

International Nuclear Instructor Development Program in FY2008

“Reactor Plant Safety Course”

Autumn Course

1. Outline

Reactor Plant Safety Course (RPSC) is implemented as part of the “Energy Research and Development Centralization Plan” promoted by Fukui prefecture. It is consigned from International Nuclear Instructor Development Program offered by Ministry of Education, Culture, Sports, Science and Technology (MEXT) after the application by Japan Atomic Energy Agency (JAEA). It is recognized as part of the enhancement of the international technical training centralization scheme in Tsuruga region based on Fast Breeder Reactor; FBR “Monju”. RPSC was implemented with eight participants for three weeks. After the expansion of the scale of the course, duration was prolonged to four weeks and participants increased to 20 persons. In response to the status, the course is divided into “autumn course” and “winter course”. This report reviews the autumn course in FY2006.

2. Duration: November 4, 2006 ~ November 28, 2006

3. Countries and Participants: 7 countries / 10 participants

China; 2, Indonesia; 2, Bangladesh; 2, Vietnam, Philippine, Malaysia and Thailand; 1

4. Program

The program is composed of “Lecture”, “Practice”, “Facility Visit” and “Discussion” to learn safety technique of light water reactor and FBR systemically.

◇ “Lecture”: 18 lectures

Nuclear Safety Culture, Basic Concept of Nuclear Power Plant (NPP) Safety, Safety Design Principle of NPP, Safety Measures for NPP, Safety Evaluation of Reactor Plants, Quality Assurance, Emergency Preparedness and Response, Seismic Design of Reactor Plants, Japanese Fitness Code for Reactor Plant Service, Case Study of Nuclear Events in Japanese NPP, Human Factors in NPP Accidents, etc.

◇ “Practice”: 4 practices

Nuclear Practice at UTR-KINKI Reactor, Monju Operator Training Simulator, Safe Handling of Reactor Coolant (Sodium), Nondestructive Testing (NDT) Technology; 3 practices.

◇ “Facility Visit”: 10 facilities

FBR “Monju”, Ohi and Mihama Power station (Kansai Electric Power Co., Inc.; KEPCO), Nuclear Emergency Response Operations Facility, Fukui Environmental Radiation Research and Monitoring Center, Tsuruga Power Station (construction site of No. 3 and 4 reactors), NPP Maintenance Training Center (Nuclear Power Training Center, Ltd), Wakasa Wan Energy Research Center, Fugen Decommissioning Engineering Center, etc.

◇ “Discussion”: Public Acceptance of Nuclear Energy (PA)

5. Overall Evaluation

Corresponding to the expanded RPSC, new lectures such as “Nuclear Safety Culture”, “Process from Site Selection to Construction of NPP”, “Quality Assurance (QA)” etc. were introduced.

Participants’ high satisfaction with the course was shown in the questionnaire conducted on the last day; 7 persons choose the highest level “5” (very satisfied); 3 persons choose

level 4 (satisfied). On the one hand, beneficial opinions as “lectures are overabundant” or “more time is necessary for the discussion” were suggested. These opinions will be reflected on the next RPSC for the reinforcement of the program.

As for the interaction among the participants, seven out of ten persons answered they had very good communication with each other. This indicates the course contributed to the construction of human resource development network in Asian countries.

7. Lecture, Practice and Facility Visit



【Lecture】



【Nuclear Practice at UTR-KINKI Reactor】



【Monju Operator Training simulator】



【FBR “Monju”】



【Nuclear Emergency Response Operations Facility】



【NPP Maintenance Training Center (KEPCO)】



【Discussion】



【Group Photo】