



National Report for the Convention on Nuclear Safety

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**Third TAEC-USNRC Technical Exchange Meeting
NRC, Washington D.C., USA
June 2, 2005**



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Development of National Report for the Convention on Nuclear Safety (1/3)

- National report for the convention on nuclear safety was prepared by the Institute of Nuclear Energy Research (INER) under the project initiated by the TAEC in April 2002.
- It was drafted by the INER with the consultation from the TAEC and the TPC, and was finished in October 2002.
- Characteristics of the principal authors:
 - Senior staffs with broad and in depth knowledge level
 - Dr. Chao-Yie Yang, currently as the vice chairman of the TAEC, was an author in the early stage and was unable to continue later on due to his promotion.
 - Dr. Yi-bin Chen, currently as the director of Department of Nuclear Regulation of the TAEC, was one of the principal authors.



Development of National Report for the Convention on Nuclear Safety(2/3)

- Contributors to this report included the technical and regulatory experts at the TAEC, the INER and the TPC.
- Other contributor included Dr. Ka-Yu Huang for his editing to the report at the final stage.



Development of National Report for the Convention on Nuclear Safety(3/3)

- The draft report was reviewed by the TPC, the Tsing Hua university and the four Departments and two affiliated agencies of the TAEC.
 - Department of Nuclear Regulation
 - Department of Radiation Protection
 - Department of Nuclear Technology
 - Department of Planning
 - INER
 - Fuel Cycle and Materials Administration (FCMA)
- The report was presented to Advisory Committee on Nuclear Safety on July 20, 2004.



Evolution of Legislative Framework(1/6)

- The Atomic Energy Act is the basic act that provides the legislative and regulatory framework for the utilization of nuclear energy.
- The Atomic Energy Act was passed by legislative Yuan (equivalent to a parliament) and signed by the president in 1968, with later modification in 1971.
- Enforcement rules for the implementation of Atomic Energy Act was promulgated in 1971, with later modifications in 1981, 1983, 1993, 1996.



Evolution of Legislative Framework(2/6)

- Nuclear Damage Compensation Act is the act that provides the compensation for the damages resulting from the peaceful uses of atomic energy.
- This Act was promulgated in 1971, amended in 1977 and became effective in 1998.



Evolution of Legislative Framework(3/6)

- Many governmental regulations were then promulgated without approval or authorization by the Legislative Yuan.
- These governmental regulations were not authorized by the atomic energy act or the Nuclear Damage Compensation Act either.



Evolution of Legislative Framework(4/6)

- Act of Administrative Procedure was put into effect in 1999 in order to strengthen the protection of human rights in the course of litigation and to increase the administrative efficiency.
- Previous governmental regulations without approval or authorization by the Legislative Yuan will lose their legality after a buffer period that was set to be 2 years.



Evolution of Legislative Framework(5/6)

- In response to the promulgation of Act of Administrative Procedure, major modifications of the Atomic Energy Act as well as other regulations and guidelines have been performed.
- As a results, four basic Acts were newly developed. They were passed by Legislative Yuan and signed by the President.



Evolution of Legislative Framework(6/6)

- The requirements in the four newly developed basic acts and the other regulations and guidelines are mostly similar to and have not changed significantly from the previous ones.
- The newly developed basic acts and the other regulations and guidelines supersede the previous ones with similar contents.
- Specifically, Nuclear Reactor Facilities Regulation Act supersedes Atomic Energy Act with similar contents.



Independent Regulatory Agency (1/2)

- According to Article 8, Regulatory Body, NRC was created as an independent regulatory agency.
- As an independent agency, NRC is able to ensure that the civilian uses of nuclear energy and materials in the United States are conducted with proper regard for public health and safety.
- Being independent, an agency can enhance administration efficiency and consolidate implementation of regulatory mandates.



Independent Regulatory Agency (2/2)

- According to the government reorganization currently in progressing, TAEC may not be retained as an independent regulatory body in the upcoming government reorganization
- Since the effective independence of regulatory bodies is considered an essential element in nuclear safety, it is believed that TAEC should be retained as an independent regulatory body



Basic Acts

- 2 existing Acts
 - Atomic Energy Act
 - Nuclear Damage Compensation Act(1998)
- 4 newly developed Acts
 - Nuclear Reactor Facilities Regulation Act(2003)
 - Ionizing Radiation Protection Act(2002)
 - Nuclear Materials and Radioactive Waste Management Act(2002)
 - Nuclear Emergency Response Act(2003)



Reviews of the US National Report for the Convention on Nuclear Safety

- In total, 23 questions have been asked. Most of them are clarifying questions.
- Elaborated responses have been provided by NRC. These responses are well described and highly satisfied.
- Additional questions were raised after the submission of the first round questions.



Additional questions from Taiwan to US (1/2)

- The additional questions that were raised after the submission of the first round questions were divided into two groups:
- For the questions of 1st group, time and efforts are expected for the preparation of the responses. In total, 13 questions are classified as such a group and they have been submitted to NRC in advanced(May 14, 2005).



Additional questions from Taiwan to US (2/2)

- The 2nd group questions are the power uprate and digital I&C related questions. They can be best discussed when the bilateral technical exchange presentations of these topics are made.
- Additional oral questions may be asked and responded depending on the progress of the meeting.



Responses to questions raised by US in its peer reviews

- In total, 20 questions have been asked by US. Most of them are clarifying questions.
- Responses have been provided by TAEC on April 27, 2005.



Final Remarks (1/2)

- The main objective of this incentive Convention is being achieved; namely that the self-assessment process, starting with following the requirements of convention and preparing National Reports, and taking into account the results of the bilateral review meeting, had stimulated steps and measures by both the NRC and the TAEC to improve implementation of its obligations and to further enhance nuclear safety.



Final Remarks (2/2)

- Organizational independency of a Nuclear Regulatory Body is crucial to ensure the safety operation of nuclear facility. Therefore, in-depth consideration and expert panel review is a necessity for the modification of the nuclear regulatory framework.