Fukushima Daiichi Nuclear Power Station Unit 2 RPV Alternative Thermometer: SLC Pipe Soundness Confirmation

< Reference >
July 12, 2012
Tokyo Electric Power Company

Date and time
Thursday, July 12, 2012 10:30 AM – 3:00 PM

Number of people involved and planned exposure dose
-Manufacturer: 11 people, planned exposure dose: 5mSv
-TEPCO employees: 3 people, planned exposure dose: 9mSv
-Actual exposure dose (Max.): 3.45mSv

Purpose
-Confirm the soundness of the pipe (to which the thermometer is installed) prior to the RPV alternative thermometer installation.
-Reduce the radiation dose of the pipes near X-51 penetration (Flushing): Reduction in radiation dose can be expected as a result of flushing water from the instrument rack side to RPV side.

Details
-Place: Unit 2 Reactor Building 1st floor
-Procedure: Flush water from the instrumentation rack to the instrumentation pipe. Then confirm the soundness of the instrumentation pipe based on the temporary pressure gauge reading (hydraulic head pressure).

10:20 AM: Hydraulic head pressure before flushing was confirmed (Temporary pressure gauge reading: 64kPa)
10:35 AM: Started flushing (Approx. 15L, the instrumentation pipe capacity: approx. 33L)
The pump pressure gauge reading went up to 3.3MPa, and no more water could be injected from that point.
11:05 AM: Stopped flushing (the pressure gradually decreased to 0.2MPa)
2:58 PM: The temporary pressure gauge reading went down to 148kPa (still keeps decreasing).
The pressure to be confirmed again on July 13.

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