

SUMMARY OF PROCEEDINGS
17th NUCLEAR REFORM MONITORING COMMITTEE MEETING
February 4, 2020

Venue: TEPCO Headquarters, 10F West Conference Room

Participants:

- Dr. Dale Klein (Chairman)
- Lady Barbara Judge (Deputy Chairman)
- 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

We would like to hear about your progress and especially about TEPCO's self-assessment. I would like to make a few general comments and observations before we start.

TEPCO faces challenges in restarting KK, and technical issues in the decommissioning of 1F and ensuring a continuous power supply with high levels of safety, reliability and affordability. There are many issues to be solved.

An important asset in meeting these challenges is your employees. They need vision and leadership from TEPCO management. They need training and priority direction so they can do their job well. And they need to be recognized when they do perform well.

I'll give you a baseball analogy of hits, runs and errors. Hits come from the management: this is your leadership and direction. Runs come from your employees, who have the proper training and skills to succeed. And you want to avoid errors. If you complete your tasks, you will be successful as a company for your customers and for the whole country.

Comments from Committee Members:

Lady Judge requested TEPCO to explain how the Nuclear Safety Oversight Office's (NSOO) efforts and its proposals to the TEPCO management are being leveraged throughout the company. She said oversight functions improve the credibility of important decisions made by the management.

Mr. Sakurai stated that the initiatives TEPCO has taken are appropriate overall but trouble is still occurring so TEPCO needs to stay focused. He also requested TEPCO to utilize IT technology in its work.

Mr. Kawamura expressed his concern that trouble was still occurring at the site. He said it is important to think about things as yourself and work with a conscious effort to pursue and solve problems to the end.

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

Mr. Kobayakawa shared lessons learned from electricity restoration work in the wake of Typhoon Faxai last year, and said that TEPCO will reflect these lessons in nuclear reform activities as well.

Safety Minutes:

Mr. Ono shared his experience regarding the work process from the nuclear 10 traits.

Initiatives Being Implemented Based on Nuclear Safety Reform Self-Assessment

Mr. Makino and Mr. Ono reported on the status of Nuclear Safety Reform Initiatives.

Mr. Sakurai made comments regarding the general training he observed last year at KK, which reflects lessons learned from KK notification form errors, as below:

- It is interesting action taken that next trainee assigned evaluates ongoing training
- Think of more effective way to share information on the white board by photo
- Being able to fix the training team is a great advantage
- Take action to avoid verbal mistakes
- Relatively good training, but beware of getting used to the training

Mr. Shitara (KK site superintendent, who participated in the video-conference) stated in response to Mr. Sakurai's comments that the electric white board system has been used already and that KK is developing a system to enable it to share the information with HQ at the same time.

Dr. Klein asked whether previous Areas for Improvement (AFI) had been reviewed and whether action had been taken for the WANO Corporate Peer Review (CPR) or not. He also asked whether there were any repeated AFI.

Mr. Makino answered that there were no repeated AFI and that TEPCO focused on areas related to head office functions, such as leadership and oversight, considered how to utilize them and took action.

Dr. Klein responded to Mr. Makino that it is very important that there are no repeated AFI. WANO's focus is that TEPCO should find and solve problems on its own.

Lady Judge asked about initiatives taken with contractors to solve the problems caused by not correctly ascertaining conditions in the field and the actual structures/pieces of equipment.

Mr. Makino answered as follows:

- The expected behavior of contractors was not fully understood at Fukushima-Daini (2F) and KK. TEPCO is asking contractors to correct their behavior, and all parties are working together on improving this in the event of trouble
- For trouble occurrence, it is important to implement Kaizen together with the contractors
- However, the above mentioned points have not reached all of the employees yet
- Working together, including performing Kaizen activities with the contractors, is the most important point in order to strengthen relationships with contractors

Mr. Ono shared his thoughts with Lady Judge as follows:

- He feels that on-site governance at 1F is weakening, and that it is necessary to strengthen understanding of the concept of ascertaining conditions in the field and the actual structures/pieces of equipment
- Kaizen is one of the methods that strengthens governance and it helps build new relationships between TEPCO and the contractors

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Dr. Klein asked Mr. Ono about the order of debris and spent fuel removal.

Mr. Ono answered as follows:

- The fuel debris removal starts first at Unit 2
- The ideal method would be simultaneous work in fuel debris removal and spent fuel removal
- The current plan is to remove the spent fuel from the side of the Unit 2 reactor building

Dr. Klein responded to Mr. Ono that the spent fuel removal is the largest risk mitigation strategy, and that risk mitigation strategies should be prioritized.

Mr. Ono answered that there would be no delay in removing the spent fuel even if priority is given to removing fuel debris.

Lady Judge asked about current initiatives in internal communication at 1F.

Mr. Ono answered that explanatory meetings on the changes at 1F have been held many times since last summer and that TEPCO will hold a number of internal communication meetings for employees to deepen their understanding of the reorganization by April 2020.

Summary of the meeting

Dr. Klein summarized the results of the Committee's monitoring as follows:

- Progress in the area of self-assessment. The FSA was performed very strictly
- Communication is important, and it will be a possible topic for the next NRMC meeting
- Convey information in an easy-to-understand manner
- Improvements in technological capabilities will continue to be needed
- TEPCO is still highly dependent on contractors and the contractors are not sufficiently supervised or monitored by TEPCO
- Employees need to be well trained, and recognized when they perform well

He said "progress in nuclear reform is on track and is evaluated highly. However, safety is a journey without end. You have to keep moving forward. Decommissioning is like a marathon and it is a long journey. We will face various challenges in the future. The last mile of a marathon is hard. Once the fuel debris removal begins, we will face various difficulties. I want TEPCO to move forward step by step."

The NRMCM members shared their insights regarding the review.

Lady Judge shared her insights/expectations as follows:

- The NSOO is functioning well as a double layer of oversight
- It is important to convey nuclear terms in an easy-to-understand manner. Nuclear-related information is hard for the general public to understand
- The public image of nuclear power is not good. In order to dispel that image, it is important to utilize and promote women
- Many educated women are opposed to the nuclear industry. It is important that women send out messages to women
- Sending a message to a mother means sending that message to a whole family

Mr. Sakurai shared his insights/expectations as follows:

- Up to the last committee, there were many reports of plans, but this time, reports of execution were dominant. In future committee meetings we expect reports of assessments and improvement actions
- Expect more self-assessment
- Expect more work based on a policy of solving problems caused by not ascertaining conditions in the field and the actual structures/pieces of equipment
- We are encouraged by the safety training. Safety is a never-ending journey
- Continue to develop easy-to-understand communication methods
- Deepen your understanding of issues caused by Human-Error

He said that TEPCO has been improving, and that he expects that TEPCO will become an organization highly trusted by society.

Mr. Kawamura said he will promote nuclear reform together with other executives as chairman of the board of TEPCO after this committee meeting.

Comments from the Chief of TEPCO Nuclear Reform Special Task Force

Mr. Kobayakawa concluded the meeting with his findings that trust is the foundation of our business, both internally and externally. In order to build trusting relationships it is important for us to recognize who should act, for what purpose we should act, and how we should act. He also said that building trust is an endless journey like safety, and that we will keep moving forward to make sure that TEPCO group, the employees, and the contractors are recognized as trustworthy by customers and the community.