AGENDA

International Workshop on Prevention and Mitigation of Severe Accidents in Sodium-cooled Fast Reactors

11th -13th June, 2012 in Tsuruga, JAPAN

Monday, 11 June

Technical Tour to Monju (optional) [12:45 meet at Tsuruga JR Station]

Tuesday, 12 June 9:00-12:00 (The Wakasa Wan Energy Research Center)

Opening [Facilitator: Mr. Yutaka Sagayama (JAEA)]

9:00 - 9:05 Welcome address	Mr. Atsuyuki Suzuki (Japan/JAEA)
9:05 - 9:15 Opening remarks	Mr. Yonezo Tsujikura (Japan/JAEA)

Keynote speeches

9:15 - 9:30 Mr. Alexander Bychkov (IAEA)
"Fast Reactors and Closed Fuel Cycle: Safe Technologies and Sustainability"
9:30 - 9:45 Mr. David Hill (US/INL)
"SFR Safety Approach in the United States"
9:45 - 10:00 Mr. Francois Gauche (France/CEA)
"Advanced Sodium Technological Reactor for Industrial Demonstration, - THE ASTRID
PROJECT-, Status, Collaborations, Lessons from Fukushima Accident"
10:00 - 10:15 Ms. Marie-Pierre Comets (France/ASN)
"Gen IV: a necessary step forward in safety compared to Gen III"
10:15 - 10:30 Mr. Thomas A. Kevern (US/NRC)
"Regulatory Update on Advanced Reactors"
10:30 - 10:45 Mr. Hiroshi Ikukawa (Japan/MEXT)

"Current Status of Nuclear Policy and FBR R&D in Japan"

Coffee break (10:45 – 11:00)

Status report [Facilitator: Mr. Satoru Kondo (Japan/JAEA)]

11:00 - 11:15 Mr. Stefano Monti (IAEA),

"Overview of IAEA Activities in Support of SFR Development and Deployment"

- 11:15 11:30 Mr. Iurii Ashurko (Russian Federation/IPPE)"Status of SFR Development in Russia"
- 11:30 11:45 Mr. Perumal Chellapandi (India/IGCAR)
 "Overview of Indian FBR Programme" and Mr. Prabhat Kumar (India/BHAVINI)
 "Proposed Activities at PFBR in the Wake of Fukushima Accident"
- 11:45 12:00 Mr. Donghui Zhang (China/CIAE) "Status of China National SFR Program"
- 12:00 12:15 Mr. Yeong-il Kim (Korea/KAERI) "Status of SFR Development in Korea"
- 12:15 12:30 Mr. Bruno Rudi Merk (Germany/HZDR)"German SFR Research and European Sodium Fast Reactor Project"

Lunch (12:30 - 13:30)

Technical Sessions

Session I: Safety Approaches of SFR system [Facilitaror: Prof. Yoshio Kani (Japan/Tokai-U), Mr. Tanju Sofu (US/ANL)]

I-1. Safety Approach and Basic Safety Characteristics of SFR

13:30 - 14:00 Mr. Ryodai Nakai (Japan/JAEA)
"Safety Approach based on Basic Safety Characteristics of SFR - Harmonization of Safety Design Criteria -"

I-2. Severe Accident Countermeasures of SFR

- 14:00 14:30 Mr. Bernard Carluec (<u>France/AREVA</u>/CEA/EDF) "Severe Accident Countermeasures of SFR"
- 14:30 15:00 Mr. Iurii Shvetsov (Russia/IPPE)"Russian Safety Approach for NPPs with SFR"

Coffee break (15:00 - 15:30)

15:30 - 16:00 Mr. Tanju Sofu (US/ANL)
"U.S. Approach for Inherent Prevention and Mitigation of SFR Severe Accidents"
16:00 - 16:30 Mr. Karuppanna Velusamy (India/IGCAR)
"Evolution and Assessment of Core Disruptive Accident Scenarios in SFR: From PFBR to CFBR"
16:30 - 17:30 Mr. Shigenobu Kubo (Japan/JAEA)
"Safety design approach featuring Severe accident countermeasures for GEN-IV SFR - JSFR Approach –" and Mr. Mamoru Konomura (Japan/JAEA)

"Severe Accident Countermeasures of SFR (on Monju)"

Banquet (18:30 - 20:30) New Sunpia TSURUGA

Wednesday, 13 June (The Wakasa Wan Energy Research Center)

Session II: Technology Gaps and R&D Needs on Severe Accidents in SFR [Facilitator: Prof. Koji Morita (Japan/Kyushu-U), Mr. Iurii Ashurko (Russia/IPPE)]

II-1. R&D programmes related to Severe Accident in SFR

- 9:00 9:40 Mr. Yoshiharu Tobita and Mr. Hideki Kamide (Japan/JAEA)"R&D on Severe Accidents in SFR Approach toward GEN-IV SFR in JAEA -"
- 9:40 10:00 Mr. Nicolas Devictor <u>(France/CEA/EDF/AREVA)</u> "R&D Programmes Related to Severe Accident in SFR"
- 10:00 10:20 Mr. Mitchell T. Farmer (<u>US/ANL</u>/SNL)"U.S. Perspective on Technology Gaps and R&D Needs for SFRs"
- 10:20 10:40 Mr. Perumal Chellapandi (India/IGCAR)"R&D Highlights Towards Severe Accident Investigations"

Coffee break (10:50 - 11:10)

11:10 - 11:30 Ms. Lixia Ren (China/CIAE)

"Severe accidents analysis in CEFR and technology gaps"

11:30 - 11:50 Mr. Seok Hun Kang (Korea/KAERI)

"Current Status of Severe Accident Analysis for Korean Sodium-cooled Fast Reactor"

11:50 - 12:10 Mr. Iurii Ashurko (Russia/IPPE)

"Planning Experimental Studies on Modeling Phenomena Occurring under Severe Accidents in SFR"

Lunch (12:20 - 13:20)

Session III: Panel discussion 13:20 - 14:50

Topics:

- Direction for enhancing SFR safety
- Safety approaches of the SFR system against severe accidents
- Essential roles of the existing SFRs such as Monju for improving the safety of future SFRs

Facilitator: Prof. T. Takeda (Japan/Fukui-U), Mr. Stefano Monti (IAEA)

Panelist:

Mr. Satoru Kondo (Japan/JAEA)

"Current Status and Safety of Monju"

Mr. Yutaka Sagayama (GIF, Japan/JAEA)

"SFR Safety Design Criteria"

"Discussion Point in the International Workshop"

Mr. Tanju Sofu (US/ANL)

"Importance of Passive Safety and Role of Monju for the Future SFRs"

- Mr. Nicolas DeVictor (France/CEA)
- Mr. Prabhat Kumar (India/BHAVINI)
- Mr. Donghui Zhang (China/CIAE)
- Mr. Iurii Ashurko (Russia/IPPE)
- Mr. Yeong-il Kim (Korea/KAERI)

14:50 - 14:55 Closing remarks, Mr. Yonezo Tsujikura (Japan/JAEA)

Closing of International Workshop

15:15 - 16:15 Internal meeting

Internal meeting by representatives will be held to establish key messages.

Venue: Meeting room (No.3) Facilitator: Mr. Ryodai Nakai (Japan/JAEA), Mr. Stefano Monti (IAEA) Participants: Mr. Alexander Bychkov (IAEA) Mr. Tomas A Kevern (US/NRC) Mr. David Hill (US/DOE) Mr. David Hill (US/DOE) Mr. François Gauche (France/CEA) Mr. Iurii Ashurko (Russia/IPPE) Mr. Yeong-il Kim (Korea/KAERI) Mr. Yeong-il Kim (Korea/KAERI) Mr. Donghui Zhang (China/CIAE) Mr. Prabhat Kumar (India/BHAVINI) Mr. Perumal Chellapand (India/IGCAR)i Mr. Bruno Merk (Germany/HZDR) Mr. Yutaka Sagayama (GIF, Japan/JAEA) Mr. Satoru Kondo (Japan/JAEA)

Adjourn the workshop

Press Conference

14th June, 2012 in Tokyo, JAPAN

- 9:30 9:33 Opening* Mr. Yusuke Uehara, JAEA
- 9:33 9:43 Objective and introduction of the workshop Mr. Yutaka Sagayama, JAEA
- 9:43 9:53 Message from the IAEA concerning idea and expectations for SFR safety and significance to support the workshop* Mr. Alexander Bychkov, IAEA
- 9:53 10:23 High level message concerning basic idea for securing SFR safety in each country*

Representatives from each country (2min per country, France, Germany, India, Korea, Russia, US)

- Mr. David Hill (US/DOE)
- Mr. François Gauche (France/CEA)
- Mr. Iurii Ashurko (Russia/IPPE)

Mr. Prabhat Kumar (India/BHAVINI)

- Mr. Yeong-il Kim (Korea/KAERI)
- Mr. Bruno Merk (Germany/HZDR)
- 10:23 10:30 Summary of key messages in the workshop Mr. Yutaka Sagayama, JAEA

10:30 - 11:30 Q&A*

*Consecutive translation is provided in whole agenda except "objective and introduction of the workshop" and "summary of key messages in the workshop" from Mr. Sagayama.