

3RD ANNUAL



Smart Grids ASIA

Investing in T&D Infrastructure & Renewable Energy for Continuous, Efficient, Reliable & Clean Electricity

See Inside for Power Utilities & Government Special Rates!



27 – 30 September 2011
Pan Pacific Hotel, Singapore

Featuring CEO, VPs, Directors & GM's from Electricity Regulators & Utilities Across Asia-Pacific



Ahmad Fauzi Hasan
CEO,
Suruhanjaya Tenaga
(Energy Commission)
Malaysia



Melinda L. Ocampo
President,
Philippine Electricity
Market Corporation,
Philippines



Qi Dacai
Vice President,
China Southern Power
Grid, China



Yoshifumi Murase
Director Information
Economy Division,
Ministry of Economy
Trade & Industry, Japan



Ajoy Mehta
Managing Director,
Maharashtra State
Electricity Distribution
Company, India



John Theunissen
Director of Smart Networks,
Networks Strategy &
Development Division,
SP Ausnet, Australia



Erik Knive
Executive Vice President,
SN Power, Singapore



Razak Sallim
Senior General Manager
(Operations),
Sabah Electricity,
Malaysia



Victor Wong
Senior Vice President
Transmission,
Sarawak Energy Berhad,
Malaysia



Peter Jensen
General Manager,
Engineering & Projects,
Horizon Power, Australia



Nguyen Duc Cuong
Vice President,
National Power
Transmission, Vietnam



Anthony S. Rajamanickam
Specialist Telecommunications
Systems,
Tenaga Nasional Berhad,
Malaysia



Anish Garg
Joint Director (Performance
Standards & Engineering),
Delhi Electricity Regulatory
Commission, India



Trinh Quoc Vu
Deputy Director of Planning
& Demand Supply Balance
Monitoring Department,
Electricity Regulatory
Authority of Vietnam

What's New for 2011?

- 17+ case studies uncovering T&D & renewable energy investment & development opportunities
- 28+ sessions closely examining the Smart Grid value chain
- Country representation from Singapore, Malaysia, Philippines, India, China, Vietnam, Australia, Canada, US & Japan
- Key drivers & opportunities for investments in renewable energy & Smart Grid technology
- 2 dedicated streams focusing on:
 - T&D Capacity, Quality & Reliability of Electricity Supply
 - Renewable Energy Resources, Microgrids & Energy Efficiency
- Special focus workshops

Pre-Conference Workshop:
Tuesday 27 September 2011

Electric Vehicle Infrastructure Development & the Smart Grid

Post-Conference Workshop:
Friday 30 September 2011

Demand Side Planning & Management to Meet Future Load Growth & Renewable Energy Targets

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ASIA

Investing in T&D Infrastructure & Renewable Energy for Continuous, Efficient, Reliable & Clean Electricity

27 – 30 September 2011
Pan Pacific Hotel, Singapore

Electricity Policy Makers & Regulators

-  **Ahmad Fauzi Hasan**, CEO, Suruhanjaya Tenaga (Energy Commission)
-  **Melinda L. Ocampo**, President, Philippine Electricity Market Corporation
-  **Yoshifumi Murase**, Director Information Economy Division, Ministry of Economy Trade & Industry
-  **Trinh Quoc Vu**, Deputy Director of Planning & Demand Supply Balance Monitoring Department, Electricity Regulatory Authority of Vietnam
-  **Anish Garg**, Joint Director (Performance Standards & Engineering), Delhi Electricity Regulatory Commission
-  **Loreta G Ayson**, Undersecretary, Department of Energy Philippines*

Power/T&D Utilities

-  **Ajoy Mehta**, Managing Director, Maharashtra State Electricity Distribution Company
-  **Victor Wong**, Senior Vice President Transmission, Sarawak Energy Berhad
-  **Qi Dacai**, Vice President, China Southern Power Grid
-  **Nguyen Duc Cuong**, Vice President, National Power Transmission
-  **Erik Knive**, Executive Vice President, SN Power
-  **John Theunissen**, Director of Smart Networks, Networks Strategy & Development Division, SP Ausnet
-  **Razak Sallim**, Senior General Manager (Operations), Sabah Electricity
-  **Peter Jensen**, General Manager, Engineering & Projects, Horizon Power
-  **Parveen Verma**, Project Manager, Outage Management System, North Delhi Power Limited
-  **Anthony Rajamanickam**, Specialist (Telecommunications Systems) ICT Division, Tenaga Nasional Berhad
-  **Suthep Chimklai**, Director of System Planning Division, Electricity Generating Authority Thailand*
-  **Ronald D P Concepcion**, Litigation & Regulatory Division, Office of the General Counsel, National Grid Corporation of the Philippines

Smart Grid Specialists

-  **Professor Joachim Luther**, CEO, Solar Energy Research Institute of Singapore (SERIS)
-  **Dr Hassan Farhangi**, Director, Group for Advanced Information Technology, Institute of Technology, British Columbia
-  **Sridhar Samudrala**, Director Asia, World Alliance for Decentralized Energy (WADE)
-  **Steve Minnihan**, Global Head of Smart Grid & Grid Storage Intelligence, Lux Research
-  **Terry Mader**, CEO, CO2 Smart Australia
-  **Elizabeth Hicks**, Senior Principal Consultant, KEMA
-  **Christopher Beggs**, Director & SCADA Security Risk Specialist, Security Infrastructure Solutions
-  **Peter Cheng**, Managing Director and Vice President, Vestas Technology R&D

*Subject to final confirmation

Uncover Asia's Electricity Infrastructure Needs at this 3rd Annual Smart Grids Asia Summit

- How competitive electricity markets in Asia opens up the T&D sector
- Key drivers & opportunities for investments in Asia's T&D and renewable energy sector
- Stakeholder partnerships & collaboration for smart grid development
- Telecommunications network development for a smarter, more efficient grid
- Transmission network expansion projects & demand side planning
- Grid capacity & reliability developments & investments
- Grid and market requirements for realizing renewable energy resources
- Microgrids & energy management in non-interconnected power systems
- Enabling the integration of new initiatives like electric vehicles
- Integration of new outage management systems to enhance control & management of power outages

Pre-Conference Workshop:
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Day One | Wednesday, 28 September 2011
8.00 Registration & Morning Coffee
9.00 Chairman's Opening Remarks

Steve Minnihan, *Global Head of Smart Grid & Grid Storage Intelligence, Lux Research, USA*

Key Drivers & Opportunities for Investments in T&D Infrastructure
9.05 Global Smart Grid Deployment – Lessons from the Rest of the World from Which Asia Can Learn

- Growth of the Smart Grid worldwide market
- The value chain for deploying a national Smart Grid
- Global Smart Grid successes, failures and lessons for unique opportunities in Asia

Steve Minnihan, *Global Head of Smart Grid & Grid Storage Intelligence, Lux Research, USA*

9.35 The Philippines Wholesale Electricity Spot Market: Opportunities for T&D Infrastructure Development with Open Access & Retail Competition

- Developments in the Philippines electricity sector
- Privatization of the electricity market to meet future energy needs
- Market outlook, rules and guidelines
- Open access and retail competition
- Pricing and tariff setting framework
- Revenue requirement
- Incentive framework for performance improvement
- Price forecasting of energy and how to sell
- Competitive pricing of non-conventional resources
- How risks and costs are transferred across the value chain

Melinda L. Ocampo, *President, Philippine Electricity Market Corporation, Philippines*

10.05 Optimizing Clean Energy & Smart Grid Technology to Support Current Energy Needs & Future Growth

- China's 12th 5 Year Energy Plan: national energy policies for improving energy efficiency and lowering of carbon emissions
- Opportunities for renewable energy development and connection to the grid, particularly wind energy
- Building China's first Ultra High Voltage (UHV) network
- Other development and priorities of focus in T&D
- Electric vehicle infrastructure development and testing

Qi Dacai, *Vice President, China Southern Power Grid, China*

10.40 Morning Networking & Refreshment Break
11.10 Investments in Transmission Infrastructure Development in Vietnam

- Overview of Vietnam's reform and restructuring of the electricity sector in Vietnam
- Latest developments on the development and operation of the transmission network in Vietnam
- Alleviating power shortages and improving quality of power supplies by improving T&D network capacity
- Current initiatives to raise transmission and dispatch efficiency and improve power system reliability
- NPT's role in the reform and restructuring of the electricity sector

Nguyen Duc Cuong, *Vice President, National Power Transmission, Vietnam*

11.45 Energy Efficiency & Conservation Program in the Philippines & the Development of Renewable Resources

- Current update on the Renewable Energy Act and implementation guidelines
- National priorities for conservation, renewable energy and efficient utilization of energy
- Maximizing the nation's resources and maintaining sustainability
- Energy usage and consumption that benefit both providers and consumers
- Incentives to encourage new technologies and collaborations amongst organizations

Loreta G Ayson, *Undersecretary, Department of Energy, Philippines**

12.30 Networking Luncheon
Choose your own sessions from two different streams
STREAM A:
T&D Capacity, Quality & Reliability of Electricity Supply

Chairman: John Theunissen, *Director Smart Networks Strategy & Development Division, SP Ausnet, Australia*

Transmission Network Expansion Projects & Demand Side Planning
2.00 Sarawak Network Expansion & Power Quality Projects

- Current expansion projects- domestic and regional connections
- Power quality issues and experiences
- Power quality monitoring, maintenance and control of the transmission network
- Monitoring of power system and disturbances
- Power quality improvement initiatives

Victor Wong, *Senior Vice President Transmission, Sarawak Energy Berhad, Malaysia*

2.45 Sabah Electricity Supply Issues, Grid Capacity & Reliability Projects & Developments

- Balancing electricity demand, where the resources are and landscape challenges
- Development and implementation of new transmission lines in Sabah
- Identified upgrade projects
- Proposed generation plants and need for further transmission infrastructure
- Cost-effective quality initiatives

Razak Sallim, *Senior General Manager Operations, Sabah Electricity Sdn Bhd, Malaysia*

3.30 Afternoon Networking & Refreshment Break
4.00 Transmission Planning & Demand Management to Meet Load Growth in Vietnam

- Power system operation and demand-supply balance monitoring requirements
- Power network planning and performance needs
- Grid codes/distribution codes development in Vietnam
- Requirements for power system information technology

Trinh Quoc Vu, *Deputy Director of Planning & Demand Supply Balance Monitoring Department, Electricity Regulatory Authority of Vietnam*

4.45 Progress of Thailand's Power Sector Development & Transmission Projects

- Status of thermal, hydro, IPP and neighboring country power purchase
- Update on Thailand's demand forecast and power sector planning
- Thailand's power development plan and progress
- Regional interconnection of transmission networks to support power import from neighboring countries
- Transmission system expansion and upgrade projects in Thailand
- Demand side management and renewable energy development

Dr Suthep Chimklai, *Director of System Planning Division, Electricity Generating Authority, Thailand**

5.30 Chairman's Summary & End of Conference Day One
STREAM B:
Renewable Energy Resources, Microgrids & Energy Efficiency

Chairman: Dr Hassan Farhangi, *Director, Group for Advanced Information Technology, Institute of Technology, British Columbia*

Grid & Market Requirements for Realizing Renewable Energy Resources
2.00 The Integration of Solar Electricity into Energy Supply Systems

- Photovoltaic technology – status and perspectives
- Leveling out of fluctuations in solar electricity generation
- Forecasting of solar electricity generation
- Yield assessment of solar power plants
- Smart power electronics for photovoltaic installations.

Professor Joachim Luther, *CEO, Solar Energy Research Institute of Singapore (SERIS), Singapore*

2.40 Market Developments to Realize Hydropower in Asia

- Government plans in Asia for more small and large hydro generation
- Markets and utility business model developments to realize hydropower in Asia

Erik Knive, *Executive Vice President, SN Power, Southeast Asia*

3.20 Afternoon Networking & Refreshment Break
3.50 Investment Considerations for Renewable Energy & Clean Technology Development

- IFC's role in the development of renewable energy and clean technology in the Philippines
- Incentives for investors
- Financing renewable energy and clean technology
- Structuring different renewable energy and clean technology projects
- Key notes to regulators, utilities and developers

Jesse Ang, *Country Representative, IFC, Philippines*

4.20 Renewable Energy Integration into the National Philippine Grid

- Role of the National Renewable Energy Board (NREB)
- Technical and economic issues in the implementation of the RE Act

Ronald D P Concepcion, *Litigation & Regulatory Division, Office of the General Counsel, National Grid Corporation of the Philippines*

5.00 Cogen/Trigen Applications & Development to Reduce Carbon Emissions

- Opportunities to powering industrial centres, commercial parks, airports and universities
- Cogeneration, transmission and distribution regulations and development
- Cogen and smart applications
- Benefits and cost savings including transmission and distribution charges
- Current barriers to development

Sridhar Samudrala, *Director Asia, World Alliance for Decentralized Energy (WADE), India*

5.40 Chairman's Summary & End of Conference Day One

8.30 **Morning Coffee**9.00 **Chairman's Opening Remarks**

Steve Minnihan, *Global Head of Smart Grid & Grid Storage Intelligence, Lux Research, USA*

**The Smart Grid Roadmap: Stakeholder
 Collaboration & Partnerships**
9.05 **A Regulator's View on Electricity Supply Issues, Challenges & Priorities for Sustainable Energy Supply**

- Renewable energy and its progression
- Developing energy efficiency plans and incentives
- T&D capacity planning and developments
- Increasing efficiency and reliability of T&D and reduction of system losses
- Priorities and milestones for the electricity sector

Ahmad Fauzi Hasan, *CEO, Suruhanjaya Tenaga (Energy Commission), Malaysia*

9.35 **Telecommunications Network Development for a Smart, Efficient Grid**

- Common ICT infrastructure for enterprise data exchange and real time applications
- Challenges utilities face in owning and operating their telecommunications network
- Telecommunication network requirements for smart grid implementation
- Telecommunications network architecture, design and technologies
- Evaluating public and private network services and performance
- Ensuring system interoperability, security, information management and data integration
- Telecommunications network development strategy for a smarter, more efficient grid
- Network operations and maintenance

Anthony Rajamanickam, *Specialist (Telecommunications Systems) ICT Division, Tenaga Nasional Berhad, Malaysia*

10.05 **Developing a Smart Community**

- Planning for a Smart community through ICT and clean energy technologies
- Environmentally friendly vehicles
- Realise next generation networks for homes, automobiles, IT networks, building management
- Energy management systems that enhance energy conservation and utilise renewable energy resources

Yoshifumi Murase, *Director Information Economy Division, Commerce & Information Policy Bureau, Ministry of Economy Trade & Industry, Japan*

10.35 **Morning Networking & Refreshment Break**11.05 **Delivering on Smart Grid "Promises"**

- Factors influencing Smart Grid activities
- Aligning strategy, investment appetite and delivery capability
- Balancing tactical and strategic implementation
- SP AusNet case studies

John Theunissen, *Director Smart Networks Strategy & Development Division, SP Ausnet, Australia*

11.35 **Collaboration & Partnerships to Achieve a Smart Grid**

- The business case for Smart Grids
- Changing the way power is generated, distributed and used
- Responsibility of regulators and utilities to deliver benefits to customers
- Achieving a balance between organisational strategic intent around Smart Grids, the enterprise appetite for investment, and the actual delivery of outcomes that validate the business case
- Creating strong enabling technology platforms
- Flexibility and agility in planning and implementing Smart Grids which can take several years
- Demonstrating smart grid benefits along various trials
- Practical plans and solutions to achieve a smart, efficient grid

John Theunissen, *Director Smart Networks Strategy & Development Division, SP Ausnet, Australia*

Ahmad Fauzi Hasan, *CEO, Suruhanjaya Tenaga (Energy Commission) Malaysia*

Yoshifumi Murase, *Director Information Economy Division, Commerce & Information Policy Bureau, Ministry of Economy Trade & Industry Japan*

Anthony Rajamanickam, *Specialist (Telecommunications Systems) ICT Division, Tenaga Nasional Berhad, Malaysia*

12.05 **Grid Friendly Wind Power Plant- Solution for Higher Penetration of Wind Power into the Grid**

- Wind power market developments and the Smart Grid
- Wind turbine technology and power plant solutions
- Fluctuation issues and integration with the grid

Peter Cheng, *Managing Director and Vice President, Vestas Technology R&D, Singapore*

12.35 **Networking Luncheon**
Choose your own sessions from two different streams
STREAM A:
**T&D Capacity, Quality & Reliability of
 Electricity Supply**

Chairman: John Theunissen, *Director Smart Networks Strategy & Development Division, SP Ausnet, Australia*

**Reducing Electricity Loss Levels through Distribution
 Management Systems (DMS)**
2.00 **Reducing Aggregate Technical & Commercial (AT&C) Loss in Delhi through Distribution System Improvements**

- Automation and modernisation of the existing electrical distribution network
- Geographical Information System (GIS) mapping of the entire consumer base of 2.5 million consumers and GIS mapping of the distribution assets
- Implementation of SCADA system which has helped the utilities in Delhi to have a centralized command and control over their EHV & HV up to 11 kV network
- Installation of GSM enabled Automatic Meter Reading
- Outage Management System
- Technology standards

Anish Garg, *Joint Director (Performance Standards & Engineering), Delhi Electricity Regulatory Commission, India*

2.45 **Substation & Feeder Automation to Improve Quality & Ensure Continuous Supply of Electricity**

- Remote monitoring to identify the fault of the feeder to enable the isolation of that section
- Ensuring minimal interruption and continuous power supply

3.30 **Afternoon Networking & Refreshment Break**4.00 **Recent Advanced Outage Management System (OMS) Implementation for Enhanced Control & Management of Outages**

- Recent OMS implementation
- Integration with SCADA and CRM
- Standards for technology applied to ensure interoperability
- Fault isolation and system restoration
- Improved crew management
- Demonstrated success in enhanced control and management of outages

Parveen Verma, *Project Manager, Outage Management System, North Delhi Power Limited, India*

Securing the Smart Grid
4.45 **Risk Assessment & Strategies for Securing the Smart Network**

- Security threats and fraud
- Justifying investment in security policy and programs
- Obtaining a security budget
- Clearly identifying the advantages vs the risk of security
- Achieving a secure and stable network environment

Christopher Beggs, *Director & SCADA Security Risk Specialist, Security Infrastructure Solutions, Australia*

5.30 **Chairman's Summary & End of 3rd Annual Smart Grids Asia Summit**
STREAM B:
**Renewable Energy Resources, Microgrids &
 Energy Efficiency**

Chairman: Dr Hassan Farhangi, *Director, Group for Advanced Information Technology, Institute of Technology, British Columbia*

Microgrids & Non-Interconnected Power Systems
2.00 **Maharashtra State Rural Electrification, Microgrid Development & Prepaid Metering Initiatives**

- Status of rural electrification in Maharashtra and prioritization of electricity distribution
- Maharashtra renewable energy policy, projects and business opportunities
- The potential, challenges and barriers of decentralized generation for rural electrification in Maharashtra
- Prepaid metering for revenue collection efficiency and further development of electricity infrastructure
- Future development of smart microgrids

Ajoy Mehta, *Managing Director, Maharashtra State Electricity Distribution Company, India*

2.45 **Energy Management Systems for Non-Interconnected Communities**

- Power generation solutions designed for local needs and demands
- Utilizing local renewable energy sources
- Automating and modular systems for scalability and flexibility
- Community engagement for sustainable power solutions

Peter Jensen, *General Manager, Engineering & Projects, Horizon Power, Australia*

3.30 **Afternoon Networking & Refreshment Break**4.00 **Key Learnings from Canada's Burnaby Campus First Smart Power MicroGrid**

- British Columbia Government's Green Energy Plan
- Overview of British Columbia Burnaby Campus Smart Microgrid
- Meters, sensors, remote switches, controls and their operability and maintenance
- Integration of alternative sources of energy including cogeneration applications
- Network architecture and its security, stability and scalability
- Results on cost-effective technologies

Dr Hassan Farhangi, *Director, Group for Advanced Information Technology, Institute of Technology, British Columbia*

Electric Vehicle Charging Infrastructure & Energy Storage
4.45 **Electric Vehicle Charging Infrastructure & Energy Storage**

- EV Infrastructure Development
- Types of charging for EVs and solutions
- Overview of quick charging projects
- Charging behaviour and impact of quick charging on the grid
- Network load and balancing considerations
- Market model for customer charging
- Standards and regulations
- Energy Storage Applications for On/Off Grid Connections
- Overview of the different applications of energy storage devices
- Transforming grid infrastructure

5.30 **Chairman's Summary & End of 3rd Annual Smart Grids Asia Summit**



Pre-Conference Workshop
 Tuesday, 27 September 2011: 9am – 5pm

Electric Vehicle Infrastructure Development & the Smart Grid

- EV adoption and Smart Grid landscape
- Opportunities and challenges
- EVs and grid benefits
- Managed EV network architecture
- EV charging infrastructure, grid services and load management
- EVs and grid storage
- A close look at Australia's first EV trial in Western Australia

About Your Workshop Leader:

Terry Mader, CEO,
CO2 Smart Australia

Terry is the Chief Executive Officer of CO2 Smart Pty Ltd, the Australian Automobile Club and the Australian Festival of Speed, which he founded. CO2 Smart is an integrated electric vehicle fleet management company, working with organizations to lower per km costs as well as remove vehicle related CO2 emissions. This includes correct vehicle selection, the required recharging network and organizational support.

CO2 Smart is independent from vehicle provider, independent from recharge network solution, and independent from other infrastructure providers. They represent the interests of the fleet operator only – putting together the best client solution purely based on agreed usability and cost factors.

Terry's background is project management of major technology change projects in the cable sector, where he has lead large digitalization programs in Europe. There has been no large scale introduction of electric vehicles; however the cable and telecommunications sectors provide a valuable "analogy" of how this needs to be managed in the transport sector.

"The most beneficial aspect of attending this conference has been the global knowledge sharing of developments in Smart Grids. I was pleased with the level of detail involved in the different projects and case studies"

Christopher Selvin, Manager, Electrical Testing & Automation,
Tata Power

"Smart Grids Asia provided excellent updates from key Governments & Utilities in the region. It has been an excellent networking opportunity"

Max Bryan, Principal Engineer, Alcatel Lucent Asia-Pacific

Post-Conference Workshop
 Friday, 30 September 2011: 9am – 5pm

Demand Side Planning & Management to Meet Future Load Growth & Renewable Energy Targets

- Meeting energy demand and renewable energy targets
- Network planning process
- Consideration of non-network alternatives and solutions
- Network constraints and solutions: reduce demand, reduce load, shifting load to another time period or energy source, embedded generation
- Economic benefits and costs
- Regulatory requirements
- Stakeholder engagement and customer relations
- Monitoring and verification

About Your Workshop Leader:

Elizabeth Hicks, Senior Principal Consultant,
KEMA, Australia

Ms. Hicks has extensive experience in energy efficiency, regulatory and policy analysis, renewable energy, program planning, load response, benefit-cost analysis, metering, marketing and market research, and program evaluation. Examples of her recent assignments at KEMA include: designing network tariff options for Energy Australia; developing a Smart Roadmap based on a cost/benefit model that include all costs and benefits of smart grid; developing a solar strategic plan for a State agency; developing a long term resource plan for Rhode Island; developing an energy plan for the State of Connecticut; developing an energy plan for Nova Scotia; a market assessment of the wind industry in the US, assessing the feasibility of using renewable energy to offset distribution congestion, developing energy efficiency and load response programs for Sustainable Ireland and facilitating the Governor's Wind Energy Regulatory task force and performing business process re-engineering for Bonneville Power Administration.

Before joining KEMA in 2002, Ms. Hicks has held management positions with the National Grid USA (formerly New England Power Service Company) for 16 years. As the Director of Market Research and Planning, Product Development Department, Ms. Hicks was responsible for conducting customer satisfaction studies and developing new products and services including load response and metering products. In this role Ms. Hicks developed and implemented National Grid's Enhanced Metering and Data Services Products and received regulatory approval for these products. As the Director of Evaluation and Research for the Retail Services Department, she was involved in all aspects of evaluation, benefit-cost analysis, renewable energy research, energy efficiency and load response program planning, program screening, regulatory support, and policy issues. She was also the U.S. lead on an effort to develop a sustainable development strategy for National Grid. She has testified before the Massachusetts Department of Telecommunications and Energy, the Rhode Island Public Utility Commission, the New Hampshire Public Service Commission, and the California Public Utilities Commission on the subjects of energy efficiency and load response program design, cost effectiveness, least cost planning, and program evaluation.

Ms. Hicks has a BA in Economics and Mathematics from the College of William and Mary and a MS in Resource Systems and Policy Design from the Thayer school of Engineering at Dartmouth College.

Why YOU Should Sponsor This 3rd Annual Smart Grids Asia Summit:

- This summit was the FIRST in Asia to provide a Smart Grids platform
- An established event in its 3rd Year running with strong following
- Be at the forefront of T&D investments & developments in Asia
- Meet with key Asia electricity policy makers & utilities
- Global representation from 20+ countries

As a power systems equipment and service provider or ICT supplier, this 3rd Annual Smart Grids Asia Summit will raise your profile amongst key policy makers, regulators and utilities driving T&D investment and developments looking to accelerate and deliver continuous, efficient, reliable and clean electricity supply.

Contact us today to discuss how you can improve your business in the region through this 3rd Annual Smart Grids Asia Summit!

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PROGRAMME AT A GLANCE

Tuesday 27 September 2011	Wednesday 28 September 2011	Thursday 29 September 2011	Friday 30 September 2011
Pre-Conference Workshop	3rd Annual Smart Grids Summit Main Conference		Post-Conference Workshop
Electric Vehicle Infrastructure Development & the Smart Grid	Day One Plenary Sessions: Key Drivers & Opportunities for Investments in T&D Infrastructure		Day Two Plenary Sessions: The Smart Grid Roadmap: Stakeholder Collaboration & Partnerships
	Networking Luncheon		
	Stream A: T&D Capacity, Quality & Reliability of Electricity Supply	Stream B: Renewable Energy Resources, Microgrids & Energy Efficiency	Stream A: T&D Capacity, Quality & Reliability of Electricity Supply
			Demand Side Planning & Management to Meet Future Load Growth & Renewable Energy Targets

This **3rd Annual Smart Grids Asia Summit** brings together policy makers and regulators, utilities and ICT providers to discuss the modernization of Asia's transmission and distribution infrastructure with the end goal of a delivering continuous, efficient, reliable and clean electricity supply. It provides a platform to identify Asia Pacific's diverse electricity needs and new business opportunities, from major investments in T&D foundations and upgrades to renewable energy development and energy efficient initiatives for sustainable energy supply of the future.

“The Smart Grid Market is expected to Reach 15.8 Billion by 2015”
– Lux Research, 2010

Exactly where are the investments going in Asia?

Here is just a snapshot of what you will get to witness at the 3rd Annual Smart Grids Asia Summit:

- Billions of investments & developments in **NEW transmission and distribution** systems to meet new power generation projects: get updates on transmission projects from Sarawak Electricity Supply Corporation, Sabah Electricity, Vietnam Power Transmission and China Southern Power Grid
- **Renewable Energy Conservation & Energy Efficiency programs** are driving renewable energy investments: hear from the Philippines Electricity Market Corporation & Surahanjaya Tenaga on what this means for the future electricity supply
- The **Restructured Accelerated Power Development & Reforms Program (RAPDRP)** has opened the market to improve distribution in India: hear from North Delhi Power & Delhi Electricity Regulatory Commission on recent DMS systems to reduce aggregate technical and commercial loss
- According to the IEA 20% of the World's population has **no access to electricity** in which a large part can be attributed to Asia. Maharashtra State Electricity addresses the issues surrounding rural electrification and the need to provide off-grid, renewable energy supply or microgrid solutions
- With unique issues presented above, **how does Asia then develop a Smart Grid Roadmap?** Here dialogue from regulators, utilities and technology providers discuss collaboration and partnerships necessary to develop Asia's T&D foundations and renewable energy penetration to deliver sustainable energy networks.

Companies That Attended Previous Smart Grids Asia Conferences Include:

- Agency for Science Technology & Research (A*Star) ■ Aboitiz Power Corporation ■ Accenture ■ Alcatel Lucent ■ Alstom Asia-Pacific ■ Alliander ■ Alto Power Management Corporation ■ Asian Carbon Connections ■ BASF East Asia ■ BC Hydro ■ Capital Advisors Partners Asia ■ Capstone Turbine Corporation ■ Cisco Systems ■ CLP Power ■ Conal Holdings Corporation ■ CSIRO ■ Current Group ■ Curtin University Sustainable Policy Institute ■ Delta Power Solutions India ■ Department of Energy Philippines ■ Dream Incubator Inc ■ Echelon Corporation ■ Electricity Generating Authority of Thailand ■ Electricity & Water Authority Bahrain ■ Embassy of Japan ■ Energy Commission Malaysia ■ Energy Market Authority Singapore ■ Energy Market Company Singapore ■ Energy Markets Inspectorate Sweden ■ Energy Research for Sustainability Initiative Singapore ■ Energy Studies Institute Singapore ■ Ericsson Telecommunications ■ Experimental Power Grid Centre Singapore ■ GE Energy Asia Pacific ■ Global Smart Transformation Scotland ■ GS E&C ■ Hong Kong Electric Company ■ Hyosung Corporation ■ IBM ■ Infocomm Development Authority Singapore ■ Intel Corporation ■ Intel Microelectronics Sdn Bhd ■ International Copper Association South East Asia ■ International Energy Agency ■ Itron Australasia ■ JETRO External Trade Organization ■ Landis & Gyr ■ Korea Electric Power Corporation (KEPCO) ■ Kuwait Oil Corporation ■ Manila Electric Company ■ Mast Group ■ Meiya Power ■ Metropolitan Electricity Authority Thailand ■ Ministry of Economy Trade & Industry Japan ■ Ministry of Trade & Industry Singapore ■ MTU Asia ■ National Environment Agency Singapore ■ National Grid Corporation of the Philippines ■ National Institute of Standards & Technology US ■ National Technical University Athens ■ National Thermal Power Corporation India ■ Nokia Siemens Network ■ North Delhi Power ■ NTT Docomo ■ OsiSoft ■ Power Grid Corporation of India ■ Power Seraya ■ Philippines Electricity Market Corporation ■ Public Utilities Board ■ PTC India ■ Redline Communications ■ Reliance Infrastructure ■ Robert Bosch Southeast Asia ■ Samsung Electronics ■ Sarawak Energy ■ Senoko Energy ■ Seraya Energy ■ Shinlee Product Inc ■ Siemens ■ Silver Spring Networks ■ Sony Corporation ■ Southern California Edison US ■ South Cotabato II Electric Cooperative Inc ■ SP Powergrid ■ SP Services ■ ST Electronics Infocomm Systems ■ Standard Chartered Bank ■ Tata Power Company ■ TDK Lambda Corporation ■ Tech Mahindra ■ Tech Logix Software ■ Tenaga Nasional Bhd ■ The Energy & Resource Institute India ■ The University of Melbourne Australia ■ Transgrid Australia ■ TUV Rheinland Japan ■ United Premas ■ US Department of Commerce ■ Vestas Technology R&D Singapore ■ Western Power Corporation ■ Wood Mackenzie ■ World Alliance for Decentralized Energy ■ Worley Parsons Resources & Energy

Meet With Top Level Representatives From Key Government Authorities & Utilities From Across The Globe At This 3rd Annual Smart Grids Asia Summit!

