

**(Summary)**

**Investigation Results, Causes and Prevention Measures regarding Mistakes in the Reports of Emergency Countermeasures for Safety**

**Tokyo Electric Power Company**

**1. Introduction**

This report describes the investigation results on mistakes in the reports of emergency countermeasures for safety and its causes and prevention measures in accordance to the instruction document by NISA, on September 15, 2011, titled "Investigation on mistakes in the reports of emergency countermeasures for safety (instruction)" (September 14, 2011, No.5)

**2. Investigation on Mistakes in Reports**

**(1) Scope of Investigation**

We investigated mistakes in the following submitted reports in accordance to the instruction documents.

We investigated amended reports in case we submitted the amendment.

**<Instruction document>**

- "Regarding Implementation of Emergency Countermeasures for Safety at Other Nuclear Power Stations based on the Accident in Fukushima Daiichi and Daini Nuclear Power Stations in 2011 (instruction)" on March 30, 2011 (March 28, 2011, No.7)
- "Regarding Off-site Power Supply Security at Nuclear Power Stations and Reprocessing Plants (instruction)" on April 15, 2011 (April 15, 2011, No.3)
- "Regarding Emergency Countermeasures for Safety at Fukushima Daini Nuclear Power Station (Instruction)" on April 21, 2011 (April 20, 2011, No.20)
- "Regarding Implementation of Countermeasures against Severe Accidents based on the Accident in Fukushima Daiichi Nuclear Power Station (Instruction)" on June 7, 2011 (June 7, 2011, No.2)
- "Regarding Anti-earthquake Countermeasures of the Switchyard etc. with a View to Securing Reliability of Offsite Power Supply for Nuclear Power Stations (Instruction)" on June 7, 2011 (June 7, 2011, No.1)

**<TEPCO's reports in accordance to instruction documents>**

- Regarding Emergency Countermeasures for Safety at Kashiwazaki Kariwa Nuclear Power Station (Implementation status report)  
(Reported on April 21, 2011. Amendment reported on May 2, 2011.)
- Regarding Offsite Power Supply Security at Nuclear Power Stations and Reprocessing Plants  
(Reported on May 16, 2011.)
- Regarding Emergency Countermeasures for Safety at Fukushima Daini Nuclear

Power Station (Implementation status report)

(Reported on May 20, 2011. Amendment reported on July 21.)

- Regarding Implementation of Countermeasures against Severe Accidents based on the Accident at Fukushima Daiichi Nuclear Power Station (Implementation status report)  
(Reported on June 14, 2011)
- Regarding the Security of the Offsite Power Supply of Fukushima Daini Nuclear Power Station  
(Reported on July 7, 2011)
- Regarding the Anti-earthquake Countermeasures of the Switchyard etc. with a View to Securing Reliability of the Offsite Power Supply for Nuclear Power Stations (Report)  
(Reported on July 7, 2011)

## **(2) Investigation Method**

The organizational structure for investigation was as follows; the head which managed the investigation is Nuclear Power Plant Management Dept., project directors are unit general managers of power plants and general managers of departments in charge, (Nuclear Power Plant Management Dept. and Nuclear Asset Management Dept. depending on the issues) of the headquarter. In addition, Quality Management Group of power plants and Nuclear Quality & Safety Management Dept. of headquarter conducted random check of process appropriateness. The investigation was conducted under this framework.

### 1) Mistakes in reading data regarding measures and evaluation

- We confirmed no mistakes in the original data (values) which were used for measures and evaluation
- Groups in charge of making reports double checked about the mistakes.

### 2) Mistakes in the process of calculation

- We confirmed no mistakes in calculation method and the results.
- Groups in charge of making reports double checked about the mistakes.

### 3) Mistakes in writing reports

- We confirmed no mistakes in writing reports.
- Groups in charge of making reports double checked about the mistakes.

Regarding the original data (values), we checked especially the source and confirmed the consistency between the source and the reports.

- Values for measures (basis values, calculation quotation etc.)  
load equipment and equipment power capacity for power supply vehicle, supply water and water source necessary for scenario, other calculation results etc.
- Values to describe measure results  
capacity and number of power supply vehicles, possible days of continuous fuel

supply of power supply vehicles, number of fire pumps, number of fire hoses etc.

### **(3) Investigation Results**

As a result of investigation, no mistakes were found in the reports of the headquarter and Kashiwazaki Kariwa. However, we found two mistakes in writing reports concerning the installation level of the main equipment in the report of emergency countermeasures for safety at Fukushima Daini Nuclear Power Station.

### **3. Mistakes in the Report and its Impact**

#### **(1) Mistakes in the report of emergency countermeasures for safety at Fukushima Daini Nuclear Power Station**

Two mistakes in writing reports were found in the following two parts. However, we confirmed that they had no impact on the evaluation.

##### **a. Installation location of main equipment (underlined two parts)**

Description: Attachment-5 Installation location of main equipment

Original (Mistake)	Revised
• Control center of make-up water system of Unit 3 Turbine Building 1 <sup>st</sup> Floor O.P. <u>12000</u>	• Control center of make-up water system of Unit 3 Turbine Building 1 <sup>st</sup> floor O.P. <u>12200</u>
• Places of fire engines, power supply vehicles O.P. <u>18727</u>	• Places of fire engines, power supply vehicles O.P. <u>18500</u>

### **4. Probable Causes**

#### **(1) Mistakes in the report of emergency countermeasures for safety at Fukushima Daini Nuclear Power Station**

A person of TEPCO in charge of writing reports misread the data from a drawing of equipment installation.

The person who wrote the report and other people conducted double-check on the description of the report. However, they focused on the values, evaluation results, etc., which directly affect the evaluation results. Thus, their checking between the data in the report and the data in the original source was not sufficient and they did not notice the mistakes in the report which were found this time.

To summarize, they focused on the values etc. which directly affect the evaluation results and recognition of checking data which were read from drawings was not sufficient. As a

result, double-checking function did not work adequately.

## **5. Prevention Measures**

### **(1) Mistakes in the report of emergency countermeasures for safety at Fukushima Daini Nuclear Power Station**

We will establish a clear checking framework in making reports which may affect the safety of nuclear power plants, keep the persons involved informed that mistakes in the reports may undermine the credibility of the report, and share the recognition of the importance of the reports.

In addition, we will double-check more thoroughly by checking the data of the report and the drawing data (original source) before submission.

END