



Conference on

# POWER TRANSMISSION IN SOUTHEAST ASIA

UTILITY PLANS AND TECHNOLOGY SOLUTIONS

---

February 27-28, 2017

InterContinental Singapore

Hosted by:

**Global Transmission Report**

Information and analysis on the global electricity transmission industry

Supported by:

**SOUTHEAST ASIA  
INFRASTRUCTURE**

---

[www.globaltransmission.info](http://www.globaltransmission.info)

# MISSION

Southeast Asia is among the fastest growing regions in the world. Sustained economic growth and burgeoning energy demand continue to drive the expansion of the power sectors in Southeast Asian countries. Expanding electricity access remains the basis for future investment strategies. It is estimated that around USD35-40 billion will be invested in the region's power transmission grids by 2025.

These investments will not only be made to construct new power lines to cater to the increasing demand, but also to upgrade, modernise and strengthen the supply networks. The region is also introducing high voltage direct current (HVDC) technologies and initiating smart grid projects. In addition, new renewable energy projects are expected to drive investments in making the grids more resilient and reliable. With these prospects, the operations and maintenance (O&M) of the grids is becoming even more challenging.

Global Transmission is organising its first Power Transmission in South East Asia conference on February 27-28, 2017 at the InterContinental, Singapore. The conference will bring together leading utilities, transmission system operators, regulators, investors and solution providers to help shape the future of the Southeast Asian region's power transmission industry. The mission of this conference is to examine the key trends and developments in power transmission in the region, to highlight new initiatives and plans, to discuss key challenges and opportunities, and to showcase most promising technologies and best practices.

The one-and-a-half day event will have focused sessions and discussions featuring speakers with vast experience and expertise. The conference will present key regional trends and provide insights into the investment plans of leading utilities. Further, it will educate the attendees on economics of transmission planning, as well as new business models and financing structures for developing projects. The conference will also highlight new high voltage technologies and present latest innovations in towers, conductors and structures. The event will provide learnings through specific case studies and relevant project examples.

The network operators face various challenges while operating and managing grids, especially with the introduction of high levels of renewable energy. The conference will provide insights into generation forecasting and balancing with the integration of renewables. In addition, it will highlight the best practices in O&M and offer solutions to address the pressing problems of grid stability, reliability and security. It will also provide details on developments in smart grids relevant for the regional utilities.

Delegates will get ample opportunities to interact with the speakers, panelists and their peers.

[www.globaltransmission.info](http://www.globaltransmission.info)



## WHO SHOULD ATTEND?

The conference is targeted at:

- ❖ Transmission system operators
- ❖ Electric power utilities
- ❖ Independent power producers
- ❖ Electric power regulators
- ❖ Technology providers
- ❖ Equipment manufacturers
- ❖ Financing firms
- ❖ Equity and business analysts
- ❖ Engineering, procurement and construction companies
- ❖ Engineering, management and legal consultants
- ❖ Research and technical institutions
- ❖ International development agencies

## KEY BENEFITS TO PARTICIPANTS

The conference will have focused sessions to:

- ❖ Understand the Southeast Asian region's transmission market fundamentals
- ❖ Get the latest updates on the plans and projects of leading transmission companies and utilities in the region
- ❖ Gain insights into the strategies of leading industry players
- ❖ Discover the key growth markets for transmission
- ❖ Understand the challenges and issues faced by transmission system operators
- ❖ Know more about the utilities' plans for smart grids and asset management
- ❖ Discuss the strategies to make the grids more reliable and secure
- ❖ Learn about the latest developments in technologies and the key equipment, and their relevance for the grids of the Southeast Asian region
- ❖ Share and learn from industry peers
- ❖ Influence industry leaders
- ❖ Interact with potential customers and partners

# AGENDA (Tentative)

## DAY 1

Session	Time	Topics	Speakers
	8:00-9:00	Registration, Tea/Coffee and Networking	
<b>Introduction</b>	9:00-9:15	Introduction to the conference	Global Transmission Research
<b>Trends and outlook</b>	9:15-9:45	<ul style="list-style-type: none"> <li>- What have been the key developments in the transmission sectors of Southeast Asian countries?</li> <li>- What are the key drivers for transmission growth?</li> <li>- What is the outlook for the region?</li> </ul>	Industry expert/consultant
<b>Utility plans and perspectives</b>	9:45-10:45	<ul style="list-style-type: none"> <li>- What are the investment plans of the key transmission utilities in the region?</li> <li>- What are the key business challenges in the region?</li> <li>- Which are the markets to watch out for?</li> <li>- Case studies of progressive utilities</li> </ul>	Transmission operators Utilities Regulators
	10:45-11:00	Q&A and discussion with the panel	
	11:00-11:30	Tea/Coffee, and Networking break	
<b>Smart substations and new transmission structures</b>	11:30-12:45	<ul style="list-style-type: none"> <li>- What are the latest technological developments in substations, transformers, towers, conductors and other equipment?</li> <li>- How are latest equipment and technologies relevant for future grids in the region?</li> <li>- Case studies and project showcase</li> </ul>	Utilities Technology providers Equipment manufacturers
	12:45-13:00	Q&A and discussion with the panel	
	13:00-14:00	Lunch	
<b>High voltage transmission technologies</b>	14:00-15:15	<ul style="list-style-type: none"> <li>- What are the advantages of using extra/ultra-high voltage, HVDC, FACTS and other latest technologies?</li> <li>- Case studies of projects using new technologies</li> </ul>	Technology providers Equipment manufacturers
	15:15-15:30	Q&A and discussion with the panel	
	15:30-15:50	Tea/Coffee, and Networking break	
<b>Transmission economics and financing</b>	15:50-16:30	<ul style="list-style-type: none"> <li>- What are transmission economics (capex, opex, revenues, profitability, etc.)?</li> <li>- What are the traditional and new sources of financing transmission projects?</li> <li>- Presentation from utilities using new business models/financing avenues</li> </ul>	Utility Consultant
<b>Delegate viewpoints</b>	16:30-17:00	<ul style="list-style-type: none"> <li>- Delegate perspectives/views/opinions</li> <li>- Open floor</li> </ul>	
	17:00	Close of Day 1	

## DAY 2

Session	Time	Topics	Speakers
	8:00-9:00	Registration, Tea/Coffee, and Networking	
<b>Recap of Day 1 and Introduction to Day 2</b>	9:00-9:15	- Recap of Day 1 and introduction to Day 2	Global Transmission Research
<b>Best practices in operations and maintenance (O&amp;M)</b>	9:15-10:15	<ul style="list-style-type: none"> <li>- What are the best practices for O&amp;M of transmission grids?</li> <li>- What are the technology and analytics solutions available to help operators better manage their transmission assets?</li> <li>- What benefits can operators expect from these to improve asset utilisation?</li> <li>- What are some of the examples of improved asset utilisation and decision-making?</li> </ul>	Utilities Asset management and technical consultants, solution providers
	10:15-10:30	Q&A and discussion with the panel	
	10:30-11:00	Tea/Coffee, and Networking break	
<b>Smart grids and grid stability</b>	11:00-12:00	<ul style="list-style-type: none"> <li>- What are the plans of the utilities for smart grids in the region and what is their status?</li> <li>- What smart grid technologies are particularly advantageous for the region?</li> <li>- What needs to be done to adopt these technologies on a wider scale?</li> <li>- Case studies from the region</li> </ul>	Utilities Project developers Technology providers
	12:00-12:15	Q&A and discussion with the panel	
<b>Renewable energy integration</b>	12:15-13:15	<ul style="list-style-type: none"> <li>- What are the key challenges for transmission operators in grid integration of renewable energy?</li> <li>- What are the best solutions for generation forecasting, optimisation and balancing?</li> <li>- What are the best technologies and solutions to ensure grid stability and control?</li> <li>- How can operators maintain grid resiliency and network security with large-scale renewable energy?</li> <li>- What is the role and relevance of energy storage for the utilities in the region?</li> <li>- Project showcase for renewable integration</li> </ul>	Utilities Technology providers
	13:15-13:30	Q&A and discussion with the panel	
	13:30-13:45	Closing remarks	
	13:45 onwards	Lunch and Close of Conference	

## OUR PREVIOUS CONFERENCES:

Global Transmission has organised four conferences on “Grid-Scale Energy Storage” in Brussels, Belgium, and two on “Transmission Finance” in London, UK. These conferences were attended by senior-level executives from leading organisations from across the world.

The organisations that participated at our conferences include: A123 Energy Solutions, ABB, AICIA, Alliander, Alstom Grid, Analog Devices, Ansaldo, Aster Capital Finance, Austrian Power Grid, Balfour Beatty, BAE Batterien, Baccari & Associates, Beacon Power, Bernard EnergyAdvocacy, Bloomberg New Energy Finance, Brattle Group, BSRIA Worldwide Market Intelligence, Bundesnetzagentur (BNetzA), Capricorn Venture Partners, Clean Horizon Consulting, CREG, CSIRO, Customized Energy Solutions, DNV KEMA, EDF, EFACEC, EirGrid, Elia, Electrovaya, Elektroprivreda HZHB d.d. Mostar, Emerald Technology Ventures, Emrol, ENDESA, Enel Trade Spa, Energa-Operator SA, Enrichment Technology Company, ENTSO-E, Eos Energy Storage, E.ON Gas Storage GmbH, Epsilon-Electric Fuel Ltd, EURELECTRIC, European Commission, European Association for Storage of Energy (EASE), Evonik Degussa GmbH, FIAMM SPA, First Solar, Fefer Petersen & Cie, Fluxys SA, Frontier Economics, Gaelectric Energy Storage, GDF SUEZ, Google, Gravity Power, GreenPower, Heindl Energy, Highview Power Storage, Hungarian Energy Office, Hydrogenics Europe, IBGE (Brussels Regio for Environment and Energy), Internationale Freileitungsmontage AS, Isentropic, ITM Power UK, JP Elektroprivreda, JRC Institute for Energy, JSC “INTER RAO UES”, Kintech Synergy, Lahmeyer International GmbH, Macquarie Capital, Maschinenfabrik Reinhausen, MAVIR ZRt., Moody's, Mott MacDonald, NamPower, National Grid UK, Optimal Power Solutions, OmniCompete, Parker Hannifin Europe, PJM Interconnection, Publik Services Regulatory Commission, REC Systems Germany GmbH, Red Eléctrica De Espana, Regulation & Supervision Bureau, RENT A PORT ENERGY NV, Robert Bosch GmbH, RTE of France, RWE Effizienz GmbH, Siemens, Shun Hing Power T&E Co.SSE, Statkraft, Statnett, Storengy, Suzlon Energy, Technical University of Denmark, TECNALIA, Terna, Toshiba Corporation, Tractebel Engineering, Trina Solar, Terna SpA, University College Dublin, University of Birmingham, University of Leuven, University of Louvain, University of Warwick, VERBUND, VITO, VTT Energy, White & Case, World Bank, Younicos AG, ZBB Energy, etc.

## OUR CLIENTS

Our clients include leading organisations across the world such as EU GIG OÜ, ABB, Siemens, Alstom, GE Energy, Tractebel Engineering, ESB International, State Grid International Development, International Energy Agency, European Investment Bank, Nexans, Bechtel, Mott MacDonald, Balfour Beatty, Pöyry, Nexant, SNC-Lavallin, MidAmerican Energy Holdings Company, Maxwell Technologies, Power Grid Corporation of India Limited, Red Eléctrica de España, Terna, Elia, Reliance Energy, KEC International, Swissgrid, Brookfield, Statnett, Boston Consulting Group, El Sewedy Cables, National Contracting Company, Energinet, Energostroyradka, CTEEP, EdF, Hyosung, AltaLink, Suez-Tractebel, MWB Shanghai, Xcel, Teshmont, Vattenfall, Dow Chemicals, Alberta Electric System Operator, AIC-USA, Hubbel Power Systems, EfacecEnergia, ISA InterconexionEléctrica, Israel Electric Co., Trade Wind, Hythro Power, BHP Billiton, Eskom, EFACEC, UB Engineering, PJM Interconnection, BKW FMB Energie AG, Thomas & Betts Corporation, Fraunhofer-InstitutfürUmwelt-, Sicherheits- und Energietechnik UMSICHT, Cardiff University, ABEINSA, European Commission, KEMA, Volta River Authority, etc.

[www.globaltransmission.info](http://www.globaltransmission.info)



# ABOUT THE ORGANISERS

**Global Transmission** is a leading provider of information and analysis on the global electricity transmission industry. We publish newsletters and reports. We also organise conferences on crucial issues and topical themes relevant to the transmission industry. We publish the **Global Transmission Report** (a monthly newsletter) and **Global Transmission Weekly** (a weekly update). We also operate the website [www.globaltransmission.info](http://www.globaltransmission.info). These products and services provide information on all the key developments, trends and issues in the sector.

We also publish industry-focused research studies such as the **Global Electricity Transmission Report** and the **Global High Voltage Transmission Projects Report**. The first report describes the existing state of, and the expected growth in, the electricity industry across the globe in terms of generation and transmission capacity. The second report features detailed profiles of key high voltage transmission projects either under construction or planned to be built by 2020 in over 90 countries across the globe.

**SouthEast Asia Infrastructure** magazine ([www.southeastasiainfra.com](http://www.southeastasiainfra.com)) is a leading source of information on infrastructure development in Southeast Asia. It tracks key developments, analyses emerging trends, features industry players, perspectives, highlights key initiatives, and profiles exemplary projects.

## SPONSORSHIP (Limited number)\*

*This conference will provide an excellent opportunity for organisations to showcase their products and services. The deliverables include:*

- *Two delegate registrations (full conference)*
- *Table space at the conference*
- *Distribution of sponsor promotional material to each delegate*
- *Logo presence at the conference*
- *Acknowledgement on conference website*
- *A hyperlink to the organisation's website*
- *Speaker slot (If relevant, subject to approval of organisers)*

*\* Available on a first-come, first-served basis.*

For further information, contact: **Deepti Gusain**

Email: [deepti.gusain@globaltransmission.info](mailto:deepti.gusain@globaltransmission.info), Mobile: +91 9972 040 672

## DELEGATE FEES

The delegate fee is SGD1,500 for one participant; SGD2,400 for two; SGD3,300 for three; and SGD4,200 for four participants. The delegate fee is inclusive of VAT.

There is a 30 per cent "early bird" discount for those registering before January 27, 2017 and 15 per cent for those registering before February 10, 2017.

There is a special low fee for transmission and distribution operators; utilities; regulatory authorities; governmental/inter-governmental agencies and academic institutions. It is SGD500 per delegate for those registering before January 27, 2017; SGD600 per delegate for those registering before February 10, 2017; and SGD700 per delegate for those registering after that.

## HOTEL INFORMATION

**InterContinental Singapore**

80 Middle Road, Singapore 188966,

Tel: +65 6338 7600

# DELEGATE FEES

Delegates	Price before January 27, 2017	Price before February 10, 2017	Price after February 10, 2017
One delegate	SGD1,050	SGD1,275	SGD1,500
Two delegates	SGD1,680	SGD2,040	SGD2,400
Three delegates	SGD2,310	SGD2,805	SGD3,300
Four delegates	SGD2,940	SGD3,570	SGD4,200
Special category delegates*	SGD500	SGD600	SGD700

\*Transmission and distribution operators; utilities; regulatory authorities; governmental/inter-governmental agencies and academic institutions.  
(Fee includes lunch, tea/coffee on both days of the conference.)

## REGISTRATION FORM

I would like to register for the conference

Please send me more information

NAME/DESIGNATION \_\_\_\_\_ COMPANY \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_

PHONE \_\_\_\_\_ MOBILE \_\_\_\_\_

FAX \_\_\_\_\_ EMAIL \_\_\_\_\_

## PAYMENT OPTIONS

**1. Credit Card:** To make payments by credit card, please visit <http://www.cvent.com/d/fvqz2w>

*All credit card payments will be subject to standard credit card charges*

### 2. Wire Transfer:

Beneficiary: India Infrastructure Publishing Private Limited\*  
Bank Name: The Hongkong and Shanghai Banking Corporation Ltd  
Bank Address: R-47, Greater Kailash – 1, New Delhi - 110048  
Bank Account No: 094179587002  
Swift Code: HSBCINBB

*Global Transmission is a division of India Infrastructure Publishing Private Limited.*

## TERMS AND CONDITIONS

### Payment Policy

- Full payment must be received prior to the conference in Singapore dollars (SGD).

### Cancellations

- Cancellations received in writing 30 days (January 27, 2017) before the date of the conference will receive a full refund, minus a service charge/administration fee of SGD150. **We regret that no refunds will be made for any cancellations received less than 30 days prior to the conference.**
- Substitutions/name changes are welcome at no extra charge. Please send these in writing at least two days prior to the conference.
- **Disclaimer:** Global Transmission shall assume no liability whatsoever in case the event is postponed or cancelled due to a fortuitous event or unforeseen occurrence that renders the performance of this conference impracticable, illegal or impossible. For purpose of this clause, a fortuitous event shall include, but not be limited to: war, fire, labour strike, extreme weather or other emergency. Global Transmission's responsibility is limited to return of the registration fee only and is not liable for any cost in relation to travel and accommodation.
- Please note that it may become necessary for reasons beyond the control of the organisers to make alterations to the content and timing of the programme or speakers.

## CONTACT US

### For registration and sponsorship opportunities:

**Deepti Gusain**, Global Transmission Research  
Email: [deepti.gusain@globaltransmission.info](mailto:deepti.gusain@globaltransmission.info)  
Mobile: +91-9972040672

### For speaker participation opportunities:

**Jyoti Suri**, Global Transmission Research  
Email: [jyoti.suri@globaltransmission.info](mailto:jyoti.suri@globaltransmission.info)  
Mobile: +41 174 770 2339

To register, email us to: [registration@globaltransmission.info](mailto:registration@globaltransmission.info) or visit us at [www.globaltransmission.info](http://www.globaltransmission.info)