

**The Program for the International Symposium on Seismic Safety  
of Nuclear Power Plants and Lessons Learned  
from the Niigataken Chuetsu-oki Earthquake**

As of Jan. 24, 2008

**Tuesday, February 26, 2008**

08:30- Registration

09:15-09:40

< Opening >

Opening Address

Ryoichi Shirato, President, Central Research Institute of Electric Power Industry  
(CRIEPI), Japan

Welcome Address

Hiroshi Aida, Kashiwazaki City Mayor  
Hiroo Shinada, Kariwa Village Mayor

9:40-10:15

Keynote Address

"The earthquake and nuclear power plants" (tentative)

H.E. Tokio Kano, Member of the House of Councilors, Japan

10:15-10:50

Keynote Address

"The safety operation of nuclear power plants"(tentative)

Lucas Mampaey, Managing Director, World Association of Nuclear Operators  
(WANO)

10:50-11:30

Special Lecture

"The impact of the earthquake on the Kashiwazaki-Kariwa NPS and ongoing actions by  
TEPCO" (tentative)

Ichiro Takekuro, Executive Vice-President and Chief Nuclear Officer, Tokyo Electric  
Power Company (TEPCO), Japan

11:30-13:00 Lunch Break

13:00-17:20

## < Session 1 > Integrity Evaluation of Equipment Affected by the Earthquake

This session introduces the integrity evaluation methods applied in Japan and abroad regarding the equipment affected by the Niigataken Chuetsu-oki earthquake. A panel discussion is held regarding the cases of integrity evaluations for the equipment at Kashiwazaki-Kariwa Nuclear Power Station affected by the earthquake.

**Co-Chairperson:** Shojiro Matsuura, Advisor, Nuclear Safety Research Association (NSRA),  
Ex-Chairman, Nuclear Safety Commission (NSC), Japan

**Co-Chairperson:** J. Robert Sims, Senior Vice President, ASME Codes and Standards,  
American Society of Mechanical Engineers (ASME), US

### Presentations

"The Evaluation Methods for Seismic Design of ASME Mechanical Distribution Systems and Components"

John Stevenson, Member, ASME BPV Subcommittee III, American Society of Mechanical Engineers (ASME), US

"The result of inspection and analysis for major equipment at Kashiwazaki-Kariwa Nuclear Power Station"(tentative)

Kazuhiko Yamashita, General Manager, Niigataken Chuetsu-oki Earthquake Restoration Management Center, Nuclear Asset Management Dept., Tokyo Electric Power Company (TEPCO), Japan

"Interim report of the Structural Integrity Assessment Committee for Nuclear Components damaged by Earthquake (SANE)"

Toshiharu Nomoto, Chairman of the SANE, Professor Emeritus, The University of Tokyo

"Evaluation of nuclear equipment & component by EPRI" (tentative)

Greg Hardy, Member of EPRI Seismic Team, Electric Power Research Institute (EPRI), US

"Seismic design margins available for integrity assessment of piping systems"

Pierre Labbé, Program Manager, supervising activities of the Nuclear Engineering Division, Electricité de France (EDF)

"Insights from Seismic Risk Analyses of Nuclear Power Plants and their relevance to Kashiwazaki-Kariwa Nuclear Power Station"

Ravi Ravindra, Member, ASME/ANS Writing Team for PRA Standard External Events, American Society of Mechanical Engineers (ASME), US

**Panel Discussion & Chairpersons' Summary**

## **Wednesday, February 27, 2008**

09:00-11:20

### **< Session 2 > Earthquake Induced Ground Deformation - Its Impact and Safety Significance**

This session introduces the latest knowledge and information about countermeasures in Japan and abroad against the earthquake induced ground deformation which caused many damage to the equipment at Kashiwazaki-Kariwa Nuclear Power Station. A panel discussion is held.

**Co-Chairperson:** Takaji Kokusho, Professor, Civil Engineering Dept., Science and Engineering School, Chuo University, Japan

**Co-Chairperson:** Greg Hardy, Member of EPRI Seismic Team, Electric Power Research Institute (EPRI), US

#### **Presentations**

"Seismic performance evaluation of geotechnical works in nuclear power plants in Japan"

Jun'ichi Tohma, Associate Vice President, Director, Civil Engineering Research Laboratory, Central Research Institute of Electric Power Industry (CRIEPI), Japan

"Enforcement of foundation and countermeasures for liquefaction of ground made by TEPCO" (tentative)

Toshiaki Sakai, General Manager, Civil Engineering Group, Niigataken Chuetsu-oki Earthquake Restoration Management Center, Nuclear Asset Management Dept., Tokyo Electric Power Company (TEPCO), Japan

"The countermeasures for earthquake induced ground deformation at nuclear power plants in the United States"(tentative)

Lloyd S. Cluff, Director, Geoscience Dept., Earthquake Risk Management, Pacific Gas and Electric Company (PG&E), US

- Panel Discussion & Chairpersons' Summary

11:20-13:00 Lunch Break

13:00-15:30

### **< Session 3 > Emergency Preparedness and Fire Protection**

This session examines how nuclear power plants in Japan and abroad cope with natural disaster. A panel discussion is held regarding emergency preparedness and fire protection.

**Co-Chairperson:** Takashi Shoji, Secretary General, World Association of Nuclear Operators (WANO) Tokyo Centre

**Co-Chairperson:** Dave Modeen, Director, External Affairs, Nuclear Power Sector, Electric Power Research Institute (EPRI), US

#### **Presentations**

"Countermeasures made by TEPCO"

Tadayuki Yokomura, General Manager, Nuclear Power Plant Management Dept.,

Tokyo Electric Power Company (TEPCO), Japan

"The emergency prepared plan of nuclear power plants in the United States"(tentative)

George Felgate, Vice President, Institute of Nuclear Power Operations (INPO), US

"The experience of emergency preparedness at Waterford Nuclear Power Station"  
(tentative)

James Jack Lewis, Manager, Emergency Planning Department, Entergy Operations,  
Inc., US

"The measures for emergency preparedness and fire protection at nuclear power plants in  
France"(tentative)

Laurent Stricker, Advisor to the Chairman and CEO Nuclear Issue, Electricité de  
France (EDF)

### Panel Discussion & Chairpersons' Summary

15:40-15:50 Break

15:50-17:20

<Concluding Session>

Co-Chairperson: Michio Ishikawa, President, Japan Nuclear Technology Institute (JANTI)

Co-Chairperson: Alex Marion, Executive Director, Nuclear Operations & Engineering,  
Nuclear Energy Institute (NEI), US

Panelists: Shojiro Matsuura, Advisor, Nuclear Safety Research Association (NSRA),  
Ex-Chairman, Nuclear Safety Commission (NSC), Japan

Takaji Kokusho, Professor, Civil Engineering Dept., Science and Engineering  
School, Chuo University, Japan

Dave Modeen, Director, External Affairs, Nuclear Power Sector, Electric Power  
Research Institute (EPRI), US

Panel Discussion and Questions & Answers

Chairpersons' Summary

17:20-17:30

Closing Address

Takuya Hattori, President, Japan Atomic Industrial Forum (JAIF)