

## AGENDA

**First Research Coordination Meeting of a CRP  
“Development of Methodologies for the Assessment of Passive Safety  
System Performance in Advanced Reactors”  
(IAEA CRPI31018)**

**31 March – 3 April 2009,  
Room A0478 Vienna International Centre**

Scientific secretaries: (Mr.) Vladimir KUZNETSOV (NENP/NPTDS) [v.v.kuznetsov@iaea.org](mailto:v.v.kuznetsov@iaea.org)  
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**Day 1: Tuesday, 31 March 2009**

09:30	Introduction and Welcome	A. Omoto, DIR NENP or A. Rao (NENP/NPTDS)
9:45	Self-introduction of participants	All participants
9:50	Election of a meeting Chairman and approval of the Agenda	All participants
10:00	Start-up presentation “Objectives and Expected Outputs of the 1 <sup>st</sup> RCM”	V. Kuznetsov (IAEA)
10:20	Presentation "Information on Reliability of Passive Systems from IAEA CRP on Natural Circulation Phenomena, Modelling and Reliability of Passive Systems that Utilize Natural Circulation”, Questions & Answers (Q&A)	S. Bilbao y Leon (NENP, IAEA)
<b>11:00</b>	<b><i>Coffee break</i></b>	
11:15	Presentation “Methodology for Assessing the Performance of a Passive Containment Cooling System (PCCS) for Small Reactors Undergoing Beyond Design Basis (BDB) Scenarios”, Q&A	B. Williams (ISU, USA)
<b>12:15- 13:30</b>	<b><i>Lunch</i></b>	
14:00	Presentation "Passive Safety System Performance and Reliability Assessment Using the APSRA Methodology", Q&A	D. Saha (BARC, India)
15:00	Presentation “Application of REPAS methodology to assess the reliability of passive safety systems”, Q&A	D. Araneo (University of Pisa, Italy)
<b>16:00</b>	<b><i>Coffee break</i></b>	
16:15	Presentation “Application of REPAS methodology to natural circulation loop L2”, Q&A	D. Araneo (University of Pisa, Italy)
17:00	Presentation “Passive Safety System for the 4S Reactor – Reactor Vessel Auxiliary Cooling System for Decay Heat Removal”	S. Nishimura (CRIEPI, Japan)
<b>18:00</b>	<b><i>End of Sessions for Day 1</i></b>	

**Day 2: Wednesday, 1 April 2009**

09:00	Presentation "Activities carried out in CEA and contribution to the CRP", Q&A	M. Marques (CEA, France)
10:00	Presentation "RMPS methodology for the assessment of reliability of passive safety systems", (Q&A)	M. Marques (CEA, France)
<b>11:00</b>	<b><i>Coffee break</i></b>	
11:15	Presentations "(i) Assessment of CAREM Passive Residual Heat Removal System and (ii) the Argentinean Risk Based Licensing Criteria, Parts 1 and 2", Q&A	M. Gimenez (CNEA, Argentina)
<b>12:15-13:45</b>	<b><i>Lunch</i></b>	
13:45	Presentation "ENEA Activities Related to Passive Safety System Reliability Assessment", Q&A	L. Burgazzi (ENEA, Italy)
14:45	Presentation "Adjoint Operator Approach to Functional Reliability Analysis and Integration with Classical Hardware Reliability for Passive Safety System Performance Assessment Using the APSRA Methodology", Q&A	A. John Arul (IGCAR, India)
<b>15:45</b>	<b><i>Coffee break</i></b>	
16:00	Presentation from EDO "The uncertainty analysis for thermal-hydraulic calculations of accident sequences and safety functions reliability", Q&A	M. Bykov, V. Siriapin (EDO "Gidropress", Russian Federation)
17:30	If time allows, short discussion of the presentations of Day 1 and Day 2	Chairman, Scientific Secretary, All Participants
<b>18:00</b>	<b><i>End of Sessions for Day 2</i></b>	
<b>18:00</b>	<b>Hospitality: Wine and Cheese Party at VIC Restaurant Hosted by IAEA</b>	<b>All participants are invited</b>

**Day 3: Thursday, 2 April 2009**

09:00 Brainstorming and writing session 1 to define the requirements for a method of reliability assessment of passive safety systems for future advanced NPPs – this session is intended to produce a draft written consensus statement of the realistic role of, and the requirements to, the targeted common analysis-and-test method. Scientific Secretary, Meeting Chairman, All Participants

**11:00 Coffee break**

11:15 Brainstorming and writing session 2 to suggest a consistent set of definitions for reliability assessment of passive safety systems for future advanced NPPs– this session is intended to produce a draft written list of consensus and non-consensus definitions. Scientific Secretary, Meeting Chairman, All Participants

The inputs for such list would come from the presentations of participants as well as from the IAEA Safety Glossary, which could be downloaded from: <http://www-ns.iaea.org/standards/safety-glossary.htm> .

**12:30- Lunch**

**13:45**

13:45 Brainstorming and writing session 2 continued Scientific Secretary, Meeting Chairman, All Participants

**14:45 Coffee break**

15:00 Brainstorming and writing session 3 to define collaborations within the project and prepare a detailed work plan of collaborative research for the period until next RCM Scientific Secretary, Meeting Chairman, All Participants

The outputs for such work plan would come from extensive discussions between CRP participants convened during this session.

**17:30 End of Sessions for Day 3**

***Note: Scientific Secretary Will Prepare Conclusions and Recommendations of the Meeting Based on All Outputs of the Brainstorming and Writing Sessions 1, 2, and 3***

**Day 4: Friday, 3 April 2009**

9:00	Finalizing brainstorming and writing session 3, if necessary	Scientific Secretary, Meeting Chairman, All Participants
9:45	Commenting on Draft Conclusions and Recommendations of the Meeting ( <i>draft conclusions will be prepared by the scientific secretary and distributed prior to the session; written comments will be collected at the end of the session</i> )	Scientific Secretary, Meeting Chairman, All Participants
10:45	Going through and finalizing Conclusions and Recommendations of the Meeting	Scientific Secretary, Meeting Chairman, All Participants
11:45	Closing address	A. Omoto DIR NENP or A. Rao SH NPTDS
<b><i>Circa 12:00</i></b>	<b><i>End of the Meeting</i></b>	