Mid-to-Long-Term Roadmap and R&D Plan towards the Decommissioning of Fukushima Daiichi NPP Unit 1-4, TEPCO

Agency for Natural Resources and Energy
Ministry of Economy, Trade and Industry (METI), Japan
Primary Targets of Mid-to-Long-Term Roadmap

“Mid-to-Long-Term Roadmap” defines the term of decommissioning into the three phases, and details major schedule of on-site works and R&D projects

• Phase 1: From the completion of Step 2 to the commencement of fuel removal from the Spent Fuel Pools (Target: Accomplish in 2 years)

• Phase 2: From the end of Phase 1 to the commencement of fuel debris removal (Target: Accomplish in 10 years)

• Phase 3: From the end of Phase 2 to the end of the decommissioning (Target: Accomplish within 30 to 40 years)
Government and TEPCO Council on Mid-to-Long Term Response for Decommissioning

Co-Chair: Mr. HOSONO, Minister for the Restoration from and Prevention of Nuclear Accident, Cabinet office
Mr. EDANO, Minister of Economy, Trade and Industry (METI)
Vice-Chair: Parliamentary Secretary of Cabinet Office, Vice Minister of METI, President of TEPCO
Members: Agency of Natural Resources and Energy (ANRE), The Nuclear and Industrial Safety Agency (NISA)

Management Board

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Mr. KITAGAMI, Vice Minister of METI
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Adviser: Ms. KAMIMOTO, Vice Minister of MEXT
Members: METI/ANRE
TEPCO
NISA (Nuclear and Industrial Safety Agency)
MEXT (Ministry of Education, Culture, Sports, Science and Technology)
JAERA (Japan Atomic Energy Agency)
Toshiba
Hitachi-GE

R&D Management Headquarters

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Vice-Chair: Mr. SONODA, Parliamentary Secretary of Cabinet Office
Adviser: Ms. KAMIMOTO, Vice Minister of MEXT
Members: METI/ANRE
TEPCO
MEXT
AEC (Atomic Energy Commission)
JAERA
AIST
CRIEPI
Toshiba
Hitachi-GE
and Academic Advisors
Organizational Structure 2)

R&D Management Headquarters

Working team for preparation of fuel debris removal

Sub-working team (SWT) for equipment/device development, etc.

- SWT for core status assessment and treatment

SWT for fuel debris property assessment and treatment preparation

- Fuel debris criticality control
- Assessment of simulated fuel debris characteristics
- Analysis of fuel debris properties
- Fuel debris treatment technologies
- Fuel debris properties
- Stability of contaminated water processing
- Examination of waste treatment and disposal

Working team for radioactive waste treatment and disposal

Joint task force for remote technologies

Working team for spent fuel pool countermeasures

Report Examination

Long-term stability of fuel assemblies

[Overall management]

Specific R&D projects

Examination of waste treatment and disposal

[High-level management]
Fundamental Philosophy for Implementing R&D

- Address on-site technological needs
- Government involvement and support
- Open and flexible framework for implementation with support from international engineering and science communities