

Covid-19 Countermeasures at the Fukushima Daiichi Nuclear Power Station

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

1. Overview of Covid-19 Prevention Measures



- In light of the sharp increase in the number of people testing positive for the Covid-19 omicron variant, and the fact that the Minister of Economy, Trade and Industry has instructed all specified public agencies to take measures to ensure business continuity even during the pandemic, on January 25 we strengthened our Covid-19 prevention measures to ensure that the operation of power stations is not hindered. Going forward, we shall continue to appropriately implement Covid-19 prevention measures and prioritize safety during the decommissioning process.
- The omicron variant is much more transmissible than other Covid-19 variants, and due to increasing infections within families and the tendency for the period until the onset of symptoms to be short, we have strengthened prevention measures. These measures include asking employees to think carefully before traveling outside of Fukushima Prefecture for unnecessary or non-urgent reasons, and to refrain from coming to the power station the day after they have returned to Fukushima Prefecture if they have crossed prefectural lines (in this case we ask that employees either take vacation or work from home). We also ask that employees take antigen tests at home to confirm that they are negative for the virus before coming to the office and to also take into account the physical well-being of their family members before making any decisions to come to the office.
- We ask that employees continue to engage in basic prevention measures, such as taking their temperature before coming to work, wearing masks at all times, avoiding the "three C's," such as by using rest areas at different times to avoid congestion, and refraining from conversation when eating, etc.
- As of 3:00 PM on January 26, the cumulative total number of employees and contractors that work at the Fukushima Daiichi Nuclear Power Station and have tested positive for Covid-19 is 112 (employees: 13, temporary staffers: 1, contractors: 97, client company employees: 1)
- There has been no large impact on decommissioning work, such as schedule delays, etc., in conjunction with employees, etc. testing positive for Covid-19.

2. Covid-19 Prevention Measures (1/4)

< Prevention measures for both TEPCO HD employees and contractors >

- **Refraining from daily activities and business dinners (meetings) (Partial strengthening)**
 - Employees are asked to refrain from going to places where an uncertain number of people may gather
 - The holding of, or participation in, meetings (parties, etc.) in areas in which a semi-state of emergency has been declared is prohibited.
- **Moving in and out of Fukushima Prefecture (Partial strengthening)**
 - Employees should think carefully about whether errands are urgent or necessary and take into consideration the number of Covid-19 positives in the destination area. If travel to this area is required, personal vehicles should be used if possible and contact with many people should be avoided.
 - When at the destination, we encourage action to prevent the three C's and continued awareness about thoroughly implementing basic prevention measures.
 - Regardless of whether or not a night was spent in lodging, travelers shall refrain from coming to the power station the day after they have returned to Fukushima Prefecture if they have crossed prefectural lines (in this case we ask that employees either take vacation or work from home). We also ask that employees take antigen tests at home to confirm that they are negative for the virus and monitor the physical well-being of their family members, avoid the three C's, and report to their supervisor or manager the number of adults they have been in contact with, or if they are uncertain about how many people they have been in contact with, before coming to the office.
 - People residing in Fukushima Prefecture shall monitor their health and the physical well-being of their family members (with whom they live or have been in contact with), avoid the three C's, and report to their supervisor or manager the number of adults they have been in contact with, or if they are uncertain about how many people they have been in contact with, before coming to the office.
- **Meetings and meeting with visitors (Strengthened)**
 - Regardless of whether the meeting is inside or outside the company, face-to-face meetings have been suspended and online conferencing shall be used.
 - No visitors are allowed except in special circumstances.
- **Travel history checks (continued)**
 - The travel history of family members with whom the employee resides shall be recorded, and the travel records of employees shall be checked by supervisors or managers.
 - If an employee is to travel to meet family, the travel records of the family shall be checked by direct supervisors for any problems prior to departure of the employee.
 - Before an employee comes back to work after vacation, his/her travel history shall be checked along with his/her health status, and the health status of his/her family

2. Covid-19 Prevention Measures (2/4)



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

- **Body surface temperature readings taken using infrared thermography (Continued)**
 - At each power station, 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.
- **Employees are prohibited from sitting across from each other in the cafeteria, must refrain from conversation while eating, and reduce the number of chairs (continued)**
- **Daily health management (continued)**
 - Employees shall take their temperature prior to coming to work and refrain from coming to the office if they do not feel well.
- **Management of new workers at the power station (Continued)**

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

 - 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
- **In-house Covid-19 vaccinations**
 - As of September 14, 2021, a total of approximately 3,700 people (employees: approximately 950, contractors: approximately 2750) have been double vaccinated
 - **We are deliberating** whether or not to administer a booster shot.



2. Covid-19 Prevention Measures (3/4)



<Prevention measures for TEPCO HD employees>

■ Business trips (Partial strengthening)

- Domestic and overseas business trips are prohibited and online conferencing shall be utilized instead.
- The Site Superintendent must now give authorization if a business trip must be taken outside of Fukushima Prefecture.
- Direct supervisors shall check travel histories for problems prior to allowing the employee to come back to the office.
- Antigen tests shall be taken before traveling on business to other offices (Niigata Prefecture or Aomori Prefecture).

■ Replacements are ordered to work from home in order to be able to maintain emergency response structures (Strengthened)

■ Employees are encouraged to avoid rush hour and work from home (continued)

- These steps shall be proactively taken by employees in all groups in all groups to the point where work is not hindered.
- The flextime system shall be used in a planned and companywide manner.
- Employees are encouraged to work from home using company-supplied PCs and iPads.

■ 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 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)

■ 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.

2. Covid-19 Prevention Measures (4/4)



< The following measures apply to contractors >

■ Daily health management, etc. (continued)

- Employees shall engage in basic Covid-19 prevention measures, such as wearing masks at all times (nonwoven fabric masks are recommended), washing hands, and avoiding the three C's.
- Employees shall take their temperature prior to coming to the office and shall refrain from coming to the office if they do not feel well.
- Masks shall be worn on trains when commuting, and employees shall thoroughly engage in general prevention measures, such as setting air-conditioners to ventilation mode.
- Workers shall avoid creating congestion in power station rest areas to avoid the three C's (work and take breaks at different times, etc.)

■ 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.

3. Information on the Shift System

- **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.

4. Others

■ 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.

■ Visits

- All site visits had been suspended from January 25. We will restart site visits, but visitors will be required to provide a record of their travel history for the 14 days leading up to the day of the visit. 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.