



Intelligent market design – boosting global smart grid deployment

CEM9 side event, May 24 2018, 11:30–12:30

This high-level panel discussion brings together key stakeholders and policy experts to discuss the influence of market design on smart grid deployment in an international context involving opportunities on both the local/decentralized and the regional/inter-connected level. Key questions to be addressed are; how to design energy markets for a greater variety of stakeholders and roles, how to achieve energy system integration and interaction and what are the key elements in market design that we must focus on to accelerate deployment of smart grid technologies and solutions?

As input to the discussion a draft policy paper providing a first framing of opportunities and needs to accelerate smart grid deployment through market design has been prepared by the organizers and discussed/amended during a workshop the day before. Based on the discussion during this side event the document will be further developed and communicated to CEM9 participants (entirely or partially) to stimulate a continued in-depth policy discussion and to define priority actions to push the market design agenda forward.

Panelists

Ibrahim Baylan, Minister for Policy Coordination and Energy, Ministry of the Environment and Energy, Sweden

David Turk, Acting Director, Sustainability, Technology and Outlooks, IEA (International Energy Agency)

Doug Arent, Deputy Associate Lab Director, NREL (National Renewable Energy Laboratory), Operating Agent of the 21CPP (21 Century Power Partnership)

Steven Hauser, CEO, Gridwise Alliance and Secretary-Treasurer, GSGF (Global Smart Grid Federation)

Francisco Carranza Sierra, Director of Battery and Energy Services, Nissan Renault Alliance in Europe

Professor Yibo Wang, Institute of Electrical Engineering of Chinese Academy of Sciences, Co-lead of Mission Innovation Challenge 1 on Smart Grid (*TBC*)

Moderator: Marie Fossum Strannegård, partner Ernst and Young and member of the Swedish Smart Grid Forum steering committee.



Time and location

May 24, 2018, 11:30 am – 12:30 pm, Room 2, Strandgade 27 B, Copenhagen

Organizers

Smart Grid Action Network (ISGAN) and Swedish Smart Grid Forum

Registration

The number of seats are limited and priority will be given to CEM/MI delegates. For non-CEM/MI delegates: please register your interest by sending an email to info@swedishsmartgrid.se stating your name, title and organisation/company.

Context

New challenges are emerging with the ongoing transformation of the electricity industry. The forces driving change include the expansion of renewables, distributed generation, digitalization and increased electrification e.g. within the transport sector. The shift away from fossil fuels to renewables raises both technical and non-technical issues calling for an increasingly responsive electricity systems. New storage technologies and demand response from smart homes may provide solutions, but this will require some market rule enhancements. Energy policy and power sector regulation must work in co-ordination and be adapted to the new reality, whilst considering the specific characteristics of each power market, such as its institutional arrangements, grid development, electrification rate and renewables penetration.

Accelerating the deployment of new smart grid technologies will enable a broader, faster, and more cost-effective utilization of a range of clean energy technologies, substantially transforming how electricity systems are planned, operated and controlled. Power system integration and transformation is an increasingly complex policy challenge, which will require a combination of new initiatives, regulations, standards, strategies and business models to make use of emerging opportunities provided by smart grid solutions. These are to be found across the entire electrical system, from the high voltage transmission grid, through the local grid and finally at consumer level. Good governance is needed to assure market rules adapt to meet the challenges generated by this transformation of the power system calling for novel and innovative solutions in market design.

To meet national challenges different approaches and priorities may be needed and there is no generic solution or one-size that fits all. At the same time, there are generally applicable findings from experiences that can be adapted by other countries to make local implementation faster and more efficient. Identifying best practice principles, which apply in a wider range of circumstances, will play a key role to accelerate power system integration and transformation to the benefit of consumers.