1. Introduction

This document is to report the following matters in accordance with the instruction of "Installment of treatment facility and storing facility of water including highly concentrated radioactive materials at Fukushima Daiichi Nuclear Power Station of the Tokyo Electric Power Company (Instruction) "(NISA No. 6, June 8, 2011), dated on June 9, 2011.

<Instruction>
TEPCO should report to NISA the situation of storing and treatment of the contaminated water in the Power Station and the future forecast based upon the current situation has to be reported to NISA as soon as the treatment facility starts its operation. Also, subsequently, continued report has to be submitted to NISA once a week until the treatment of the accumulated water in the Central Radioactive Waste Treatment Facility is completed.

2. Situation of storing and treatment of accumulated water in the building (actual record)

Stored amounts in each unit building (Units 1 to 4 (including condensers and trenches)) and stored and treated amounts, and other related data in the Accumulated Water Storing Facility as of April 5, 2018, are shown in the Attachment -1.

3. Forecast of storing and treatment

(1) Short term forecast

Water transfer is planned so that the levels of the accumulated water in Units 1 and 2 and Units 3 and 4 building will be maintained around at the level of TP. 1,564, based on the stored amount in the Accumulated Water Storing Facilities and the operating situation of the radioactive material treatment equipment. Water is transferred to the Process Main Building and/or High Temperature Incinerator Building as Accumulated Water Storing Facilities.

Treatment is implemented considering the state of storage and transfer of Accumulated Water Storing Facilities.

We assume stored amounts in each unit building (Units 1 to 4 (including condenser and trench)), and stored and treated amounts, and other related data in the Accumulated Water Storing
Facilities as of April 12, 2018, are shown in Attachment -2.

(2) Middle term forecast

Regarding accumulated water in Units 1 and 2 buildings and Units 3 and 4 buildings, from the viewpoint of reducing the risks of discharging to the ocean and leaking into the groundwater, it is necessary to keep enough capacity for the accumulated water in the building until its level reaches TP. 2,564 and to keep the accumulated water level lower than the groundwater level. On the other hand, based on the view of limiting inflow of underwater to buildings and reducing the amount of emerged accumulated water, we are planning to transfer accumulated water keeping its level in the building around TP. 1,564 considering water tank capacity.

As for accumulated water of the Process Main Building and the High Temperature Incinerator Building, we are planning to treat the accumulated water considering the situation of construction of middle and low level waste water tanks, the operation factor of the radioactive material treatment instruments and duration for maintenance.

We forecast stored amounts in each unit building (Units 1 to 4 (including condensers and trenches)), and storing and treatment situations in the Accumulated Water Storing Facilities for the next 3 months, as shown in Attachment -3.

Stored amounts in each building and the water storage equipment are forecasted to be unchanged in case transfer and treatment were implemented as scheduled without rain. However, it would be subject to change depending on the operation factor of the radioactive material treatment instruments and so on.

Also, the water treated at the radioactive material treatment equipment (fresh water and condensed salt water) can be stored in the middle and low level waste water tanks.

END
**Storage and treatment of high level radioactive accumulated water (as of April 5, 2018)**

### Storage and Change

#### Reactor building
- Unit 1: 67m³/day, FDW-CS
- Unit 2: 72m³/day, CS
- Unit 3: 67m³/day, FDW-CS

#### Turbine building
- Reactor Pressure Vessel
- Primary Containment Vessel
- Condenser
- High Temperature Incinerator Building
- Process Main Building

### Water Transfer

- Water transfer from the Units 1-4 to the buildings (Units 1-4, Centralized radioactive waste treatment facility) and to the treatment facility was conducted whenever necessary.
- From March 1, the operations of the Cesium Adsorption Apparatus have been suspended.
- Operations of the 2nd Cesium Adsorption Apparatus have been conducted; the availability factor is 25% (previously simulated: 25%).
- On April 2, operations of the 2nd Cesium Adsorption Apparatus were suspended.
- Storage capacity of Treated water was changed as operations of new tanks started.

### Chloride Concentration
- Below/After Desalination: 300ppm (+1ppm (Sampled on March 23))
- Below/After Reverse Osmosis Concentration: 400ppm (+3ppm (Sampled on February 23))
- Below/After Evaporative Concentration:

### Breakdown of the Used Vessels
- 3,945

### Breakdown of the Treatment Amount

<table>
<thead>
<tr>
<th>Facility</th>
<th>Storage volume</th>
<th>Change from last report</th>
<th>Water level in T.P.*8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>Approx. 4,160m³</td>
<td>-100m³*10</td>
<td>T.P. 370</td>
</tr>
<tr>
<td>Unit 2</td>
<td>Approx. 9,030m³</td>
<td>-10m³</td>
<td>T.P. 351</td>
</tr>
<tr>
<td>Unit 3</td>
<td>Approx. 11,170m³</td>
<td>+50m³</td>
<td>T.P. 351</td>
</tr>
<tr>
<td>Unit 4</td>
<td>Approx. 10,800m³</td>
<td>-20m³</td>
<td>T.P. 402</td>
</tr>
<tr>
<td>Total</td>
<td>Approx. 35,220m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The data of the used vessels are those of the previous announcement data as of March 29, 2018.

### Radioactivity Concentration

- Process Main Building: 1,1E+08 Bq/L (Sampled on February 20)
- Reactor Pressure Vessel: 1,7E+08 Bq/L (Sampled on February 23)
- Condenser: 1,7E+08 Bq/L (Sampled on February 23)
- High Temperature Incinerator Building: 1,1E+08 Bq/L (Sampled on March 16)
- Condenser adsorption apparatus: 1,7E+08 Bq/L (Sampled on March 16)

### Breakdown of the Cumulative Treated Amount

<table>
<thead>
<tr>
<th>Facility</th>
<th>Storage volume</th>
<th>Change from last report</th>
<th>Water level in T.P.*8</th>
<th>Cumulative treated volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Main Building</td>
<td>Approx. 15,800m³</td>
<td>+90m³</td>
<td>T.P. 3,136</td>
<td>Approx. 1,911,180m³</td>
</tr>
<tr>
<td>High Temperature Incinerator Building</td>
<td>Approx. 2,870m³</td>
<td>-80m³</td>
<td>T.P. 1,025</td>
<td>Approx. 92,980m³</td>
</tr>
<tr>
<td>Total</td>
<td>Approx. 18,630m³</td>
<td></td>
<td></td>
<td>2,004,160m³</td>
</tr>
</tbody>
</table>

### Breakdown of the Used Vessels

- 3,945

### Breakdown of the Treatment Amount

- Water transfer from the Unit 1 Turbine Building to the Unit 1 Radioactive Waste Treatment Facility was conducted.

### Breakdown of the Used Vessels

- 3,945

### Breakdown of the Treatment Amount

- Water transfer from the Unit 2 Radioactive Waste Treatment Facility to the Process Main Building was conducted whenever necessary.
- Operations of the 2nd Cesium Adsorption Apparatus have been conducted; the availability factor is 25% (previously simulated: 25%).
- On November 20, water transfer from the Unit 1 Turbine Building to the Unit 1 Radioactive Waste Treatment Facility was conducted.
- Due to other work, water transfer to the buildings (Units 1-4, Centralized radioactive waste treatment facility) and to the treatment facility was conducted whenever necessary.

### Breakdown of the Used Vessels

- 3,945
Storage and treatment of high level radioactive accumulated water (as of April 12, 2018)

### Classification

<table>
<thead>
<tr>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>High level radioactive water/waste, Concentrated waste liquid</td>
<td>/Strontium-treated water treated water</td>
</tr>
</tbody>
</table>

#### Storage and treatment of high level radioactive accumulated water

**Water Injection tank (CST) (Buffer tank)**

- **Water injection tank**
- **Concentrated waste liquid storage tank**
- **Evaporative concentration apparatus**
- **Multi-nuclide Removal Equipment**
- **Treated water (Concentrated saltwater) **
- **Reverse osmosis treated water**
- **Desalination plant (Reverse osmosis)**
- **Wastewater supply tank**
- **Centralized radioactive waste treatment facility**
- **Turbine building**
- **Condenser**
- **Treatment facility (Cesium adsorption apparatus)**
- **Centralized radioactive waste treatment facility**
- **Primary Containment Vessel**
- **T/P. 380**
- **T/P. 387**
- **Storage volume**
- **Water level in Each tank**
- **Storage capacity**

#### Storage Facilities

<table>
<thead>
<tr>
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<th>Storage volume</th>
<th>Change from last report</th>
<th>Water level in T/B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>approx. 4,170m³</td>
<td>+10m³</td>
<td>T/P. 380 (Unit 2 T/B)</td>
</tr>
<tr>
<td>Unit 2</td>
<td>approx. 9,535m³</td>
<td>+20m³</td>
<td>T/P. 387 (Unit 3 T/B)</td>
</tr>
<tr>
<td>Unit 3</td>
<td>approx. 11,720m³</td>
<td>+50m³</td>
<td>T/P. 387 (Unit 3 T/B)</td>
</tr>
<tr>
<td>Unit 4</td>
<td>approx. 10,670m³</td>
<td>+10m³</td>
<td>Total</td>
</tr>
</tbody>
</table>

#### Storage Volume

<table>
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<th>Water level in Each tank</th>
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</tbody>
</table>

#### Breakdown of the treated amount

- Cesium adsorption apparatus (383,630m³)
- 2nd Cesium adsorption apparatus (2,520m³)

#### Breakdown of the cumulative treated amount

- Cesium adsorption apparatus (383,630m³)
- 2nd Cesium adsorption apparatus (2,520m³)

#### Breakdown of the used vessels

- Storage container (2,707)
- Treated column (11)
- Used vessels (208), Filters and as forth (85)

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1. The figures of "Storage volume" do not include those of the volumes that have accumulated from the bottom of the tanks to the height of so-called "down scale (DS)," where water gauges show 0%.
2. The figures of the data show the operational limits.
3. The figures of "Storage capacity" do not include those of the volumes that have accumulated from the bottom of the tanks to the height of so-called "down scale (DS)," where water gauges show 0%. However, each tank has the capacity that accommodates the amount of the residual water of concentrated saltwater as calculated based on that of the water treated through the ALPS and other facilities.
4. The figure of "Residual water" includes the one of the volumes that have accumulated from the bottom of the tanks to the height of so-called "down scale (DS)," where water gauges show 0%. The amount of the residual water of concentrated saltwater is calculated based on that of the water treated through the ALPS and other facilities.
5. Total treated amount of Cesium adsorption apparatus and 2nd Cesium adsorption apparatus
6. Breakdown of the treated amount: Cesium adsorption apparatus (383,630m³)
- 2nd Cesium adsorption apparatus (2,520m³)
- Breakdown of the cumulative treated amount: Cesium adsorption apparatus (383,630m³)
- 2nd Cesium adsorption apparatus (2,520m³)
- Breakdown of the used vessels: Cesium adsorption apparatus (2,707)
- 2nd Cesium adsorption apparatus (196)
- Others: Storage container (2,707), Treated column (11), Used vessels (208), Filters and as forth (85)
Simulation Results of Accumulated Water Treatment in Units 1-4 Turbine

Accumulated Water Level in Unit 2 Turbine Building (mm) (Units 1-2 Connected)

Accumulated Water Level in Unit 3 Turbine Building (mm) (Units 3-4 Connected)

Storage Capacity of the Centralized Radioactive Waste Treatment Facility

Storage Capacity and Volume of the Concentrated Saltwater Tank

Note
- The amount of water treated through the 2nd Cesium Adsorption Apparatus is estimated to be 780 m³/d (Subject to change depending on the factors such as the levels of water accumulated in T/Bs.)
- *Accumulated Water Levels in Unit 2 and 3 T/Bs* are simulated water levels in consideration of the change of the water levels caused by recent rainfall, inflow of groundwater, etc.
- in the surrounding areas of the Fukushima Daiichi Nuclear Power Station.
- *Accumulated Water Levels in Unit 2 and 3 T/Bs Taking into Account the Rainfall* are simulated water levels which are calculated by adding to the accumulated water amounts which are assumed to increase at the rate 8mm a day when the surrounding areas of the Fukushima Daiichi Nuclear Power Station have the rainfall equal to the average amount of rain which fell for three months from August to October in 2015 to 2017.
- Unit 2 Turbine Building  water level is controled by retained water transfer pumps in the Unit 2 reactor building.
- Unit 3 Turbine Building  water level is controled by retained water transfer pumps in the Unit 3 turbine building.

*1 Water transfer from the Unit1-4 to the Centralized radioactive waste treatment facility will be changeover from the High temperature incinerator building to the Process main building.

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