Challenges in enhancing the global nuclear safety and nuclear security framework.

How can technical and scientific support contribute?

Keynote Panel

The 2nd International Conference on the Challenges Faced by TSOs in Enhancing Nuclear Safety and Security

26 October 2010 Tokyo Japan

Yoshihiro NAKAGOME

Senior Vice-President
Japan Nuclear Energy Safety Organization (JNES)

Challenges in enhancing the global nuclear safety and nuclear security framework.

How can technical and scientific support contribute?

My points of discussion are:

- 1. Maintenance and enhancement of TSO competence
- 2. Cooperation among TSOs in the Global Nuclear Safety & Security Framework
- 3. Effective support for new nuclear power countries

Challenges in enhancing the global nuclear safety and nuclear security framework.

How can technical and scientific support contribute?

1. Maintenance and enhancement of TSO competence (1/3)

- 1 Prerequisites for obtaining resources:
- High quality, neutral and effective state-of-the-art technical services for regulatory bodies
- 2 Some key words for maintaining technical expertise:
- Effective use of research activities
- Sensitivity to technological development
- Far-sighted and preemptive approach to future issues
- Materialization of tacit knowledge including that of retiring experts

Challenges in enhancing the global nuclear safety and nuclear security framework.

How can technical and scientific support contribute?

continued (2/3)

- **3 Ensuring of necessary resources:**
- Financial support by governments backed up excellent performance and public confidence
- Well-considered mid-term rolling plans for optimizing the balance and priority of required support services, and budget for them
- Long term recruiting and human resource development plan, flexible stuffing scheme and appealing career program

Challenges in enhancing the global nuclear safety and nuclear security framework.

How can technical and scientific support contribute?

continued (3/3)

- Cooperation with academic societies for professional knowledge and for recruiting young staff
- Proper outsourcing
- Effective use of domestic and international cooperation and collaboration for resource saving

Challenges in enhancing the global nuclear safety and nuclear security framework.

How can technical and scientific support contribute?

2. Cooperation among TSOs in the Global Nuclear S&S Framework

- **1** Cooperation is indispensable for:
- Extensive sharing of information and experience (mutual learning)
- Exchange of views on common issues
- Aggregation of knowledge to address current and emerging safety issues
- Collaborative studies for the best use of available resources
- Cooperative approach to capacity building in new nuclear power countries

Challenges in enhancing the global nuclear safety and nuclear security framework.

How can technical and scientific support contribute?

Continued

- 2 Possible modes of cooperation:
- New cooperation platform (e.g. TSO forum)
- Use of existing frameworks like ETOSN
- Using proper platform or framework
 - Human interaction/exchange
 - Workshops on special issues
 - Benchmark studies
 - Organization of review/assessment teams
 - Cyber networking
 - Development of technical tools
 - Intermediate meetings between TSO conferences

Challenges in enhancing the global nuclear safety and nuclear security framework.

How can technical and scientific support contribute?

3. Effective support for new nuclear power countries (1/3)

- **1** Prerequisites:
- Establishment of own national capacity building plans/strategies (descriptions in the NSC National Reports)
- Clarification and prioritization (scheduling) of support needs using forerunners' advice and guidance
- Avoidance of unnecessary duplication
- Dissemination effort in recipient countries

Challenges in enhancing the global nuclear safety and nuclear security framework.

How can technical and scientific support contribute?

continued (2/3)

- 2 Support organization:
- Coordinated cooperative support by regulatory bodies, TSOs and international organizations for fundamental issues (with clear role allocation)
- Independence of commercial activities
- Total coordination by the IAEA

Challenges in enhancing the global nuclear safety and nuclear security framework.

How can technical and scientific support contribute?

continued (3/3)

- 3 Some special considerations:
- Technology transfer with technical background (e.g. many trouble experiences behind designs)
- International pool of analysis/evaluation codes
- Effective use of international documents
- Use of advanced IT tools (e.g. e-learning and cloud computing)

Challenges in enhancing the global nuclear safety and nuclear security framework.

How can technical and scientific support contribute?

Thank you very much