction					Restoration work commenced on Oct. 29.
	Seismic reinforcement	Seismic reinforcement works for reactor building overhead crane					Reinforcement work commenced on Oct. 21.
		Seismic reinforcement works for stack					Reinforcement work commenced on Jul. 6.

【Inspection/Restoration Status】 **Work Schedule of the Main Inspection/Restoration of the Kashiwazaki-Kariwa Nuclear Power Station in Response to the Niigata-Chuetsu-Oki Earthquake (during 4 Weeks) (2/2)**

◆ From October 25, 2009 (Sun) to November 21, 2009 (Sat)

System / Equipment		Items	October 25 (Sun) to October 31 (Sat)	November 1 (Sun) to November 7 (Sat)	November 8 (Sun) to November 14 (Sat)	November 15 (Sun) to November 21 (Sat)	Status of Inspection / Restoration	
Unit No.5	Turbine facilities	Turbine inspection	▼					High-pressure turbine and low-pressure turbine (A) (B) (C) detailed inspection commenced on May 25. Restoration work of high-pressure turbine and low-pressure turbine (A) (B) (C) to be commenced on Oct. 29.
	Other facilities	Main transformer inspection						Carrying in and installation work commenced on Mar. 25.
		House transformer inspection						5A, 5B Carrying in and installation work commenced on Apr. 25.
		Excitation transformer inspection						Carrying in and installation work commenced on Mar. 2.
		500kV power cable inspection					▼	Laying cables to be conducted from Aug. 10 to Nov. 9. Voltage application test to be conducted on Nov. 5.
		Main exhaust duct inspection / restoration						Restoration work of duct completed on Oct. 24.
		Circulating water pipe inspection						Foundation improvement, excavating work, and inspection of pipes commenced on Oct. 25, 2008.
	Seismic reinforcement	Seismic reinforcement works such as pipe supports						Reinforcement work commenced on Apr. 28.
Seismic reinforcement works for stack							Reinforcement work commenced on Jun. 23.	
Unit No.6	Functional test for the entire plant						Final evaluation of functional tests for the entire plant completed on Sep. 28.	
Unit No.7	Functional test for the entire plant						Final evaluation of functional tests for the entire plant completed on Jun. 19.	
	Planned shutdown of the unit						Unit shutdown for refueling conducted from Sep. 26.	
Transformer (common) / Switch Yard	High-voltage start-up transformer #2 inspection					▼	Carrying in and installation work to be commenced on Nov. 9.	
	On-site check / inspection / restoration of the oil protection bank for the transformer						Unit No.2 Preparation for restoration work commenced on May 20, 2008.	
Environmental Facilities	House boilers inspection						(Arahama-side) 1A Inspection to be conducted from Apr. 8, 2008 to late November 2009. 3A Electric boiler transformer carrying in and installation commenced on Oct. 13.	
	Restoration work of filtrate tank / demineralized tank on Arahama-side						Restoration work of No.1 demineralized tank commenced on May 26. Restoration work of No.1 filtrate tank commenced on Jun. 1.	
Others	Restoration work for solid waste storage facility						Prevention countermeasure for drum falling commenced on Jan. 16.	
	Restoration work for administration building / information building, etc.						Restoration work for administration building and information building is underway.	
	Reinforcement works for spent fuel transportation cask storage building					▼	Preparation for reinforcement work to be conducted from Aug. 24 to Nov. 1. Reinforcement work to be commenced on Nov. 2.	
	Construction of seismic-isolated essential buildings						Construction commenced on Oct. 14, 2008.	
	Restoration of laundry facility building on Arahama-side						Restoration work commenced on Jan. 30.	
	Reconstruction of arrester steel tower on Arahama-side						Reconstruction commenced on Jun. 17.	
	Reconstruction of arrester steel tower on Ominato-side						Reconstruction commenced on Sep. 3.	
	Restoration and reinforcement work for the on-site / outside roads & slope, etc.						Restoration work for roads inside and outside of the site currently in progress. Maintenance work of the slope in front of sub protection headquarter office commenced on May 13. Restoration work of Daini Takamachi Bridge commenced on May 12. Maintenance work for the slope behind Daini Kigyuu Center commenced on Oct. 20.	
Restoration work for port facility						Restoration work for bank protection commenced on Apr. 3, 2008.		

※ Inspection results for each facilities will be announced as soon as they compiled.

※ Inspection and restoration work and execution date for each item may alter according to the situation.