

Start of Nozzle Unit Installations for Mist Sprinkler Associated with the Dismantling of Unit 1 Reactor Building Cover at Fukushima Daiichi Nuclear Power Station

REFERENCE

April 6, 2016

Tokyo Electric Power Company Holdings, Inc.

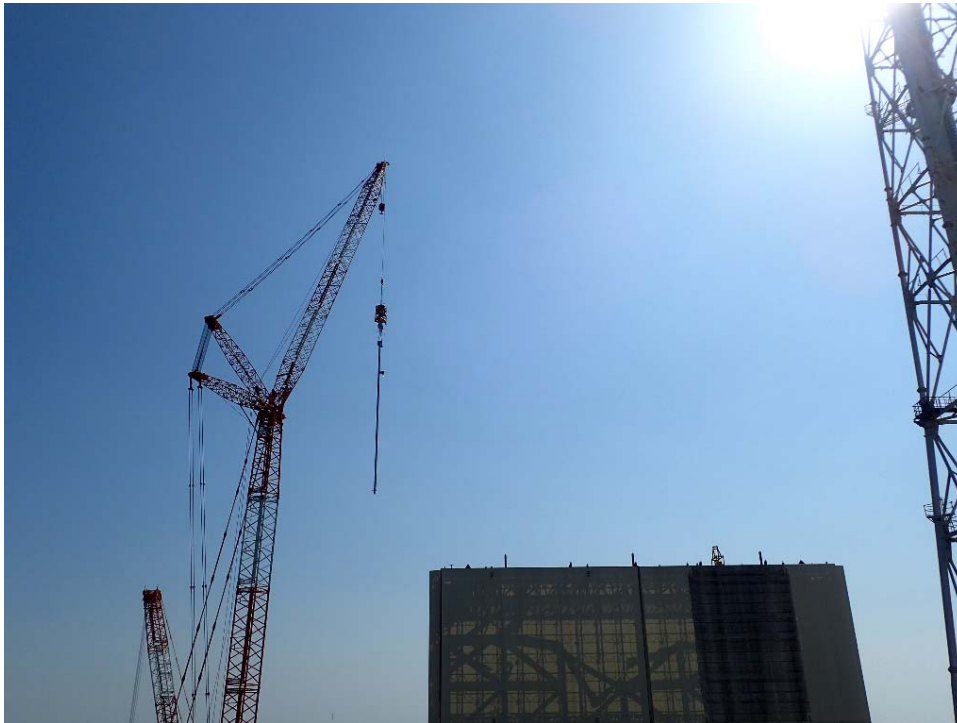
On April 6, 2016, the installation of nozzle units started for mist sprinklers on the operating floor of the Unit 1 reactor building.

One of the nozzle units was installed today on the east side of the building, and a total of 13 nozzle units will be installed. The performance of mist sprinklers will be monitored closely.

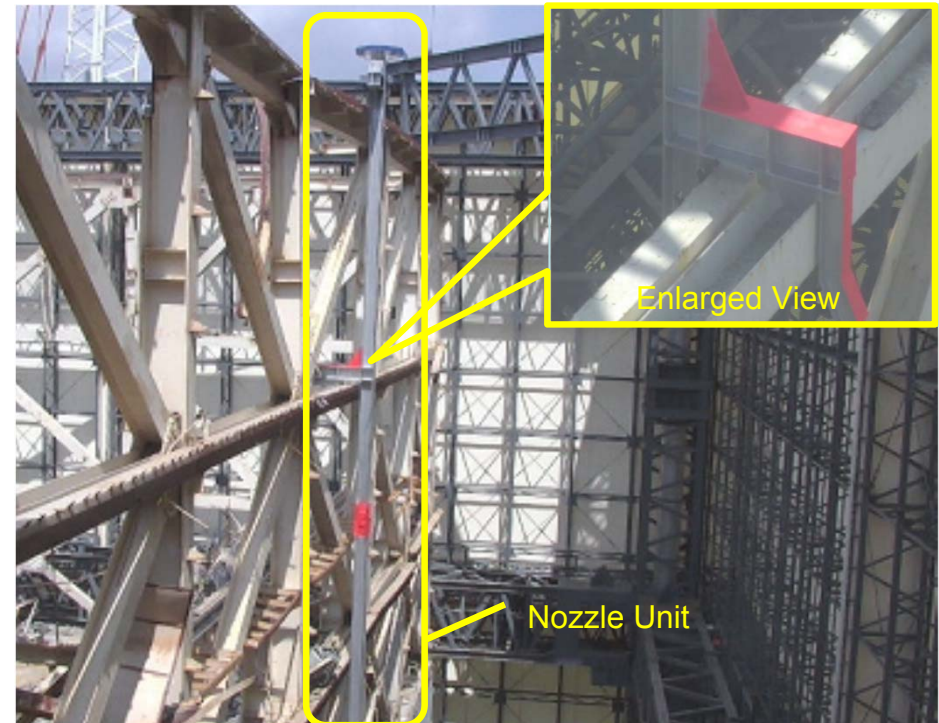
No significant changes in measurement values have been found from the dust monitors for radioactive concentrations.

Work Summary

- Date: April 6, 2016
- Time: 8:56 a.m. 10:55 a.m.



Hauling of Nozzle Unit with Crane



Nozzle Unit Installation (East side of building)

*The above photos were taken by Tokyo Electric Power Company Holdings, Inc. on April 6, 2016.

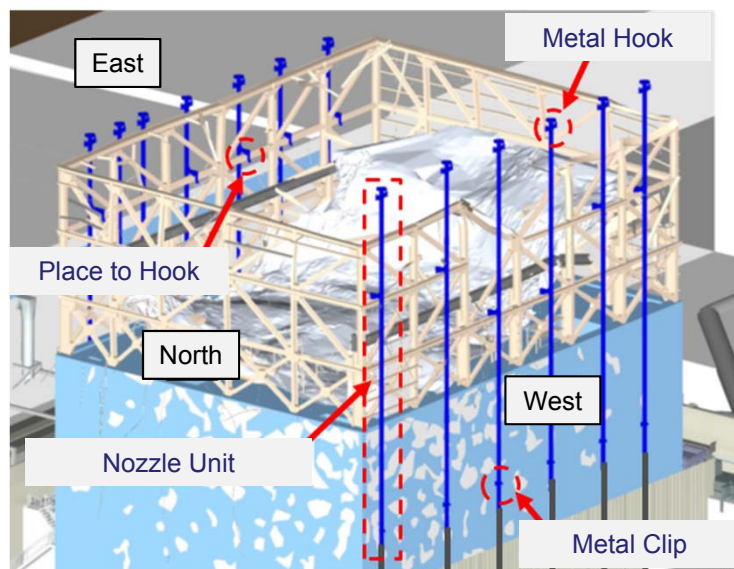
REFERENCE: Installation of Mist Sprinklers

■ Purpose of Installations

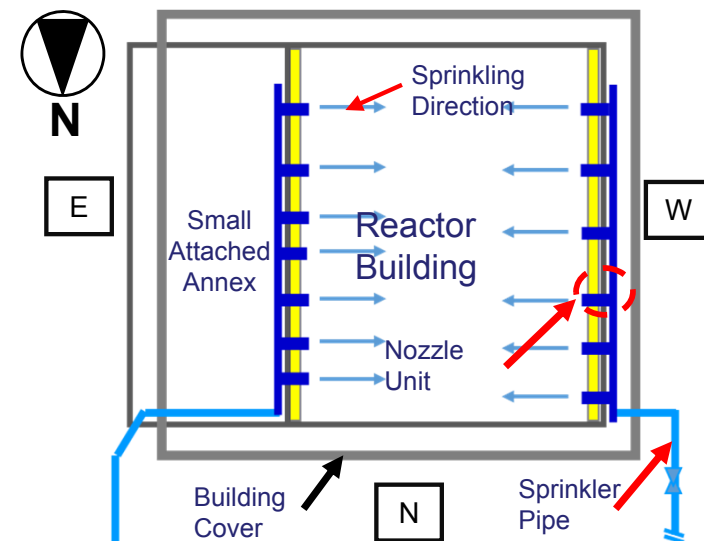
Mist sprinklers are installed to sprinkle water on the rubble piled up on the operating floor (top most floor) of Unit 1. They are used particularly in emergency situations when strong winds are forecasted or alarms go off from the dust monitors installed on the floor.

■ About Mist Sprinklers

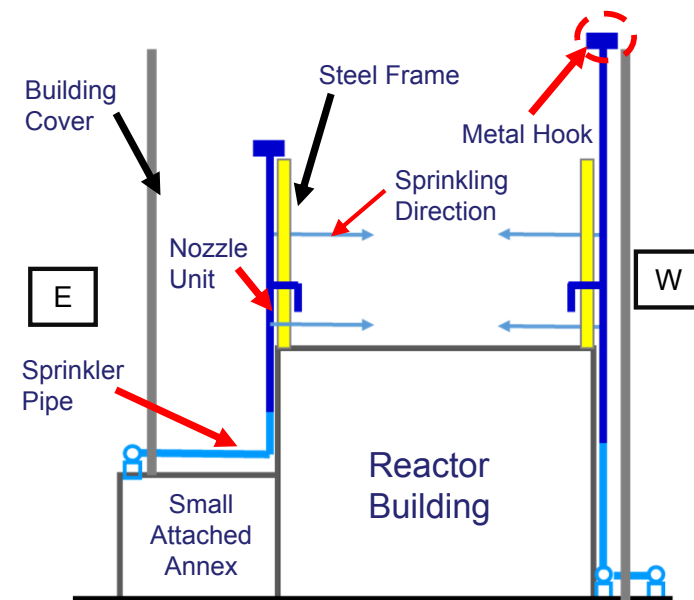
- Steel-frame units with two or three sprinkler nozzles are installed by hooking on the existing steel frames of the reactor building.
- A total of 13 nozzle units will be installed: about 7 units on the east site and about 6 units on the west side.
- Two types of sprinkler nozzles will be used. The amounts of water to be sprinkled are about 15 liter/min and about 22 liter/min.



Mist Sprinkler Image
(Bird's eye view)



Planar Image of Mist Sprinkler



Cross-section Image of Mist Sprinkler

REFERENCE: Installation of Mist Sprinklers

- The installations of mist sprinklers, including pipes to sprinkler nozzles, have started from February 4, 2016.

To install pipe stands for mist sprinklers, the rubble piled on the small attached annex located on the east side of the Unit 1 reactor building were cleaned up with a vacuum. The pipes and the pipe stands were installed after installing iron plates.

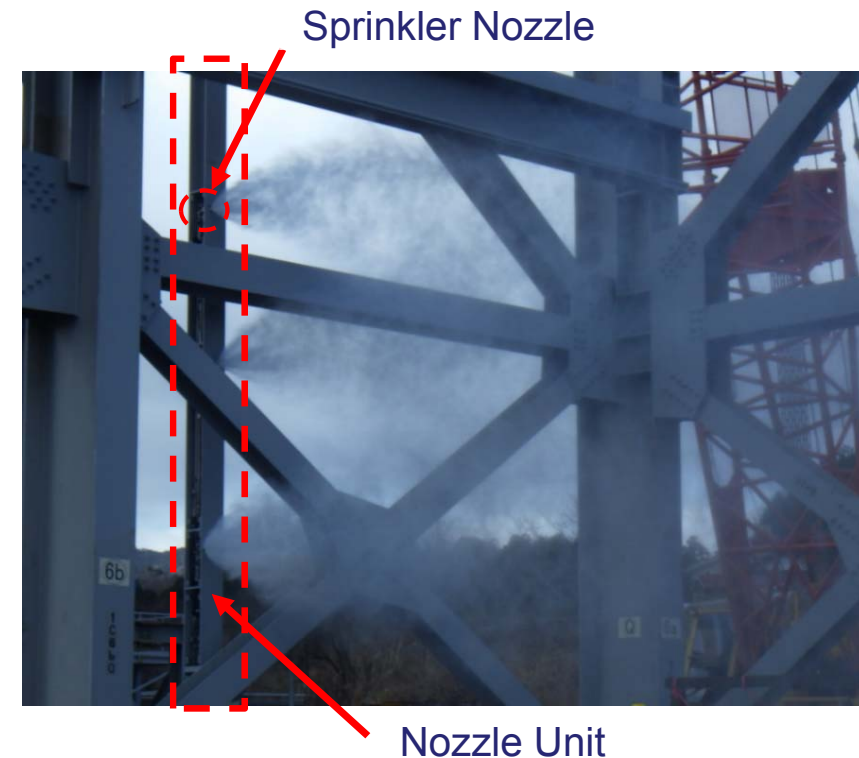
- Mock-up testing for mist sprinklers was carried out at the out side of the power station.



Before Cleaning Up Rubble on the Small Attached Annex



After Cleaning Up Rubble on the Small Attached Annex
Installations of Pipes to Sprinkler Nozzles



Mock-up Testing of Mist Sprinklers at
the Outside of the Power Station