

Overview of the “Partial Loss of Nuclear Material Protective Equipment Function at the Kashiwazaki-Kariwa Nuclear Power Station”

March 16, 2021

Tokyo Electric Power Company Holdings, Inc.

<Incident Overview>

- On January 27, 2021, a portion of the nuclear material protection equipment to detect intruders (hereinafter referred to as, “intruder detection equipment”) was accidentally damaged by a contractor. The Nuclear Regulatory Agency was immediately notified of this incident. Thereafter, when explaining how intruder detection equipment was malfunctioning in other locations, the Nuclear Regulatory Agency requested that further details be provided. TEPCO therefore provided a report on the details of the malfunctions, substitute measures that have been put in place, and repair predictions. The steps that have been taken to address this issue and an overview of the reports that have been given are as follows.

■ October 12~16, 2020

During nuclear regulatory inspections an explanation of the number of intruder detection equipment malfunctions, the causes of the malfunctions, and trends in the number of repair days was given as part of an update on nonconformances pertaining to nuclear material protection that occurred during FY2019.

■ January 27, 2021

A contractor accidentally damages intruder detection equipment. This incident is reported to the Nuclear Regulatory Agency on the same day.

■ February 12, 2021

When reporting to the Nuclear Regulatory Agency that some functions resulting from damage to intruder detection equipment on January 27, 2021 had been repaired, an explanation was also given of substitute measures. At this time questions were asked about the status of other intruder detection equipment malfunctions to which it was answered that malfunctions were seen in 12 locations and that substitute measures have been implemented.

■ February 15&18, 2021

Documents explaining the progress status of handling malfunctions at three other locations of intruder detection equipment malfunctions in addition to the 12 locations of intruder detection equipment malfunctions explained on February 12,

such as the status of malfunctions and repair schedules, etc., were submitted to the Nuclear Regulatory Agency. At this time, it was TEPCO's understanding that substitute measures had been put in place, however the Nuclear Regulatory Agency pointed out that the substitute measures implemented at 10 out of the 15\* locations had been insufficient for more than 30 days.

\*The one malfunction (already repaired) that occurred during a field inspection on February 21 had already been reported (total 16 locations).

- Field inspections performed by the Nuclear Regulatory Agency on February 21, 24~26, and March 3~4 yielded the following indications.

- The substitute measures explained by TEPCO have not been effective at multiple locations since March 2020 thereby resulting in a long period of time during which unauthorized intruders cannot be detected, and this situation has not been rectified.
- The situation has not been rectified even though TEPCO security guards are aware that the substitute measures are not effective.
- As a result, it is possible that it has been impossible to detect unauthorized intruders for more than 30 days.
- The company is not fully aware that these circumstances exist.

- During field inspections by the Nuclear Regulatory Agency a briefing of intruder detection equipment malfunctions for the period from January 2018 through March 2020 (outside the scope of the aforementioned inspection) was given in response to a request for such information. It was pointed out that during the aforementioned period of time, malfunctions of some intruder detection equipment functions had occurred at multiple locations, and that long periods of time were required to make repairs.

- On March 16, 2021, we received notification from the Nuclear Regulation Authority that a preliminary assessment of the significance of this incident had deemed the event to be "red" due to the fact that, "Organizational management functions at the Kashiwazaki-Kariwa Nuclear Power Station have declined to the point that the effectiveness of security measures has not been appropriately ascertained for a long period of time thereby resulting in the potential for a serious incident pertaining to nuclear material protection."

<Repair status of malfunctioning equipment>

- On March 5, 2021 it was reported to the Nuclear Regulatory Agency that we have confirmed the resolution of all malfunctions as a result of repairs made to malfunctioning equipment. Furthermore, it was also confirmed that there had been no unauthorized intrusions at the aforementioned locations.
- Furthermore, we have constructed a mechanism for implementing effective substitute measures to counteract any new malfunctions of nuclear material protection equipment.