Reactors

- Type of Reactor (Unit 1 through 4)
  - BWR-3
  - BWR-4

- Accumulated water
  - Volume: 3900 m³ on 5/31
  - Volume: 6000 m³ on 5/31
  - Volume: 6400 m³ on 5/31
  - Volume: 6500 m³ on 5/31

- Cooling by minimum injection rate
  - Injecting freshwater into the reactor via feed water line at 0.5 m³/h

- Establishment of circulation cooling flow
  - Circulation flow is started following the radioactive water process facility starts operation

- Nitrogen gas injection into PCV
  - Injection continued [4/1] - Work for injection line nearly completed
  - Injection continued [5/31] - Work for injection line in progress

-Flooding of PCV after sealing leaks
  - Studying

- Securing heat exchange function
  - Work for secondary loop piping
  - Construction work to be started after improving the work environment

- Improving work environment
  - High radiation circumstance is hampering the work to restore reactor cooling
  - Preparation work such as removing radiation monitoring is underway in each unit. Larger-scale work inside the R/B started at unit 1 and after radioactive substance and humidity in the air inside the R/B dropped.

- Fuel integrity in SFP
  - Unknown
  - Most spent fuels not damaged
  - Unknown
  - Most spent fuels not damaged

- Reactor cooling
  - Stable cooling

- Reliability improvement in injection operation
  - Injecting freshwater via SFP coolant line

- Circulation cooling with HX
  - Planned

Increase and accumulation of radiactively contaminated water

- High level radioactive wastewater is accumulating in the R/B, T/B and RW/B of each unit.
  - About 92,000 m³ on 5/31

- Severe damage and leakage in SFP
  - Unknown
  - No damage

- Sea level rise and increase of sea level
  - Sea level rise and increase of sea level

- Current status of the plant and the progress of countermeasures taken
  - Reactor water level
  - Reactor pressure

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1 TEPCO’s analysis [announced on 5/15,23]
2 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]
3 Rough estimate by TEPCO [announced on 5/31]

[Source]
Government Nuclear Emergency Response Headquarters: News Release, Press Conference
NISA: News Release, Press Conference
TEPCO: Press Release, Press Conference

[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
- Severe (Need immediate action)

[Progress of countermeasures]
- Completed
- Under construction
- To be done (including studying and manufacturing)