



First Solar Knowledge Exchange 2014

Riyadh, Kingdom of Saudi Arabia

Riyadh Marriott Hotel, Monday, 8th December 2014

09:00-09:30: Workshop registration

09:30-09:35: Welcome & introduction

Dr. Raed Bkayrat
VP, Saudi Arabia

09:35-10:15: Thin Film technology

- Module Performance & Efficiency Roadmap
- PV Plant Performance and Prediction
- Quality & Reliability

Nicholas Strevel
Manager, Technical Sales

10:15-11:45: Grid Integration of Utility Scale PV Plants

- Impact of Solar Power Plants on the Electricity Grid
- Best Practice in Balancing Solar Generation with Overall Generation Planning
- Solar Contribution to Grid Stability

Vladimir Chadliev
Director Global Grid Integration

Coffee Break

12:00-13:00: Solar Solutions & Applications

- PV Hybrid solutions
- Commercial & industrial applications
- Middle East best practice:
 - Dubai 13MW case study
 - Dust mitigation
- Power plant operations & maintenance (O&M)

Dr. Raed Bkayrat
VP, Saudi Arabia

13:00-14:30: Q&A, followed by lunch



Speaker Biographies

Dr. Raed Bkayrat

As Vice President for Business Development in the Kingdom of Saudi Arabia, Dr. Raed Bkayrat is responsible for establishing and overseeing First Solar's commercial footprint in the country. With over 15 years of experience, Raed joins First Solar from the King Abdullah University of Science and Technology (KAUST), where he was responsible for creating the institution's successful Industry Collaboration Program (KICP). During his four year stint at KAUST, he also created a demonstration and testing program for solar and other clean energy technologies. Prior to that he was part of the core team behind Direct Drive Systems, a US-based start-up that was acquired by an oil and gas major, and previously spent eight years in various roles at Siemens. Raed holds a Ph.D. and a Master of Science (MS) in Electrical Engineering from the Arizona State University and a Bachelor of Science from the University of Jordan.

Vladimir Chadliev

Vladimir Chadliev is Director of Grid Integration at First Solar. He has over 27 years' experience in the electric power industry, including transmission and substation design, transmission and distribution planning, project management, power system security analysis and integration of renewable resources. His focus is on the integration of solar PV plants into the electrical grid, including the impact of intermittency of solar resources on the electrical systems operations. Mr. Chadliev has served on several committees and technical working groups of the Mid-Continent Area Power Pool (MAPP), Midwest Independent System Operator (MISO) and Western Electricity Coordinating Council (WECC). He is a member of the IEEE. He holds a Master's degree in Electrical Engineering from Azerbaijan State Oil Academy.

Nicholas Strevel

Nicholas Strevel is a technical sales engineer at First Solar, specializing in PV module technology and performance. He has worked in the thin-film PV technology field for six years, in module manufacturing, application engineering and business development. Mr. Strevel has a BSME in mechanical engineering from Michigan State University, and also studied at the Rheinisch-Westfälische Technische Hochschule Aachen.