PSA 2019 Conference Grid by Day						
Date	**Day**	**Start Time**	**Ending Time**	**Function or Event Space or Room**	**Session or Event**	**Session Chair or Lead Workshop Facilitator**
4/28/2019	Sunday	8:00	18:00	Topaz/Opal Prefunction	Registration	
4/28/2019	Sunday	8:00	18:00	Topaz/Opal/Emerald Prefunction	Exhibits (Set-up)	
4/28/2019	Sunday	9:00	12:00	Yellow Topaz & Blue Topaz	**1. Dynamic PSA Workshop - I** a.ADS (University of California at Los Angeles) b.ADAPT (Sandia National Laboratories)	Professor Tunc Aldemir, The Ohio State University
4/28/2019	Sunday	12:00	13:00		Lunch on your Own	
4/28/2019	Sunday	13:00	16:30	Yellow Topaz & Blue Topaz	**2. Dynamic PSA Workshop - II** a. RAVEN (Idaho National Laboratory) b. PyCATSHOO (Electricité de France)	Professor Tunc Aldemir, The Ohio State University
4/28/2019	Sunday	13:00	17:30	Opal 1	**3. SAPHIRE Workshop**	James K. Knudsen, Idaho National Laboratory
4/28/2019	Sunday	15:00	15:30	Topaz/Opal Prefunction	Mid-Afternoon Break	
4/28/2019	**Sunday**	**18:00**	**21:00**	**Courtyard (Weather Permitting) or Emerald**	**PSA 2019 Arrival Meet & Greet**	

4/29/2019	Monday	7:00	18:00	Topaz/Opal Prefunction	Registration	
4/29/2019	Monday	7:00	8:00	Opal 1	Continental Breakfast - Monday Chairs, Presenters, and Panelists	
4/29/2019	Monday	8:00	9:00	Opal 1	Spouse/Guest Breakfast	
4/29/2019	Monday	7:00	18:00	Opal 2	Speaker/Presentation Ready Station	
4/29/2019	Monday	7:00	18:00	Topaz/Opal/Emerald Prefunction	Exhibits	
4/29/2019	Monday	8:00	10:00	Emerald	**Monday Opening Plenary (OP1)** **a. Welcome Greeting - General Chair Kevin O'Kula** **b. Welcome from the Mayor Pro Tem, Peter Shahid, City of Charleston, South Carolina** **c. Welcome from Professor Mohammad Modarres, Technical Program Chair** **d. Keynote Presentation,** *Safe Enough? WASH-1400 and Its Legacy* **, Mr. Thomas Wellock, U.S. Nuclear Regulatory Commission Historian** **e. Presentation from Professor Mohammad Modarres to WASH-1400 Authors** **f. Remarks from WASH-1400 Authors: Richard Denning, Joseph Murphy, and Ian Wall**	Kevin O'Kula, AECOM TS Professor Mohammad Modarres, University of Maryland
4/29/2019	Monday	10:00	10:30	Topaz/Opal/Emerald Prefunction	Mid-Morning Break	
4/29/2019	Monday	10:30	12:15	Emerald	**MPS Plenary Panel (II):** **27102 PRA Knowledge Management: Preserving Data and Information** **Professor Mohammad Modarres, Moderator**	Professor Mohammad Modarres, University of Maryland
4/29/2019	**Monday**	**12:30**	**13:45**	**Emerald**	**PSA 2019 Luncheon - Daniel Churchman, Fleet Engineering Director for SNC** **Sponsored by Westinghouse**	
4/29/2019	Monday	13:45	15:25	Emerald Salon One	**MTS1 Multi-Unit PSA and Risk Integration - I (4 papers)** 27149 Development of Multi-Unit PSA Model for the Case Study of the IAEA Project 26718 Seismic Correlation Modeling in Multi-Module PRAs 27126 Use of Risk Insights in the Practical Implementation of Integrated Risk-Informed Decision-Making Framework 26900 An Approach to Developing an Integrated Site Probabilistic Risk Assessment (PRA) Model	Cornelia Spitzer, IAEA
4/29/2019	Monday	13:45	15:15	Emerald Salon Two	**MTS2 Internal Events - I (3 papers)** 26641 Simplified Structural Steel Analysis to Support Assumption of Loss of One Column for Building Structural Integrity 27035 An Approach for Apportioning Fire Scenario Frequencies to Induced Initiating Events 27151 Characterization of Interruptible and Growth Fires for Nuclear Power Plant Applications	Jeff Mitman U.S. NRC
4/29/2019	Monday	13:45	15:15	Emerald Salon Three	**MTS3 Working Group & International Program Insights (3 papers)** 27105 Summary of the results of 4th Mandate of PSA Working Group Established by Co-operation Forum for VVER Regulators 27409 BWROG Insights based on PRA Peer Review F&O Closure Workshops 26949 PWROG SAMG Implementation Lessons Learned	Dennis Henneke, GE-Hitachi
4/29/2019	Monday	13:45	15:15	Yellow Topaz	**MTS4 Risk-Informed Decision-Making - I (3 papers)** 27036 Quantitative Risk Analysis Support to Decision-Making for New Systems 27097 Use of Risk Insights in the Practical Implementation of Integrated Risk-Informed Decision-Making Framework 27038 Identifying Key Factors Affecting the Performance of Decision-Making Tasks Included in SAMGs	Professor Michelle (Shelby) Bensi, University of Maryland
4/29/2019	Monday	13:45	15:15	Blue Topaz	**MTS5 Passive System Reliability (3 papers)** 26876 Decision Making for Active and Passive Safety Systems Alternative: Preliminary Assessment 27027 Interfacing Passive System Performance Degradation Initiated by Nuclear Power Plant Operator Action 27100 Bathtub Shaped Hazard Rate functions Change Points Determination; Hazard Graph's Properties	Curtis L. Smith, Idaho National Laboratory
4/29/2019	Monday	13:30	15:15	Opal 1	**MPS1 27078 Understanding and Managing Conservatisms and Safety Margins to Support Safety Decisions**	James E. O'Brien, NNSA, U.S. DOE
4/29/2019	Monday	15:15	15:45	Topaz/Opal/Emerald Prefunction	Mid-Afternoon Break	
4/29/2019	Monday	15:45	17:25	Emerald Salon One	**MTS6 Multi-Unit PSA and Risk Integration - II (4 papers)** 27060 A Review of Selected Multi-Unit PRA Issues 27127 A Method for Considering Numerous Combinations of Plant Operational States in Multi-Unit PSA Models 27411 Simplified Methodology for Multi-Unit PSA Model 27162 Methodological Approach for a Hydrological Hazards PSA for a Multi-Unit Multi-Source Site	Andrea Maioli, Westinghouse Electric Company

4/29/2019	Monday	15:45	17:15	Emerald Salon Two	**MTS7 Internal Events - II** (3 papers) 27152 Modeling of Personnel Suppression in Nuclear Power Plant Applications 27158 Radiative Heat Flux Zone of Influence for Open Fires and Electrical Enclosures Fires 27188 The Effect of Pressurizer Heaters on Spurious Pressurizer Main Spray Initiation, MSO 36, Scenario in a Reference Plant Fire PRA	Sunil D. Weerakkody, U.S. NRC
4/29/2019	Monday	15:45	17:25	Emerald Salon Three	**MTS8 Risk-Informed Decision-Making - II (4 papers)** 27121 Applying Risk-Informed Decision-Making to the Acceptance Criteria for Evaluating Leak-Before-Break Analyses in Piping Which is Susceptible to Primary Water Stress Corrosion Cracking Degradation 27015 Condition-Based Probabilistic Safety Assessment for an Induced Steam Generator Tube Rupture 26956 Development of 3+ Level Probabilistic Safety Assessment Methodology and Application for Akkuyu Nuclear Power Plant 27171 Risk-Informed Design Process of the FHR Using Dynamic PRA	Fernando Ferrante, Electric Power Research Institute (EPRI)
4/29/2019	Monday	15:45	16:45	Yellow Topaz	**MTS9 Risk Management** (2 papers) 26402 Discussion of Risk Aggregation in Three Dimensions for Various Risk Hazards 27063 Insights from Risk-Related Implementation of Reactor Pressure Vessel Water Inventory Control (RPV WIC)	Gerald Loignon, SCANA (ret.)
4/29/2019	Monday	15:45	17:15	Blue Topaz	**MTS10 Extended Sequences (3 papers)** 27207 PSA Evaluation of the New Independent Feedwater System at Ringhals NPP in Sweden 26947 Power Supply and Mitigation System Consdierations for Extended Loss of All AC Power Events 28205 Modeling Fire-Induced Main Control Room Abandonment in PRA Fault Trees	Felix Gonzalez, U.S. NRC
4/29/2019	Monday	15:45	17:15	Opal 1	**MTS11 Criticality Safety Insights (3 papers)** 27043 Defining Realistic Conservatism in Nuclear Criticality Safety Analysis 27143 Criticality Safety Insights for a Nuclear Waste Process Using Hazard Analysis 27167 Estimating the Probability of Multiple Misloads in Spent Fuel Casks for Light Water Reactor Systems	Professor Robert Hayes, North Carolina State University, Assistant Chair Herbert Carl Benhardt, AECOM Technical Services
4/29/2019	**Monday**	**18:00**	**21:00**	**South Carolina Aquarium**	**PSA 2019 Opening Reception - Hosted by Jensen Hughes**	

4/30/2019	Tuesday	7:00	18:00	Topaz/Opal Prefunction	Registration	
4/30/2019	Tuesday	7:00	8:00	Opal 1	Continental Breakfast - Tuesday Chairs, Presenters, and Panelists	
4/30/2019	Tuesday	8:00	9:00	Opal 1	Spouse/Guest Breakfast	
4/30/2019	Tuesday	7:00	18:00	Opal 2	Speaker/Presentation Ready Station	
4/30/2019	Tuesday	7:00	18:00	Topaz/Opal/Emerald Prefunction	Exhibits	
4/30/2019	Tuesday	8:00	9:30	Emerald	**Tuesday Opening Plenary (OP2)** **PSA methodologies for external hazards at nuclear power plants:** **Current status and future developments - Plenary (II)** **Robert J. Budnitz, Lawrence Berkeley National Laboratory, (retired)**	Professor Mohammad Modarres, University of Maryland
4/30/2019	Tuesday	9:30	10:00	Topaz/Opal/Emerald Prefunction	Mid-Morning Break	
4/30/2019	Tuesday	10:00	12:00	Emerald	**27134 Seismic Multi-Unit PSA: Special Challenges and Opportunities**	Robert J. Budnitz, LBNL (retired)
4/30/2019						
4/30/2019	**Tuesday**	**12:00**	**13:30**	**Topaz/Opal/Emerald Prefunction**	**Buffet Luncheon**	
4/30/2019	Tuesday	13:30	15:00	Emerald Salon One	**TTS1 SMR and Advanced Reactor PSA (3 papers)** 27138 Severe Accident Source Terms for Small Modular SFRs 27388 Development of a Methodology for Early Integration of Saftety Analysis into Advanced Reactor Design 27198 Probabilistic Risk Assessment of a Single-Failure-Proof Crane for Small Modular Reactor Refueling Operations	Tom Morgan, ENERCON Services, Inc.
4/30/2019	Tuesday	13:30	15:10	Emerald Salon Two	**TTS2 External Events - I (4 papers)** 26969 Once upon a time, there was a total loss of ultimate heat sink... 27023 A Study on Probabilistic Risk Assessment Methodology of External Hazard Combinations, - Identification of Hazard Combination Impacts on Air Cooling Decay Heat Removal System 26670 Risk-Reduction Credit for Very Early Warning Fire Detection: From FAQ to Fiction 27110 Incorporation of Spatial Variability of Ground Motions in a Seismic Multi-Unit Probabilistic Risk Assessment	Robert J. Budnitz, Lawrence Berkeley National Laboratory (retired)
4/30/2019	Tuesday	13:30	15:10	Blue Topaz	**TTS3 Level 1/2 PSA - I (4 papers)** 27209 Accident Sequence Probability in PSA 27020 Modeling Hydrogen Explosion in Level 1 PSA 27009 Practical Application of the Loss of Offsite Power Recovery Analysis using the Convolution Methodology 27229 Simplified/harmonized PSA: a generic modeling framework applied to precursor analysis	Jeff Gabor, Jensen Hughes
4/30/2019	Tuesday	13:30	14:30	Yellow Topaz	**TTS4 Digital I&C, Software Reliability, and Cyber Risk (2 papers)** 27154 MODEL BASED RELIABILITY ANALYSIS OF DIGITAL I&C OF THE HOISTING EQUIPMENT IN NUCLEAR FACILITIES 26999 Development of Cyber-Attack Complexity Evaluation Model for Cyber Security of Nuclear Power Plants	Professor Tunc Aldemir, The Ohio State University
4/30/2019	Tuesday	13:30	15:00	Opal 1	**TTS5 Internal Events & Common Causes - III (3 papers)** 27056 Internal Flooding PRA Refinement by Partitioning of Pipe Rupture Frequencies 27021 Evaluation of Common Cause Failure by an Initiating Event for Multi-unit using Bayesian Belief Network 27224 Development of Inter Unit CCF Methods for Multi-Unit PSA	Rick Summit, EPM Inc.
4/30/2019	Tuesday	13:00	15:00	Emerald 3	**27275 Advancing HRA Technology: Short-Term and Long Term Needs**	Paul Amico, Jensen Hughes
4/30/2019	Tuesday	15:00	15:30	Topaz/Opal/Emerald Prefunction	**Mid-Afternoon Break**	
4/30/2019	Tuesday	15:30	17:15	Emerald Salon One	**27233 Learning from Experienced Nuclear Events: The Role of Precursor Analysis**	Wolfgang Kröger, ETH Zürich
4/30/2019	Tuesday	15:30	17:10	Emerald Salon Two	**TTS6 External Events - II (4 papers)** 27120 Integrating External and Internal Event Hazard Models at Nuclear Power Plants 27192 A Preparatory Study on Systematically Considering Combinations of External Events in the Design Basis and the Probabilistic Safety Assessment of NPP Paks 27058 Lessons Learned from Recent Seismic Risk Evaluations Including Probabilistic Risk Assessments to Support Regulatory Actions 27146 A new method to allocate combination probabilities of correlated seismic failures into CCF probabilities	Zoltan Kovacs, RELKO Ltd.
4/30/2019	Tuesday	15:30	17:00	Emerald Salon Three	**TTS7 Level 1/2 PSA - II (3 papers)** 26664 Assessment for SRV line break 27088 General Screening Criteria for Loss of Room Cooling in PRA Modeling 27074 On Assessing the Risk Related to Consequential Steam Generator Tube Rupture Events in Nuclear Power Plants	Gabriel Georgescu, IRSN

4/30/2019	Tuesday	15:30	17:10	Yellow Topaz	**TTS8 Risk-Informed Regulation - I (4 papers)** 27181 Office for Nuclear Regulation Risk Informed Regulatory Decision Making 27285 Assessing the Impact of TSTF 505 Initiative 4B Risk-Informed Completion Times on Baseline Risk 27059 Insights from Review of Seismic Probabilistic Risk Assessments in the Context of 10 CFR 50.69 26662 Risk-Deformed Regulation: What Went Wrong with NFPA 805	Susan Cooper, U.S. NRC George Flanagan, ORNL
4/30/2019	Tuesday	15:30	17:10	Opal 1	**TTS9 Low Power Risk, Accident Management and Emergency Planning (4 papers)** 27044 Power restoration timescales and probabilities: new data and a general theory 27029 Low Power Shutdown PRA Modelling Challenges and Recommendations 26124 NuScale's Emergency Planning Zone Methodology 27065 FLEX Equipment Reliability Data	Bruce Morgen, EPM Inc.
4/30/2019	Tuesday	15:15	17:15	Blue Topaz	**30118 PRA Standard Update**	Andrea Maioli, Westinghouse Electric Company
4/30/2019	**Tuesday**	**17:30**	**21:30**	**Charleston Harbor**	**Dinner Harbor Cruise Aboard Spirit Line Cruise Ship "Lowcountry"**	

05-01-19	Wednesday	7:00	13:00	Topaz/Opal Prefunction	Registration	
05-01-19	Wednesday	7:00	8:00	Opal 1	Continental Breakfast - Wednesday Chairs, Presenters, and Panelists	
05-01-19	Wednesday	8:00	9:00	Opal 1	Spouse/Guest Breakfast	
05-01-19	Wednesday	7:00	13:00	Opal 2	Speaker/Presentation Ready Station	
05-01-19	Wednesday	7:00	18:00	Topaz/Opal/Emerald Prefunction	Exhibits	
05-01-19	Wednesday	8:00	9:30	Emerald	**Wednesday Opening Plenary (OP3)** **International perspective of ongoing and future PSA activities at the IAEA and its Member States - Plenary (III)** **Ms. Cornelia Spitzer** **Safety Assessment Section, Division of Nuclear Installation Safety, Department of Nuclear Safety and Security, International Atomic Energy Agency**	Professor Mohammad Modarres, University of Maryland
05-01-19	Wednesday	9:30	10:00	Topaz/Opal/Emerald Prefunction	Mid-Morning Break	
05-01-19	Wednesday	10:00	12:00	Emerald Salon One	**WTS1 State-of-the-Art Consequence Analysis (SOARCA)/Uncertainty Analysis (4 papers)** 27145 State-of-the-Art Reactor Consequence Analyses Project: Uncertainty Analyses for Station Blackout Scenarios 27164 State-of-the-Art Reactor Consequence Analyses Project: Insights on Accident Progression and Source Term 27165 State-of-the-Art Reactor Consequence Analyses Project: Insights on Offsite Consequences 27166 State-of-the-Art Reactor Consequence Analyses Project: Insighs on Methodologies	Jeff Gabor, Jensen Hughes Carl Mazzola, PEC
05-01-19	Wednesday	10:00	12:00	Emerald Salon Two	**WTS2 Dynamic PSA - I (3 + 1 4 papers)** 27012 Integration of Recoveries into Dynamic Event Trees: A Case Study 27051 India-United States Collaboration on Advanced Dynamic Reliability Modeling 27055 Code Surrogate Development for Dynamic PRA 27142 Applications of Evidence Theory to Issues with Nuclear Weapons	Professor Tunc Aldemir, The Ohio State University
05-01-19	Wednesday	10:00	12:00	Emerald Salon Three	**WTS3 Level 1/2 PSA - III (4 papers)** 27419 Extension of a Level 2 PSA Event Tree Based on Results of a Probabilistic Dynamic Safety Analysis (Dynamic PSA) of Induced Steam Generator Tube Rupture (SGTR) 27108 Source Term Analysis for PWR ISLOCA Using MAAP5 27161 Recent Developments on a Level 1 PSA for a Research Reactor 27218 A Source Term Evaluation in a SGTR accident sequence using the MELCOR code	John E. McAllister, HukariAscendent
05-01-19	Wednesday	10:00	12:00	Opal One	**WTS4 Risk-Informed Regulation & I&C Insights (4 papers)** 27408 Demonstration of NEI 18-04 RIPB Guidance for non-LWR Licensing Basis Development 27338 NRC Decommissioning Rulemaking 27136 PRA Maintenance and PRA Upgrade 27106 Comparative Application of Digital I&C Modeling Approaches for PSA	Antonios Zoulis, U.S. NRC
05-01-19	Wednesday	10:00	12:00	Blue Topaz	**27155 Insights from Advanced and Small Modular Reactor PRA Development**	Sarah Bristol, NuScale Power
05-01-19	Wednesday	10:00	12:00	Yellow Topaz	**WTS5 Plant & Site Level PSA Applications - I (4 papers)** 27241 Insights from a WGRISK Activity on the Status of Site-Level PSA Developments 27034 TMRE Implementation Experience at Duke Energy and Southern Nuclear Company Pilot Plants 27049 Incorporation of Surveillance Frequency Control Program Risk Evaluations in PRA Models 27144 A Simplified Probabilistic Model for Flywheel Integrity Using "R"	Zhegang Ma, Idaho National Laboratory
05-01-19	Wednesday	12:00	20:00	Opal 1	**ASME/ANS RA-S-1.3 Level 3 PRA Standard Working Group Meeting**	
05-01-19	Wednesday	12:00	22:00	**PSA 2019 Mid-Week Break**	**Tours to Plant Vogtle, High Level Waste Facilities at Savannah River Site, Hunley Submarine Museum, Charleston Walking Tours and** **time on your own to explore Charleston**	

05-02-19	Thursd	7:00	13:00	Topaz/Opal Prefunction	Registration	
05-02-19	Thursd	7:00	8:00	Opal 1	Continental Breakfast - Thursday Chairs, Presenters, and Panelists	
05-02-19	Thursd	8:00	9:00	Opal 1	Spouse/Guest Breakfast	
05-02-19	Thursd	7:00	13:00	Opal 2	Speaker/Presentation Ready Station	
05-02-19	Thursday	7:00	12:00	Topaz/Opal/Emerald Prefunction	Exhibits	
05-02-19	Thursday	8:00	10:00	Emerald	**Thursday Opening Plenary (OP4)** **PSA Research and Education at Universities: History, Impact, Challenges, and Future Outlook - Plenary (V)** **Professor Ali Mosleh, Moderator, (Garrick Institute for the Risk Sciences, UCLA)** **Panel:** **George Apostolakis (MIT Emeritus Prof.)** **Mohammad Modarres (Prof. UMD)** **Ali Mosleh (Prof. UCLA)** **Akira Yamaguchi (Prof. Univ. of Tokyo)** **Katrina Groth (Assistant Prof. UMD)** **Tunc Aldemir, The Ohio State University** **Wolfgang Kröger, ETH Zürich**	Professor Ali Mosleh, Garrick Institute of Risk Sciences, UCLA
05-02-19	Thursday	10:00	10:30	Topaz/Opal/Emerald Prefunction	Mid-Morning Break	
05-02-19	Thursday	10:30	12:30	Emerald	**27231 Perspectives on Nuclear Safety Since the Three Mile Island Event: Learning from the Past 40 Years (VI)** **Dr. Robert A. Bari, Chair, Brookhaven National Laboratory, Senior Physicist Emeritus, (retired)** **Dr. Robert J. Budnitz, Lawrence Berkeley National Laboratory, (retired)** **Dr. Robert E. Henry, Fauske and Associates, Inc. (retired)** **Dr. Roger J. Mattson, Consultant**	Robert A. Bari, Brookhaven National Laboratory, (retired)
05-02-19	Thursday	12:30	13:30	Topaz/Opal/Emerald Prefunction	Buffet Luncheon	
05-02-19	Thursday	13:30	15:00	Emerald Salon One	**ThTS1 Dynamic PSA - II (3 papers)** 27099 Simulation Based Dynamic Event Tree Analysis 27117 Mutual Integration of Classical and Dynamic PRA 29590 Dynamic Probabilistic Risk Assessment with PyCATSHOO: The Case of the Emergency Power Supply of a Nuclear Power Plant	Zachary Jankovsky, Sandia National Laboratories
05-02-19	Thursday	13:30	15:10	Emerald Salon Two	**ThTS2 Human Reliability Analysis and Human Factors - I (4 papers)** 27260 Models for Human Performance Improvement 27062 Human Reliability Analysis Quantification Guidance for Main Control Room Abandonment Scenarios in Fire PRAs: What's New and When Can Existing Methods Be Used? 27128 The Use of Expert Judgment to Support Human Reliability Analysis of Implementing FLEX Equipment 27081 Human Action Dependency Development in the Age of Automation	Mary Presley, Electric Power Research Institute
05-02-19	Thursday	13:30	15:10	Opal 1	**ThTS3 Level 3 PSA (4 papers)** 27032 Level 3 PSA Application for Akkuyu Nuclear Power Plant 27217 Ingestion Dose Evaluation in A Food Chain Model for Consequence Analysis 27129 Development and Status of the ASME/ANS RA-S-1.3 Level 3 PRA Standard 25805 A Focused Sensitivity Study on the Key Input Parameters Important to Long-Term Level 3 PSA Metrics	Nathan Bixler, Sandia National Laboratories
05-02-19	Thursday	13:30	15:10	Yellow Topaz	**ThTS4 Safety Goals,Risk Metrics, and Guidance Updates (4 papers)** 27037 Re-Evaluating the Current Safety Goal Policy 27125 Technical Evaluation of the Margins Between Established Risk Goals and Health Objectives for Nuclear Power Plants 27213 Application of Qualitative Importance Measures 27150 Overview of the Society of Fire Protection Engineers (SFPE) latest Engineering Guide to Fire Risk Assessments, 2nd Edition	S. Tina Ghosh, U.S. NRC
05-02-19	Thursday	13:30	15:10	Blue Topaz	**ThTS5 Reliability Estimation and Data Analysis - I (4 papers)** 27108 ANALYSIS OF LOSS-OF-OFFSITE-POWER EVENTS 1987-2017 27095 Pilot Application of SACADA Database for Feed and Bleed Operator Action 27013 A complex network analysis for balanced design verification 27184 A Guidance for the Scoping and the Frequency of a PRA Data Update	Richard H. (Chip) Lagdon, Bechtel National Inc.
05-02-19	Thursday	13:30	15:10	Emerald Salon Three	**ThTS6 Plant & Site Level PSA Applications - II (4 papers)** 27109 Complex Modeling for Surveillance Test Interval Extensions 27057 Application of Electrical Power Recovery in the South Texas Project (STP) PRA Model 27077 Whole-site Risk Characterization Approaches in Canada: Regulatory and Technical Challenges 27014 Reliability analysis of a dynamic system using Petri net and comparison with Smart Component Methodology	Marina Röwekamp, Gesellschaft für Anlagen- und Reaktorsicherheit (GRS)

05-02-19	Thursday	15:00	15:30	Topaz/Opal/Emerald Prefunction	Mid-Afternoon Break	
05-02-19	Thursday	15:30	17:00	Emerald Salon One	**ThTS7 Dynamic PSA - III (3 papers)** 27173 ATF: A Dynamic PRA Comparison 27169 Preliminary Methodology and Scenarios for Integrated Safety/Security Dynamic Probabilistic Risk Assessments 27016 A Dynamic Safety Margins Estimation with a Limited Number of PWR Large Break LOCA Simulations	Valentin Rychkov, EDF
05-02-19	Thursday	15:30	17:00	Opal 1	**ThTS8 Education, Training, and Knowledge Management (3 papers)** 27104 Communicating PRA Concepts to Non-Practitioners 26981 RISKAUDIT and CNEN Cooperation on Probabilistic Safety Analysis 27096 Release Category Characterization; Towards a More Realistic Method	Maeley K. Brown, AECOM Technical Services
05-02-19	Thursday	15:30	17:10	Emerald Salon Three	**TTS9 Advances in Computer Tools and HRA (4 papers)** 27418 The GRS Source Term Prognosis Software FaSTPro for PWR and BWR Spent Fuel Pools 29625 SAPHIRE's Current "State-of-Practice" to Meet PRA Demands 27156 New Functions and Features Associated with EPRI HRA Calculator Version 5.2(R) 27143 Human Reliability Dependency Analysis and Configuration Risk Management	Rachel E. Vail, AECOM Technical Services
05-02-19	Thursday	15:30	17:00	Yellow Topaz	**ThTS10 Reliability Estimation and Data Analysis - II (3 papers)** 27130 Sodium Pump Performance in the NaSCoRD Database 27191 Development of a Reliability Data Toolkit for Component Analysis in Liquid Waste Nuclear Facilities 27124 ESO-based online reliability estimation method for nuclear reactors	John E. McAllister, HukariAscendent
05-02-19	Thursday	15:30	17:10	Blue Topaz	**ThTS11 Uncertainty Quantification (4 papers)** 27079 Alternative Approach for Defining Truncation Limits 27375 Quantification of the Uncertainty Due to State-of-Knowledge Using ROAAM + Framework for Nordic BWRs 27214 An Approach to Fire Probabilistic Risk Assessment Modeling, Uncertainty Quantification and Sensitivity Analysis 27107 Understanding and Effectively Managing Conservatisms and Safety Margin	James E. O'Brien, U.S. DOE
05-02-19	Thursday	15:15	17:45	Emerald Salon Two	**27070 Risk Informed R&D Prioritization: Near-Term and Long-Term Needs**	Nathan Siu, U.S. NRC
05-02-19	Thursday	**18:30**	**21:00**	**Crystal ABC**	**PSA 2019 Banquet**	

05-04-19	Saturday	8:00	12:00	Topaz	**MACCS Workshop - II**	Nathan E. Bixler, Sandia National Laboratories