Reactor imaging technology for fuel debris detection by cosmic ray muon Installation completion report

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Tokyo Electric Power Company

TEPCO 東京電力

IRID

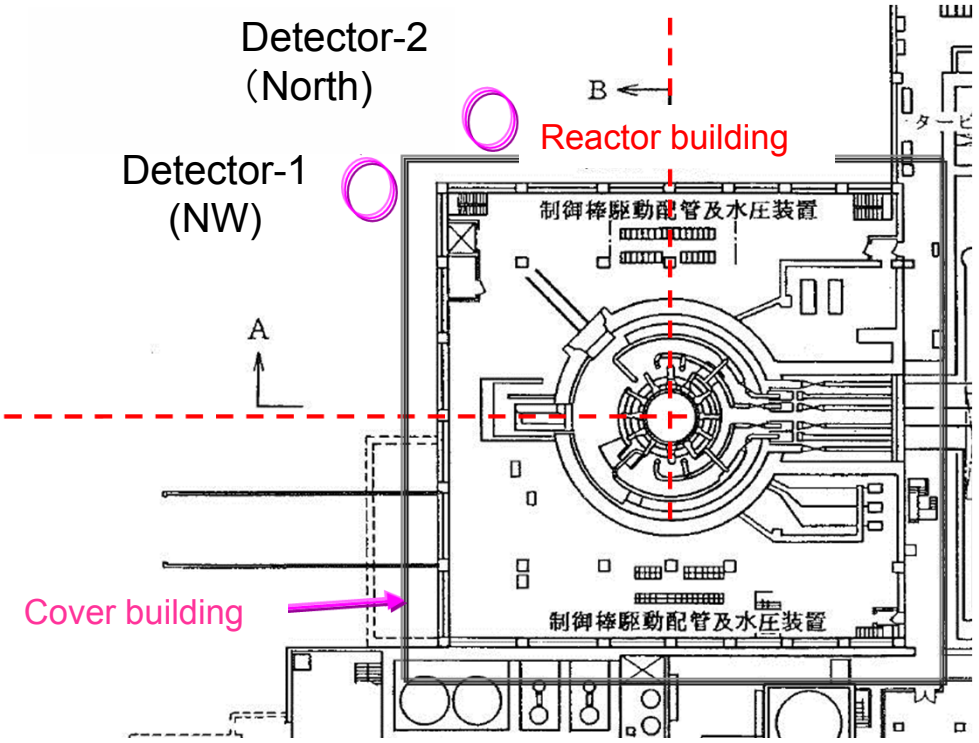
The content in this document utilizes the development results of International Research Institute for Nuclear Decommissioning (IRID).

1. Installation schedule

●From 9th to 13th February, Two Muon (fuel debris detection apparatus) have been installed at the North West side and North side of reactor 1, Fukushima Daiichi NPS

◎2/9: 1st Muon has been Installed (North side of reactor building)
◎2/10: 2nd Muon has been installed (North West side of reactor building)
◎2/12: Power receiving for the apparatuses are confirmed
◎2/12: Measurement began
◎2/13: No trouble confirmed in the data

●Send those data to HIGH ENERGY ACCELERATOR RESEARCH ORGANIZATION (KEK) , to evaluate measured data gradually



2. Installation Image (1st Muon : February 9)

Image1: Unloading by crane

Image 2: Installation of Detector-2 (North side)

2. Installation Image (2nd Muon :February 10)

Image 3: Installation of Detector-1 (North West side)

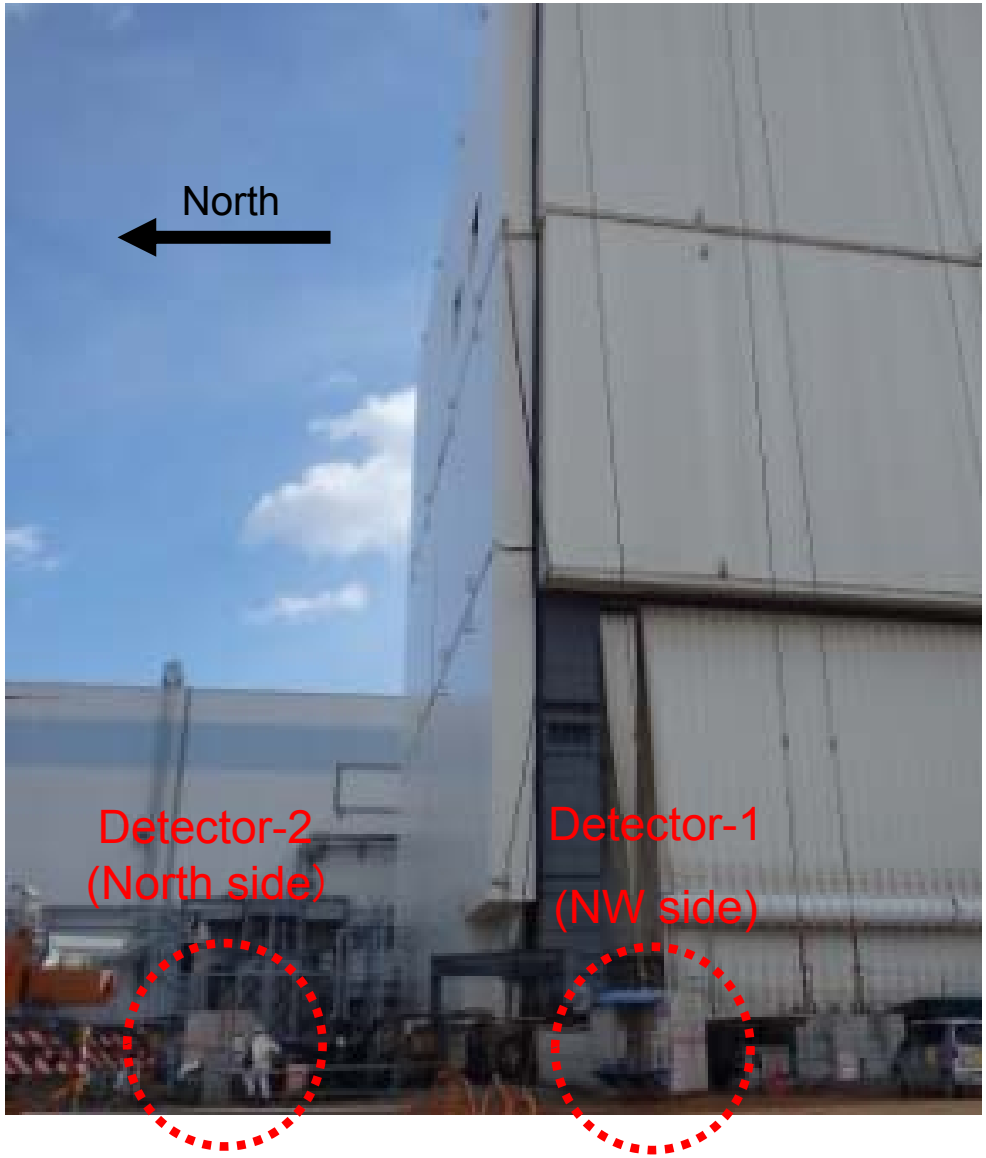


Image 4:Condition after Detectors installed

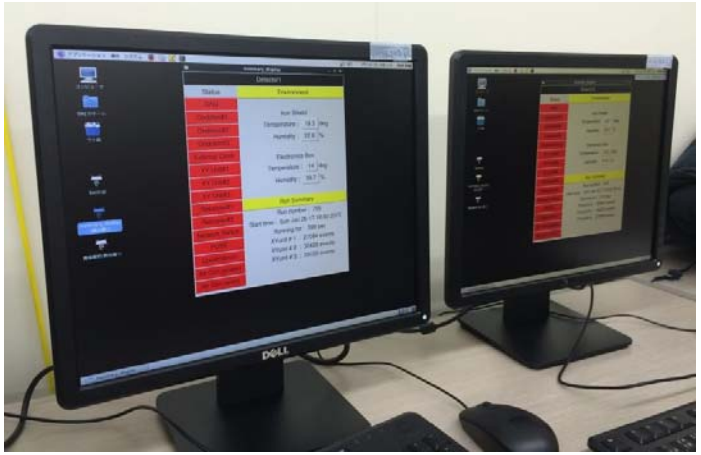
2. Installation Image (Power receiving: February 12)

Image 5: Cable connection to Detector-1 (NW side)

Image 6:Detector-2 (North side) installation completed

2. Installation Image (Confirmation of measurement condition: February 13)

Image7 : Data confirmation



(Ref: Condition before cable connection Alert switching on)

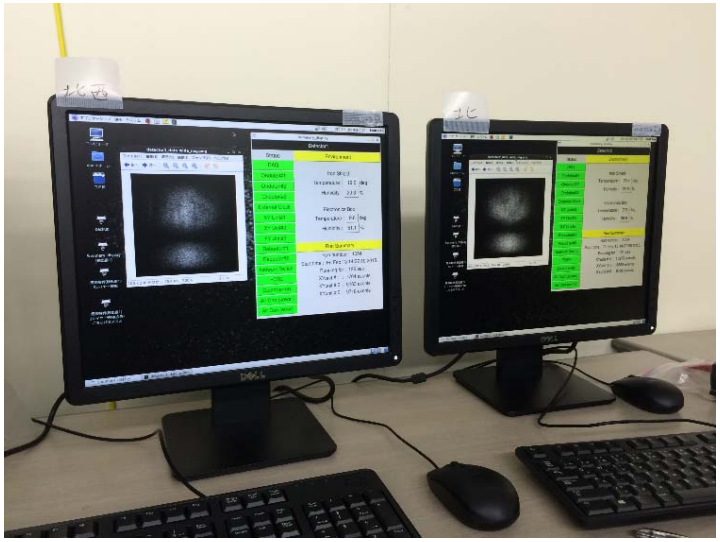


Image 8 : Operating condition of the measurement system (No alert)