2nd IEA CCC workshop on advanced ultra-supercritical coal-fired power plants
Centro Sviluppo Materiali S.p.A.
Rome, Italy, 14–15 October 2014
Tuesday, 14 October 2014

07:50  Buses depart Holiday Inn Hotel for CSM
08:30 – 09:00  Registration (conference room, CSM)

09:00 – 10:30  Welcome and Session 1: International overview

Chair: Andrew Minchener, General Manager IEA CCC

Welcome and introductions  Andrew Minchener and Cesare Murgia, CEO CSM

Status of advanced ultrasupercritical pulverised coal technology (Dec 2013)  Mr Kyle Nicol – IEA Clean Coal Centre [United Kingdom]

Advantages of A-USC in pulverized coal units  Mr Howard Hendrix – EPRI [United States]

Technology innovation of the most efficient and greenest coal-fired power plant  Mr Weizhong Feng – Shanghai Waigaoqiao No 3 Power Generation Co LTD [China]

10:30 - 11:00  Coffee break (conference room bar)

11:00 - 12:30  Session 2: International overview

Chair: Egidio Zanin, CSM

Future steam power plants with highest steam parameters  Dipl-Ing Frank Kluger – Alstom Boiler Deutschland GmbH [Germany]

Progress of China 700°C USC development program  Dr Ye Tao – Electric Power Planning & Engineering Institute [China]

The progress of development for A-USC boiler  Keiji Kubushiro – IHI Corporation [Japan]

12:30 - 14:00  Lunch (conference room bar)
14:00 - 15:15  **Session 3: Boilers**

Chair: Alberto Pettinau, Sotacarbo

**An elevated T-G unit technology for the next generation of power plant**  Mr Weizhong Feng – Shanghai Waigaoqiao No 3 Power Generation Co LTD [China]

**Research on material selection of 700°C USC boiler heating surface**  Mr Zhihao Tian – Shanghai Boiler Works, Ltd [China]

**Design parameters of main steam piping for 700°C A-USC unit**  Professor Yongjian Ye – East China Electric Power Design Institute [China]

15:15 – 15:40  **Coffee break** (conference room bar)

15:40 – 17:00  **Session 4: Piping and turbines**

Chair: Yongjian Ye, East China Electric Power Design Institute

**Research progress of 700°C HUSC power plant**  Prof Hong Yang - Shanghai Turbine Works Co Ltd [China]

**Siemens’ evolution of large USC steam turbines**  Dr Rainer Quinkertz – Siemens AG [Germany]

**Investigations on the Ni-based superalloy used for 700?A-USC steam turbine rotor**  Dr Wei Min Wang – Science & Technology Administration Dept of Central Research Academy of DEC [China]

17:00  **Buses return to Holiday Inn Hotel**

18:00 - 23:30  **Buses depart Hotel for walking tour of Rome and Workshop Dinner at ‘The View’ restaurant**
Wednesday, 15 October 2014

08:10  Buses depart Holiday Inn Hotel for CSM

09:00 – 10:30  Session 5: Nickel alloys
Chair: Keiji Kubushiro, IHI Corp

Macplus project, early results  Dr Egidio Zanin – CSM [Italy]
Development of Nickel Superalloy INCONEL alloy 740H for A-USC Boilers  Dr Stephen McCoy – Special Metals / PCC Energy Group [United Kingdom]
Production of thick-walled components made from optimized material Alloy 617 B for highly efficient power plants at operating temperatures of 700°C - HWT II  Dr-Ing Karola Klenke – BGH Edelstahl Siegen GmbH [Germany]
Corrosion phenomena on nickel base alloys for advanced ultra super critical technologies  Silvia Olivotto [Italy]

10:30 – 11:00  Coffee break (conference room bar)

11:00 – 12:30  Session 6: Steels and CCS
Chair: Frank Kluger, Alstom Boiler Deutschland GmbH

Multiaxial creep testing and modelling on P91 steel  Dr Tommaso Coppola – Centro Sviluppo Materiali [Italy]
Martensitic and austenitic steels for application in A-USC thermal power plants  Mr Vladimir Skorobogatykh – PJSC RPA CNIITMASH [Russian Federation]
Economic performance of a carbon capture and storage demonstration-scale project in Sardinia  Dr Alberto Pettinau – Sotacarbo S.p.A. [Italy]
Concluding remarks  Andrew Minchener, General Manager IEA CCC

12:30 – 14:00  Lunch (conference room bar)

14:00 – 16:00  Visit to CSM facilities

16:00  Buses leave for Fiumicino Airport and Holiday Inn Rome
Eur Parco Dei Medici Hotel