

Cigre Conference Cairo - Egypt 6-7 March 2019

# The Future of Electricity Grids

Challenges and Opportunities

## **KEY DATES**

Receipt of abstracts deadline October 1, 2018 Abstract acceptance November 1, 2018 Receipt of full papers January 1, 2019 Paper acceptance February 1, 2019 Receipt of the powerpoint presentation deadline February 15, 2019

### CONFERENCE LANGUAGE

The papers should be submitted in English Language

### **REGISTRATION FEES**

For Egyptian : 1500 L.E For Foreigners : 400 USD Payment For Egyptian : kindely Contact us. Payment From Abroad : Account No.9/450/81619/1 Egyptian Central Bank

## CORRESPONDENCE

Dr. Ahdab Elmorshedy President Egyptian Cigre National Committee

For More Information

+2-023860301 +201223422553 cigre.egypt@eehc.gov.eg www.eehc.gov.eg/cigre A reliable, economically competitive and environmentally sustainable electricity system is the corner stone of a modern society. The electricity landscape is a prime example of the Fourth Industrial Revolution as it undergoes transformation, becoming more complex than ever before, with rapidly evolving technologies, emerging innovative business models and shifting regulatory landscapes.

Modernizing the grid will create opportunities for an expanded role for utilities and for new market entrants. Utilities will continue to implement technologies to modernize the grid and may expand their traditional role as suppliers of electricity to include a broader set of services made possible by new technology. Private sector technology firms will also have new markets and opportunities for their products. Manufacturers, software developers, and service providers will interface with utilities to produce and deploy advanced digital meters, network-connected devices, in-home en-ergy monitors, and other devices to collect and transmit more data about the performance of the grid. Other third-party companies with and without a tie to the electricity sector may have software and services that aggregate or interpret customer energy data to allow for the more efficient use of electricity. On the other hand, Challenges are also facing the Electricity Utilities. The new instability, arising through the evolution of the existing grid, requires faster communications for effective grid control. The need arises to have reliable telecommunication backbone and at the same time identifying the information security and privacy issues as top priorities. EV and its impact on the aged grid is also an issue. Electricity Markets restructuring and the needed regulatory framework and capacity building are cornerstones.

Egypt Strategy is to be the HUB for Electricity Interconnection and consequently connecting Electricity Markets between Africa, Asia and EU.



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The Egyptian National Committee of CIGRE has the honor to invite utility experts, decision makers, researchers, investors and suppliers of solutions from various industries to this important conference which will include the following topics:

- The Digital Utility: Opportunities and Challenges
- Challenges for Grid Modeling and Analysis
- Grid Codes and Smart Grid
- Wide Area Monitoring, Protection and Control applications for Smart Transmission Grid
- System Blackouts
- Fault Prediction and Grid Healing
- Predictive Maintenance instead of Time Based Maintenance

### • Integration of Renewable Energy into the Grid

- Solar and Wind Power Generation: Challenges and Opportunities
- Renewable Energy Integration into Transmission and Distribution Systems
- Global and Regional Electricity Interconnectivity Interconnection
- Telecommunication Backbone and Information Security
- Securing Electricity Utility from Cyber attacks

#### • Electricity Market and Regulatory Issues

- Electricity Markets Restructuring
- Economic and Financial Restructuring
- Tariff restructuring and revenue considerations
- Manpower building revaluation
- Questions to be answered:
- What are the needed resources now?
- Future view?
- Tasks needed? cover or not by our actual manpower
- How can utility cover the future needs?
- H R Reallocate
- Training
- Education policy for the utility