Report regarding "Collection of Reports pursuant to the Provisions of Article 106, Paragraph 3 of the Electricity Business Act"

> May 16<sup>th</sup>, 2011 Tokyo Electric Power Company

## Contents

- Record of damages on the electric facilities inside and outside of Fukushima Daiichi Nuclear Power Station after the Tohoku-Chihou-Taiheiyou-Oki Earthquake occurred in 2011
- 2. Current status of the power supply to Fukushima Daiichi Nuclear Power Station and record of the restoration process of the offsite power by emergency measures

## Attachments

Appendix 1: Damages on the electric facilities inside and outside of Fukushima Daiichi Nuclear Power Station

Appendix 2: Damages on Shin Fukushima Substation

Appendix 3: Photos of the damages on Shin Fukushima Substation

Appendix 4: Photos of the damages on Transmission Tower No. 27 of Yonomori Transmission Line

Appendix 5: Damages on the electric facilities in Fukushima Daiichi Nuclear Power Station

Appendix 6: Damages on the station power facilities in Fukushima Daiichi Nuclear Power Station

Appendix 7: Photos of the damages on the station power facilities in Fukushima Daiichi Nuclear Power Station

Appendix 8: Record of Circuit Breaker Action of Main Transmission Power System on Dispatch Control System

Appendix 9: Status of power supply to Fukushima Daiichi Nuclear Power Station

Appendix 10: Time series table of restoration process of the offsite power by emergency measures This is the report about the damages on the electric facilities inside and outside of Fukushima Nuclear Power Station, current status of power supply to the station and the record of the restoration process of the offsite power by emergency measures in accordance with "Regarding Collection of Reports pursuant to the Provision of Article 106, Paragraph 3 of the Electricity Business Act" (04. 24. 2011 Nuclear Number 2) issued on April 25<sup>th</sup>, 2011.

 Record of damages on the electric facilities inside and outside of Fukushima Daiichi Nuclear Power Station after the Tohoku-Chihou-Taiheiyou-Oki Earthquake occurred in 2011

Electric facilities of Shin Fukushima Substation, transmission lines and Fukushima Nuclear Power Station (1F) got damaged by the Tohoku-Chihou-Taiheiyou-Oki Earthquake and Tsunami occurred at 14:46 on March 11<sup>th</sup>, 2011 (Appendix 1). Main damages of each facility are as follows. (Damages that have been confirmed so far are described.)

- (1) Damages on Shin Fukushima Substation (Appendix 2, 3) Transformers, circuit breakers and disconnectors in Shin Fukushima Substation got damaged. Also, an overhead ground wire of Okuma Transmission Line 3L broke and touched the facilities.
- (2) Damages on transmission facilities (Appendix 4) Among the transmission facilities between Shin Fukushima Substation and the power receiving facilities of 1F, Transmission Tower No. 27 of Yonomori Transmission Line got damaged. At the moment, it seems to have collapsed due to the collapse of large mound.
- (3) Damages on the station power facilities in 1F (Appendix 5, 6, 7)
   Unit 1
   Circuit breaker of Okuma Transmission Line 1L for receiving power got damaged by the earthquake. Also, high voltage distribution board (M/C) and diesel generators got wet or submerged by Tsunami.

■ Unit 2

Circuit breaker and disconnector of Okuma Transmission Line 2L for receiving power got damaged by the earthquake. Also, high voltage distribution board (M/C) and diesel generators got wet or submerged by Tsunami.

■ Unit 3

Circuit breaker of Okuma Transmission Line 3L for receiving power was under construction. High voltage distribution board and diesel generators got submerged by Tsunami.

■ Unit 4

It did not appear that circuit breaker of Okuma Transmission Line 4L for receiving power was damaged, but there was a mark of Tsunami. High voltage distribution board (M/C) and diesel generators got submerged by Tsunami. Diesel generator 4A and high voltage distribution board (M/C (C)) supplied by the generator were under inspection and construction.

∎ Unit 5

High voltage distribution board (M/C) and diesel generators got submerged by Tsunami.

∎ Unit 6

A part of the high voltage distribution board (M/C) and diesel generators got wet or submerged by Tsunami.

- TEPCO Nuclear Power Line (of Tohoku Electric Power Company) It was confirmed that cables connected to the high voltage distribution board (M/C) had troubles.
- 2. Current status of the power supply to Fukushima Daiichi Nuclear Power Station and record of the restoration process of the offsite power by emergency measures
  - Power supply to 1F immediately after the earthquake (Appendix 8)
     At Shin Fukushima Substation immediately after the earthquake, Okuma Transmission Line 2, 3, 4L and Yonomori Transmission Line 1, 2L tripped. Okuma Transmission Line 1L tripped at 1F and stopped power supply.

(2) Restoration process of power supply by emergency measures Considering the damages on Shin Fukushima Substation, transmission facilities and power receiving facilities of 1F, we supplied power by using facilities available at that time (Appendix 9). Restoration process of power supply by emergency measures is described in Appendix 10.

We collected and organized major records of damages in this report, but there still are places where it is difficult to confirm damages. Therefore, it is possible that additional damages will be revealed through further confirmation and investigation. In such a case, we will notify them in another report.

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