Defect with Emergent Nitrogen Gas Separation Apparatus in Fukushima Daiichi NPS

<Reference> November 20, 2013 Tokyo Electric Power Company

<Chronological order> On November 19

- 9:26 AM: We started a regular test with the emergent nitrogen gas separation apparatus.
- 11:31 AM: A person on duty found no flow rate of nitrogen supply.
- 11:49 AM: When checking the can angle indicator of an air actuating ball valve , he found the indicator showing 'full closed', though it is supposed to show 'full open'
- 11:54 AM: We determined it does not meet the Limiting Conditions for Operation (LCO), Part 1, Article 25 in Security of the Specified Reactor Facilities
- 12:00 PM: We stopped the emergent nitrogen gas separation apparatus manually. We found no abnormality with the common-use nitrogen gas separation apparatuses A and B, and nitrogen injection at Units 1 to 3.

On November 20

- 11:05 AM: We started a regular test with that valve 'full opened'
- 11:40 AM: We confirmed each parameter (No abnormality for flow rate etc.)

12:15 PM: We finished the regular test.

<Implementation Plan Article 25 (Status maintenance function of inert atmosphere inside PCV)

'One nitrogen separation apparatus is in operation and an emergent nitrogen gas separation apparatus (including a diesel power generator for emergent nitrogen gas separation apparatuses) is ready to start.'



Emergent nitrogen gas separation apparatus



Nitrogen Filled Equipment (Schematic Diagram)

A person on a duty confirms the emergent nitrogen gas separation apparatus functions in a monthly surveillance, and it refers to an equipment which needs operating, in case a commonuse nitrogen gas separation apparatus does not function.

