

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 December 20, 2009 (Sun) to January 16, 2010 (Sat)

System / Equipment	Items	December 20 (Sun) to December 26 (Sat)	December 27 (Sun) to January 2 (Sat)	January 3 (Sun) to January 9 (Sat)	January 10 (Sun) to January 16 (Sat)	Status of Inspection / Restoration	
Unit No.1	Reactor facilities	Fuel-load work				Fuel-load work completed on Dec. 18. Core status confirmation completed on Dec. 21.	
		Reactor pressure vessel closure				Closure work to be conducted from Dec. 22, 2009 to Jan. 8, 2010.	
		Primary containment vessel closure					Closure work to be commenced on Jan. 9, 2010.
	Turbine facilities	Turbine inspection				High-pressure turbine and low pressure turbine (A) (B) (C) detailed inspection completed on Dec. 19. Restoration of high-pressure turbine and low pressure turbine (A) (B) (C) completed on Dec. 19.	
	Other facilities	Main transformer inspection				Carrying in and installation work to be conducted from Apr. 20 to Dec. 25. Pre-operational test completed on Dec. 17.	
		House transformer inspection				1A, 1B Carrying in and installation work to be conducted from Mar. 30 to Dec. 25.	
		Excitation transformer inspection				Carrying in and installation work to be conducted from Mar. 30 to Dec. 25.	
		Main generator inspection					Inspection to be conducted from Feb. 7, 2008 to Jan. 15, 2010.
		Circulating water pipe inspection					Foundation improvement, excavating work, and inspection of pipes to be conducted from Aug. 6, 2008 to Jan. 12, 2010.
	Verification of system integrity	System functional test					System functional test commenced on Nov. 17, 2009. Management conditions confirmation of solid waste storage facility conducted on Dec. 17. Functional test of main steam isolation valve conducted on Dec. 19. Reactor shut-down margin inspection conducted on Dec. 20. Partial interlock functional test of liquid waste storage facility and disposal equipment #1 conducted on Dec. 22. Partial interlock functional test of liquid waste storage facility and disposal equipment #1 to be conducted on Dec. 25. Partial interlock functional test of liquid waste storage facility and disposal equipment #2 to be conducted on Dec. 25. Functional test of control rod drive mechanism to be conducted on Jan. 5, 2010. Functional test of control rod drive system to be conducted from Jan. 7 to Jan. 8, 2010.
Unit No.2	Turbine facilities	Turbine inspection				High-pressure turbine and low-pressure turbine (A) (B) (C) detailed inspection commenced on Dec. 7.	
	Other facilities	House transformer inspection				Carrying in and installation work commenced on Nov. 30.	
		Excitation transformer inspection				Carrying in and installation work commenced on Nov. 30.	
		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 substructure 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.	
	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 to be conducted from Jul. 17, 2009 to Jan. 29, 2010.	
		Main exhaust duct inspection / restoration				Restoration work of substructure commenced on Jan. 9, 2009. 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				Reinforcement work commenced on Dec. 8.	
		Seismic reinforcement works for stack				Reinforcement work commenced on Jul. 21.	
		Seismic reinforcement works for the fuel handling machine				Reinforcement work 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.	
		500kV power cable inspection				Preparation for laying cables commenced on Nov. 26.	
		Main exhaust duct inspection / restoration				Preparation for restoration work commenced on Jun. 23, 2008.	
Restoration work of standby gas treatment system piping duct substructure					Restoration work commenced on Oct. 30.		
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.	

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)

【Inspection/Restoration Status】

◆From December 20, 2009 (Sun) to January 16, 2010 (Sat)

System / Equipment	Items	December 20 (Sun) to December 26 (Sat)	December 27 (Sun) to January 2 (Sat)	January 3 (Sun) to January 9 (Sat)	January 10 (Sun) to January 16 (Sat)	Status of Inspection / Restoration	
Unit No.5	Turbine facilities	Turbine inspection				High-pressure turbine and low-pressure turbine (A) (B) (C) detailed inspection completed on Dec. 17. Restoration work of high-pressure turbine and low-pressure turbine (A) (B) (C) completed on Dec. 17.	
	Other facilities	Main transformer inspection					Carrying in and installation work to be conducted from Mar. 25 to Dec. 25.
		House transformer inspection					5A, 5B Carrying in and installation work to be conducted from Apr. 25 to Dec. 25.
		Excitation transformer inspection					Carrying in and installation work to be conducted from Mar. 2 to Dec. 25.
		Circulating water pipe inspection					Foundation improvement, excavating work, and inspection of pipes completed on Dec.17.
Seismic reinforcement	Seismic reinforcement works for stack					Reinforcement work commenced on Jun. 23.	
Verification of system integrity	System functional test					System functional test commenced on Nov. 13. Partial interlock functional test of liquid waste storage facility and disposal equipment #1 conducted on Dec. 22. Functional test of feedwater pump to be conducted on Dec. 24.	
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	General integration inspection					General integration inspection to be conducted from Dec. 27 to Dec. 28.	
Transformer (common) / Switch Yard	High-voltage start-up transformer #2 inspection					Carrying in and installation work commenced on Nov. 9.	
	On-site check / inspection / restoration of the oil protection bank for the transformer					Unit No.2 Restoration work commenced on Nov. 17.	
Environmental Facilities	House boilers inspection					(Arahama-side) 1A Inspection completed on Dec. 10. 3A Electric boiler transformer carrying in and installation work commenced on Oct. 13.	
	Restoration work of filtrate tank / demineralized tank on Arahama-side					Restoration work of No.1 demineralized tank to be conducted from May 26 to Dec. 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, 2009.	
	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					Reinforcement work commenced on Nov. 2.	
	Construction of seismic-isolated essential buildings					Construction to be conducted from Oct. 14, 2008 to Dec. 25, 2009.	
	Restoration of laundry facility building on Arahama-side					Restoration work commenced on Jan. 30, 2009.	
	Reconstruction of arrestor steel tower on Arahama-side					Reconstruction commenced on Jun. 17.	
	Reconstruction of arrestor 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. Restoration work of Daini Takamachi Bridge commenced on May 12. Maintenance work for the slope behind Daini Kigyou Center commenced on Oct. 20.	

* 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.

* Unit No. 6 and Unit No. 7 are in the pre-conditioning operation at rated thermal output.

* The works to be suspended for the year-end and new year recess from Dec. 27 to Jan. 3. Periods may alter according to the progress situation of each work and inspection.