

January 29, 2019

Attn: Board of Directors
Tokyo Electric Power Company Holdings, Inc.

Nuclear Reform Monitoring Committee

Committee Review Report on TEPCO's Nuclear Safety Reform Self-Assessment Results

1. Foreword

Amidst deep regret over the Fukushima Nuclear Accident, in September 2012 a resolution was passed during a meeting of the Board of Directors of Tokyo Electric Power Company, Inc. (currently Tokyo Electric Power Company Holdings, Inc.; hereinafter referred to as "TEPCO HD") calling for the establishment of a Nuclear Reform Special Task Force (hereinafter referred to as "TF") and a Nuclear Reform Monitoring Committee (hereinafter referred to as "NRMC") to objectively supervise and monitor TF initiatives.

In March 2013, the TF formulated a Nuclear Reform Plan and has since engaged in nuclear reforms. In November 2015, the first self-assessment of these initiatives commenced and a summary of the results was presented to the NRMC in September 2016. The NRMC reviewed this, and presented a report to the Board of Directors in January 2017.

In November 2017, the NRMC subsequently identified the following five key issues that must be addressed in order to make further improvements. The NRMC also requested that a self-assessment of the status of improvements be performed and that a report on the results be presented. This report on the results of the self-assessment was given by the TF to the NRMC in October 2018.

The NRMC believes that the fact that TEPCO HD performed a self-assessment is a step in the right direction. Strict self-assessments serve to not only clarify areas that are functioning well, but also to identify areas that require improvement.

However, while TEPCO HD was performing the self-assessment, and even afterwards, problems occurred that indicate a gap between the self-assessment results and actual conditions. This has forced the NRMC to question the degree of severity with which TEPCO is assessing its own actions. The expression "*initiatives are rooted and possibly effective*," used as a rating in the self-assessment, has caused confusion both within and

outside of the company – a situation that will not help to further reforms.

It has been more than seven years since the Fukushima Daiichi accident and the number of employees that were not in the company at the time of the accident is increasing. Under these conditions, it is imperative that the main lesson learned from the accident, namely that nuclear reforms are necessary if TEPCO HD is to continue to be active in the nuclear power industry, and the sense of urgency, do not fade with the passage of time.

2-1. Strengthening Governance

- Having the leaders of an organization clarify the direction in which the organization is to head is the foundation of good governance.
- TEPCO HD should be commended for clarifying the direction in which it is to head through the creation of the Management Model and the Decommissioning Promotion Strategy, as these initiatives have improved communication not only within the company and with contractors, but also with the public.
- The following processes need to be in place when staff engage in their duties:
 - Confirmation of the effectiveness of specific actions
 - Implementation of self-assessments
 - Timely corrections of policies/plans in accordance with changing circumstances
- Making internal changes that are related to changing or developing circumstances is important in order to make employees aware of the progress of reforms and to help reforms spread throughout the company. It is therefore time to examine the following issues:
 - Administrative systems, as well as the roles and authority of Headquarters, power stations and corporate communications & regional relations departments, need to be clarified.
 - Now that six years have passed since the formulation of the Nuclear Reform Plan, a list of the achievements of departments (plans) that were created in the wake of the accident should be compiled and the role of these departments going forward should be reexamined and changes made if necessary.
- TEPCO HD should be highly commended for its continuing perseverance to learn from overseas best practices through the establishment of the Nuclear Safety Advisory Board.
- With regard to the decommissioning of Fukushima Daiichi, TEPCO HD should be highly commended for creating a strategy to fulfill its main responsibility, which is

to safely decommission the Fukushima power plant.

- If it is necessary to alter plans as a result of new information gathered in conjunction with the progress of internal investigations of containment vessels, etc., a new plan should be created after strictly assessing the impact on safety. In addition, the reason for such changes should be explained to parties both within and outside the company, as well as the reasons why this new plan is an optimal means of ensuring safety.

2-2. Improving Human Resource Training

- Improvements in the areas of education and training have been seen as a result of Human Resource Training Center initiatives.
- TEPCO HD must clarify what human resources will be needed, and how employees are to be trained so that these resources become available.
- The following issues should be addressed in order to further develop human resource education and training:
 - In an electric utility company, a high degree of ownership is required at every level, from facility design through operation; therefore human resources are needed in both technical fields and in materials and accounting fields.
 - An education and training system that produces well-trained experts needs to be created.
 - An educational system that enables knowledge obtained during training and education to be leveraged needs to be created, and its effectiveness increased through on-the-job training and other means.
- The results of human resource training should be ascertained and assessed, and resources (including training/education plans) distributed in accordance with the duties of each department.

2-3. Improving Communication

- The starting point of externally-targeted communication is ensuring that information is not just “conveyed” but also “understood.”
- TEPCO HD needs to be aware that external parties are still very critical.
- Although the Committee has spoken about communication at the meetings and other opportunities, this has not always led to improvements.
- Restoring trust means performing the following three basic actions upon admitting and reflecting upon one’s own mistakes:

1. Reflecting upon the Fukushima accident
 2. Continuing to maintain the level of competence required of a nuclear power operator
 3. Transitioning from internal communication to external communication
- With regard to explanations given to the public, TEPCO HD is still not able to engage in the level of dialogue expected of them, and their current communication levels are insufficient. In particular:
 - Although a large amount of data is being disclosed, the context and the message being conveyed is often not clear, so the information provided is not always useful.
 - Information is being disseminated quickly, but not being conveyed to those it should be, thereby creating concerns among the public.
 - TEPCO HD must understand it is vital that the three branches of corporate communications (Headquarters Corporate Communications Department, power station corporate communications departments, Fukushima Daiichi Decommissioning Communication Center) take responsibility and coordinate and share information.
 - The roles and duties of risk communicators must be correctly understood within the company and further leveraged.

2-4-1. Cultivating a Nuclear Safety Culture

- The basic objective of a nuclear safety culture is the protection of the power stations. If they cannot be protected, the surrounding region and environment are at risk.
- Management is aware of the nuclear safety culture and the idea has permeated to all employees.
- The entire Nuclear Power Division, including contractors, must make further efforts to engage in their daily activities on the basis of the nuclear safety culture.
- It is hoped that in addition to conveying messages to employees, management will make efforts to further strengthen the nuclear safety culture through its own actions and dialogue.
- Management must never forget that nuclear safety is paramount, and must continue expressing its commitment to this both internally and externally.

2-4-2. Relationship with Contractors

- For the sake of nuclear safety, it is necessary that TEPCO HD and contractors are jointly aware that they form a “community.”
- In order to achieve nuclear safety, it is important that both parties not only jointly endorse the nuclear safety culture, but also exchange opinions on policies for sharing information and achieving safety.

2-5. Strengthening Internal Oversight Functions

- Internal oversight is the most important function in successful organizations and is an absolute necessity as TEPCO HD moves into the future.
- TEPCO HD should be commended for performing self-assessments repeatedly. The Committee expects these assessments to continue.
- The Nuclear Safety Oversight Office is an important department for internal oversight and should be commended for its achievements, such as reporting from an independent standpoint to the Board of Directors on the results of monitoring.
- The following measures will help to further improve internal oversight functions:
 - Nuclear Power Division leaders should strictly assess their own departments with a full understanding of the world’s highest level of excellence and identify weaknesses, in particular.
 - The Nuclear Safety Oversight Office should further strengthen its independent and sound monitoring based on past achievements.
 - The progress of nuclear reforms should be ascertained through internal audits on a daily basis.
- In reviews by external organizations (WANO, JANSI), Nuclear Power Division leaders should ensure that workers understand the expectations people have of them.

Conclusion

TEPCO should be commended for creating departments and systems necessary for reforms during the more than six years of nuclear safety reform initiatives.

Meanwhile, incidents that cause loss of the public’s trust continue even today. Accordingly, the root causes of these accidents must be analyzed to enhance the effectiveness of nuclear reform in consideration of the following:

1. Understanding of the necessity for reforms and their nature is being fostered, but has yet to reach all four corners of the organization.

2. Even if the need for reforms is understood, the ability to carry them out is insufficient (human resource allocation & education and training issues).
3. The level of dialog has not met the expectations of the public.

Nuclear safety is a never-ending process. For nuclear reforms to take root, it is therefore important to consider initiatives and priorities flexibly, and to move forward at a sure and steady pace whilst deploying innovations such as system construction to improve administrative efficiency.

With constant diligence and monitoring by external parties, the organization will grow. The NRMC will continue to monitor the nuclear reforms of TEPCO HD and convey the results to the public.

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