JANSI Annual Conference 2015 Summary

[Conference Outline]

Date: Thursday, April 23, 2015, 9:30-18:25 Place: lino Hall

Number of attendees: Approx. 460 (not including speakers)

[Opening Remarks]

Shojiro MATSUURA, Chairman, JANSI



- O This conference is held to widely inform the JANSI members as well as people in the nuclear community of our activities and to gather diverse opinions that would help improve our future activities.
- O I hope that participants will deepen discussion on efforts to improve safety and on other accomplishments through the keynote speech, panel discussions, and reports on past activities. It will help JANSI to improve its activities.
- Ο As JANSI's second annual conference, today's event is enhanced from last year's conference, based on findings from it. I hope to receive various opinions on JANSI's future activities through this conference so that we can deepen and strengthen our efforts.

[Keynote Speech] Our Expectations toward the Nuclear Industry

Syunichi TANAKA, Chairman, Nuclear Regulation Authority



- 0 I hope to contribute to the further improvement of nuclear safety by speaking about the Nuclear Regulation Authority's philosophy, involvement in the decommissioning at the Fukushima Daiichi NPS, and efforts toward organizational improvement, as well as medium- to long-term perspectives needed for the nuclear community at large and expectations on JANSI.
- To allow safety culture to take root in an organization, the leadership and management of the top executives is essential. In addition, I want JANSI to take the initiative and play an active role in fostering safety culture in the operators' organizations.
- O I greatly welcome JANSI's becoming the Japanese version of INPO. I hope that JANSI will exercise strong leadership over the operators and drive their efforts to improve safety.
- O During my visit to the NRC and INPO, I understood both agencies play complementary roles in ensuring safety in the nuclear industry. I hope to promote good multifaceted communication between the NRA and JANSI.
- O I want to see peer review independent of operators and peer pressure between CEOs put in practice. I ask again that JANSI establishes its sought-after capabilities securely and quickly.

[Session 1: What the Nuclear Industry Needs to Do]

O Short Speech

Michiaki URIU, President, Kyushu Electric Power



- What we learned from the Fukushima Daiichi NPS accident is the need to foster safety culture and organizational climate, strengthen risk management, and hone communication skills and technical expertise.
- O The foundation of efforts to improve nuclear safety lies in very human factors, such as organizational climate and communication. To promote these efforts, there are three things I constantly value as a leader.

- Make "ensured nuclear safety" an essential part of organizational climate.
- Develop the leadership of individuals.
- of society.
- O I hope that JANSI will continue to support and encourage us through activities such as peer review, provision of knowledge from overseas, and training to nurture PRA engineers.

Tomohide KARITA, President and Director, Chugoku Electric Power



- meetings on the review status, and collaborate with INPO.
- continuing such efforts, we can regain trust of society.
- whole.

Akira CHIBA, President and Director, Shikoku Electric Power



- visits for communication.
- head office in Takamatsu to Matsuyama.
- O To incorporate the lessons from the accident at the Fukushima Daiichi NPS accident, we have taken, in addition to actions to conform to the new regulation standards, voluntary measures to further improve safety. While continuing these safety improvement measures, we will continue to value the local people's views and sensibilities and move forward with the local community as a trusted nuclear operator.

Shigeyuki KOIDE, President, Japan Association of Science & Technology Journalists



- biggest issue.
- What caused the failure and what can we learn from it? Searching for the answers to these questions is essential for restoring trust, and this is what the utilities should do now.
- O What matters in communication is not the skill, but the message to get across. The philosophy of profound thinking, or thinking about what you can say based on the principles, is key to regaining trust.

The text herein is not based on the consent of the speakers.

Enhance communication with local residents. Communication from the stance of heliocentric theory that our business is worked out by our customer not ptolemaic theory that operators are the center

O The speaker talked about the company's efforts to improve safety, including those to foster safety culture, conform to new regulation standards, implement a failure prediction monitoring system and a risk management structure, hold explanatory

O Commitment to voluntary pursuit of improved safety and fulfilling it are key. Only by

JANSI's deepening of activities to accurately evaluate the operators' performance and to support and guide them are crucial to restore trust in the nuclear industry as a

O Our efforts to improve safety even before the Fukushima Daiichi NPS accident include incorporating the lessons learned from the Chuetsu Earthquake, promoting preventative maintenance programs, fostering a sense of unity with contractors, adopting a proactive disclosure policy (known as the Ikata method), and promoting

Immediately following the Fukushima Daiichi NPS accident, we took every possible safety measures at the time and released relevant information (e.g. through press conferences by the president). Our nuclear headquarters was relocated from the

O The Fukushima Daiichi NPS accident was a technical accident, but the issue goes beyond that; I think that human aspects, or confusions involving humans, were the

O Today, reliability of nuclear power is declining because confidence in people engaged in the industry has largely weakened. Tokyo Electric Power Company failed to disclose sufficient information, while the government did not adequately release data from the SPEEDI system, which was capable of projecting the dispersal of radioactive material.

O Panel Discussion

Chairperson: Shojiro MATSUURA, Chairman, JANSI Panelists: Michiaki URIU, President, Kyushu Electric Power Tomohide KARITA, President and Director, Chugoku Electric Power Akira CHIBA, President and Director, Shikoku Electric Power Shigeyuki KOIDE, President, Jap. Assoc. of Sc. And Tech. Journalists

- O Having safety culture take root in an organization is a very difficult task. What we should do for this is repeating communication with team members, showing management commitment to every employee, gathering voices from the front-line people, including even those getting into the particulars, and being active in disclosing information.
- O We often hear that the audience trust what they have been told, even though they did not understand the contents very well, when the speakers are very eager to explain. For utilities, communicating with the public is difficult because although faithful communication with detailed information can earn trust, we want people to understand technical aspects as well, given that nuclear power is about technology to certain extent.
- O Some say that when women visit for communication, people feel easier to talk. Nuclear power stations in Japan have fewer female employees than those overseas. I think it would be effective to nurture and increase female engineers and experts.
- O We have agreed that all operators will share information and cooperate with one another in preparation for the restart of reactors. JANSI is expected to work in coordination with them, for example, by acting as a consultation office of nuclear experts and summarizing findings and knowledge across the industry.

<Summarv>

- O Although the nuclear industry has been working to foster safety culture, we must have a renewed awareness of the possibility that society may be casting a critical eye toward the industry. We have recognized that if there is a gap in the awareness of safety culture between society and the nuclear industry, we should consider it again.
- O We have renewed the awareness of the importance of sincerely addressing technology. We strongly reaffirm that this perspective is of primary and fundamental importance in promoting nuclear energy.

[Session 2: Results of JANSI's Activities in 2014]

Kiyoshi NARUSE, Strategy Planning Division, Director, JANSI

- O JANSI's operations consist of two pillars: (1) assessments, proposals and/or recommendations, and support for safety improvement measures; and (2) assessments, proposals and/or recommendations, and support for nuclear power facilities. To support both initiatives, JANSI also engages in (3) basic work.
- O The speaker described (1) assessments, proposals and/or recommendations, and support for safety improvement measures, explaining assessments in terms of defense in depth, the development of measures to address individual challenges, systematization of safety assessment reports, and establishment of a risk management structure.
- O The speaker described (2) assessments, proposals and/or recommendations, and support for nuclear power facilities, explaining peer reviews, enhancement of support activities, plant general evaluations, and safety culture assessments.
- O With respect to (3) basic work, the speaker talked about promotion of safety culture, expansion of information analysis activities, establishment of human resource development systems, and support for the development of commercial standards.

O Poster Session

- O Efforts within JANSI toward the Voluntary Improvement of Nuclear Safety
- O Regarding JANSI's Peer Review
- O Supporting the Operators' Safety Activities

- O NUCIA Data Trend Analysis
- O Development and Implementation of a Leadership Training Program
- O Technical Support through the Establishment of a Base of Commercial Standards and Maintenance Technologies
- O Planning of the Implementation of Plant General Evaluations
- O Health Effects of Low Level Radiation Exposure

[Session 3: Improvement of Emergency Response] O Theme Presentation: Learning from the crisis response to the Great East Japan Earthquake and Tsunami

Wako TOJIMA, Science Journalist



- personnel to act autonomously without waiting for instructions.
- from sticking to the logic of the company or experts.

O Short Speech

Makoto KAIWA, President, Tohoku Electric Power



- emergency response office in action, and routine drills.
- efforts on these areas as we consider them particularly important.
- O Since we are operating in an area inherently requiring battles with frequent natural disasters, we recognize preparedness for disasters as fundamental to our business. Fukushima Prefecture, where the Fukushima Daiichi NPS is located, is our service area, and thus we must make particular efforts to gain local communities' understanding of nuclear energy.

Yasuo HAMADA, President, The Japan Atomic Power Company



- effectively use risk information and to raise safety awareness.

Citing as examples the recovery activities by the gas industry and the Onagawa NPS in response to the Great East Japan Earthquake, the speaker emphasized the importance of a networked logistics support structure and a network that allows field

Although the safety of individual NPSs is steadily increasing, if the operators want to be better prepared, they must develop a local disaster prevention/mitigation network and a structure to ensure prompt assistance and logistics support from outside the affected area. Another key factor is diversity. Resilience and socially-oriented decisions in the event of a crisis depend on creating teams that can act independently and autonomously, and fostering diverse perspectives in normal times to prevent officers

O The speaker explained how the Onagawa NPS was affected by and responded to the 2011 disaster. As to the reason that no accident occurred at Onagawa, the speaker pointed out, based on his analysis, Onagawa's safety margin against earthquakes and tsunami, various anti-seismic measures in place, the ability to keep the

The lessons we learned from the Great East Japan Earthquake are drawing (learning) lessons from examples, preparing for (or predicting) future risks, and responding (or being able to respond) flexibly to unexpected situations. We focus our

O The speaker explained how the Tokai Daini Power Station was affected by and responded to the 2011 disaster. Initial response, safeguards against tsunami, and the determination of the secure core cooling method led to the successful response. O Improvements made based on our experience from the disaster include measures to

It is crucial to keep local residents informed of our nuclear safety activities. We will make steady efforts to gain understanding by expanding our approach to external stakeholders and providing more explanatory meetings for local residents.

Takafumi ANEGAWA, Managing Executive Officer, Tokyo Electric Power Company

* Managing Executive Officer Anegawa gave a speech on behalf of the original speaker, President Hirose, who became unavailable.

- O The speaker described the influence of the 2011 disaster and the status of post-disaster restoration of supply capability. The earthquake and tsunami severely damaged the power generation facilities (both nuclear and thermal) along the Pacific coast.
- O Based on the major problems found with the emergency response to the Fukushima Daiichi NPS accident, we have identified six key areas in emergency response: assumption and preparedness for accidents, operation of the emergency organization, communication of information and information sharing, procurement and transport of materials and equipment, capacity building and assignment, and communication of information with society. Efforts are underway to enhance our capabilities in these areas.
- O Since TEPCO was actually involved in the Fukushima Daiichi NPS accident, we will continue our efforts with emphasis on continuous improvement of safety.

Naotoshi YOSHIKAWA, Executive Vice President, Central Japan Railway Company



- O The speaker described the situation at the time of the 2011 disaster, the company's preparedness for a Tokai earthquake, and key points of emergency response.
- Ο After the Great Hanshin-Awaji Earthquake, the company reinforced its civil engineering structures. Measures to prevent derailment and deviation have also been taken after the Chuetsu Earthquake.
- O Following the Great East Japan Earthquake, we have taken the following safeguards against earthquakes and tsunami, among others.
 - Further enhancing features of anti-seismic systems •
 - Establishing guidelines for evacuating passengers in the event of tsunami •
 - Posting maps showing evacuation sites at easily visible places in train stations
 - Implementing measures to ensure smooth evacuation from trains stopped between stations
- O We believe that the key to emergency response is, for the purpose of restoring service as soon as possible, securing heavy equipment and recovery materials, reviewing stockpiles of rails and other items, and establishing means of transporting them.

Shojiro MATSUURA, Chairman, JANSI

- O Looking back to the period from the Great East Japan Earthquake to the foundation of JANSI, I reiterate that we should never let another accident like the one at the Fukushima Daiichi NPS happen and that we must be prepared on the assumption that a severe accident can occur.
- O In particular, we must thoroughly strengthen our resilience, or the ability to recover in response to an emergency. The resilience of nuclear operators must be built at all levels, including overall operations, business management, the head office, power station management, and field work.
- O JANSI must also respond to accidents from this perspective. Resilience is an art of exercising one's full abilities in a crisis, and we must be trained to do so in every possible aspect. At the personal level, emphasis should be placed on enhancing self-control. As for organizations, organizational leadership should be firmly reinforced.

O Panel Discussion

Chairperson: Akira YAMAGUCHI, Professor, Tokyo University Panelists: Makoto KAIWA, President, Tohoku Electric Power Yasuo HAMADA, President, The Japan Atomic Power Co. Takafumi ANEGAWA, Managing Executive Officer, Tokyo Electric Power Co. Wako TOJIMA. Science Journalist Naotoshi YOSHIKAWA, Exec. Vice Pres., Central Japan Railway Co. Shojiro MATSUURA, Chairman, JANSI



Chairperson Yamaguchi

- O Based on the theme presentation and short speeches, the panel discussion focused on three topics: What is a crisis and how should a crisis be understood?; Crisis assistance and logistics support, and coordination among operators; Creating teams that can act independently and autonomously.
- O Some panelists said that a crisis must be responded at different levels and refers to a situation that cannot be understood, including areas beyond the scope of assumption. In response to these opinions, Chairman Matsuura said that JANSI should engage in activities that can increase the resilience of overall operations.
- O As to assistance and logistics support, the panel shared good and poor practices observed in responding to the Great East Japan Earthquake. The panel agreed on the need for the use of the emergency assistance center, which is to be established, and coordination among utilities in areas such as the mutual supply of necessary equipment and materials.
- O The panel stressed the importance of experience and training to allow teams to act independently and autonomously. JANSI and operators are facing the need to discuss feasible ways to respond to a crisis.
- O A proposal for JANSI was that it should engage personnel with different duties in peer review which is beneficial for improving safety levels (e.g., through information sharing and personnel exchange between utilities) and giving access to knowledge obtained by other stations. <Summary>
- O The support structure and skills based on field experience are essential to the reliable crisis management we pursue. The panel pointed out many aspects where JANSI is expected to play an important role. including close information sharing among operators, the effective sharing of experiences gained at different operators, and providing training to learn such information and experiences.
- O We will see an increased need for crisis management capability in a coordinated manner. Exchange of information with other industries will be meaningful as well. JANSI should take the initiative in such efforts.

[Closing Remarks]

Takao FUJIE, President & CEO, JANSI



- successful.
- long hours.

[Questionnaire Results] Submitted by 123 attendees

- In general, the sessions and panel discussions were well-received, with many respondents saying they understood or were satisfied with them. However, multiple respondents pointed out that the panel had vigorless or poor discussions.
- Many praised the lecture by Mr. Koide.
- Multiple respondents said that presentations by speakers from outside the nuclear community were interesting and proposed that more panelists should be invited from non-nuclear sectors.
- Many found the manager training DVD excellent.
- Some said they wanted to know the specifics of JANSI activities, noting that only a brief explanation was provided on the topic.

O During the keynote speech, Chairman Tanaka expressed large expectations for the nuclear industry and JANSI. In the panel discussions, we received valuable opinions and advice from the panelists on JANSI's activities. These all made the conference

O As the organizer of this event, I would like to extend my deep gratitude again to the speakers and panelists, as well as the audience who have remained attentive for