Covid-19 Countermeasures at the Fukushima Daiichi Nuclear Power Station

May 28, 2020



Tokyo Electric Power Company Holdings, Inc. (TEPCO HD)

At the Fukushima Daiichi Nuclear Power Station, we have implemented countermeasures to prevent the spread of Covid-19, such as requiring employees to take their temperature prior to coming to the office and to wear surgical masks at all times, and to avoid the "Three Cs" (Closed (environments), Crowded (places), Close (contact)) such as by using rest areas at different times etc.

TEPCO

- No TEPCO HD employees or contractors at the Fukushima Daiichi Nuclear Power Station have contracted Covid-19 (as of May 26).
- All personnel who traveled outside of Fukushima Prefecture even after the Golden Week holiday, which was deemed an "enhanced countermeasures period," have been requested to work from home for two weeks, in principle.
- There has been no major impact from the Covid-19 pandemic on work, such as schedule delays, so far.
- Further countermeasures are being considered in light of the lifting of the declaration of a state of emergency for the Tokyo Metropolitan area on May 25.

2. Overview of Covid-19 countermeasures implemented at the Fukushima Daiichi Nuclear Power 2 Station (1/2) (information on the following countermeasures has already been given) **TEPCO** (The countermeasures on the following pages were announced on April 30. Changes have been noted in red.)

Based on the State of Emergency Declaration*, we shall be implementing the following proactive measures in light of the risk of spreading of the virus.

The State of Emergency Declaration has been lifted.

- We shall further enhance efforts to avoid the "Three Cs" (Closed (environments), Crowded (places), Close (contact)).
- We continue to engage in decommissioning work. (Tasks not required to maintain safe and stable plant operation will be considered separately.)
- Any requests made by Fukushima Prefecture shall be addressed upon examining the details of such requests, etc.
- The period from April 29 to May 10 has been deemed as an enhanced countermeasures period, and TEPCO HD employees and contractors are requested to implement the following countermeasures.
 - To avoid leaving their homes for unnecessary reasons, including travel outside of Fukushima Prefecture. Any personnel that must travel outside of the prefecture for unavoidable reasons will be prohibited from entering the power station for two weeks from May 11.
 - Personnel will be asked to keep a record of their activities between April 8 and May 10.
- Out of concern that certain medical institutions were being overwhelmed by responding to theCovid-19 pandemic, we have been coordinating with medical doctors about the need to postpone ionizing radiation health screenings (as reported on April 30). The opinion of our medical experts is that, "the number of Covid-19 infections in Fukushima Prefecture has remained low, and screenings can be conducted as usual at current time." So we are coordinating with related parties to conduct screenings as usual.
- At the Fukushima Daiichi Nuclear Power Station, infrared thermography is being used to take body surface temperature readings at the entrances to primary buildings* as a Covid-19 countermeasure. Anyone with a temperature of 37.5°C or higher is not allowed to enter. New administration o ce building, access control facility, partner companies building, main gate

- TEPCO HD employees are required to wear surgical masks and to take their temperatures prior to coming to the office (and to refrain from coming to the office if they have a fever). We are continuously collecting information on confirmed or possible infections and have prohibited employees from going on domestic or international business trips.
- Contractors have been instructed to contact the TEPCO HD labor office in the event of a confirmed or possible infection.
- At current time employees are working on normal work shifts. Countermeasures have been implemented to prevent shift members that are indispensable for moving forward in a stable manner with decommissioning work from contracting the virus.
- > All site visitations have been suspended from February 29 through June 30.
- The Covid-19 pandemic has increased the demand for surgical masks and personal protective equipment (PPE) both in Japan and overseas, but at current time we have enough radiological protective equipment to continue the decommissioning of the Fukushima Daiichi Nuclear Power Station.

3. Covid-19 countermeasures implemented at the Fukushima Daiichi 4

Nuclear Power Station (1/3)

TEPCO

< The following measures apply to both TEPCO HD employees and contractors >

Personnel have been requested to refrain from leaving their homes for unnecessary

reasons, including travel outside of Fukushima Prefecture

- Personnel have been requested to refrain from leaving their homes for unnecessary reasons, including travel outside of Fukushima Prefecture, during the enhanced countermeasures period. Any personnel that must travel outside of the prefecture for unavoidable reasons will be prohibited from entering the power station for two weeks from May 11 during which time they will be instructed to stay at home.
- Personnel will be asked to keep a record of their activities for a while from April 8
 - Personnel were asked to keep a record of their activities from April 8 to May 10 to enable contact tracing to be easily performed if there is concern about possible infection.
 - Employees have continued to keep a record of their activities since May 11 in conjunction with the extension of the State of Emergency Declaration.

We are coordinating with related parties in order to conduct ionizing radiation health

screenings as usual

We have been coordinating with medical doctors about the need to postpone ionizing radiation health screenings. Since
medical experts are under the opinion that screenings can be conducted as usual at current time, we are now
coordinating with related parties to conduct screenings as usual.

Body surface temperature readings taken using infrared thermography

- At each power station (new administration office building: two locations, access control facility: two locations, partner companies building, main gate) body surface temperature readings are being taken and anyone with a temperature of 37.5°C or higher is not being admitted on site or into buildings.
- Workers are prohibited from sitting face-to-face in the cafeteria
 - The number of workers allowed in cafeterias has been restricted in order to prevent infection by droplets when sitting face-to-face while eating.





3. Covid-19 countermeasures implemented at the Fukushima Daiichi 5 ΤΞΡϹΟ

Nuclear Power Station (2/3)

< The following measures apply to both TEPCO HD employees and contractors >

- Countermeasures when entering the main anti-earthquake Technical Support Center and the Unit 5/6 MCR
 - In principle, only operators are being allowed into these locations and anyone entering is required to wash their hands and sterilize them with alcohol, and to wear a mask at all times.
 - Entry/exit information (name, department, entry time) is recorded to enable contact tracing if needed.

< The following measures apply to TEPCO HD employees >

Personnel that have been temporarily posted away from their families and unmarried employees have been asked

to refrain from going back to their home towns (4/8)

Personnel that have been temporarily posted away from their families and unmarried employees have been asked to refrain

from going back to their home towns unless absolutely necessary.

- Employees are required to wear masks at all times $(4/17 \sim)$
 - All site personnel are required to wear masks (personnel that have been temporarily posted away from their families are required to wear masks when returning home for the weekends/holidays, etc.)
- Employees must take their temperature prior to coming to work and information is

being collected on confirmed and possible infections $(2/25 \sim)$

- All site personnel are required to take their temperature prior to reporting to work and to report the readings.
- Personnel with a temperature of 37.5°C or higher are being asked to stay at home and to check in with work managers. A database is being used to keep track of employees.
- Business trip restrictions $(3/2 \sim)$
 - Teleconferences are being leveraged in lieu of actual visits and, in principle, all domestic and overseas business trips have ٠ been prohibited except when absolutely necessary.



3. Covid-19 countermeasures implemented at the Fukushima Daiichi Nuclear Power Station (3/3)

- < The following measures apply to TEPCO HD employees >
- Employees have been recommended to commute during off-peak hours and to work from

home when possible $(3/2 \sim)$

• The flex-time system is being employed on a company-wide basis and employees are being recommended to work from home using their company-provided computers and iPads.

Cafeterias in dorms for unmarried employees and employees posted away from their

families (3/6~)

• Partitions have been erected and a shift system is being employed for use of cafeterias in order to prevent infections during shift changes.

Restrictions on meetings and events (3/2~)

 Employees have been asked to refrain from attending meetings or events (assemblies) that may draw an undetermined number of people, and from visiting these locations.

< The following measures apply to contractors >

- Contractors have been asked to provide updates (3/2~)
 - Contractors have been asked to contact TEPCO if any of their employees come down with a fever of 37.5°C or higher, or do not feel well (have a sore throat or feel lethargic)



■ Manufacturers and contractors have been asked to refrain from visiting (3/6~)

- Major contractors have been asked to refrain from any unnecessary visits, and to wear nonwoven fabric masks when coming on site.
- In principle, all meetings in the new administration office building are to be held in the center hall on the first floor.

4. Information on the shift system at the Fukushima Daiichi Nuclear 7 Power Station **TEPCO**

- At current time employees are working on normal work shifts
- The following countermeasures have been implemented to prevent shift members that are engaged in fuel debris management, the continual cooling of spent fuel, and contaminated water treatment, which are tasks that are indispensable for moving forward with decommissioning work in a stable manner, from contracting the virus.

Commuter bus restrictions

- The "shift-member priority bus" has been changed to the "shift-member only bus"
- Shift members have been asked to avoid contact with non-operations personnel in building hallways, etc.
 - A separate route from the access control facility to the main anti-earthquake building has been established.
 - The changing room usually reserved for visitors is being borrowed in order to separate shift personnel from non-shift personnel.
 - The entry/exit to the main anti-earthquake building central monitoring room has been separated to provide one for shift personnel and another for all other personnel.

Operator task environments

- Work orders are now being given outside of the central monitoring room.
- Information that needs to be passed on to the next shift is being prepared in advance so as to enable this information to be passed on quickly and while maintaining a fixed distance from other shift members.
- Independent air-conditioning systems are being used to prevent the virus from spreading to other areas
 - The air conditioning systems for the main anti-earthquake building Technical Support Center and the unit 5/6 MCRs are independent and separate from those used for other areas.

5. Visits to the Fukushima Daiichi Nuclear Power Station and personal 8 protective equipment **TEPCO**

Visits

• All site visits have been suspended from February 29 to June 30. The exact time when visits will be allowed again shall be determined based upon social conditions.

Personal protective equipment

- The Covid-19 pandemic has increased the demand for surgical masks and personal protective equipment both in Japan and overseas, but at current time we have enough radiological protective equipment to continue the decommissioning of the Fukushima Daiichi Nuclear Power Station.
- We fear that manufacturing supply chain issues will persist over the long-term. Therefore, in order to maintain current levels of safety required during the decommissioning of the Fukushima Daiichi Nuclear Power Station, we need to make adjustments as necessary to ensure a stable supply of personal protective equipment, such as seeking this equipment from other vendors. We have also implemented measures to flexibly use personal protective equipment in order to ensure the safety of workers.