SUMMARY OF PROCEEDINGS 16th NUCLEAR REFORM MONITORING COMMITTEE MEETING January 29, 2019

Venue: TEPCO Headquarters, 10F West Conference Room

Participants:

- Dr. Dale Klein (Chairman)
- Lady Barbara Judge (Deputy Chairman): Participated via teleconference
- Masafumi Sakurai (Member of the Committee)
- Takashi Kawamura (TEPCO Chairman, and Member of the Committee)
- Kazuhiro Suzuki (Secretary-General)
- Tomoaki Kobayakawa (TEPCO President and CEO, and Chief of the Nuclear Reform Special Task Force)
- Shigenori Makino (Managing Executive Officer, and Secretary General of the Nuclear Reform Special Task Force)
- Ryutaro Yamamoto (Managing Executive Officer)
- Akira Ono (Managing Executive Officer, and President of Fukushima Daiichi D&D Engineering Company [FDEC])

Chairman's Opening Remarks: by Dr. Klein

It is almost eight years since the nuclear accident occurred at Fukushima Daiichi (1F) and considerable progress has been made. The 1F site has transformed from an unstable situation to one that is more stable.

TEPCO's self-assessment is today's topic. There have been many positive accomplishments, but there are still gaps, such as a lack of properly trained and skilled personnel and an inability to develop and maintain an effective communication program.

Comments from Committee Members:

Lady Judge stated three main points:

- Management of the Nuclear Safety Oversight Office has passed successfully from Dr. Crofts to TEPCO's internal successor.
- A safety culture is being cultivated at TEPCO, but executives should work with contractors to help them develop similarly high safety standards.
- The most important thing is to continue internal audits, self-assessments and self-testing in comparison to the world's best nuclear operators.

Mr. Sakurai noted that an important point of self-assessments is to identify weaknesses. He said the Nuclear Reform Monitoring Committee (NRMC) has recognized the great achievements that TEPCO has made, but there are still gaps that need to be overcome.

Mr. Kawamura expressed his appreciation to NRMC members for their work in compiling the NRMC's review of TEPCO's self-assessment. He said that TEPCO executives should take the results of the review seriously and move forward with nuclear safety reforms.

Comment from the Chief of the Nuclear Reform Special Task Force:

Mr. Kobayakawa expressed his appreciation for the NRMC's support. He said that nuclear safety is a journey and that TEPCO must move forward with professionalism and show a strong will to achieve safety on its own.

Safety Minutes:

Mr. Yamamoto shared his experience regarding continuous learning.

Initiatives Being Implemented Based on Nuclear Safety Reform Self-Assessment Mr. Makino reported on "Reflecting on Self-Assessments and an Introduction of Initiatives Aimed at Improvement Efforts."

Lady Judge shared her concerns that the job rotation system is too short to develop experts and that TEPCO needs to implement education & training programs to develop currently lacking skills, such as those for fire prevention. Mr. Makino responded to Lady Judge that job descriptions for expert positions have been stipulated. Job rotations for experts are being adjusted to align with TEPCO's job-rotation system. Regarding fire prevention, he said that in-house firefighting skills are lacking, so a fire drill will be held at the station in the coming year. Mr. Ono shared his understanding that FDEC's in-house engineering skills must be enhanced in many ways, and that the company cannot depend on engineering contractors as before, so it will develop a plan for skill enhancement.

Review of Nuclear Safety Reform Self-Assessment

The NRMC members shared their insights regarding the review.

<u>Dr. Klein</u> noted that the self-assessment has many positive aspects, but TEPCO still needs to develop people who can skillfully monitor and manage contractor schedules and costs.

Mr. Sakurai shared his insights/expectations as follows:

- More self-assessment and less external oversight.
- Develop legal personnel.
- Executive managers need to indicate their expectations for human resources to middle (group) managers.
- Disclosing data is not enough. The public also needs to understand the meaning of data.
- More understandable communication is needed internally.
- Risk Communicator roles and functions must be indicated more specifically.
- Safety culture has not penetrated contractors thoroughly. Measures for achieving this must be communicated in understandable ways to contractors.
- Executive managers need to monitor oversight and strengthen the independence of this function.
- Nuclear safety reform is a never-ending journey and experience with reform must be accumulated. It is important to reorganize existing measures to avoid going in wrong directions.

<u>Dr. Klein</u> shared his insight that TEPCO still has a negative reputation and NRMC has not yet seen a strategic plan for recovery. He noted the example of TEPCO not being strategically prepared for crisis communications.

Mr. Kawamura shared his understandings/expectations as follows:

- TEPCO's self-assessment is lenient.
- TEPCO needs to prepare a strategic plan for worst-case scenarios.
- Education & training should be conducted at operating power plants, such as a TEPCO thermal power plant and another utility's operating nuclear power plant.

<u>Lady Judge</u> commented that the position of Risk Communicator has not been as effective as originally expected. She also commented that progress achievements are not understood by locals, so executives need to communicate progress to locals.

<u>Dr. Klein</u> summarized the review by saying, "TEPCO has made progress, but there is room for improvement."

Comment from the Chief of TEPCO Nuclear Reform Special Task Force

Mr. Kobayakawa expressed his understandings/insights as follows:

- Some measures implemented at the plants are not functioning as planned. The cause might be an organizational issue of TEPCO.
- It is important to show results, not process.
- There are gaps in internal communication as well as external communication, such as communication between headquarters and plants and between plants themselves. He will work with Mr. Makino and Mr. ONO to fill in such gaps.
- It is important to prepare for worst-case scenarios, so the support of external experts will be sought to help make such preparations.

Mr. Sakurai asked Mr. Kobyakawa to share the review with all employees. Mr. Kobayakawa responded that the review would be shared through internal communication channel under his responsibility.