



AHUG 2016

Australasian HRSG Users Group Conference and Workshops

15 - 17 November 2016 - Sydney



Program

Day 1 – Tuesday, 15th November

7:15	Registration
8:00 to 8:10	Opening Remarks B. Dooley Structural Integrity, UK and R. Anderson Competitive Power Resources, USA
8:10 to 8:40	General Open Floor Discussion and Questions
8:40 to 9:05	Achieving and Managing Extended Internal Inspection Intervals on Pressure Equipment M. Utley and M. Young, Contact Energy, New Zealand
9:05 to 9:30	Increase Efficiency, Decrease Costs and Increase Megawatts M. Peterson, Precision Iceblast, USA
9:30 to 10:00	Morning coffee/tea within exhibits
10:00 to 10:20	Presentations on Plant Updates Return to Service Requirements and Planning after 3 Years Storage J. Blake and M. Sands, Stanwell Corporation, Queensland, Australia
10:20 to 10:45	Expansion Joint Technology: Penetration and Casing Seals for HRSG J. Tarrant, Dekomte, UK
10:45 to 11:10	General Open Floor Discussion and Questions
11:10 to 11:35	The Latest on Steam and Water Sampling Systems J. Powalisz, Sentry Equipment Corp, USA
11:35 to 12:00	Controlling Oxygen on New HRSGs T. Hill, Diamantina Power Station, Queensland, Australia
12:00 to 13:20	Working Lunch within Exhibits
13:20 to 13:45	Applying Power Station Chemistry to a Risk Based Inspection Programme H. Henderson, Petrofac, Australia
13:45 to 14:10	Kaleidoscope of Cycle Chemistry Activities at Tallawarra I. Currie, Tallawarra, Australia
14:10 to 14:35	Presentations on Plant Updates Update on HP Bypass A. McKay and P. Wessels, Origin, Australia Short Update

14:35 to 15:00	General Open Floor Discussion and Questions
15:00 to 15:30	Afternoon coffee/tea within exhibits
15:30 to 15:55	Reheater Tube Failure L. Mosele and J. Spencer, NewGen Kwinana Power Station, Western Australia
15:55 to 16:20	Yarnima Power Station – A New Power in the Pilbara M. Watkinson, TW Power Services, Bunbury, Western Australia, Australia and A. Pandey, Senior Power Specialist – Yarmina Power Station, BHP Billiton, Western Australia, Australia
16:20 to 17:00	General Open Floor Discussion and Questions
17:00 to 18:30	Day 1 Concludes Networking, Social Gathering and Drinks within Exhibits

Day 2 – Wednesday, 16th November

8:00 to 8:40	General Open Floor Discussion and Questions
8:40 to 9:05	HRSG Designers Meeting the Challenge J. Roberts, R. Incampo and J. Reddel, Jacobs, Australia
9:05 to 9:30	ASME Code Issues Relating to Advanced Materials J. Henry, USA
9:30 to 10:00	Morning coffee/tea within exhibits
10:00 to 10:40	Presentations on Updates Update on Cycle Chemistry Control and FAC B. Dooley, Structural Integrity, UK Update on Thermal Assessments R. Anderson, Competitive Power Resources, USA
10:40 to 11:10	General Open Floor Discussion and Questions
11:10 to 11:35	Tallawarra's Experience with P91 S. Gupta, Tallawarra, NSW, Australia
11:35 to 12:00	Corrosion Monitoring using an On-line Analyzer in HRSGs T. Maatta, MEP Instruments, Gladesville, NSW, Australia



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Program continued ...

- 12:00 to 13:20 **Working Lunch within exhibits**
- 13:20 to 13:45 **Presentations on Plant Activities**
Outage Activities at Contact Energy's Te Rapa Plant
R. Meijer, Contact Energy, New Zealand
- 13:45 to 14:15 **General Open Floor Discussion and Questions**
- 14:15 to 14:40 **Presentations on Plant Updates**
- Ultrasonic Control of SH/RH Drains
R. Anderson, Competitive Power Resources
- 14:40 to 15:05 **How to apply IAPWS Guidelines for Effective Cycle Chemistry**
D. Addison, Thermal Chemistry, New Zealand
- 15:05 to 15:35 **Afternoon coffee/tea within exhibits**
- 15:35 to 16:00 **The Latest IAPWS Updates**
B. Dooley, Structural Integrity, UK, and
G. Joy, Retired Australia (Chair of AUSAPWS)
- 16:00 to 16:25 **Outdated Rituals versus Modern Water-Steam Sampling and Analysis Design**
M. Sigrist, Swan, Switzerland
- 16:25 to 17:00 **General Open Floor Discussion and Questions**
- 17:00 **Day 2 Concludes**

Day 3 – Thursday, 17th November 2016

- 8:00 to 10:00 **Workshop 1:
Attemperator Issues**
C. Jones and C. Thomas, Quest Integrity, Australia and New Zealand
Metallurgical investigation, inspection, thermocouple and inspection monitoring, stress analysis and life assessment applied to damaged attemperators. This workshop will present, to the extent of investigations applied, evidence and conclusions relating to each case. Where commonality is found the risk of problems arising from malfunctioning attemperators and/or the realisation of damaging transients will be discussed.
- 10:00 to 10:30 **Morning coffee/tea within exhibits**

- 10:30 to 12:30 **Workshop 2:
Preparation of a Covered Pipe System Management Plan in Combined Cycle Plants.**
D. Ross and D. Charman from ALS, Australia
This workshop will present information on covered pipe systems which are common throughout the power and process industries. Many of these pipe systems are critical and involve high risks to people and plant if they are not managed carefully. The ASME codes refer to insulated pipes as Covered Pipe Systems (CPS) in B31.1 (Power) and B31.3 (Process) and offers a detailed methodology for management. AS/NZS 3788 offers Appendix I for Inspection of Piping. This workshop will introduce the code requirements of ASME for CPS, identify differences with AS/NZS 3788, and apply this to some examples from combined cycle plants. To further support the need for a CPS management plan, the issues associated with Grade 91 pipe material will be discussed.
- 12:30 to 14:00 **Working Lunch within exhibits**
- 14:00 – 16:00 **Workshop 3:
Anatomy of HRSG Thermal Surveys**
R. Anderson, Competitive Power Resources, USA
When thermal transients beyond those anticipated by the HRSG designer occur irreversible thermal fatigue damage occurs in some pressure parts, resulting in premature failure. These transients can be identified by informed review of normal plant operating data and can often be eliminated, or mitigated, by changes to operating procedures. This workshop will describe a methodology by which to identify the most common undesirable transients and present case studies from actual thermal surveys.
- 16:30 **Day 3 Concludes**