APEx Association of Power Exchanges

APEx Newsletter

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APEx Objective

To facilitate development and communication of ideas and practices in the operation of global competitive electricity markets.

One of its primary intentions is to provide a platform for the sharing of information between its members.

Join us on LinkedIn!

APEx LinkedIn Community and Group

"Association of Power Exchanges"

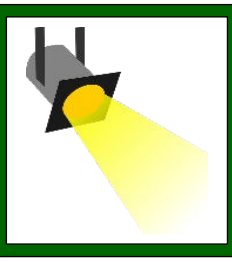
Please join and invite colleagues!

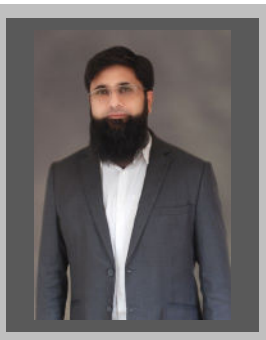
https://www.linkedin.com/groups/4008956/

On Thursday, 18 February, APEx held its second on-line webinar focused on perspectives on Wholesale Market Design to Accommodate Storage. The webinar, moderated by Cecilia Maya, CFO /MOO of XM and APEx Director, included speakers from IRENA, CAISO, Nord Pool, and AEMO. After Cecilia provided some history of storage integration and the importance to the electricity sector, the panel speakers discussed some of the challenges associated with integration of storage in markets and its value. Themes included the role of Energy Storage and its support to system operations, statistics of storage integration and participation in various markets, and future design mechanisms and expectations. Questions from the audience focused on different areas including the cost of storage and its value, percentage of storage capacity considered as maximum amount for grid operational security, and options for bidding as hybrid resource.

Please visit the APEx Website
APEx Webinar Presentation February 2021
to view the presentations from the Webinar

To have your member company featured "In the Spotlight" column, please send an email to:
Linda.Spreeman@pjm.com





Omer Haroon Malik
Head of Strategy & Market Development
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It is my immense pleasure to write for APEx on behalf of the APEx Board. I feel excited to serve our member organizations and help APEx in meeting members' expectations.

Information sharing through APEx like platforms definitely helps decision makers to make better-informed decisions. Challenges ranging from integration of national grids, decentralization, fast-paced technological changes, consumers becoming prosumers to effects of global climate change on this industry, requires more and more collaboration and learning from experiences; and I am glad to be part of this association providing these services to our valuable members.

I also feel excited about the APEx commitment to arrange workshops and interactive sessions for disseminating knowledge and information. I am looking forward to having an exciting year ahead, learning from this platform and sharing our story of transitioning the power market of Pakistan with the world.

I also pray to see the post pandemic world soon, in which our community will socialize and integrate more effectively!

In the Spotlight - Elexon


Mark Bygraves

Record electricity imbalance prices in GB – what does it mean for the future?

By Mark Bygraves, Chief Executive, Elexon

Last year a new record was set for Britain's longest ever 'coal-free' electricity generation period, totalling 67 days between April and June. It is an example of the progress the sector needs to make to meet the UK Government's net zero commitment. As the manager of the Balancing and Settlement Code, one of the key commercial arrangements for companies operating in the GB energy market, Elexon fully supports this commitment.

Transitioning to a decentralised system with much more intermittent generation results in major challenges for the electricity system operator, National Grid ESO. The high imbalance prices on several days in January 2021 illustrate the scale of that challenge.

The spare capacity margin for Britain this winter (the safety cushion of available generation compared with demand) has been tight at times. Coal plant has previously helped to provide this cushion. However as coal's share of the generation mix has dropped to around 1.75%, on cold, windless days there has been more reliance on gas plant to provide adequate reserve.

Imbalance prices (calculated by Elexon) act as incentives for Suppliers and Generators to ensure that they have bought, or produced enough electricity. The higher the price the more it encourages generators to make themselves available. Our Balancing Mechanism Reporting Service (BMRS) is the go to source for information on the wholesale market and our monitoring shows that the highest spikes in imbalance prices since 2001 occurred between 6 and 8 January 2021, coinciding with a cold snap and several plant outages.

Imbalance prices reached or exceeded £1,000/MWh on seven occasions over those two days, topping £4,000/MWh on 8 January. These spikes were preceded by notifications from National Grid ESO that more spare capacity was needed. The call was heeded by gas fired generators.

The market did its job, therefore should we be concerned, and what does this mean for the future? Britain has a resilient electricity system, nevertheless the electricity system operator (ESO) has to adapt to increasingly complex supply and demand scenarios. Another illustration of this challenge was the power cut affecting more than a million British customers in August 2019.

The Government and the market regulator (Ofgem) want to reform the ESO role. Elexon strongly supports this because it is also an opportunity to consolidate and simplify the 11 codes governing the system. In January Ofgem recommended that the ESO role should be carried out by an independent body, completely separate from National Grid. In our latest Policy View we put forward options for how the gas and electricity system operator roles and the codes could be reformed in tandem.

As a sector, if we encourage more demand-side response (DSR) it can help with management of supply and demand. Innovators, electric-vehicle to grid schemes, aggregators and other participants need access to granular information on the wholesale market so they can more easily see when DSR is required. Elexon is helping new business models to enter the market and we are working to make all data that we hold openly available unless there is a specific reason not to.

We have also proposed the set up of nation-wide flexibility markets where DSR offers and spare capacity can be openly traded between market participants.

Having more DSR available can help the ESO deal with peaks and troughs in demand. The ESO also needs to consider how 'inertia' provided by turbines at large power stations to maintain system frequency can be secured in the future, when more renewables are connected, and fewer traditional power stations may be available.

Elexon looks forward to working with the ESO and our customers to meet challenges such as this, to ensure that the energy transition happens smoothly for companies, and customers.