# World Nuclear Fuel Cycle Conference (WNFC 2016)

Abu Dhabi, United Arab Emirates 4 - 6 April 2016

ISBN: 978-1-5108-2593-2

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2016) by Nuclear Energy Institute All rights reserved.

Printed by Curran Associates, Inc. (2016)

For permission requests, please contact Nuclear Energy Institute at the address below.

Nuclear Energy Institute 1201 F St., NW, Suite 1100 Washington, DC 20004-1218 USA

Phone: (202) 739-8000 Fax: (202) 785-4019

www.nei.org

#### Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400 Fax: 845-758-2633 Email: curran@proceedings.com Web: www.proceedings.com **Programme** 



## MONDAY, 4 APRIL 2016

Welcome Reception sponsored by ROSATOM 18:00-19:30 Pool Deck

## **TUESDAY, 5 APRIL 2016**

Registration 08:00-16:30 Roma Ballroom Foyer

Arrival Coffee and Tea 08:00-09:00 Roma Ballroom Foyer

**General Session** 09:00-16:00 Roma Ballroom

Session 1 09:00-10:15 Welcome and Keynote Presentations

Session Chair: Agneta Rising, Director General World Nuclear Association

- Welcome to Abu Dhabi and Global Overview .....1 • Agneta Rising, Director General World Nuclear Association
- U.S. Nuclear Energy 2016: Status and Outlook .....12 Daniel Lipman, Vice President, Suppliers and International Programs Nuclear Energy Institute
- Keynote Address .....22 • Mohamed Chookah, Nuclear Fuel Executive Director Emirates Nuclear Energy Corporation

Break sponsored by ENEC 10:15-10:45 Roma Ballroom Foyer

Session 2 10:45-12:00 Keynote Presentations: Role of Nuclear Power in Electricity Systems

#### **Session Chair:**

Daniel Lipman, Vice President, Suppliers and International Programs Nuclear Energy Institute

- Structure of U.S. Electricity Markets and Impact on Nuclear Generation.....40 J. Bradley Fewell, Senior Vice President, Regulatory Affairs & General Counsel Exelon Generation
- Current Status and Future Prospect of Nuclear Power in Japan.....48
   Takuya Hattori, Senior Advisor
   Japan Atomic Industrial Forum
- The Chinese Nuclear Programme.....58 Min-gang Huang, Chief Economic Officer China National Nuclear Corporation

**Lunch sponsored by ENEC 12:00–13:00** *Giornotte Restaurant* 

Session 3 13:00–14:30 Uranium Supply .....77

Session Chair: James Dobchuk, President Cameco Inc.

- Global Uranium Production Costs.....79
   Nicolas Carter, Executive Vice President, Uranium
   UxC
- Development of Low Grade Uranium Resources of India .....86 A.K. Sarangi, General Manager Uranium Corporation of India
- Husab Uranium Mine Outlook .....93
   Sashi Davies, General Manager
   CGN Global Uranium Ltd.
- Building a Better Kazatomprom .....113
   Scott Melbye, Advisor to the Chairman
   Kazatomprom

**Break sponsored by ENEC** 14:30–15:00 Roma Ballroom Foyer

Session 4 15:00–16:00 Fuel Manufacturing

**Session Chair:** Rick Patterson, Technical Managing Director Uranium Solutions, LLC

• Fuel Manufacturing Plant Pitesti .....121 Florin Ovidiu Gheba, Director, Nuclear Fuel Plant Sn Nuclearelectrica Sa

- Fuel Cycle Cost Reductions from Improved Absorber Analysis .....130 David Stucker, Director, Global Fuel Cycle Strategy Westinghouse
- Advanced Fuel Designs and Implications of Enrichment Beyond 5% .....136
  James Malone, Chief Nuclear Fuel Development Officer
  Lightbridge Corporation

Special Event: Arabian Nights Village 16:30–21:00	
16:30-16:30 17:30-21:00	Departures from Roma Ballroom Foyer Dune Bashing, Arrival at Village, Drinks, Buffet Dinner and Local
21:00	Entertainment Return Transport to Ritz-Carlton

# WEDNESDAY, 6 APRIL 2016

**Registration 08:00–12:30** Roma Ballroom Foyer

**Arrival Coffee and Tea 08:00–09:00** Roma Ballroom Foyer

**General Session 09:00–16:00** Roma Ballroom

Session 5 09:00–10:30 Strategic Issues

**Session Chair:** Milton Caplan, President MZConsulting Inc.

- TNF-XI: Transport Packaging Model for Non-irradiated Enriched Uranium Oxide.....143 Ylan Toubol, Business Manager, Head of Front-End Project Department AREVA TN
- SMART: Paving the Way Toward Small Reactor Deployment .....147 Keung Koo Kim, Vice President, SMART Development Korea Atomic Energy Research Institute
- The Entry Into Force of the Convention on Supplementary Compensation.....160
   Helen Cook, Counsel
   Shearman & Sterling LLP
- Nuclear Security and Nuclear Industry Summits A Review .....167 Adrian Rony, Manager, Corporate Strategy & Development Edlow International

**Break sponsored by ENEC** 10:30–11:00 Roma Ballroom Foyer

#### Session 6 11:00–12:30 Back End Fuel Cycle Issues

Session Chair:

Tony Williams, Department Head, Nuclear Fuel AXPO Power AG

- French Management Model for Sustainable Transportation of Used Fuel .....179
   Dominique Dapei, Nuclear Fuel International Affairs Director
   EDF
- REMIX Nuclear Fuel Cycle.....192 Mikhail Baryshnikov, Division Head, Back–End TENEX
- The Evolution of Spent Nuclear Fuel Storage Technology in the U.S. .....198 William S. Woodward, Senior Vice President, International Projects Holtec International
- Sustainable Used Fuel management The Benefits of Treatment and Recycling of Used Nuclear Fuel Solutions .....206 Henri Zaccai, Vice President, International Development AREVA

**Lunch sponsored by ENEC 12:30–14:00** *Giornotte Restaurant* 

Session 7 14:00 – 16:00 Enrichment

Session Chair: Joseph McCourt, President New York Nuclear Corporation

- Status of the Enrichment Market .....216 Ruthanne Neely, Senior Vice President, Enrichment and General Counsel UxC
- Enriching the Past Enrichment of Legacy Materials in Russia .....223 Mikhail Aboimov, Director for Special Projects and Chief Risk Officer TENEX
- URENCO Programme .....232
   Michael Bryant, Manager, Marketing and Sales
   URENCO