

### **3. Sessions for obstacles**

#### **Session 3 Establishing Performance Metrics**

**-What is the role of performance metrics in safety improvement beyond regulations?-**

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- Risk-Informed Decision-Making: Benefits and Obstacles-

## Session 3 Establishing Performance Metrics

- What is the role of performance metrics in safety improvement beyond regulations?-

### ➤ Background

- In the U.S., resources are committed to safety critical areas using risk information to improve performance (number of trouble cases, capacity factor, outage period, radiation exposure, industrial accidents, etc.)
- Use of risk informed approach domestically is not always on par with expected levels, but operators take initiatives to improve safety while using initiatives to pursue excellence led by JANSI.
- Domestic reviews for safety goals and performance metrics in the nuclear area have been conducted by the Japanese Nuclear Safety Commission, Nuclear Regulation Authority and relevant academic committees. Also, In review and discussion at the NRA, it was recognized that results from the former Japanese Nuclear Safety Commission reviews would serve as a foundation for discussion, and that metrics for environmental contamination should be added considering the Fukushima Daiichi accident, but this did not result in the official establishment (specific conclusion) of safety goals and performance metrics.
- Regarding decision-making, information from PRA is only of the various information to be referred to, and decisions are not made based solely on PRA information.

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### ➤ Recognition of issues and purpose of the session

- One answer to the question, "How safe is safe enough?" regarding the use of risk information is "safety goals", and its alternative scale the "performance metrics".
- Effective and consistent regulation and risk management is necessary to improve safety, and perhaps quantitative indicators such as performance metrics are important.
- Safety goals and performance metrics indicate risk control standards for risk management, but achieving these does not mean risk reduction activities become unnecessary.
- Do relevant parties share the same understanding on how to use safety goals and performance metrics for risk informed approach?
- Recognize the issues and obstacles for establishing safety goals and performance metrics for expanding the scope of application of risk informed approach which includes its use by regulators.

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### ➤ Session structure

- a. Introduction (Chair) : 5min.
- b-1. Current Status and Future Expectation for Safety Goals in Japan: 20min.  
(Yoshiyuki Narumiya, Japan Nuclear Safety Institute / Science and Technology subcommittee, Atomic Energy Society of Japan)
- b-2. Achieving Excellence in Operation through Risk-informed Safety Enhancement: 20min.  
(Maureen Zawalick, PG&E/NRRC)
- b-3. Pursuit of Excellence in Performance Improvement: 20min.  
(Masayuki Ono, Japan Nuclear Safety Institute)
- c. Q&A and Discussion: 50min.