Situation of Storage and Treatment of Accumulated Water containing Highly Concentrated Radioactive Materials at Fukushima Daiichi Nuclear Power Station (688th Release)

February 17, 2025 Tokyo Electric Power Company Holdings, Inc.

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 containing 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 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 Facilities as of February 13, 2025 are shown in the Attachment -1.

3. Forecast of storing and treatment

Accumulated water in the Unit 1 to 4 buildings is transferred to the Process Main Building and/or High Temperature Incinerator Building as Accumulated Water Storing Facilities systematically considering the stored amount in the Accumulated Water Storing Facilities and the operating situation of the Radioactive Material Treatment Equipment.

Transferred accumulated water is treated at the Radioactive Material Treatment Equipment systematically considering the state of storage and transfer of Accumulated Water Storing Facilities. Specifically, in order to suppress the flow of groundwater into the buildings and reduce the amount of accumulated water being generated, we are planning to transfer accumulated water from the Unit 1 to 3 Reactor Buildings, where injected cooling water is being circulated, in accordance with the capacity of the Accumulated Water Storing Facilities and the status of the treatment of accumulated water in the buildings, etc., while ensuring a specific difference between the levels of

accumulated water in the buildings and the water levels of subdrains in the vicinity. At other buildings where the lowermost floors have been exposed, we are planning to transfer accumulated water to keep these floor surfaces exposed.

We also treat systematically the accumulated water in the Accumulated Water Storing Facilities considering the situation of construction of Middle and Low Level Treated Water Receiving Tanks, the operation factor of the Radioactive Material Treatment Equipment and duration for maintenance. The water treated at the Radioactive Material Treatment Equipment is stored in the Middle and Low Level Treated Water Receiving Tanks.

Currently, transfer, storing and treatment with Radioactive Material Treatment Equipment of accumulated water in the buildings are being implemented systematically, and the situation can continue to be maintained. Therefore, it is expected that storing and treatment of high level radioactive accumulated water will continue to be stable in the future.

* Matters pointed out at the "Regular meeting pertaining to circulating injection cooling, accumulated water, etc. at the Fukushima Daiichi Nuclear Power Station" on October 20, 2023 (Excerpt from the meeting summary of Nuclear Regulatory Agency dated on the same day):

For the part that relates to the forecast ((1) Short term forecast, (2) Middle term forecast) based on the situation of storing and treatment of the contaminated water contained in the report document entitled "Situation of Storage and Treatment of Accumulated Water containing Highly Concentrated Radioactive Materials at Fukushima Daiichi Nuclear Power Station" submitted in accordance with "Installment of treatment facility and storing facility of water containing 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, it is sufficient to report to that effect if it is certain that storing and treatment of the contaminated water will continue to be stable and that the changes of water level in the Accumulated Water Storing Facilities, etc. will fall within the normal range considering the progress of contaminated water treatment at the aforementioned power station (quantitative evaluation is not required).

On the other hand, if the change of water level at the Accumulated Water Storing Facilities, etc. is expected to be different from normal due to planned work, abnormality occurrence, etc., it shall be reported in a format containing a quantitative evaluation.

END

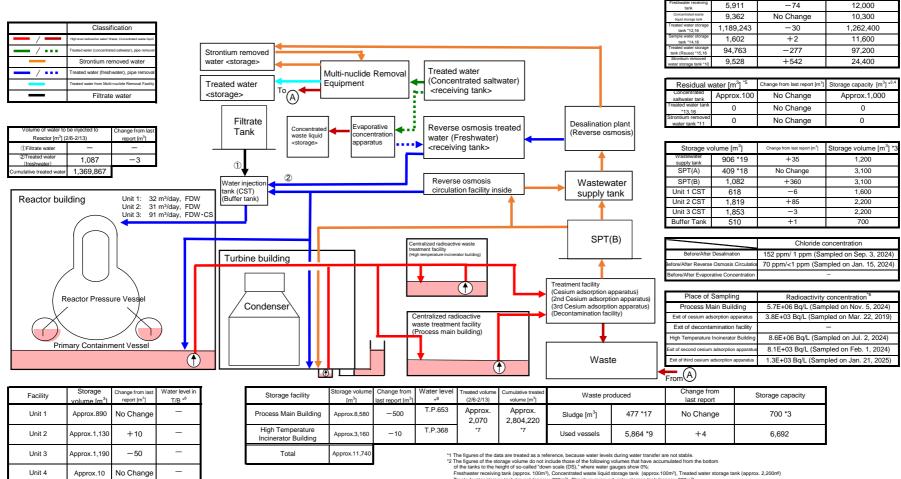
Attachment-1

Change from last report [m³] Storage capacity [m³] *3

Storage volume [m3] *1,2

0

Storage and treatment of high level radioactive accumulated water (as of February 13, 2025)



Main operations that have been conducted during the period from February 6, 2025 to February 13, 2025]

Water transfer from the Units 1-4 to the buildings (Units 1-4, Centralized radioactive waste treatment facilities) and to the treatment facilities was conducted whenever necessary

Due to other works, water transfer to the buildings (Units 1-4, Centralized radioactive waste treatment facilities) was conducted whenever

necessary

Total

Operations of the Cesium Adsorption Apparatus have been suspended

Approx.3,220

Operations of the 2nd Cesium Adsorption Apparatus have been suspended

Operations of the 3rd Cesium Adsorption Apparatus have been conducted; the availability factor is 49%.

Treated water storage tank (reuse) (approx. 200m³), Strontium removed water storage tank (approx. 200m³). *3 The figures of the data show the operational limits.

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4 The figures of Storage capacity of a 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 more than the storage volume that accumulates up to the height of "DS."

5 The figure of "Resistal 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 above 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. To The data shown here are those of CG-137.

*7 Total treated amount of Cesium adsorption apparatus and 2nd Cesium adsorption apparatus and 3rd Cesium adsorption apparatus

Breakdown of the treated amount: Cesium adsorption apparatus (0 m³) 2nd Cesium adsorption apparatus (0 m³) 3rd Cesium adsorption apparatus (2,070 m³)

Breakdown of the cumulative treated amount: Cesium adsorption apparatus (394,720 m³) 2nd Cesium adsorption apparatus (20,99,160 m³) 3nd Cesium adsorption apparatus (310,340 m³)

*8 The data of the water levels are as of 5 a.m., January 13

10 The data or the water levels are as or 5 a.m., January 13 "9 Breakdown of the used vessels: Cestim adsorption apparatus (779), 2nd Cesium adsorption apparatus (225), 3rd Cesium adsorption apparatus (22) Others: Storage container (4,449), Treated column (17), Used vessel (267), Filters and so forth (65) "10 Volume of the Strontium removed water (before ALPS treatment) stored in the welded-type tanks "11 Volume of the Strontium removed water (before ALPS treatment) remaining in the filange-type tanks

12 Volume of the YALPS treated water and treated water to be re-purified stored in the weided type tanks 13 Volume of the treated water to be re-purified "terraining in the flarged-type tanks 14 Volume of the treated water to be re-purified" terraining in the flarged-type has the and the high performance ALPS temporary storage tanks (welded-type) and the high performance ALPS temporary storage tanks (welded-type)

*15 Volume of the "treated water to be re-outlined" stored in the reuse welded-type tanks which stored Strontium removed water (before ALPS treatment) before

(These welded-type tanks have been reused from 2019)

These welded type tance have been revised from 2019/ (including fluctuations in onclustication with the distange of ALB's transfer well on the stated water, sample water, treated water (reuse) and treated water (residual) (including fluctuations in onclusted scale of 12 p.m., February 13) 17 Sum of sludge and supervalant water (as of 12 p.m., February 13) 18 Water transfer from SPT(A) to PMB/HT was conducted wherever necessary.

*19 Water transfer from treated water storage tanks to wastewater supply tanks was conducted whenever necessary.