

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.

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IN THE SPOTLIGHT

GCC INTERCONNECTION Authority (GCCIA)

GCCIA: A robust setup for Energy stability and sharing Capacity and Reserve for GCC countries.

In line with the shared vision and goals of the Gulf Cooperation Council (GCC), the GCC Interconnection Authority (GCCIA) was established in 2001 to interconnect the national grids of the six GCC countries namely Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. The construction of the super-grid began in late 2005 and the operations commenced in late 2009, with the primary objectives being sharing of installed capacity resources and reserves, providing ancillary services, and creating a power market in the GCC.

During its 11 years of operations, GCCIA 400kV Super-Grid has helped Member States to avoid partial or total blackouts in more than 1950 incidents, and provided economic savings in excess of US\$ 2.6 billion for the six Member States, compared to a capital cost of the project of US\$ 1.5 billion. The potential economic savings for the next 25 years for the GCC countries is estimated at \$30 billion with the establishment of an effective and competitive GCC Power Market.

Having achieved seamless operations in supporting the GCC Member States, GCCIA focus in the past few years has been to develop an efficient regional electricity market in the GCC. GCCIA is mandated by its members to incubate and carry out the function of the power exchange as well as act as a clearing house for financial settlements. Accordingly, in December 2018, GCCIA launched the operations of the GCC Power Exchange (GEMS) for the GCC region starting with day ahead continuous market (DAM) and non-standard markets dealing with in-kind energy transactions between GCC Member States. So far, the electricity trade between the GCC Member States have been bilateral in nature mainly facilitated by GCCIA, and growing in volume by 15-10% each year.

Eng. Ahmed Al-Ebrahim took over as the Chief Executive Officer of GCCIA in 2014 and has been the driving force in development of the electricity market for the GCC region since 2010. GCC power market recorded electricity trade volume of 3.4 TWh during the years 2016 to 2019. A clean energy enthusiast, Eng. Al-Ebrahim advocates for greater penetration of renewable energy for which GCCIA super-grid can provide resiliency, reliability & flexibility services and an electricity market with competitive prices; accordingly working on expansion of the current interconnector capacity as well as interconnecting neighboring countries and regions.



Lanny Nickell
Board Member APEx
Executive VP & COO
Southwest Power Pool

Hello! I'm delighted to have the opportunity to serve as a newly elected member of the APEx Board of Directors and to provide a message on their behalf in this newsletter. I was elected to fill a position previously held by Mr. Carl Monroe who retired from Southwest Power Pool earlier this year. Carl thoroughly enjoyed his time participating with this organization, undoubtedly learning and gaining tremendously valuable insights from many of you that he has been able to share with many others.

This has been an unusual year, in fact, it is one that has been precedential in many ways! While many APEx members have been observing the impacts of the COVID-19 pandemic on our industry, many of us are still developing an understanding of its longer-term implications. Regardless of the outcome of those implications, I fully believe the services we provide and functions we perform in the operation of energy markets will only become more critical and valuable to our customers.

Although we've decided reschedule our annual conference that would have been held this year, I'm excited about our commitment to hold virtual workshops this fall. These will allow us to continue to share information and learn from each despite other, the unprecedented circumstances we are currently experiencing. hope to be able to share some of what has been learned during this pandemic and, more importantly, what our expectations are for the

**2020 CONFERENCE **

POSTPONED



Due the worldwide COVID-19 pandemic, the 2020 APEx Annual Conference that was scheduled to be held in Dubrovnik, Croatia has been *postponed*.

The conference will be rescheduled for no sooner than the second quarter of 2021 and will be held in the same location. Further details will be communicated once available.



APEx is looking to host a series of 90 minute Webinar sessions in the Fall of 2020.

We are excited to announce the first webinar will be held on 9 September, 2020 at 12:00 p.m. EDT.

For additional information, or if you are interested in participating and/or have suggestions for topics, please contact <u>Linda.Spreeman@pjm.com</u>.

DID YOU KNOW?

COVID-19 Impacts to Energy

- Consumption of Energy in the PJM market has been down about 8-10% as result of social distance efforts, business closures, and additional impacts from the COVID-19 virus.
- After correcting for weather effects, full lockdowns have reduced daily electricity demand by at least 15% in France, India, Italy, Spain, the United Kingdom and the US northwest.¹
- The Brattle group predicts that Coal-fired generation in the United States appear to have the greatest lost production, due to reduced load and lower competing fuel costs, with some forecasters predicting it will decline 25% in 2020.²
- In the combined EU and UK, coal generation is down 29% between 10 March and 10 April compared to the same period in 2019, making up only 12% of total generation while renewables delivered almost half (46%) of generation an increase of 8% compared to 2019.³
- Under a study performed by IEA with assumptions of months-long restrictions on mobility and social and economic activity
 the global CO₂ emissions are expected to decline by 8%, to levels of 10 years ago. Such a year-on-year reduction would be
 the largest ever, six times larger than the previous record reduction of in 2009 caused by the global financial crisis and
 twice as large as the combined total of all previous reductions since the end of World War II.⁴
- Overall, as stay-at-home mandates sprang up across the United States power companies have seen residential electrical consumption rise by 5% to 10%.5

https://www.wartsila.com/media/news/17-04-2020-european-responses-to-covid-19-accelerate-the-electricity-system-transition-by-a-decade-according-to-wartsila-analysis-2689055

^{1 &}quot;Exploring the impacts of the Covid-19 pandemic on global energy markets, energy resilience, and climate change", IEA, https://www.iea.org/topics/covid-19

² " Brattle Economists Release Updated Assessment on COVID-19 Impacts on Energy Industry", Market Insider, https://markets.businessinsider.com/news/stocks/brattle-economists-release-updated-assessment-on-covid-19-impacts-on-energy-industry-1029192594

³ "European responses to Covid-19 accelerate the electricity system transition by a decade, according to Wärtsilä analysis", Wartsila Corporation,

^{4 &}quot;Global Energy Review 2020; The impacts of the COVID-19 crisis on global energy demand and CO2 emissions" https://www.iea.org/reports/global-energy-review-2020

⁵ "As COVID-19 quarantines continue, US residential power consumption changes", Tech Republic, https://www.techrepublic.com/article/as-covid-19-quarantines-continue-us-residential-power-consumption-changes/