

< Reference >

October 3, 2012

Tokyo Electric Power Company

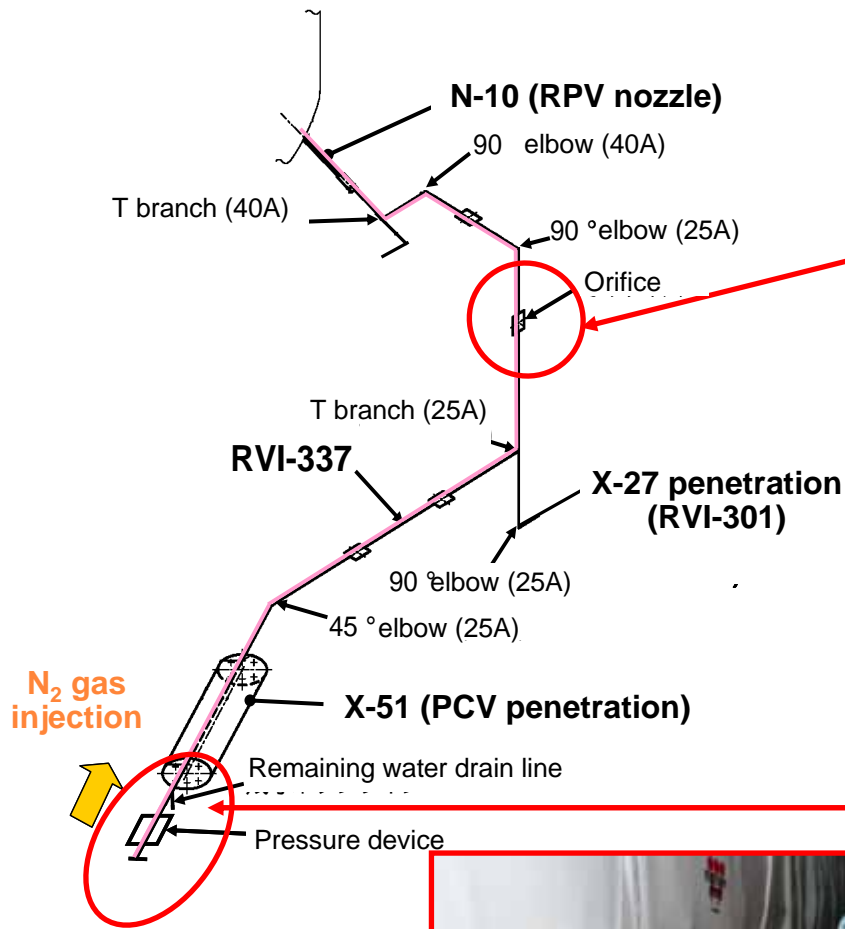
# Unit 2 RPV Alternative Thermometer Installation at Fukushima Daiichi Nuclear Power Station



東京電力

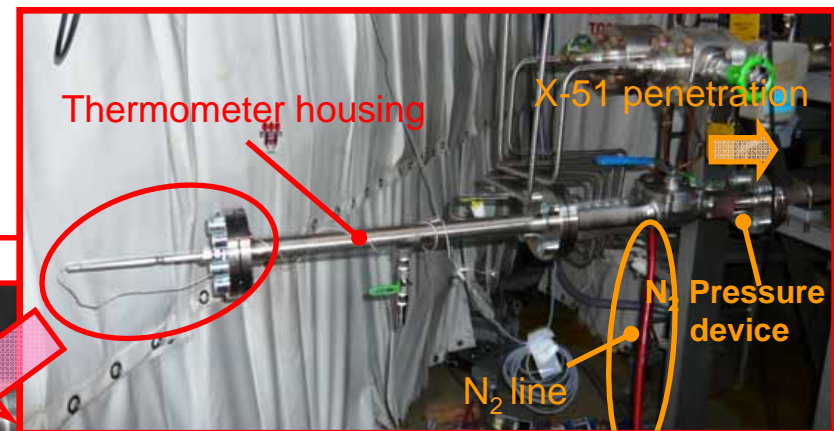
---

# 1. Alternative Thermometer Installation Condition (Photo)



Investigation of the inside of the pipe by an endoscope (October 2)

Photo taken by a cooperative company



Thermometer installation condition (October 3)

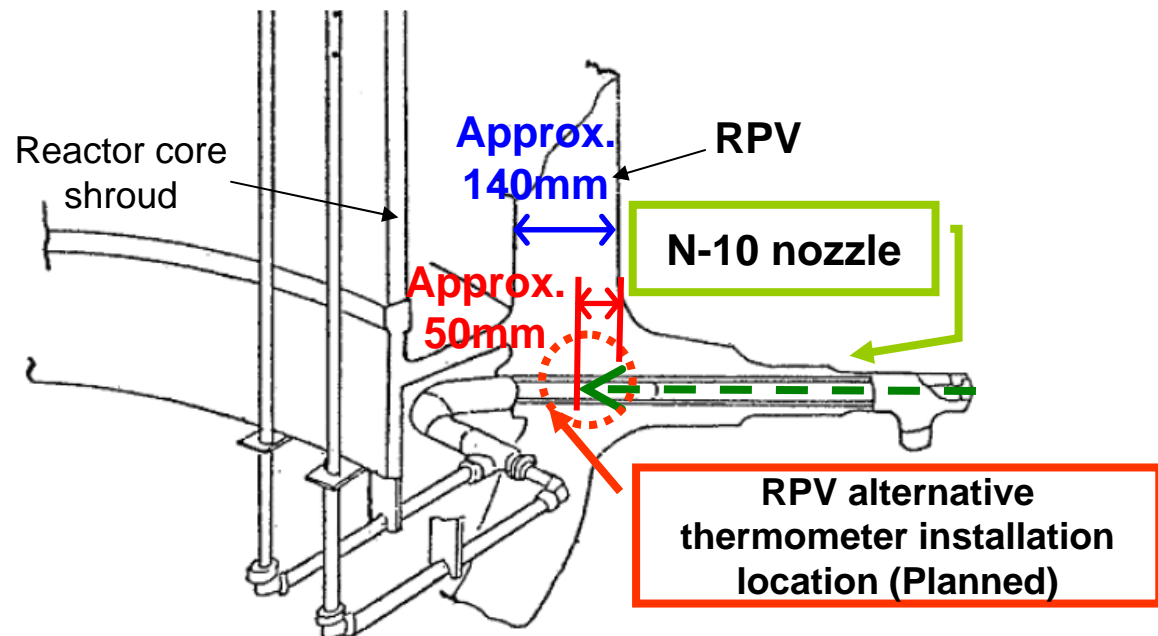
Photo taken by TEPCO

Thermometer compensation lead wire



## 2. RPV Alternative Thermometer Installation Location

- The RPV alternative thermometer has been installed in N-10 nozzle at approx. 5cm inward from the RPV external wall surface. The thermometer measures the temperature of the RPV wall surface material similarly to the existing RPV bottom thermometer. The thermometer was inserted to the location determined based on dimensional control. The target installation location is set at 5cm inward from the RPV external wall surface considering the error ( $\pm 5\text{cm}$  max.).
- It has been confirmed at the mockup test that the thermometer is capable of accurately measuring the temperature as long as the thermometer reaches the RPV wall even if it does not touch the metal part.



# 3. Comparison between the Alternative Thermometer and the Existing Thermometer

## Installation location

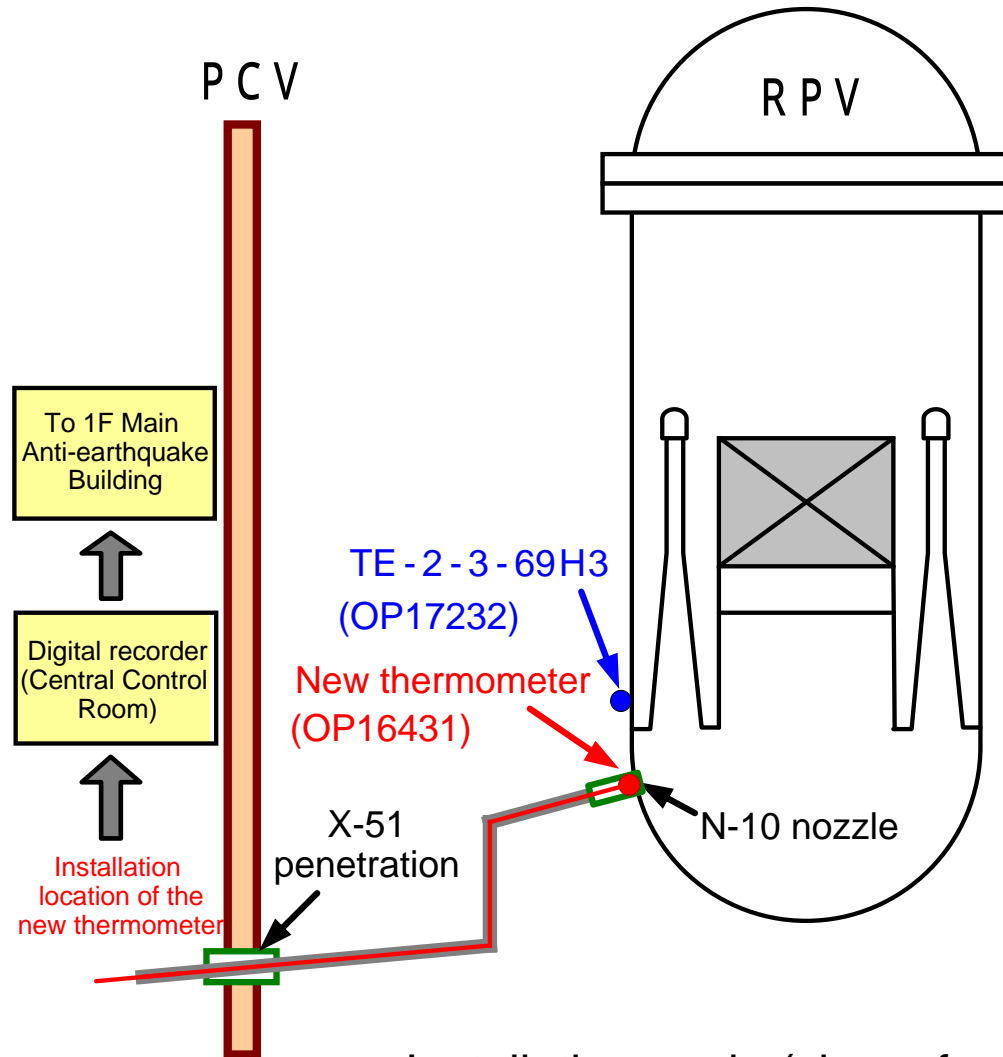


Table 1. Readings of the existing thermometer and the new thermometer

TE-2-3-69H3 (RPV bottom head upper thermometer)	New thermometer
46.1	42.6

As of 11:00 AM on October 3

Table 2. Direct current resistance of the new thermometer

Instrument	Before installation	After installation
New thermometer	1461.8	1464.6

Installation angle (circumferential direction): 270 ° / 180 °