

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)(1/3)

【Inspection/Restoration Status】

◆From February 3rd, 2008 (Sun) to March 1st, 2008 (Sat)

System/Equipment	Items	Feb. 3rd (Sun) to Feb. 9th (Sat)	Feb. 10th (Sun) to Feb. 16th (Sat)	Feb. 17th (Sun) to Feb. 23rd (Sat)	Feb. 24th (Sun) to Mar. 1st (Sat)	Status of Inspection/Restoration	
Unit No.1	Reactor facilities	Refueling floor service tools inspection (stud tensioners, etc.) preparation					Preparation for inspection completed on Jan. 27.
		Reactor pressure vessel inspection preparation				Preparation for inspection of nozzle parts etc. completed on Jan. 30.	
							inspection
	Pressure suppression chamber inspection preparation				Preparation for pressure suppression chamber inspection completed on Jan. 28.		
						inspection	
	Fuel / control rod inspection						
	Turbine facilities	Turbine internal inspections *2					Low pressure turbine (B) internal inspection completed on Nov. 30.
	Other facilities	Submerged equipment inspection on ground floor 5 of the reactor combination building					Provisional restoration of low conductivity waste system (A) completed on Oct. 15, and (B) completed on Dec. 17. Provisional restoration of high conductivity waste system (A) completed on Nov. 9, and (B) completed on Dec. 26. Provisional restoration of storm drain system (B) completed on Dec. 18, and (A) completed on Dec. 25.
		Main transformer inspection (preparation for transportation into the factory)					Inspection completed on Nov. 23. Preparation for transportation into the factory conducted from Oct. 29 to Dec. 28. Coordinating for the start date of transportation.
House transformers inspection (preparation for transportation into the factory)						1A Inspection completed on Sept. 4. 1B Inspection completed on Oct. 12. Coordinating for the start date of transportation into the factory.	
Excitation transformers inspection (preparation for transportation into the factory)						Inspection completed on Oct. 18. Coordinating for the start date of transportation into the factory.	
Main generator inspection						Inspection to be commenced on Feb. 15.	
Unit No.2	Reactor facilities	Fuel / control rod inspection				Inspection planned from Nov. 27 to Nov. 30, from Dec. 25 to Feb. 9 and in mid-March.	
	Turbine facilities	Turbine internal inspections *2				High pressure turbine and low pressure turbine (A) internal inspection completed on Dec. 21.	
	Other facilities	Main transformer inspection (preparation for transportation into the factory)					Preparation for transportation into the factory planned from Nov. 1 to Dec. 28, and Feb. 12 to Mar. 7. Coordinating for the start date of transportation.
		House transformers inspection (preparation for transportation into the factory)					2A Inspection completed on Nov. 13. 2B Inspection completed on Nov. 19. Coordinating for the start date of transportation into the factory.
	Excitation transformers inspection (preparation for transportation into the factory)					Inspection completed on Dec. 6. Coordinating for the start date of transportation into the factory.	
Unit No.3	Reactor facilities	In-core inspection preparation					Phase3*1 preparation for inspection completed on Feb. 5.
		Reactor pressure vessel inspection preparation				Preparation for inspection of nozzle parts etc. planned from Jan. 21 to Feb. 21.	
							inspection
	Inspection of reactor recirculation piping applicable to the Fitness-for-Service rule					Inspection planned from Jan. 22 to Feb. 14.	
	Turbine facilities	Turbine internal inspections *2					High pressure turbine and low pressure turbine (A) internal inspection completed on Dec. 14.
	Other facilities	Main transformer inspection (preparation for transportation into the factory)					Inspection completed on Oct. 26. Preparation for transportation into the factory completed on Nov. 26. Coordinating for the start date of transportation.
		House transformers inspection (preparation for transportation into the factory)					3A Inspection completed on Oct. 22. Preparation for transportation into the factory to be commenced on Feb. 20. * 3B Transportation completed on Sept. 20.
Excitation transformers inspection (preparation for transportation into the factory)						Inspection completed on Nov. 3. Coordinating for the start date of transportation into the factory.	
Main generator inspection						Inspection to be commenced on Feb. 18.	

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)(2/3)

【Inspection/Restoration Status】

◆From February 3rd, 2008 (Sun) to March 1st, 2008 (Sat)

System/Equipment	Items	Feb. 3rd (Sun) to Feb. 9th (Sat)	Feb. 10th (Sun) to Feb. 16th (Sat)	Feb. 17th (Sun) to Feb. 23rd (Sat)	Feb. 24th (Sun) to Mar. 1st (Sat)	Status of Inspection/Restoration
Unit No.4	Reactor facilities	In-core inspection				Phase1 & 2 ⁺ inspection completed on Jan. 16. Phase3 ⁺ inspection completed on Feb. 5.
		Reactor pressure vessel inspection				Preparation for inspection of nozzle parts etc. planned from Jan. 16 to Feb. 8.
		preparation inspection				Inspection of nozzle parts etc. planned from Dec. 8 to Dec. 18, and from Jan. 28 to Feb. 14.
	Turbine facilities	Turbine internal inspections *2				High pressure turbine and low pressure turbine (A) internal inspection completed on Dec. 14.
	Other facilities	Main transformer inspection (preparation for transportation into the factory)				Inspection completed on Dec. 13. Preparation for transportation into the factory conducted from Dec. 14 to Dec. 27. Coordinating for start date of transportation.
		House transformers inspection				4A, 4B Coordinating for the start date of inspection.
		Excitation transformers inspection				Coordinating for the start date of inspection.
Main generator inspection					Inspection commenced on Jan. 15. Withdrawal of the rotor planned on Feb. 14.	
Unit No.5	Reactor facilities	Jet pump inspection				No.1 Visual inspection to be conducted on Jan. 18 prior to disassembly. Coordinating for the start date of disassembly.
		Fuel / control rod inspection				Inspection planned from Feb. 14 to early March.
	Turbine facilities	Turbine internal inspections *2				High pressure turbine and low pressure turbine (A) internal inspection completed on Dec. 14.
	Other facilities	Main transformer inspection (preparation for transportation into the factory)				Inspection completed on Nov. 29. Preparation for transportation into the factory conducted from Nov. 30 to Dec. 25. Coordinating for the start date of transportation into the factory.
		House transformers inspection (oil extraction / internal inspection)				5A Preparation for inspection planned from Feb. 11 to Feb. 24. 5B Preparation for inspection to be commenced on Feb. 27.
		preparation inspection				5A Internal inspection planned from Feb. 25 and 26. 5B Internal inspection to be commenced on Mar. 10.
Excitation transformers inspection (oil extraction / internal inspection)					Coordinating for the start date of inspection.	
Main generator inspection				Inspection commenced on Nov. 3. Transportation of rotor into the factory completed on Dec. 1.		
Unit No.6	Reactor facilities	Pressure suppression chamber inspection				Preparation for inspection of reactor pressure vessel completed on Feb. 6.
		preparation inspection				Inspection planned from Feb. 7 to Mar. 8.
		In-core inspection				Phase 3 ⁺ inspection completed on Jan. 28.
		Fuel / control rod inspection				Inspection planned from Feb. 1 to mid-March.
	Turbine facilities	Turbine internal inspections *2				High pressure turbine and low pressure turbine (A) internal inspection completed on Oct. 25.
	Other facilities	Main transformer inspection				Transportation into the factory completed on Oct. 31.
		House transformers inspection				6A, 6B Preparation for carrying in planned from Feb. 25 to Feb. 27.
		Reactor internal pump input transformer inspection				Preparation for carrying in to be commenced on Feb. 25.
		500kV power cable (OF cable) inspection				Inspection to be commenced on Feb. 9.
		Discharge canal inspection / restoration				Discharge canal inspection completed on Sept. 29. Preparation for maintenance commenced on Dec. 3.
preparation inspection					Internal inspection of discharge canal to be commenced on Feb. 26.	

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)(3/3)

【Inspection/Restoration Status】

◆From February 3rd, 2008 (Sun) to March 1st, 2008 (Sat)

System/Equipment	Items	Feb. 3rd (Sun) to Feb. 9th (Sat)	Feb. 10th (Sun) to Feb. 16th (Sat)	Feb. 17th (Sun) to Feb. 23rd (Sat)	Feb. 24th (Sun) to Mar. 1st (Sat)	Status of Inspection/Restoration
Unit No.7	Reactor facilities	Pressure suppression chamber inspection preparation	▶			Preparation for inspection of reactor pressure vessel planned from Jan. 28 to Feb. 7.
		inspection	▶			Inspection planned from Feb. 7 to Feb. 25.
		Fuel / control rod inspection	▶			Inspection planned from Nov. 19, Nov. 20, Dec. 4, Dec. 5, and from Jan. 23 to Feb. 19. *3
		Reactor-well inspection	▶			Inspection and provisional restoration completed on Nov. 15. (Vacuum work is still underway.) Lining to be repaired planned from Jan.18 to Feb. 16.
	Turbine facilities	Turbine internal inspections *2	▶			High pressure turbine and low pressure turbine (A) (B) (C) detailed inspection commenced on Dec. 1.
	Other facilities	Main transformer inspection	▶			Transportation into the factory completed on Oct. 25.
		House transformers inspection	▶			7A, 7B Transportation into the factory completed on Dec. 6.
		Reactor internal pump input transformer inspection	▶			Two units carried out to the factory on Nov. 19. Two units carried out to the factory on Nov. 24. (total of 4 units).
		Main generator inspection	▶			Inspection commenced on Nov. 2. Withdrawal of the rotor completed on Nov. 20.
		500kV power cable (OF cable) inspection	▶			Inspection to be commenced on Jan. 22.
Discharge canal inspection / restoration		preparation	▶			Discharge canal inspection completed on Oct. 10. Preparation for maintenance commenced on Dec. 3.
	inspection	▶			Internal inspection of discharge canal to be commenced on Feb. 26.	
Transformer (common) / Switch Yard	High-voltage start-up transformer #1 inspection	▶			Work for installation commenced on Dec. 7. Planned to be received power on Feb. 28.	
	On-site check / inspection / restoration of the oil protection bank for the transformer	▶			Unit No.7 Restoration work commenced on Dec. 25. Unit No. 7 Foundation repair work to be commenced on Feb. 18 (Pile drive works.) Unit No.3 Preparation for restoration work commenced on Feb. 12.	
Environmental Facilities	Inspection of house boilers	▶			House boiler (Arahama-side) 1A, 2A, 2B: Inspection underway. (Ohminato-side) 4A: Inspection underway. 4B: Inspection completed on Oct. 23.	
Solid Waste Storage Facility	Restoration work	▶			Drum soundness verification work commenced on Oct. 9. Drums to be transferred to temporary warehouse from Feb. 6.	
Others	Restoration work for administration building / information building, etc.	▶			Repair work of the second floor of the administrative building, and the first and second floors of information building is underway.	
	Restoration work for the on-site / outside roads & slope, etc.	▶			Restoration of the slope completed on Oct. 22. Restoration work for roads inside and outside of the site currently in progress.	
	Replacement of seismic data recorders	▶			Unit No.1 Replacement completed on Dec. 27. Unit No.5 Replacement completed on Jan. 18. Unit No.6 Replacement planned from Jan. 28 to Feb. 8.	
	Outdoor fire protection system piping to be placed above ground, installation of fire protection tank, etc.	▶			Site inspection commenced on Dec.25. Installation of fire protection tank to be commenced on Feb. 19 (17 tanks).	
	Pre-construction geological survey for seismic-isolated essential buildings	▶			Survey planned from Feb. 4 to Feb. 29.	
	Inspection of spent fuel transportation cask	▶			Inspection to be commenced on Feb. 5.	

※ 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.

*1 Phase 1 : Inspection for the upper part of reactors, Phase 2 : Inspection for the middle part (reactor core) of the reactor, Phase 3 : Inspection for the bottom part of the reactor.

*2 Turbine inspection work will be conducted as follows:

- All units will be inspected in detail by opening all turbine casings after conducting internal inspection.

- Internal inspection will be conducted by opening the high-pressure turbine and low-pressure turbine (A) and visually checking for damages or significant deformation in major components such as the casings and blades.

(For the unit No. 1, since the high-pressure turbine and low-pressure turbines (A) and (C) had been opened for regular outage at the time of the earthquake, inspections will be conducted for the low-pressure turbine (B) that had not been opened.)

- Detailed inspection includes, in addition to regular full-scope inspection, special inspection in consideration of the impact of the earthquake and necessary repairs in case damages are found.

*3 Revised on Feb. 22, 2008: only preparation works were conducted on Nov. 17 and 18.

To be corrected: To be inspected from Nov. 17 to Nov. 20, Dec. 4, Dec. 5 and from Jan. 23 to Feb. 22.