

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 6, 2009 (Sun) to January 2, 2010 (Sat)

System / Equipment	Items	December 6 (Sun) to December 12 (Sat)	December 13 (Sun) to December 19 (Sat)	December 20 (Sun) to December 26 (Sat)	December 27 (Sun) to January 2 (Sat)	Status of Inspection / Restoration
Unit No.1	Reactor facilities	Fuel-load work				Fuel-load work to be conducted from Dec. 12 to Dec. 19. Core status confirmation to be conducted on Dec. 20 and Dec. 21.
		Reactor pressure vessel closure				Closure work to be commenced on Dec. 22.
	Turbine facilities	Turbine inspection				High-pressure turbine and low pressure turbine (A) (B) (C) detailed inspection to be conducted from Nov. 17, 2008 to Dec. 19, 2009. Restoration of high-pressure turbine and low pressure turbine (A) (B) (C) to be conducted from Nov. 19, 2009 to Dec. 19, 2009. .
	Other facilities	Main transformer inspection				Carrying in and installation work to be conducted from Apr. 20 to Dec. 25. Pre-operational test to be conducted on Dec. 16 and 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 commenced on Feb. 7, 2008.
		500kV power cable inspection				Laying cables completed on Nov. 28.
		Main exhaust duct inspection / restoration				Restoration work of main exhaust duct completed on Dec. 2.
		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 completed on Dec. 9.
		Seismic reinforcement works for stack (Unit No.1 and Unit No.2)				Reinforcement work to be conducted from Jul. 27 to Dec. 10.
		Seismic reinforcement works for emergency intake channel				Foundation improvement work completed on Dec. 4. Reinforcement work for the bank protection connection completed on Dec. 4.
	Verification of system integrity	System functional test				System functional test commenced on Nov. 17, 2009. Rated capacity verification test for emergency diesel generator conducted on Dec. 3 and Dec. 4. Functional test of the emergency diesel generator, high pressure core spray system diesel generator, high pressure core spray system, low pressure core spray system, low pressure flooder system and reactor component cooling water system to be conducted on Dec. 9 and Dec. 10. Test run #3 of the auxiliary boiler to be conducted on Dec. 9 and Dec. 10. Functional test of instrument compression air system to be conducted on Dec. 11. Functional test of liquid waste disposal system to be conducted on Dec. 14 and Dec. 16. Functional test of automatic depressurization system to be conducted on Dec. 15. Management conditions confirmation of solid waste storage facility to be conducted on Dec. 17.
	Unit No.2	Turbine facilities	Turbine inspection			
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 to Dec. 18. Voltage application test conducted on Nov. 30.
		Main exhaust duct inspection / restoration				Restoration work of substructure 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 completed on Dec. 7. 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 6, 2009 (Sun) to January 2, 2010 (Sat)

System / Equipment	Items	December 6 (Sun) to December 12 (Sat)	December 13 (Sun) to December 19 (Sat)	December 20 (Sun) to December 26 (Sat)	December 27 (Sun) to January 2 (Sat)	Status of Inspection / Restoration	
Unit No.5	Turbine facilities	Turbine inspection					High-pressure turbine and low-pressure turbine (A) (B) (C) detailed inspection to be conducted from May 25 to Dec. 17. Restoration work of high-pressure turbine and low-pressure turbine (A) (B) (C) to be conducted from Oct. 29 to Dec. 17.
	Other facilities	Main transformer inspection					Carrying in and installation work to be conducted from Mar. 25 to Dec. 25. Pre-operational test completed on Dec. 3.
		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.
		500kV power cable inspection					Laying cables completed on Nov. 28.
		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 completed on Dec. 3.
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, 2009. Functional test of main steam isolation valve to be conducted on Dec. 11. Interlock functional test of reactor protection system to be conducted on Dec. 15. (Carried over from Nov. 16.)	
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.	
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 to be conducted from Apr. 8, 2008 to Dec. 10, 2009. 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 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					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.	
	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. Maintenance work of the slope in front of sub protection headquarter office completed on Nov. 30. Restoration work of Daini Takamachi Bridge commenced on May 12. Maintenance work for the slope behind Daini Kigyou Center commenced on Oct. 20.	
	Restoration work for port facility					Restoration work for bank protection completed on Nov. 30.	

* 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.