

Time series table of restoration process of the offsite power by emergency measures

This table is organized based on records and hearing investigation to persons involved.

Date	Time	Measures
March 11	1 4 : 4 6	Tohoku-Chihou-Taiheiyou-Okai Earthquake and Tsunami occurred Fukushima Daiichi Nuclear Power Station: Okuma Transmission Line 1L tripped. Shin Fukushima Substation : Okuma Transmission Line 2,3 and 4L tripped. Yonomori Transmission Line 1 and 2L tripped.
	Approx. 1 5 : 0 0	Shin Fukushima Substation: Patrol inspection started. Damages were confirmed.
	Approx. 1 5 : 4 1	Fukushima Daiichi Nuclear Power Station (1F): All of the emergency diesel generators except 6B stopped.
	Approx. 1 6 : 0 5	Transmission Facilities (Okuma Line, Yonomori Line): Patrol inspection started. No damages were confirmed. (Patrol inspection in 1F was not conducted.)
	Approx. 2 0 : 0 5	Transmission Facilities (Yonomori Line) in 1F: Patrol inspection started. Nothing abnormal detected on Transmission Tower 26 and 28. While it was hard to approach Transmission Tower 27 due to landslides, it was estimated from the surrounding situation that the tower collapsed.
March 12	0 : 0 0	Shin Fukushima Substation: Tentative restoration work of the tilted steel structure of Okuma Transmission Line 3 and 4L started. <b>【Work】</b> Point to be fixed: Indicated in Appendix 9
	3 : 3 5	Shin Fukushima Substation: Tentative restoration work of the tilted steel structure of Okuma Transmission Line 3 and 4L completed. <b>【Work】</b>

	8 : 3 5	Shin Fukushima Substation: Tying overhead ground wire of Okuma Transmission Line 3L to the steel structure completed. 【Work 】
	Approx. 1 0 : 0 0 ~	Wait (due to the ventilation work and the explosion of Unit 1 of 1F)
March 13	Approx. 8 : 0 0 ~	Wait (due to the ventilation work of Unit 2 and 3 of 1F)
	1 6 : 3 5	Shin Fukushima Substation: Removal of the overhead ground wire of Okuma Transmission Line 3L completed. 【Work 】
	2 1 : 4 0	Shin Fukushima Substation: Disconnection of cable head jumper of Yonomori Transmission Line 1L started. 【Work 】
	2 2 : 5 8	Shin Fukushima Substation: Disconnection of cable head jumper of Yonomori Transmission Line 1L completed. 【Work 】

Date	Time	Measures
March 14	2 : 2 5	Shin Fukushima Substation: Trial electrification of the cables of Yonomori Transmission Line 1L indicated “ good ” . 《Attachment 1 》
	Approx. 1 1 : 0 0 ~	Wait (due to the explosion of Unit 1 of 1F)
	1 6 : 0 6	With confirmation of the situation after the explosion, re-connection work of the cable head jumper of Yonomori Transmission Line 1L in Shin Fukushima Substation started. 【Work 】,
	1 7 : 5 0	Transmission Tower 12 of Okuma Transmission Line 3 and 4L: Disconnection of the jumper of Yonomori Transmission Line 1L started. 【Work 】,
	1 8 : 1 3	Re-connection of the cable head jumper of Yonomori Transmission Line 1L in Shin Fukushima Substation completed. 【Work 】,
	1 9 : 3 9	Transmission Tower 12 of Okuma Transmission Line 3 and 4L: Disconnection of the jumper of Yonomori Transmission Line 1L completed. 【Work 】,
March 15	Approx. 9 : 4 5	TEPCO Nuclear Power Line (of Tohoku Electric Power Company): Trial electrification of LS31 indicated “ good ” .
	1 4 : 4 0	Transmission Tower 7 and 8 of Okuma Transmission Line 3 and 4L: Connection of Okuma Transmission Line 3L and Yonomori Transmission Line 1L started. 【Work 】,
	2 3 : 1 0	Transmission Tower 7 and 8 of Okuma Transmission Line 3 and 4L: Connection of Okuma Transmission Line 3L and Yonomori Transmission Line 1L completed. 【Work 】,
March 16	9 : 1 0	Transmission Tower 3 of Okuma Transmission Line 3 and 4L: Disconnection of the jumper of 3L started. 【Work 】,

9 : 1 0	Shin Fukushima Substation: Removal of the cable between Okuma Transmission Line 3 and 4L in Shin Fukushima Substation and Transmission Tower 1 started. 【Work 】
1 0 : 5 5	Wait ( due to increase in radiation dose in Shin Fukushima Substation )
1 7 : 1 5	Transmission Tower 3 of Okuma Transmission Line 3 and 4L: Disconnection of the jumper of 3L completed. 【Work 】
1 8 : 0 0	Shin Fukushima Substation: Installation of movable transformers ( for station power of Unit 3 and 4 of 1F ) started. 【Work 】
2 2 : 1 0	Shin Fukushima Substation: Removal of the cable between Okuma Transmission Line 3 and 4L in Shin Fukushima Substation and Transmission Tower 1 completed. 【Work 】

Date	Time	Measures
March 17	5 : 0 0	Shin Fukushima Substation: Installation of movable transformers completed. 【Work 】
	Past 9 : 3 0 ~ past 20:00	Wait (due to water spray by SDF helicopters)
	2 0 : 4 5	After the water spray, workers departed from J Village and installation of movable MC in 1F started. 【Work 】
March 18	8 : 3 0	Okuma Transmission Line 3L: Workers departed from J Village and re-arrangement of leading wires at the steel structure of 1F started. 【Work 】
	9 : 1 5	Transmission Tower 27 of Yonomori Transmission Line: Workers departed from J Village and tentative restoration work of 2L started. 【Work 】
	1 2 : 5 3	Okuma Transmission Line 3L: Re-arrangement of leading wires at the steel structure of 1F completed. 【Work 】
	1 3 : 2 0	Installation of movable MC in 1F completed. 【Work 】
	1 4 : 2 8	Trial electrification between Yonomori Transmission Line1L and movable MC of Okuma Transmission Line 3L indicated “ good ” . 《Attachment 2 》
	1 8 : 4 8	Transmission Tower 27 of Yonomori Transmission Line: Tentative 2L restoration work of the day finished. 【Work 】
March 19	8 : 1 3	Transmission Tower 27 of Yonomori Transmission Line: Tentative 2L restoration work resumed. 【Work 】
	1 7 : 0 5	Transmission Tower 27 of Yonomori Transmission Line: Tentative 2L restoration work of the day finished. 【Work 】
March 20	8 : 3 0	Transmission Tower 27 of Yonomori Transmission Line: Tentative 2L restoration work resumed. 【Work 】
	1 3 : 4 0	Transmission Tower 27 of Yonomori Transmission Line: Tentative 2L restoration work completed. 【Work 】

	1 7 : 2 2	Trial electrification between Yonomori Transmission Line2L and LS51 of 1L indicated “good” . 《Attachment 3》
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## Attachments

Attachment 1 : Record of trial electrification (March 14)

Attachment 2 : Record of trial electrification (March 18)

Attachment 3 : Record of trial electrification (March 20)

End