Tuesday, September 13

Welcoming Session:

8:30-8:40	Tawfik Raby, Co-Chair, TRTR Seymour Weiss, Co-Chair, TRTR
8:40-8:50	Alain Ballagny, Chairman, IGORR
8:50-9:05	Welcome Dr. Patrick Gallagher Director, NIST Center for Neutron Research
9:05-9:20	Keynote Address: Colin West, First IGORR Chairman
9:20-9:40	Keynote Address: William Magwood, Former Director, DOE-NE
9:40-10:00	Keynote Address: Prof. Dr. Winfried Petry, Scientific Director, FRM-II Performance of the New High Flux Neutron Source -FRM-II
10:00-10:20	Keynote Address: Dr. Daniel Iracane, CEA, Project Leader, Jules Horowitz Reactor The Jules Horowitz Reactor, a New Material Testing Reactor in Europe

Technical Session 1:

11:20-12:20

Ballroom

Ballroom

Chairman: Rob	ert Williams
10:40-11:00	Enhancing Research Reactor Safety – The IAEA's Approach Ken E. Brockman (presented by L. Walter Deitrich)
11:00-11:20	Progress on the Construction of Australia's Replacement Research Reactor (OPAL) Ross Miller

Operating Reactors and Upgrades

11:20-11:40	First Experience with the Operation of the FRM-II
	Heiko Gerstenhero

11:40-12:00	Advanced Test Reactor Capabilities and Future Oper Frances M. Marshall	ating Plans
12:00-12:20	Status of the High Flux Isotope Reactor and the React Upgrades Program Douglas L. Selby	tor Scientific
7	Keynote Address: The Honorable William A. Jeffrey Director, National Institute of Standards and Technology	Ballroom
Technical Sessi	ion 2: Fuel Cycle Developments	Ballroom
Chairman: Alain	n Ballagny	
14:00-14:20	Research Reactor Low Enriched Uranium: Supply, D Capabilities and Quality Morris Hassler	emand,
14:20-14:40	Update on the Effort to Develop and Qualify New Low Fuels Mitchell K. Meyer	v Enrichment
14:40-15:00	CERCA's and TRIGA International's Experience in I Manufacturing (not presented) Jean-Louis Falgoux and Anthony Veca	Fuel
Technical Sessi	ion 3: Research Reactor Utilization I	Ballroom
Chairman: Doug	glas Selby	
15:20-15:40	Scientific Opportunities at OPAL, the Australian Replacement Research Reactor Robert A. Robinson	
15:40-16:00	An Overview of Current Projects / Reactor Utilization Advanced Test Reactor Robert C. Howard	n for the
16:00-16:20	A Preview of Research Projects at the NC State Univer PULSTAR Reactor Andrew Cook	ersity

16:20-16:40	Jules Horowitz Reactor Experimental Capabilities Stephane Gaillot	
16:40-17:00	Irradiation Devices for Materials Studies in the Jules Horowitz Reactor Pascal Yvon (presented by Daniel Iracane)	
17:00-17:20	MIT Research Reactor as a National User Facility for Advanced Materials and Fuel Research Lin-Wen Hu	
Wednesday, Sentember 14 (NRC Day)		

Wednesday, September 14 (NRC Day)

8:30-8:35	Welcome and Introduction of Chairman Diaz Brian Thomas	Ballroom
8:35-9:10	Keynote Address: The Honorable Nils J. Diaz Chairman, US Nuclear Regulatory Commis	sion

9:20-10:20 **Parallel Technical Sessions:**

Secondary Sources I

Session 4B:

Session 4A:	Licensing (NRC)	Ballroom
Chairman: Brian Thomas		
9:20-9:35	Operating Licensing Results Paul Doyle	
9:35-10:20	Licensing Issues Dan Hughes	

Chairman: Anto	on Scheuer
9:20-9:40	The FRM-II Hot and Cold Neutron Sources Christian Müller
9:40-10:00	Installation and Testing of the OPAL (RRR) Cold Neutron Source Russell Thiering

Washingtonian

10:00-10:20 **High Flux Isotope Reactor (HFIR) Cold Source Safety Analysis**

David H. Cook

10:40-12:00 **Parallel Technical Sessions:**

Session 5A:	New Reactor Facilities	Ballroom
Chairman: Ros	s Miller	
10:40-11:00	OPAL Reactor Commissioning and Operations Planni David Vittorio	ng
11:00-11:20	Jules Horowitz Reactor: General Lay Out, Main Desig Resulting From Safety Options, Technical Performance Operating Constraints Xavier Bravo (presented by Jean-Paul Dupuy)	-
11:20-11:40	The Jules Horowitz Reactor Core and Cooling Circuits Claude Pascal	s Design
11:40-12:00	Planning for Final Operation of the HIFAR Reactor David Vittorio	

Description of Utilization Program for CARR (China Advanced Research Reactor)

Ke Guo-tu (not presented)

Session 5B: CLOSED SESSION – NRC Licensees ONLY Washingtonian

Chairman: Tawfik Raby

13:00-13:30 **Keynote Speaker:** Ballroom

The Honorable Luis A. Reyes

Executive Director for Operations, USNRC

13:40-14:50 **Parallel Technical Sessions:**

Session 6A: Special Session in Honor of Sy Weiss Ballroom

Chairman: Tawfik Raby

13:40-14:10 **Tribute to Sv**

14:10-14:30 Kansas State University (KSU) Reactor License Renewal

Experience Mike Whaley

14:30-14:50 Accelerator Driven Subcritical Experiments at The University of

Texas

Sean O'Kelly

Session 6B: Reactor Utilization II – Fuel Testing Washingtonian

Chairman: Robert C. Howard

13:40-14:00 Design of a Gas Test Loop Facility for the Advanced Test Reactor

Charles A. Wemple (presented by James Parry)

14:00-14:20 Developing Irradiation Devices for Fuel Experiments in the Jules

Horowitz Reactor

Daniel Parrat

14:20-14:40 The New CABRI Water Loop: Detailed Description of the New

Water Loop and of the Specific New Zircaloy in Core Experimental

Cell

Denis Bourguignon

14:40-15:30 *Poster Session*:

Upgrade Plan of Instrumentation and Control System for HANARO

Jong-Sup Wu

The NIST Health Physics Training Program

Tom O'Brian and Janna Shupe

Ten Year Review of Tritium Build-up in Heavy Water Coolant/Moderator for 20

MW Test Reactor and Resulting Radiological Consequences

David R. Brown

Processing or Shipping Samples Back Home – How It's Done at NCNR Keith A Consani

SUNRISE – A Regional Concept for University Research Reactors

ETRR2 Safety Evaluation and Licensing

Esmat Hanem Amin (not presented)

Consultancy for Research Reactors

Anton Scheuer

Joseph Kelly

Structural Integrity Verification of a Primary Circuit Pump Flywheel for the OPAL Research Reactor

Robert P. Harrison

The State of Nuclear Education in the State of Kansas

Mike Whaley

Mechanical Characteristics of Aluminum Alloys 5754-Net-O and 6061-T6 Irradiated to High Fluences: Neutron Spectrum and Temperature Effects

Benedicte Kapusta (presented by Alain Ballagny)

15:30-16:30 Parallel Technical Sessions:

Session 7A: Reactor Safety Ballroom

Chairman: David Diamond

15:30-15:50 Research Reactor in the Event Of an Earthquake: Safety Targets,

Technical Approaches and Work Carried Out

François Plewinski

15:50-16:10 Disparities in the Safety Demonstrations for Research Reactors and

Need for Harmonization

Hassan Abou Yehia

16:10-16:30 CABRI Reactor Safety Re-Assessment

Stanislas Massieux

Session 7B: Decommissioning Washingtonian

Chairman: Wade Richards

15:30-15:50	Isotope Ratio Method Analysis of the Ford Nuclear Reactor Christopher J. Gesh
15:50-16:10	Characterization of a University TRIGA Reactor Kevin E. Taylor
16:10-16:30	Korea Research Reactor-2 (TRIGA) Decommissioning Project Sam T. Paik

Thursday, September 15 (DOE Day)

8:30-10:00 Parallel Technical Sessions:

Session 8A: DOE Research Reactor Programs Ballroom

Chairman: John Guttridge

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8:30-8:40	Introduction John Guttridge
9:20-9:40	2005 Status Report for the University Reactor Fuel Assistance Program Anthony J. Vinnola
9:40-10:00	The Process for Shipment of Test, Research and Training Reactor Spent Nuclear Fuel (SNF) to the INL Alan Robb

Session 8B: Computational Methods & LEU Washingtonian

Chairman: Trent Primm

8:30-8:50	A Computational Model of the High Flux Isotope Reactor: Validation and Application to Low Enriched Uranium Fuels Ned Xoubi
8:50-9:10	Determination of Inventories and Power Distributions for the NBSR Albert L. Hanson
9:10-9:30	Core Design for Neutron Flux Maximization in Research Reactors Federico E. Teruel
9:30-9:50	OPAL Reactor Licensing Juan Pablo Ordonez

10:20-12:00 Parallel Technical Sessions:

Session 9A:	Ballroom			
Chairman: Sean O'Kelly				
10:20-10:40	Global Threat Reduction Approach Catherine Anne, NAC International			
10:40-11:00	SUNRISE – A Regional Concept for University Research Reactors Rich Kochendarfer			
	Reactor Utilization III			
11:00-11:20	The IPR-R1 TRIGA Mark I Reactor: Improving the Brazilian Nuclear Technology in 45 Years of Operation Fausto Maretti Júnior			
11:20-11:40	Material and Fuel Testing in the OSIRIS Reactor Philippe Durande-Ayme			
11:40-12:00	Instrumented Fuel Plate for IRIS Irradiation Program in the OSIRIS Reactor Patricia Boulcourt			
Session 9B:	Secondary Sources II Washingtonian			
Chairman: Russ	sell Thiering			
10:20-10:40	The FRG-1 Cold Neutron Source - Measures for High Neutron Flux and Availability Wolfgang Knop			
10:40-11:00	Current Status of the HANARO CNS Moderator Cell Design Yeong Jin Yu			
11:00-11:20	Special Constructional Design Features of Cold and Hot Neutron Sources and Confirmation/Verification during Commissioning of the Hot and Cold Neutron Sources at the FRM-II Anton Scheuer			
11:20-11:40	Analysis of the Causes and Consequences of Neutron Guide Tube Failures J. Michael Rowe			

11:40-12:00 Feasibility of a Liquid Deuterium Cold Source at NIST

Robert E. Williams

<u>Technical Session 10:</u> 50th Anniversary: Ballroom Pennsylvania State Breazeale Reactor

Chairman: Fred Sears 13:00-13:10 **Recognition by the TRTR Co-Chairs** Tawfik Raby and Sy Weiss 13:10-13:40 Dr. Fred Sears Director, Radiation Science & Engineering Center A History of the Penn State Breazeale Reactor (1955-2005) 13:40-14:00 The Recent Upgrade to the Penn State TRIGA Reactor Control and **Monitoring System** Brenden Heidrich 14:00-14:20 Transient Rod Drop Time - A Synopsis of a Reportable Event Mac E. Bryan 14:20-14:40 An Overview of Neutron Beam Research Projects and the Future of **Neutron Beam Facilities and Research at Penn State**

15:00 – 16:40 <u>Parallel Technical Sessions:</u>

Session11A: Reactor Utilization III – PSBR Ballroom

Chairman: Fred Sears

15:00-15:20 Neutron Imaging at Penn State: Past, Present and Future Jack Brenizer

15:20-15:40 Facilities, Uses and Capabilities of NAA at the Radiation and

Engineering Center at Penn State

Danielle Hauck

Kenan Unlu

15:40-16:00 Development of Time-Of-Flight and Neutron Depth Profiling at

Penn State University

Sacit Cetiner

Ballroom

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16:00-16:20	Replacement of the Regulating Rod in the Reed Research Reactor
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Rachel C. Barnett

16:20-16:40 Inspecting a Research Reactor's Control Rod Surface for Pitting

Using a Machine Vision Approach

Akira T. Tokuhiro

Session 11B: Licensing and Safety Washingtonian

Chairman: François Plewinski

15:00-15:20 Radiation-Induced Growth in Zircaloy-4 under Research Reactor

Operating ConditionsRobert P. Harrison

15:20-15:40 Seismic Strengthening of the ILL High Flux Reactor Building

Lionel Germane

15:40-16:00 Dismantling Internal Concrete Structures in an Operating Nuclear

Research Reactor

Frédérique Frery

16:00-16:20 Safety Re-evaluation and Relicensing of the HFR-Petten

Peter M. Stoop

OPAL Reactor Licensing

Juan Pablo Ordonez (presented in Session 8B)

Friday, September 16

8:30 – 10:30 Parallel Technical Sessions:

Session 12A: *Operation and Maintenance II* Ballroom

Chairman: Kenan Unlu

8:30-8:50 Upgrade of the Wide Range Reactor Instrumentation at the

Washington State University Nuclear Radiation Center

Eric Corwin

8:50-9:10	Developing and Optimizing Resources for an Upgrade to 3-Shift Operation: The Experience at the NC State University PULSTAR Reactor Scott Lassell
9:10-9:30	Experience in Rotary Specimen Rack (RSR) Operations, Maintenance and Repairs at the Kansas State University TRIGA II Reactor Mike Whaley
9:30-9:50	Long-Term Experience Operating with LEU at Up-rated Power Joseph Talnagi
9:50-10:10	Upgrading and Refurbishing of Secondary Cooling System and Air Monitor Tim DeBey
10:10-10:30	Sandia National Labs Annular Core Research Reactor Outage Lessons Learned (July 04 – Mar 05) David Clovis
Session 12B:	Reactor Utilization IV Washingtonian
Chairman: Step	hane Gaillot
8:30-8:50	Innovative In-Pile Instrumentation Developments for Irradiation Experiments in MTRs Jean-Francois Villard
8:50-9:10	In-Pile CFUZ53 Sub-Miniature Fission Chambers Qualification in BR2 Under PWR Conditions Ludovic Oriol (presented by Gilles Bignan)
9:10-9:30	The ENEA-CASACCIA Research Reactors: Current Status Roberto Rosa
9:30-9:50	The PHEBUS Facility and Related Studies Yves Belpomo
9:50-10:10	The Place of EOLE, MINERVE and MASURCA Facilities in the R&D Activities of the CEA Philippe Fougeras (presented by Gilles Bignan)

10:10-10:30	Measurements of Nuclear Heating Rate and Neutron Flux in HANARO CN Hole for Designing the Moderator Cell of Cold Neutron Source Myong-Seop Kim

11:00-12:00	Closing Session	Ballroom
11:00-11:20	IGORR Business Meeting Alain Ballagny, Chairman	
11:20-11:40	TRTR Business Meeting Tawfik Raby and Sy Weiss, Co-Chairmen Sean O'Kelly, Chairman-elect	