



ENERGY GRID ANALYTICS Round Table Webinar, 5 August 2021, 7.30 pm – 9 pm

The IEEE Power & Energy Society Singapore Chapter (IEEE PES) and the Smart Grid and Power Electronics Consortium Singapore (SPECS) are jointly organizing a 1.5 hours real-time webinar for academia, students and industry energy practitioners on Energy Grid Analytics. Some of the best industry practitioners and academia will share their insights on the current innovation and state-of-the-art best practices.



Contact:

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Programme Overview

Duration	Speaker
(7:30pm-9pm)	
5min	Session Chair: Er. Tan Teck Lee – IEEE PES-SPECS Introduction
15min	Speaker 1: Mr. Chan Eng Kiat, NCS
15min	Speaker 2: Dr. Chen Shuaixun, EMA
15min	Speaker 3: Dr. Daniel Liang, UL
15min	Speaker 4: Assoc. Prof Xu Yan, NTU
20min	Moderator: Dr. Koh Leong Hai, SPECS
5min	Session Chair: Er. Tan Teck Lee – Closing

IEEE PES Singapore Chapter & SPECS proudly brings you real-time round table webinar ‘Energy Grid Analytics’

Smart grid big data analytics is promising to shake up an industry not known for its technological innovations: Utilities. There is a growing overlap between utilities and data, with data sensors and other equipment being integrated into the provision of utility resources. Energy companies are using smart grid analytics to measure various variables, like the amount of energy distributed from smart network triggers. Smart data analytics is, therefore, going to have a huge impact on how we live.



Speaker 1
Mr. Chan Eng Kiat
NCS Pte. Ltd.



Speaker 2
Dr. Chen Shuaixun
EMA



Speaker 3
Dr. Daniel Liang
UL



Speaker 4
Assoc. Prof Xu Yan
NTU



Moderator
Dr. Koh Leong Hai
SPECS



Session Chair
Er. Tan Teck Lee
IEEE PES SGP

Webinar Objectives

At the end of the webinar, the attendees will gain advanced knowledge in the area of energy grid analytics, the current best practices and future state-of-the-art technologies for analytics.

Energy Grid Analytics: Smart grid big data analytics is promising to shake up an industry not known for its technological innovations: Utilities. There is a growing overlap between utilities and data, with data sensors and other equipment being integrated into the provision of utility resources. Energy companies are using smart grid analytics to measure various variables, like the amount of energy distributed from smart network triggers. Smart data analytics is, therefore, going to have a huge impact on how we live.

Source: Selertiy

Overview of Programme

Speaker 1. Mr. Chan Eng Kiat, NCS (15min)



Speaker 2. Dr. Chen Shuaixun, EMA (15min)



Speaker 3. Dr. Daniel Liang, UL (15min)



Speaker 4. Assoc. Prof Xu Yan, NTU (15min)



Moderator 1. Dr. Koh Leong Hai, SPECS



Moderator 2. Er. Tan Teck Lee, IEEE PES





Gearing Up for Smarter Distribution Grid

Speaker 1

Mr. Chan Eng Kiat, Senior Principal, NCS

Mr Chan Eng Kiat has been in the utility industry for more than 45 years. He has been working on OT/ICT field since 1980's, and the last 10+ years has been on smart grid. He was the project director with EMA for the Intelligent Energy System project – a Singapore smart grid pilot from 2009 to 2013, before joining DNV GL and subsequently Accenture's Smart Grid Services. He recently joined NCS as Senior Principal to support its utility business.

His talk will discuss on some of the trends and challenges, and how analytics and automation will help to de-risk distribution planning and operations, and to maintain an adaptable, sustainable and resilient distribution grid.



Cloud Data Analysis for Distributed Energy Management

Speaker 2

Dr. Chen Shuaixun, System Expert, Head of Microgrid, EMA

Dr. Chen Shuaixun received his Ph.D. degree in Power Engineering from Nanyang Technological University, Singapore in 2012. He has worked for Accenture, DNV GL Energy and lead Microgrid Business for Southeast Asia in Siemens previously. Recently, He joined Energy Market Authority to support system planning and stability analysis for Singapore National Grid.

Dr. Chen will share his view of cloud data analytic technology in Microgrid and renewable energy domain.



Smart Data Analytics for Renewable Energy Assets

Speaker 3

Dr. Daniel Liang, Head of ESS advisory – APAC, UL

Dr. Daniel Liang started his career in power engineering in 2006 after receiving doctorate in Nanyang Technological University. Throughout his career in the power industry in Singapore and the UK, Daniel has developed domain expertise in power systems studies, renewable energy (solar / wind / hybrid), and energy storage system integration.

Dr. Daniel Liang will share his experience in how smart data analytic technology prolongs the renewable energy assets and make the investment profitable.



Machine Learning-based Data-Analytics for Smart Grid Applications

Speaker 4

Dr. Xu Yan, Assoc. Prof., School of EEE, NTU

Dr Xu Yan is now an Associate Professor at School of Electrical and Electronic Engineering and a Cluster Director at Energy Research Institute at Nanyang Technological University. His research interests include power system stability and control, Microgrid, and data-analytics. His research is funded by major funding agencies (NRF, EMA, etc.) and industrial partners (Rolls-Royce, SP Group, etc.). Dr. Xu is an Editor for IEEE Transactions (TSG and TPWRS) and IET Journals (GTD and ECE). He is also serving as the Chairman for IEEE Power & Energy Society Singapore Chapter.

Dr Xu will introduce the machine learning-based data-analytics methodologies developed by him and his research team for a variety of smart grid applications at power grid, customers, and power asset levels.



Energy Grid Analytics Roundtable

Moderator

Dr. Koh Leong Hai, Programme Director, SPECS

Session Chair

Er. Tan Teck Lee, IEEE PES Singapore Chapter

Dr. Koh Leong Hai manages the Singapore national technology consortium, Smart Grid and Power Electronics Consortium Singapore (SPECS), to support the transfer of IP and know-how to local companies for commercialisation projects.

Er. Tan Teck Lee is an active volunteer with IEEE Power and Energy Society (Singapore Chapter). He believes that there are exciting opportunities in turning Singapore's vision of a smart nation into reality.

The joint webinar between IEEE PES and SPECS will support their members to gain beneficial insights to the best practices of energy grid analytics and the future state-of-the-art from some of the best industry professionals and academia. The attendees from IEEE PES and SPECS can envisage the benefits to adopt IP and know-how from institute of higher learnings to enhance their economic potentials in Singapore and the regions.