

Covid-19 Countermeasures at the Fukushima Daiichi Nuclear Power Station

January 8, 2021



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

1. Overview of Covid-19 countermeasures implemented at the Fukushima Daiichi Nuclear Power Station (1/2)

1



(The countermeasures on the following pages were announced on December 10. Changes have been noted in red)

- At the Fukushima Daiichi Nuclear Power Station, ensuring the safety of employees, workers and the residents of the local community is our highest priority. We have been carefully implementing countermeasures to prevent employees and workers from contracting and spreading Covid-19. Going forward, we believe it is of vital importance that we balance Covid-19 prevention measures with the continuation of decommissioning work.
- The Covid-19 prevention measures we have implemented to date include asking employees and contractors to take their temperature prior to coming to the office, to wear surgical masks at all times, to avoid the “Three C’s” (*Closed (environments), Crowded (places), Close (contact)*) by using rest areas at different times, and to refrain from traveling to other prefectures and gathering in large groups.
- In preparation for a quick increase in nationwide infections, we have created a shift system that will enable essential decommissioning work to continue in a stable manner.
- **Some contractors that work at the Fukushima Daiichi Nuclear Power Station have tested positive for Covid-19.** However this has not had any major impact on the decommissioning process, such as schedule delays so far.

1. Overview of Covid-19 countermeasures implemented at the Fukushima Daiichi Nuclear Power Station (2/2)

2



Changes made in light of the declaration of a state of emergency on January 7, 2021

- All site tours had been suspended **from January 8 to February 7**.
(During the previous declaration of a state of emergency, site tours were suspended from February 29 through June 30, 2020)
- Allowing employees that live away from their families and single employees to return to their homes during holidays/weekends
 - Employees who are single or who live away from their families are asked to inform their supervisors the day before if they plan to return to their homes outside the prefecture.
 - After employees return from visiting their families they must submit a record of their activities while away.
 - **Employees living away from their families are strongly urged to refrain from returning home if such travel involves going through areas where a state of emergency has been declared.**
 - **When traveling through areas in which a state of emergency has been declared, employees must receive permission from their supervisor prior to leaving/returning home.**
- Restrictions on participation in large gatherings and events
 - Employees are strongly urged to avoid, or refrain from, leaving their homes or eating in restaurants where the “Three C’s” cannot be avoided, or where there will be an uncertain, or unpredictable, number of people. (Continued)
 - **In particular, employees are strongly urged to abstain from dinner meetings (Partaking in meals with others during which masks are removed to converse) *Urged to the strongest degree**
This request is also directed at the families of employees in light of the fact that some family members of employees in the Nuclear Power Division have tested positive for Covid-19.
 - **If the aforementioned requests are not complied with, and measures have not been taken at home to prevent the spread of Covid-19, such as mask-wearing, etc., employees shall work from home for two weeks.**

2. Covid-19 countermeasures implemented at the Fukushima Daiichi Nuclear Power Station (1/3)

3

TEPCO

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

■ Body surface temperature readings taken using infrared thermography (Continued)

- At each power station (new administration office building: two locations; access control facility: two locations; contractor office building; main gate) body surface temperature readings are being taken and anyone with a temperature of 37.0°C or higher is not being admitted on site or into buildings. (At current time no one has been refused entry)



■ Countermeasures when entering the main anti-earthquake emergency response center and the Unit 5/6 MCR (Continued)

- 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 surgical mask at all times.
- Entry/exit information (name, department, entry time) is recorded to
- enable contact tracing if needed.



■ Workers are prohibited from sitting face-to-face in the cafeteria (Continued)

- The number of workers allowed in cafeterias has been restricted in order to prevent infection by droplets when sitting face-to-face while eating.

■ Response to restriction on activities (Continued)

- When traveling inside or outside of the prefecture, employees/workers should take thorough action to avoid the “Three C’s” based on the “new life style”.
- Employees living away from their families are strongly urged to refrain from returning home if such travel involves going through areas where a state of emergency has been declared.

■ Management of new workers at the power station (Continued)

New workers* (contractors) from out side of the prefecture are asked to implement following:

* Excluding employees currently assigned to the Kashiwazaki-Kariwa Nuclear Power Station or Higashidori Nuclear

Construction Station

- Activity records for the two weeks prior to transfer are to be reviewed
- Entry permits shall be granted after confirming through PCR testing that there are no problems
- If the worker cannot take a PCR test, entry shall be permitted after confirming that there is no problem by having the worker self-quarantine for two weeks at home without going to the office and watch for any changes in health before coming to the prefecture.

2. Covid-19 countermeasures implemented at the Fukushima Daiichi Nuclear Power Station (2/3)

- **Restrictions on business trips (managed even stricter than before)**
 - In principle, business trips to the out of Fukushima Prefecture are prohibited.
 - In principle teleconferences are encouraged, and employees are being asked to refrain from travel outside of the prefecture as much as possible.
 - If planning a business trip, the necessity of the trip must be explained and activity records for the traveling employees for the two weeks prior to the day of travel must be submitted to supervisors.
 - Employees are not allowed to go to places where clusters have occurred.
 - ※ "Close (contact)" refers to, "Contact with others at a distance of less than 1m for 15 minutes or more without wearing surgical masks".

- **Allowing employees that live away from their families and single employees to return to their homes during holidays/weekends (Continued)**
 - Employees who are single or who live away from their families are asked to inform their supervisors the day before they plan to return to their homes outside the prefecture.
 - After employees return from visiting their families they must submit a record of their activities while away.
 - Employees living away from their families are strongly urged to refrain from returning home if such travel involves going through areas where a state of emergency has been declared.
 - When traveling through areas in which a state of emergency has been declared, employees must receive permission from their supervisor prior to leaving/returning home.

- **Restrictions on participation in large gatherings and events (Continued)**
 - Employees are strongly urged to avoid, or refrain from, leaving their homes or eating in restaurants where the "Three C's" cannot be avoided, or where there will be an uncertain, or unpredictable, number of people. (Continued)
 - In particular, employees are strongly urged to abstain from dinner meetings (Partaking in meals with others during which masks are removed to converse) *Urged to the strongest degree
This request is also directed at the families of employees in light of the fact that some family members of employees in the Nuclear Power Division have tested positive for Covid-19.
 - If the aforementioned requests are not complied with, and measures have not been taken at home to prevent the spread of Covid-19, such as mask-wearing, etc., employees shall work from home for two weeks.

- **Employees are required to wear surgical masks at all times (Continued)**
 - All employees are required to wear surgical masks at all time
(Employees that live away from home must wear surgical masks at all times when around family members)

2. Covid-19 countermeasures implemented at the Fukushima Daiichi Nuclear Power Station (2/3)

5



< The following measures apply to TEPCO HD employees >

- **Employees must take their temperature prior to coming to work and information is being collected on confirmed and possible infections (Continued)**
 - All employees must take their temperature prior to coming to work and information is being collected on confirmed and possible infections.
 - Employees with a fever must refrain from coming to work and inform their supervisor.
 - If an employee gets a PCR test at a medical institution due to fear of possible infection, s(he) must notify the labor department.
- **Employees have been recommended to commute during off-peak hours and to work from home when possible (Continued)**
 - The flex-time system is being employed on a company-wide basis.
 - Employees are being recommended to work from home using their company-provided computers and iPads.
- **Cafeterias in dorms for single employees and employees living away from their families (Continued)**
 - Partitions have been erected and a shift system is being employed for use of cafeterias in order to prevent infections during shift changes.

< The following measures apply to contractors >

- **Contractors have been asked to provide updates on employee status (Continued)**
 - Contractors have been asked to contact TEPCO if any of their employees develop serious symptoms such as difficulty breathing, lethargy or a high fever.
 - If a contractor gets a PCR test at a medical institution due to fear of possible infection, TEPCO must be promptly notified.
- **When visiting manufacturers and contractors (Continued)**
 - In principle visits by people coming from the outside of Fukushima prefecture are prohibited.
 - The following countermeasures are to be implemented during unavoidable visits.
 - ✓ Visitors are asked to wear surgical masks during visits.
 - ✓ Rules for our "new lifestyle," such as wearing surgical masks and only meeting in small groups, must be followed.
 - ✓ Confirm as much as possible that no visitor has subjected themselves to the Three C's during the two weeks prior to the visit.

3. Information on the shift system at the Fukushima Daiichi Nuclear Power Station



- **At current time workers are adhering to normal shift schedules.**
- **We have been implementing countermeasures to separate lines of travel for shift members and other personnel to prevent those workers who are indispensable for the stable continuation of decommissioning from being infected, such as workers involved in the management of fuel debris, the continuous cooling of spent fuel, and contaminated water treatment.**

- **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. (or travel times have been staggered)
 - 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.
- **Countermeasures when entering the main anti-earthquake emergency response center and the Unit 5/6 MCR**
 - In principle, only operators are allowed into these locations. If non-authorized personnel must enter these locations, they are required to wash their hands and sterilize them with alcohol, and to wear a surgical mask at all times.
 - Entry/exit information (name, department, entry time) is recorded to enable contact tracing if needed.
- **Operator task environments**
 - Work orders from maintenance division, etc. 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 emergency response center and the Unit 5/6 MCR’s are independent and separate from those used for other areas.

■ Measures for when an employee tests positive (applies to both TEPCO HD employees and contractors)

- The infected person and people with whom they have had close contact are prohibited from coming to the office. The infected person and people with whom they have had close contact are required to wait at home or work from home.
The instructions of medical institutions and health centers shall be followed in regards to the PCR testing of people that have had close contact with the infected party (including people suspected of having close contact)
- Disinfection of the areas used by the infected person
Areas used by the infected person shall be disinfected immediately.
Areas used by people with close contact shall also be disinfected immediately.
- The infected person must contact a health center immediately and follow their instructions for subsequent actions.

■ Tours

- All site tours had been suspended from January 8 to February 7. We will restart site tours, but visitors will be required to provide a record of their travel history for the 14 days leading up to the day of the tour. This will become a part of the normal process for visitors in accordance with the lifestyle changes.

■ 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.