International User’s Group Meeting
Thursday, 13 August 2015 and Friday, 14 August 2015

Host: James Wolf, 208-526-7725
Meeting Coordinator: Barbara Taylor, 208-526-1054
Rev. 7 Date: 10 Aug 2015
THURSDAY, 13 AUGUST 2015
Residence Inn, 635 West Broadway, Idaho Falls, ID – Taylor Crossing Conf Rm

Chairman: Jim Wolf - INL

08:00 Welcome and Introduction ................................................................. Jim Wolf - INL
08:15 Evaluation of Jacobian Matrix Accuracy ................................................. George Mesina - INL
08:45 Validation of a RELAP5-3D Point Kinetics Model of TREAT .................. Cliff Davis, INL
09:15 NRELAP5 Prediction of KAIST High Pressure Condensation Data ...................... Pravin Sawant - NuScale
09:45 Development of a RELAP5-3D Property Library for Use by Other Computer Codes ................................................................. Cliff Davis - INL
10:15 Break

Chairman: Tom Conroy – Bettis

10:30 Polate Demonstration ........................................................................ Cliff Davis - INL
11:00 Moving coordinate paper ........................................................................ Frank Buschman - Bettis
11:30 Six Field Governing Equations for RELAP5-3D and Selected Closure Modes ............................................................................. Fatih Aydogan – Univ of Idaho
12:00 Lunch........................................................................................................

Chairman: Hope Forsmann – INL

13:30 Dual Number Automatic Differentiation in RELAP5-3D ... Joshua Hodson – Utah State Univ
14:00 Impact of Pressure Relief Holes on Core Coolability for a PWR During a Large Break Loss of Coolant Accident with Core Blockage Using RELAP5-3D .................. Rodolfo Vaghetto
14:30 Expanded Verification Testing ..................................................................... George Mesina – INL
15:00 Break

2
Chairman: Frank Buschman – Bettis

15:15  Qualitative and Quantitative Evaluation of Coupling.................... Josh Pack – Univ of Idaho
       Approaches for Coupling of RELAP and LabVIEW ..................Fatih Aydogan – Univ of Idaho

15:45  Multi-deck input file operations .................................................. George Mesina – INL

16:15  SCCRED a Supporting Tool for V&V and Uncertainty Evaluation of Best-Estimate System
       Codes for Licensing Application ........................................... Marco Lanfredini – Univ of Pisa

16:45  Development of a Quality-Assured HTTF RELAP5-3D Input Model .... Paul Bayless – INL
       ......................................................................................... Paul Humrickhouse – INL

17:15  Adjourn

18:30  No-Host Dinner .............................................................................. Stockman’s Restaurant
       .........................................................................................1175 Pier View Drive, Idaho Falls, ID
FRIDAY, 14 AUGUST 2015
Residence Inn, 635 West Broadway, Idaho Falls, ID – Taylor Crossing Conf Rm

Chairman: George Mesina – INL

08:00  RELAP-7 Status Update ................................................................. Haihua Zhao – INL
08:30  New Simulation Schemes and Capabilities for the
PHISICS/RELAP5-3D Coupled Suite .................................................... Crisitan Rabiti – INL
09:00  Modeling the supercritical CO2 power cycle of a generic dual-coolant
Fusion reactor with RELAP5-3D. Preliminary results and findings . Lluis Batet – Universitat
Politecnica de Catalunya BarcelonaTECH
09:30  RELAP5-3D ongoing activities at SCK●CEN ................................. Diego Castelliti - SCK●CEN
10:00  Break
10:15  RELAP5 Applications at GRNSPG-NINE: Thirty years of activities .... Marco Lanfredini
................................................................................................................. Univ of Pisa
10:45  Thermal-Hydraulic Analysis of an AHTL In-Pile Tube in the Southwest
Loop of ATR ............................................................................................. Cliff Davis – INL
11:15  Demonstration of BEPU Analysis of LBLOCA with RELAP5-3D
For High Burnup Fuel ........................................................................... Haihua Zhao – INL
11:45  RELAP5-3D Gas Cooled Reactor Activities ..................................... Paul Bayless - INL
12:15  Lunch
13:45  The BEPU Evaluation Model with RELAP5-3D© for the
Licensing of Atucha-II NPP ...................................................................... Marco Lanfredini – Univ of Pisa
14:15  H2ON – H2095 Fluids and Auxiliary Tools ....................................... Hope Forsmann – INL

BUSINESS MEETING

Chairman: Doug Barber – ISL

14:45  IRUG Business
• Introduction ............................................................................................. Jim Wolf – INL
• Review of the 2014 Meeting Minutes ......................................................... Doug Barber – ISL
• Election of new IRUG Vice-Chairman ............................... Doug Barber – ISL
• Licensing status, license fee increase, export control status .......... Gary Smith – INL

15.15 Break
15:30 Selected User Problems ......................................................... Nolan Anderson – INL
16.00 Comparison of features between V4.3.3 and V4.2.1 ...................... Nolan Anderson – INL
16:30 Dates for next year’s meeting ......................................................... Jim Wolf – INL
16:45 Other business ................................................................................ All
Adjourn