Environmental effect in the vicinity of the station

<table>
<thead>
<tr>
<th>Type of plant</th>
<th>Unit 1</th>
<th>Unit 2</th>
<th>Unit 3</th>
<th>Unit 4</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant status when hit by the earthquake</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Stopped due to the earthquake</td>
<td>-</td>
</tr>
</tbody>
</table>

### Emergency power supply
- EDGs automatically started when the external power was lost but stopped later when tsunami hit the plants.

### Core and fuel integrity
- Damage and leakage suspected
- Damage and leakage suspected
- Damage and leakage suspected
- No fuel loaded

### PCV structure integrity
- Damage and leakage suspected
- Damage and leakage suspected
- Damage and leakage suspected
- No damage

### Core cooling
- Cooling systems of Unit 1 and 2 have stopped due to the earthquake.
- Cooling systems of Unit 3 and 4 have stopped due to the earthquake.
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- Cooling systems of Unit 3 and 4 have stopped due to the earthquake.

### GOAL OF STEP 1 (April through July)
- Stabilizing cooling (circulating injection cooling restarting accumulated water)
- Cooling by minimum injection rate
- Improving work environment
- Reactor water level monitors to redundant instruments

### Fluctuation of Radioactive Materials
- Radioactive iodine, I-131, cesium, Cs-134, 137, and Sr-89, 90 were detected from the subdrain, underground water collected and controlled in the facility, and the well water in the Fukushima Daiichi site. (7/11)
- Radioactive materials and radionuclide contaminated debris scattered due to the hydrogen explosion at Unit 1 and 3 R/Bs and other events.

### Improvement of Work Environment
- Blocking the concrete tailouts outside the T/Bs completed (6/10), etc.
- Preventing以外 of high level radioactive waste water system should be operated in stable and effective manner to prevent radioactive water accumulated in unit-2 and 3 overflowing.

### Improvement of Rescue System
- Stopping and processing low level radioactive waste water
- Radioactive iodine, I-131, cesium, Cs-134, 137, and Sr-89, 90 were detected from the subdrain, underground water collected and controlled in the facility, and the well water in the Fukushima Daiichi site. (7/11)

### Improvement of Rescue System
- Preventing outside of radioactive waste water system should be operated in stable and effective manner to prevent radioactive water accumulated in unit-2 and 3 overflowing.

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<th>Source</th>
<th>TEPCO Press Release, Press Conference</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/15</td>
<td>TEPCO's analysis [announced on 5/15]</td>
</tr>
<tr>
<td>5/31</td>
<td>TEPCO judged that most spent fuels were not damaged in the Unit 2 and 4 SFPs based on the detailed analysis of the radioactive materials in the pool water. [5/31]</td>
</tr>
<tr>
<td>5/31</td>
<td>Rough estimate by TEPCO [announced on 5/31]</td>
</tr>
</tbody>
</table>

**Significance judged by JAIF**

- 🟢 Low
- 🟠 High (Need immediate action)
- 🟥 Severe (Need immediate action)

**Progress of countermeasures**

- 🟢 Completed
- 🟠 Under construction
- 🟥 To be done (including studying and manufacturing)

**Abbreviations**

- SFP: Spent Fuel Storage Pool
- EDG: Emergency Diesel Generator
- RPV: Reactor Pressure Vessel
- PCV: Primary Containment Vessel
- R/B: Reactor Building
- T/B: Turbine Building
- RW/B: Radioactive Waste Disposal Building
- RHR: Residual Heat Removal system
- CST: Condensate water Storage Tank
- Hx: Heat exchanger

**Significance judged by JAIF**

- 🟢 Low
- 🟠 High (Need immediate action)
- 🟥 Severe (Need immediate action)