Preliminary Technical Program Agenda

Monday, 25th March 2013
6:00 – 8:00pm Early Registration

Tuesday, 26th March 2013
7:00am  Continental Breakfast and Registration. Exhibition is Open.
8:00am  Welcome and Introductory Remarks on FAC.
        B. Dooley, Structural Integrity Associates, USA.

SESSION 1:  Fossil Plant FAC Experiences and Programs #1
8:20am  Perpetuating a Successful FAC Program at Progress Energy.
        C. Barbee, E. Westberg and J. Preece, Progress Energy, USA.
8:45am  New Experiences within Eskom’s Flow-accelerated Corrosion Programme on
        Coal Fired Power Plants – Problems and Solutions.
        A. Sewraj and K. Northcott, Eskom, South Africa.
9:10am  RWE Npower's Experience of Assessing and Managing the Risk of FAC in
        Water/Steam Circuits of Fossil Plant.
        M. Conqueror, RWE npower, UK.
9:35am  Experience and Management of FAC in Israel Electric Power Plants.
        D. Zinemanas and B. Erenburg, Israel Electric, Israel.
10:00am Discussion on Session 1.
10:10am Morning Coffee and Tea Break. Exhibition is Open.

SESSION 2:  FAC in Air-cooled Condensers
10:40am  FAC Assessment and Mitigation of an Air-Cooled Condenser.
        A. Olszewski and J. Barnett, Exelon Generation, USA.
11:05 am  FAC in Air-cooled Condensers. 
**B. Dooley**, Structural Integrity Associates, USA, and A. Howell, Xcel Energy, USA.

Y. Deng, X. Zhang, W. Huang, and **Z. Li**, Thermal Power Research Institute, China

12:00 noon  Discussion on Session 2.

12:10 pm  Lunch. Exhibition is Open.

**SESSION 3:** Combined Cycle/HRSG FAC Experiences and Programs #1

1:25 pm  Cycle Chemistry Refinement to Reduce FAC. Instrumentation Upgrades to Enhance Cycle Chemistry Monitoring. 
**S. Joki**, Portlands Energy Center, Canada.

1:50 pm  Combined Cycle Power Plants (CCPP) with Once-through HRSGs – Is FAC here an Issue? 
**M. Rziha**, Siemens Energy, Germany.

2:15 pm  Assessing FAC in Combined Cycle Plants with HRSGs.  
**J. Huhs**, NRG Energy, USA and **B. Dooley**, Structural Integrity Associates, USA.

2:40 pm  Chemistry and Mechanical Field Assessment Actions for Effective Flow-accelerated Corrosion Minimization in Heat Recovery Steam Generators.  

3:05 pm  Afternoon Coffee and Tea Break. Exhibition is Open.

3:35 pm  Discussion on Session 3

**SESSION 4:** FAC Codes and Modeling

3:45 pm  FAC Screening Analysis and Experience Feedback Gained from Fossil Fired Plants in Belgium.  

4:10 pm  Mathematical Modeling of FAC under Single-phase Flow Conditions. 
**P.M. Gotovtsev** and V.N. Voronov, Moscow Power Institute, Russia.
4:35pm FAC surveillance at Le Havre Unit 4 using BRT-CICERO™. Maintenance program, pipes & welds thickness measurements and alloy contents measurement.
P. Caylar, D. Delacoux, H. Adghar and S. Trévin, V. Cadinot and R. Masselin, Électricité de France, France.

5:00pm Discussion on Session 5 and Any General Discussion on FAC.

5:30 - 7:00pm Light Networking Reception. Exhibition will be Open.

Wednesday, 27th March 2013

7:00am Continental Breakfast. Exhibition is Open.

SESSION 5: FAC in Renewable Energy Plants: Geothermal and Solar

8:00am Flow-accelerated Corrosion of Metals in Geothermal Flows.
G.V. Tomarov, JSC Geotherm-EM, Russia.


8:50am Effect of Flowing Environment on Corrosion - Geothermal Environment.
J. Soltis and K.A. Lichti, Quest Integrity, New Zealand, and M.E. Inman, Faraday Technology, USA.

R. Baier and R. Gamble, Areva, Germany.

9:40am Discussion on Session 5.

SESSION 6: NDE and Material Analysis for FAC #1

10:15am An Overview of Present and Future NDE Technologies for FAC Detection and Monitoring.
H. Queen, J. Van Velsor, J. Milligan, and O. Malinowski, Structural Integrity Associates, USA.
Detection of Flow-accelerated Corrosion without Insulation Removal. 
**L. Volkmann**, Applus RTD, USA and D. Sielski, Tennessee Valley Authority, USA.

Defect Imaging in Plate Structure using Ultrasonic Guided-wave Arrays.  
**Y. Nagashima**, M. Miki, M. Endo, Hitachi Research Laboratory, Japan, Y. Nonaka, Hitachi GE-Nuclear, Japan; and K. Asami, Hitachi Engineering Services, Japan.


Discussion on Session 6.

**SESSION 7: Cycle Chemistry Aspects and Control of FAC**

The IAPWS Technical Guidance Documents - Internationally Acknowledged Documents helping to Reduce the FAC Risk.  
**M. Rziha**, Siemens Energy, Germany, and B. Dooley, Structural Integrity Associates, USA.

**D. Addison**, Thermal Chemistry, New Zealand, and Members of IAPWS Task Group who Developed the TGD.

**R. Turner**, Swan Analytical, USA, and M. Sigrist, Swan Systeme AG, Switzerland.

The Effects of Amines on FAC in Steam-Water Systems.  
C. Lerkurasakda, P. Srisukvatananan, Lihui Liu, and **Derek Lister**, University of New Brunswick, Canada, and J. Mathews, Electric Power Research Institute, USA.

**Afternoon Coffee and Tea Break. Exhibition is Open.**
SESSION 8: FAC Mechanisms

3:25pm Determination of High-Risk Zones for Local Wall Thinning due to Flow-accelerated Corrosion.
S. Uchida, M.Naitoh, H. Okada and H. Suzuki, Institute of Applied Energy, Japan; S. Koshiduka, University of Tokyo, Japan, and D. Lister, University of New Brunswick, Canada.

N. Fujisawa, T. Takano, T. Yamagata, and N. Kanatani, Niigata University, Japan.

4:15pm Surface Morphological Changes of Carbon Steel Corrosion Sensors Downstream from an Orifice.

4:40pm Pattern Formation in Single Phase FAC: A Stability Analysis of an Oxide Layer.
D. Zinemanas and A. Herszage, Israel Electric, Israel.

5:05pm Flow-accelerated Corrosion Mechanism on Real Steel Surface.
Y. Zhang, Xi’an Thermal Power Research Institute, China, and D. Che, Xi’an Jiaotong University, China.

5:30pm Discussion on Sessions 7 and 8 and General Discussion on FAC.

Thursday, 28th March 2013

7:00am Continental Breakfast. Exhibition is Open.

SESSION 9: Combined Cycle/HRSG FAC Experiences and Programs #2

8:00am Combined Cycles with Heller systems: Challenges and Solutions for Water Chemistry.
P. Honcoop, NEM Energy bv, The Netherlands.

8:25am FAC: Facing and Challenging.
8:50am   Discussion on Session 9.

SESSION 10: Fossil Plant FAC Experiences and Programs #2

9:00am   Managing FAC in a Diverse Fleet of Fossil Plants.
          J. Huhs, NRG Energy, USA; B. Dooley and K. Shields, Structural Integrity
          Associates, USA.

9:25am   FAC Experience at New Madrid.
          L. Braun, Associated Electric Cooperative, Inc., USA.

9:50am   Morning Coffee and Tea Break. Exhibition is Open.

10:20am  FAC at Jorge Lacerda Coal Fired Power Plant – Lessons Learned.
          L. Felippe, Tractebel Energia, GDF Suez, Brazil.

10:45am  Discussion of Session 10.

SESSION 11: NDE and Material Analysis for FAC #2

10:50am  Practical Applications of Destructive and Non-Destructive Evaluation Techniques
          for FAC.
          P. Waldrop, PacifiCorp, USA.

11:15am  Pulsed Eddy Current Non-Destructive Testing for FAC.
          D.A. Bosko, Intertek, USA.

11:40am  Reliability Assessment of Pipe Wall Thinning Measurements using
          Electromagnetic Acoustic Transducer.
          F. Kojima, Kobe University, Japan, D. Kosaka, Polytechnic University, Japan,
          and H. Nakamoto, Kobe University, Japan.

12:05pm  Lunch. Exhibition is Open.

1:20pm   Using RVI to Reveal, Gauge and Measure FAC.
          J.J. Stadler GE Inspection Technologies, USA.

1:45pm   Discussion of Session 11.

SESSION 12: Fossil Plant FAC Experiences and Programs #3

1:55pm   Ontario Power Generation’s Experience with FAC.
          J. Siracusa, Ontario Power Generation, Canada.
2:20pm  Use of Neutralizing Amines and Formation of Iron Oxide on Steel Surfaces of the Condenser Steamside.  
**N.A. Parker** and A. Howell, Xcel Energy, USA.

2:35pm  Flow Accelerated Condensate Corrosion in a Newly-Commissioned Plant.  
**A. Howell**, Xcel Energy, USA.

3:00pm  Further Lessons Learnt from Fossil Plant Assessments.  
B. Dooley, **K. Shields** and L. McQueen, Structural Integrity Associates, USA, and Canada.

3:25pm  Discussion of Session 12

3:35pm  **Closing Remarks. Summary of Discussion and Key FAC Aspects.**

4:00pm  Adjournment of Conference.

**Friday, 29th March 2013**

7:30am  Continental Breakfast.

8:00am  FAC Expert Panel and Round Table Discussion

10:00am  Morning Coffee and Tea Break.

12:00 noon  Adjournment of Panel and Discussion.