

**SUMMARY OF PROCEEDINGS**  
**18<sup>th</sup> NUCLEAR REFORM MONITORING COMMITTEE MEETING**  
**January 27, 2021**

**Venue:** Web meeting system

**Participants:**

- Dr. Dale Klein (Chairman)
- Masafumi Sakurai (Member of the Committee)
- Shoichiro Onishi (Member of the Committee)
- Shiro Arai (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)
- Akira Ono (Managing Executive Officer, and President of Fukushima Daiichi D&D Engineering Company [FDEC])
- Ryutaro Yamamoto (Managing Executive Officer)

**Chairman's Opening Remarks:** by Dr. Klein

This is the first time the NRMC has ever met virtually. And unfortunately, this is also the first meeting that we have had without Lady Barbara Judge. Lady Judge's sudden death was a shock to us all and we will miss her contributions. She, like all of us, wanted to see Japan attain a robust, safe and secure energy supply.

And I am sure, given the weather you experienced recently, we all appreciate the role that nuclear power can play as part of the energy mix. On a brighter note, the NRMC has had a lot of very positive meetings over the last several days, with good technical discussions, and we look forward to hearing more comments from TEPCO during the meeting.

For the NRMC, we expect TEPCO to make further progress on its safety culture and continuous improvements, and continue to enhance its self-assessments and communications. As we have stated before, TEPCO's communications are important, both internally and externally. In addition to improvements at TEPCO, we also want to make some improvements within the Nuclear Reform Monitoring Committee.

We would like to look at adding additional personnel to address technical issues, as well as communication issues. We are excited to welcome our new member, Mr. Onishi, and are glad to have the continued participation of Mr. Sakurai.

I would like to point out that we will likely only submit a drafted report after this meeting because we have just been informed of a security issue at Kashiwazaki-Kariwa Nuclear Power Station (KK). We realize that the handling of security information is sensitive but we would like to hear more from TEPCO on this issue at a later date.

**Comments from Committee Members:**

Mr. Sakurai: We have always said that there is no such thing as zero risk. But I think that COVID-19 is exactly that kind of unexpected risk that we never anticipated and have had to work within the constraints of, so I think this is one example of there being no such thing as zero risk.

In terms of expanding, or enhancing safety as much as possible, in a situation whereby

something unexpected happens and there are no associated rules or regulations, how flexibly, and how appropriately you can respond to that situation is very important. So, how can we achieve that kind of flexible and appropriate response? I think that one element is alignment. Alignment is extremely important. Because if you fully understand what the goal is and define that goal very clearly, then even if there are no specific rules, you will be able to behave and act based on that alignment. I think that to underpin that kind of mindset, stringent self-assessment and internal auditing are important, together with rigorous management observation activities.

So, in any case, you are of course in a world of technology, but the most important aspect is human assets. You have to educate and guide people, and also try to foster the younger generation who do not know much about the Fukushima accident. I think that communication, both internally and externally, will be a fundamental part of this - not just providing information but making sure that the message you are communicating actually gets through is important.

Mr. Onishi: It is almost 10 years since the accident at Fukushima Daiichi Nuclear Power Station. Compared to the situation in 2011, TEPCO has changed its management structure significantly. It has become a company with committees and has introduced a holding company system, and costs have been reduced significantly through 'Kaizen,' or improvement activities. The business environment is changing dramatically, and the electricity market has been deregulated, so the company needs to be quick and agile, and continuously revisit its business model and the executive structure. At the same time, risk management and self-assessment pertaining to nuclear safety are things that must be pursued and there is no end to that journey.

The preparations for the restart of KK are now underway but amid these circumstances, mindful of the lessons learned from the Fukushima nuclear accident, you must eliminate any complacent view that safety has already been well established, and steadily promote reforms in the area of nuclear safety so that the overall nuclear business can develop effectively.

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

Mr. Kobayakawa expressed his appreciation to the NRMCM members and shared lessons learned from the Fukushima nuclear accident. He said that TEPCO will fulfill its responsibilities to Fukushima without allowing the lessons learned to be forgotten, and will continue to convey to employees that there is no end to the pursuit of safety.

#### **Safety Minutes:**

Mr. Makino shared information on 'Kaizen' activities regarding improvements in safety/quality at KK, and stated that TEPCO will continue its efforts in the future.

#### **Status of Nuclear Safety Reform Initiatives and FDEC initiatives:**

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

Dr. Klein stated that the NRMCM has been looking at how KK moves from the construction stage to the operation stage, which will involve a lot of staff training, and asked for TEPCO's thoughts on how the training is progressing.

Mr. Makino answered that KK has not been in operation for 10 years, so the company has created educational programs from various angles to educate employees in order for them to develop a resolute mindset.

Dr. Klein also asked about the status of preparations for WANO's pre-startup review.

Mr. Makino answered that he understood that WANO and IAEA had established standards for the restart of nuclear reactors after a long-term shutdown, and that TEPCO was making action plans and plans for preparations, and implementing preparatory work for facilities and training, based on these standards.

Dr. Klein said that the ID misuse incident had an impact on safety culture, and asked for TEPCO's thoughts on how security issues relate to safety culture.

Mr. Makino stated that TEPCO lacked awareness as a nuclear power operator, and that he thought the problem was related to safety culture and organizational culture. He also said that TEPCO would strengthen its safety culture in addition to taking firm measures to prevent a recurrence.

Mr. Onishi said that he understood that the process of realizing never-ending reform and improvements will be simplified using the Kaizen method, but added that, considering safety, it may be necessary to take countermeasures based on ideas opposite to simplification. He asked about the relationship between Kaizen methods and safety.

Mr. Makino said that the Kaizen approach involves repeating related activities to approach an ideal state, and the concept is similar to that of CFAM and SFAM activities. He stated that Kaizen evaluations are not limited to economic efficiency, but also include improvements in safety and operational quality.

### **Summary of the 18<sup>th</sup> NRMC meeting**

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

- Both the KK and Fukushima Daiichi nuclear power stations seem to be producing good results, so we expect TEPCO to continue its efforts.
- The ID misuse incident is extremely unfortunate and undermines society's trust. We will continue to work as a committee to ensure the success of TEPCO's various initiatives.
- In particular, there are two areas where significant progress is expected in terms of safety. The first is that KK should be restarted safely. The other is that the issue of contaminated water at the Fukushima Daiichi Nuclear Power Station should be handled safely.
- As the committee's opinion cannot be reflected in the Review at this time, because it has not received a detailed report on the ID misuse incident, the committee will leave the draft as it is and make a decision after receiving a detailed report later.

The NRMC members shared their insights regarding the review.

Mr. Sakurai shared his insights/expectations as follows:

- With the ID misuse incident in mind, it is impossible to predict all the risks. Therefore,

TEPCO should not limit its focus to there being zero risks, but should adopt a system that enables it to respond flexibly.

- In regard to the ID misuse incident, the details are not yet known, but I think it is fundamentally a psychological problem, and it would be better to reassess how education should be conducted.

Mr. Onishi shared his insights/expectations as follows:

- In the process of restarting KK, there will be risks even after the plant begins operation. I would like TEPCO to do its best to prepare for the risks and provide education in both technical and mental areas.
- TEPCO should properly implement the self-assessment model. In addition to self-assessment, I would like TEPCO to improve its overall safety through third-party assessments.

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

Mr. Kobayakawa stated that the draft of the review by the NRMF had three main points: risk management, internal oversight function and communication. Based on these points, he stated that TEPCO would place top priority on safety and would like to reflect the opinions of local communities and society in its initiatives. He also stated that TEPCO would always keep in mind that there will be no end to safety in the future, that Fukushima was the focal point of TEPCO's efforts, and that the company would continue in its endeavors.