

Progress milestone dates are defined as follows:

Removal: The date when an equipment is removed

Entry to power station: The date when an equipment is carried into the relevant building within the premises after repair/production

Installation: The date when all the equipments are installed on the mount

Function check: The date when an equipment is checked and confirmed that the unit is recovered and functions as a system

(e.g.) For power panels, the date when they start receiving power supply; for facilities, the date when trial running after system recovery (except for power supply) is conducted and confirmed that there is no problem; etc.

Switch to permanent installation: The date of switching from temporary installation to permanent installation (mainly for power supply)

Planned completion of permanent installation: Planned date when permanent installation is completed

(The completion date for equipments that have already completed the permanent installation)

Fukushima Daini Nuclear Power Station: Progress Status Based on the Recovery Plan (As of the End of July 2012)

Unit 1		Legend: : Underway, inspection, repair : Completed : Not started : Outside of the scope Write the date when finished (completed) : Updated from the previous monthly report							
Equipment		Work type	Removal	Entry to power station	Installation	Function check	Switch to permanent installation	Planned completion of permanent installation	Internal inspection
6.9 kV power system	C system	New production of power panel (M/C 1C)	2011/10/31	2012/3/15	2012/3/28			2012 1st half	
	H system	New production of power panel (M/C 1HPCS)						2012 2nd half	
480 V power system	C-1 system	New production of power panel (P/C 1C-1)	2011/12/7	2012/4/13	2012/4/19			2012 2nd half*1	
	C-2 system	New production of power panel (P/C 1C-2)	2011/11/11	2012/7/3	2012/7/10			2012 2nd half*1	
	D-2 system	New production of power panel (P/C 1D-2)	2011/12/14	2012/6/12	2012/6/18			2012 2nd half*1	
Emergency diesel generator	Control panel and related equipment	New production						2012 2nd half	
	Power generator	New production & repair	2011/8/29					2012 2nd half	
	Diesel engine	Repair						2012 2nd half	
	Auxiliary facility	New production & repair	2012/1/23					2012 2nd half	
	Control panel and related equipment	New production	2011/11/15					2012 2nd half	
	Power generator	New production & repair	2011/10/19					2012 2nd half	
	Diesel engine	Repair						2012 2nd half	
	Auxiliary facility	New production & repair	2012/1/23					2012 2nd half	
DC power supply	Battery charger	New production	2011/9/16					2012 2nd half	
	Battery	New production	2011/6/3					2012 2nd half	
Seismometer		New production & replacement		2012/6/1	2012/6/13			2012 2nd half	
Low-pressure core spray system		Recovery of high-voltage power supply (M/C 1C) system and cables						2012 2nd half*1	

Fukushima Daini Nuclear Power Station: Progress Status Based on the Recovery Plan (As of the End of July 2012)

Unit 1

Legend: : Underway, inspection, repair : Completed : Not started : Outside of the scope
Write the date when finished (completed) : Updated from the previous monthly report

Equipment		Work type	Removal	Entry to power station	Installation	Function check	Switch to permanent installation	Planned completion of permanent installation	Internal inspection
Residual heat removal system	A system	Recovery of high-voltage power supply (M/C 1C) system and cables				2011/11/17		2012 2nd half* ¹	
	C system	Recovery of high-voltage power supply (M/C 1C) system and cables						2012 2nd half* ¹	
Residual heat removal system cooling system	A system	Recovery of power supply (P/C 1C-2) system and cables		2011/10/26	23.10.27	2011/11/9		2012 2nd half	
	B system	Recovery of power supply (P/C 1D-2) system and cables		2011/9/20	2011/9/21	2011/9/26		2012 2nd half* ¹	
	C system	Recovery of power supply (P/C 1C-2) system and cables		2012/5/22	2012/5/22	2012/7/24		2012 2nd half	
	D system	Recovery of power supply (P/C 1D-2) system and cables		2011/9/20	2011/9/20	2012/3/15		2012 2nd half* ¹	
Residual heat removal system cooling seawater system	A system	Recovery of power supply (P/C 1C-2) system and cables		2011/8/5	2011/11/2	2011/11/11		2012 2nd half	
	B system	Recovery of power supply (P/C 1D-2) system and cables			2012/4/5	2012/4/12		2012 2nd half* ¹	
	C system	Recovery of power supply (P/C 1C-2) system and cables		2011/8/5	2012/5/15			2012 2nd half	
	D system	Recovery of power supply (P/C 1D-2) system and cables			2012/1/6	2012/1/12		2012 2nd half* ¹	
Emergency diesel generator cooling system	A system	Recovery of power supply (P/C 1C-2) system and cables		2011/10/26	2011/10/27	2011/11/4		2012 2nd half	
	B system	Recovery of power supply (P/C 1D-2) system and cables		2011/11/22	2011/11/25	2011/11/26		2012 2nd half* ¹	
Reactor water cleanup system	A system	Recovery of power supply (P/C 1C-1) system and cables, and permanent installation of						2012 2nd half	
	B system	Permanent installation of purge line						2012 2nd half* ¹	
High-pressure core spray system		Recovery of high-voltage power supply (M/C 1HPCS) system and cables						2012 2nd half	
High-pressure core spray system closed cooling system		Recovery of high-voltage power supply (M/C 1HPCS) system and cables						2012 2nd half	
High-pressure core spray system closed cooling seawater system		Recovery of high-voltage power supply (M/C 1HPCS) system and cables						2012 2nd half	
Reactor auxiliary cooling system	A system	Recovery of power supply (P/C 1C-2) system and cables		2012/6/12	2012/6/13	2012/6/19		2012 2nd half	
	B system	Recovery of power supply (P/C 1D-2) system and cables		2011/7/2	2011/7/4	2011/7/4		2012 2nd half* ¹	
Condensate water makeup system	A system	Recovery of power supply (P/C 1C-1) system and cables						2012 2nd half	
Standby gas treatment system	A system	Recovery of power supply (P/C 1C-1) system and cables						2012 2nd half	

* MC: Metal-Clad Switch Gear

Power panel used for in-plant high voltage circuit, which is compact storage of magnetic or vacuum circuit breaker, protective relay, and ancillary meters.

* P/C: Power Center

Power panel used for in-plant low voltage circuit, which is compact storage of air circuit breaker (ACB), protective relay, and ancillary meters.

* Purge line: Seal water line of reactor water cleanup system pump

Current progress rate is **44%** (Previous month: 41%)

Note: Progress rate = (Number of completion columns)/(Total columns from removal to permanent installation - Number of columns in scope) x 100

* At the internal inspection after the permanent installation, the equipments subject to the Recovery Plan will be tested.

*¹ The planned completion of permanent installation has been changed to "2012 2nd half" according to the changes made to the restoration plan.

Fukushima Daini Nuclear Power Station: Progress Status Based on the Recovery Plan (As of the End of July 2012)

Unit 2

Legend: : Underway, inspection, repair : Completed : Not started : Outside of the scope
Write the date when finished (completed) : Updated from the previous monthly report

Equipment	Work type	Removal	Entry to power station	Installation	Function check	Switch to permanent installation	Planned completion of permanent installation	Internal inspection
480 V power system	C-2 system	New production of power panel (P/C 2C-2)	2012/6/13				2012 2nd half	
	D-2 system	New production of power panel (P/C 2D-2)	2012/7/6				2012 2nd half	
Residual heat removal system cooling system	A system	Recovery of power supply (P/C 2C-2) system and cables			2011/8/6		2012 2nd half	
	B system	Recovery of power supply (P/C 2D-2) system and cables			2011/3/14		2012 2nd half	
	C system	Recovery of power supply (P/C 2C-2) system and cables					2012 2nd half	
	D system	Recovery of power supply (P/C 2D-2) system and cables			2011/3/24		2012 2nd half	
Residual heat removal system cooling seawater system	A system	Recovery of power supply (P/C 2C-2) system and cables		2011/7/28	2011/7/28	2011/8/6	2012 2nd half	
	B system	Recovery of power supply (P/C 2D-2) system and cables		2012/3/1			2012 2nd half	
	C system	Recovery of power supply (P/C 2C-2) system and cables		2011/8/2			2012 2nd half	
	D system	Recovery of power supply (P/C 2D-2) system and cables		2011/9/12	2011/9/12	2011/10/12	2012 2nd half	
Emergency diesel generator cooling system	A system	Recovery of power supply (P/C 2C-2) system and cables		2011/7/26	2011/7/26	2011/8/3	2012 2nd half	
	B system	Recovery of power supply (P/C 2D-2) system and cables				2011/3/14	2012 2nd half	
Reactor auxiliary cooling system	A system	Recovery of power supply (P/C 2C-2) system and cables		2012/6/5	2012/6/5	2012/6/14	2012 2nd half	
	B system	Recovery of power supply (P/C 2D-2) system and cables		2011/6/28	2011/6/28	2011/7/12	2012 2nd half	
Reactor water cleanup system	A system	Permanent installation of purge line					2012 2nd half ^{*1}	
	B system	Permanent installation of purge line				*2	2012 2nd half ^{*1}	
High-pressure core spray system closed cooling seawater system	New production of motor		2011/9/2				2012 1st half	

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Power panel used for in-plant high voltage circuit, which is compact storage of magnetic or vacuum circuit breaker, protective relay, and ancillary meters.

* P/C: Power Center

Power panel used for in-plant low voltage circuit, which is compact storage of air circuit breaker (ACB), protective relay, and ancillary meters.

* Purge line: Seal water line of reactor water cleanup system pump

Current progress rate is **46%** (Previous month: 43%)

Note: Progress rate = (Number of completion columns)/(Total columns from removal to permanent installation - Number of columns in scope) x 100

* At the internal inspection after the permanent installation, the equipments subject to the Recovery Plan will be tested.

* Progress rate is the same as the previous month because there was no change in each step. However, the recovery tasks are proceeding steadily.

^{*1} The planned completion of permanent installation has been changed to "2012 2nd half" according to the changes made to the restoration plan.

^{*2} The status has been changed from "Not started" to "Outside of the scope" according to the revised definition of each step of progress.

Fukushima Daini Nuclear Power Station: Progress Status Based on the Recovery Plan (As of the End of July 2012)

Unit 3

Legend: : Underway, inspection, repair : Completed : Not started : Outside of the scope
Write the date when finished (completed) : Updated from the previous monthly report

Equipment		Work type	Removal	Entry to power station	Installation	Function check	Switch to permanent installation	Planned completion of permanent installation	Internal inspection
480 V power system	C-2 system	New production of power panel (P/C 3C-2)	2011/9/15	2012/1/26	2012/1/27			2012 1st half	
Residual heat removal system cooling system	A system	Recovery of power supply (P/C 3C-2) system and cables		2011/8/2	2011/8/3	2011/8/26		2012 1st half	
	C system	Recovery of power supply (P/C 3C-2) system and cables		2011/8/29	2011/8/30	2011/9/9		2012 1st half	
Residual heat removal system cooling seawater system	A system	Recovery of power supply (P/C 3C-2) system and cables		2011/8/24	2011/8/24	2011/8/30		2012 1st half	
	C system	Recovery of power supply (P/C 3C-2) system and cables		2011/9/5	2011/9/7	2011/9/14		2012 1st half	
Emergency diesel generator cooling system	A system	Recovery of power supply (P/C 3C-2) system and cables		2011/8/2	2011/8/3	2011/8/23		2012 1st half	
Reactor water cleanup system	A system	Permanent installation of purge line						2012 1st half	
	B system	Permanent installation of purge line						2012 1st half	

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* P/C: Power Center

Power panel used for in-plant low voltage circuit, which is compact storage of air circuit breaker (ACB), protective relay, and ancillary meters.

* Purge line: Seal water line of reactor water cleanup system pump

Current progress rate is **69%** (Previous month: 69%)

Note: Progress rate = (Number of completion columns)/(Total columns from removal to permanent installation - Number of columns in scope) x 100

* At the internal inspection after the permanent installation, the equipments subject to the Recovery Plan will be tested.

* Progress rate is the same as the previous month because there was no change in each step. However, the recovery tasks are proceeding steadily.

Fukushima Daini Nuclear Power Station: Progress Status Based on the Recovery Plan (As of the End of July 2012)

Unit 4

Legend: : Underway, inspection, repair : Completed : Not started : Outside of the scope
Write the date when finished (completed) : Updated from the previous monthly report

Equipment		Work type	Removal	Entry to power station	Installation	Function check	Switch to permanent installation	Planned completion of permanent installation	Internal inspection
480 V power system	C-2 system	New production of power panel (P/C 4C-2)	2011/9/7	2011/12/2	2011/12/9	2012/1/30		2012/1/30	2010/5/15
	D-2 system	New production of power panel (P/C 4D-2)	2011/9/30	2012/2/28	2012/3/8	2012/3/23		2012/3/23	2010/5/16
Residual heat removal system cooling system	A system	Recovery of power supply (P/C 4C-2) system and cables		2011/7/8	2011/7/8	2011/7/25	2012/2/24	2012/2/24	2010/5/15
	B system	Recovery of power supply (P/C 4D-2) system and cables		2011/7/5	2011/7/5	2011/7/7	2012/4/11	2012/4/11	2010/5/16
	C system	Recovery of power supply (P/C 4C-2) system and cables		2012/4/19	2012/4/19	2012/4/26	2012/4/26	2012/4/26	2010/5/15
	D system	Recovery of power supply (P/C 4D-2) system and cables		2011/9/5	2011/9/5	2011/9/29	2012/4/12	2012/4/12	2010/5/16
Residual heat removal system cooling seawater system	A system	Recovery of power supply (P/C 4C-2) system and cables		2011/7/27	2011/7/27	2011/8/2	2012/2/24	2012/2/24	2010/5/15
	B system	Recovery of power supply (P/C 4D-2) system and cables		2011/9/7	2011/9/7	2011/9/21	2012/4/11	2012/4/11	2010/5/16
	C system	Recovery of power supply (P/C 4C-2) system and cables		2011/7/27	2012/4/18	2012/4/26	2012/4/26	2012/4/26	2010/5/15
	D system	Recovery of power supply (P/C 4D-2) system and cables		2012/4/17	2012/4/17	2012/4/25	2012/4/25	2012/4/25	2010/5/16
Emergency diesel generator cooling system	A system	Recovery of power supply (P/C 4C-2) system and cables		2011/7/8	2011/7/8	2011/7/21	2012/2/24	2012/2/24	2010/5/15
	B system	Recovery of power supply (P/C 4D-2) system and cables				2011/3/14	2012/4/12	2012/4/12	2010/5/16
Reactor water cleanup system	A system	Permanent installation of purge line					2012/5/11	2012/5/11	2010/5/17
	B system	Permanent installation of purge line					2012/5/17	2012/5/17	2010/5/17

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Power panel used for in-plant high voltage circuit, which is compact storage of magnetic or vacuum circuit breaker, protective relay, and ancillary meters.

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Power panel used for in-plant low voltage circuit, which is compact storage of air circuit breaker (ACB), protective relay, and ancillary meters.

* Purge line: Seal water line of reactor water cleanup system pump

Restoration completed on May 17 (Progress rate: 100%)

Note: Progress rate = (Number of completion columns)/(Total columns from removal to permanent installation - Number of columns in scope) x 100

* At the internal inspection after the permanent installation, the equipments subject to the Recovery Plan will be tested.

Fukushima Daini Nuclear Power Station Progress status based on Recovery Plan (As of the end of July 2012)

Common facilities

Legend: : Underway, inspection, repair : Completed : Not started : Outside of the scope
 Write the date when finished (completed) : Updated from the previous monthly report

Equipment		Work type	Removal	Entry to power station	Installation	Function check	Switch to permanent installation	Planned completion of permanent installation	Remarks
Outlet monitor	Units 1& 2	New production & replacement						2012 2nd half	
	Units 3& 4	New production & replacement						2012 1st half	

Current progress rate is 0% (Previous month: 0%)

Note: Progress rate = (Number of completion columns)/(Total columns from removal to permanent installation - Number of columns in scope) x 100

* At the internal inspection after the permanent installation, the equipments subject to the Recovery Plan will be tested.