Specialist Meeting on the Seismic Probabilistic Safety Assessment of Nuclear Facilities, Seogwipo ICC, Jeju Island, Korea, 6-8 November 2006

Hosted by the Korea Atomic Energy Research Institute (KAERI) and the Korea Institute of Nuclear Safety (KINS)

In co-operation with the International Atomic Energy Agency (IAEA)

PRELIMINARY DETAILED PROGRAMME

DAY 0, Sunday, 5 November 2006

Pre-registration at 15.00-20.00, hotel Lotte – it is suggested that all would use this alternative especially if they intend to pay the meeting fee on the spot

DAY 1, Monday 6 November 2006 (Venue: Samda Hall)

8.30 Registration

OPENING SESSION, Chairs U.C. Lee, Dr. P.Pyy

9.00 Welcome, U.C. Lee (Professor, University of Seoul, Korea, chairman)

9.10 – 9.40 Welcomes addresses:
Representative of NEA, T. Tanaka, Director, Safety and Regulation
Representative of IAEA, J. Yllera, IAEA Nuclear Safety Division (to be confirmed)
Representative WGRISK, J-M Lanore, chair, NEA CSNI Working Group on Risk

9.40 – 10.10 M. Drouin, A. J. Murphy, and N. Chokshi, US NRC, Application of Seismic PSA in the United States: Activities since the Tokyo Workshop, INVITED

TOPOCAL AREA 1

Regulatory framework and objectives of SPRA and SMA studies, chairs A. Murphy (US NRC) and C.J. Lee (KINS)


11.10 - 11.30 Coffee break

11.30 – 12.50 Technical session, 4 papers, chairs A. Murphy (US NRC) and C.J. Lee (KINS)

P. Hessel, T. Sung, CNSC, Canada: Methodology and Use of PSA/SMA results
S. Andersson, R. Roberts, J. Lundwall, SA Ingenjorsbyra, Uppsala University, Ringhals AB, Sweden: Assessment Of Seismic Risk – Pilot Study
J. Sandberg, P. Välikangas and Y. Hytönen, STUK, Finland: Seismic Risk Analysis and Design in Finland - A Regulatory View

12.50 – 13.30 Discussion of Topical Area 1

13.30 – 14.30 Lunch

TOPOCAL AREAS 2 and 4

Lessons Learnt from Applications of SPRA and Uses of PSA/SMA Results, chairs R. Budnitz and J.E. Yang (KAERI)

14.30 – 15.05 A. Bareith (VEIKI, Hungary), Use of Insights from Seismic PSA for NPP Paks, INVITED

15.05 – 16.15 Technical session, 3 papers, chairs R. Budnitz and J.E. Yang (KAERI)

J-U. Klügel, NPP Goesgen-Daeniken, Switzerland: Lessons learned from seismic PSA - Level 1 and Level 2 at NPP Goesgen
U. Menon, P. Santamura, H. Shapiro, T. Ramadan, M. Elgohary, AECL, Canada: Insights from PSA Based Seismic Margin Assessment of the Advanced CANDU Reactor™
I.K. Choi, KAERI, Korea: Seismic Risk Analysis of a CANDU Containment Building for Probability Based Scenario Earthquake
16.15 – 16.35 Coffee break

16.30 – 17.30 Discussion of Topical Areas 2 and 4

19.30 Dinner
TOPICAL AREA 3    Methodology, chairs A. Bareith, K. Ebisawa

9.00 – 9.30    H. Shibata, Professor Emeritus, University of Tokyo, Japan : Evaluation on Some Gaps between Theoretical Approach and Techniques for Practice in Seismic PSA Code, INVITED

9.30 – 10.30 Technical session, 5 papers, chairs A. Bareith, K. Ebisawa

J-U. Klügel, NPP Goesgen-Daeniken, Switzerland: Procedure for the evaluation of damaging effects of earthquakes
T. Hakata, NSC, Japan: Seismic PSA Methodology for Multi-Unit Sites
K. Ogura, M. Fukuda, M. Sakagami, K. Ebisawa, JNES, Japan: Accident Sequence Study for Seismic Event At The Multi-Unit Site

10.30 – 10.50 Coffee break

10.50 – 11.30 Technical session continues, chairs A. Bareith, K. Ebisawa

K. Funayama, S. Sumida, M. Kajimoto and M. Sakagami, JNES, Japan: The Radiological Consequence Analysis by Evacuation Model for Earthquake Event of a BWR plant
K. Muramatsu, Q. Liu, K. Onizawa, JAEA, Japan: Potential Uses of Seismic PSA for Risk Management of NPPs - a Review of Recent Studies at JAEA

11.30 – 12.15 Discussion of the morning papers of Topical area 3, Methodology

12.15 – 13.30 Lunch

13.30 – 15.10 Technical session, Hazard analysis, 5 papers, chairs R. Budnitz, K. Muramatsu

P. Varpasuo, Fortum Nuclear Services Ltd, Finland: Probabilistic Seismic Hazard Assessment for OL3 Plant Site In Finland
H. Tsutsumi, H. Nanba, S. Motohashi, K. Ebisawa, JNES, Japan: Development of seismic PSA methodology considering aftershock
E. Viallet, C. Martin, C. Durouchoux, P. Labbé, P. Sollogoub, D. Sicilia, N. Humbert, EdF/GEOTER/CEA, France: An Innovating Approach to Address Uncertainties in Probabilistic Seismic Hazard Assessment
H. Nanba, H. Kameda, K. Ebisawa, M. Sakagami, K. Irino, JNES, Japan: A Probabilistic Seismic Hazard Assessment based on Logic Tree Utilizing Expert Judgment
S. Motohashi, JNES, Japan: Probabilistic Evaluation Of Near-Field Ground Motions Due To Buried-Rupture Earthquakes Caused By Undefined Faults

15.10 – 15.50 Discussion about the papers of the session

15.50 – 16.10 Coffee break

16.10 – 17.30 Technical session, Ground motion, 4 papers, chairs R. Budnitz, K. Muramatsu

P. Zuidema, NAGRA, Switzerland: PEGASOS: A PSHA for the Swiss nuclear power plants – Some comments from the managerial point of view
K-H. Yun, D-H. Park, KEPR, Korea: Recent Advances in Developing Site-Specific Ground Motion Attenuation Relations for the Nuclear Power Plant sites in Korea
K. Dan, M. Muto, N. Hata, J. Miyakoshi, M. Kaneko, Y. Suzuki, J. Kanda, Ohsaki Research Institute, Inc.; The University of Tokyo, Nagoya University, Japan: Probabilistic Approach To Design Earthquake Ground Motions Based On Fault Rupture Scenarios
H. Wenzel, G. Achs, VCE Holding, Austria: Determination of Fragility Curves of Aging Plants by Ambient Vibration Measurements

17.30 – Discussion of the above papers (and observations of the whole Technical area 3)
DAY 3, Wednesday, 8 November

TOPICAL AREA 3 (continued) Methodology and standards, J.Yllera, J.M. Lanore


10.00 – 11.05  Technical session, Fragility, 6 papers, J.Yllera, J.M. Lanore

J-G. Song, S-K. Kang: A Study on Comparison of Seismic Capacities by Probabilistic Approach and Deterministic Approach
A. Yamaguchi, Osaka University, Japan: Usage of Information Entropy in Updating Seismic Fragilities

11.05 – 11.25  Coffee break

11.25 – 12.30  Technical session continues, J.Yllera, J.M. Lanore

R. Bertrand - J.M. Rambach - C. Lincot, IRSN, France: Development of the fragility curve of the Refuelling Water Storage Tank Institute for Radiological protection and Nuclear Safety
M. Sakagami, N. Takamatsu, T. Iijima, JNES, Japan: Seismic Fragility Capacity Tests on Nuclear Power Plant

12.30 – 13.20  Discussion about the above 6 papers, and about Area 3 generally

13.20 – 14.30  Lunch
CLOSING SESSION, Chairs U.C. Lee, P.Pyy

14.30 – 15.30 Rapporteurs: Ravindra, Varpasuo, Kang, Muramatsu

15.30 – 16.00 R. Budnitz (US): Summary of what was learned during the meeting

16.00 – Closing Discussion

Closing remarks, Chairman U.C. Lee, Korea

Adjourn by 17.00