Use Common Sense When Thinking About Nuclear Issues

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Recent Topics

- \bigcirc Issues related to nuclear facilities
- 1. What is expected of the Nuclear Regulation Authority (NRA)
- 2. Hosting municipalities and neighboring municipalities (heads of local governments and assemblies)
- 3. Relations between nuclear experts/specialists and the general public
- 4. Future court cases?
- $\ensuremath{\bigcirc}$ Issues related to restarts of nuclear power plants
- \bigcirc Issues related to compensation and reconstruction

Nuclear Regulation Authority (NRA)

 \bigcirc Dissatisfaction of operators with NRA examinations

- Examination standards are unclear, uncertain, unstable (matters of procedure)
- Self-important, superior (unequal)
- Time-consuming
- $\boldsymbol{\cdot}$ Doubts about level of expertise
 - Background to revising the Reactor Regulation Law and the Law on Establishment of Regulatory Commissions

 \bigcirc Is there dissatisfaction among the people?

- Not mistrust per se, but generally "wait and see"
- At the same time, some are taking their objections to court

Relationship between Nuclear Operators and Nuclear Regulation Authority (NRA)

- The purpose of the legislation was to separate nuclear promotion from nuclear safety examinations.
 - Separation has almost succeeded in the context of 3.11.
- There is the issue, however, of the "ability" of the party carrying out the examinations.
- <Special License of Public Enterprises>
 - The ability of regulators should be at least as great as the ability of those they are regulating
 - NTT and the Ministry of International Affairs and Communications, JR and the Ministry of Land, Infrastructure, Transportation and Tourism, building officers and developer, consultants
- Procedural issues

Overview of Nuclear Energy Administration <Tri-Party Relationship>



Desired Safety Regulation

○ <u>Regulating the safety of only facilities</u>, including nuclear reactors, is not enough.

Because the "accident unlikely to occur" occurred and caused unprecedented, widespread disaster.

Regulation of nuclear safety should be based on the special nature of nuclear disasters.

- 1 Including neighboring municipalities that will also be affected - not just the hosting municipality -in measures is necessary.
- 2 Is it adequate to implement risk assessments?
- 3 More than engineering is needed.

State's Role in Safety Regulation

- Given the special professional nature of the technology, the state's active involvement is essential.
 - 1 Situations requiring technological regulation of facility safety
 - 2 Situations involving disaster responses

Evacuation plans/crisis management
Need to rebuild national and local relationships

- O Structural issues in administration's supervision of the private sector
 - 3 Do not push the administration's responsibilities onto private-sector operators

Return to the original role of administration

Operators will adjust to competitive situations

Special Nature of Nuclear Disasters

- Not only are individuals endangered physically (life and health); their communities and daily lives are disrupted (work, school, family) and normality is very difficult to restore.
- Multiple communities were actually destroyed unrivaled scope of disaster across extensive areas.
- Because there is no access to some affected areas, reconstruction activities are impossible.
- "Unlikely" became real in the Fukushima accident, and is continuing.
- This should be the starting point in nuclear energy administration.

Points Highlighted in Court Cases since 3.11

- The danger of nuclear power plants and the seriousness of damage based on experience with the Fukushima accident.
- Arguments within the field of Constitution and logic, apart from the Reactor Regulation Law.
- It is publicly known that a massive earthquake cannot be predicted.
- In an accident, there is uncertainty always the possibility of multiple, unexpected situations.
- The cause of the Fukushima accident is not known yet.
- Four earthquakes beyond standard ground motion have occurred in the past ten years.
- The danger of spent nuclear fuel.
- Criticism of the attitude and manner of defendants costs, optimistic prospects, reliance on administration.
- Advantages of stable supply of electricity, low cost and CO2 reduction are "light."
- New regulatory standards are not sufficient. External power sources/main feed-water measures, raising standard ground motion, spent-fuel measures, tsunami, terrorism, tornadoes and more.

Reconsideration of Advantages and Disadvantages of Nuclear Energy

 Reason the Supreme Court did not "balance" the advantages/disadvantages of nuclear energy.

Re-examination of lawsuit against the Ikata NPP (Supreme Court Ruling in 1992) is necessary.

- Persuasiveness of CO2 reduction effect
- Inexpensive power rates, economic and employment measures
- Magnitude and seriousness of an accident
- Massive earthquake will definitely occur sometime
- Security viewpoint
- O Limits of "balancing" theory and cost-benefit analysis
- \bigcirc "The value of human life outweighs the Earth."

Issues in Disaster Management - Negative Dispute over Authority

- Who is the competent authority?
 - Nuclear Regulation Authority/Nuclear Regulation Agency
 - Cabinet/Nuclear Disaster Management Council
 - Cabinet Office/Central Disaster Management Council for general disaster management, Nuclear Disaster Countermeasures Headquarters
 - Ministry of the Environment, Agency for Natural Resources and Energy, Japan Atomic Energy Commission
- \bigcirc Division of roles between the central and local governments
 - Actual work is done locally By municipality or prefecture?
 - Relationship with the central government
 - Who has the organizational aptitude to be the responsible body? Rules in crisis management are different from those in normal times.

Conclusion

- Dealing with risk when the event could be impossible to control. What is role of government?
- Relationships among industry, the public sector and academia are so close that science is distorted.
- Specialists in their fields are amateurs in other fields.
- Thoughtful discussions neither against nuclear energy nor promoting it are called for.
- Old-time dreams will not come back.
- Movements of financial institutions and markets.