

## 2020 IEEE International Conference on Power System Technology (POWERCON 2020)



IEEE Power & Energy Society (IEEE PES) and Chinese Society for Electrical Engineering (CSEE) co-initiated the POWERCON brand and started the biennial conference in 1998 in Beijing, China. IEEE PES Bangalore Chapter is pleased to host the IEEE PES POWERCON 2020 in Bangalore, the Silicon Valley of India, during 14-16 September 2020. The conference will be a virtual event due to global pandemic

### Objectives:

The conference aims to discuss the “Transformations in Power Grids: Producers to Prosumers”. Bulk power systems across the world are transforming at a rapid pace with the phenomenal advances in computing, communication, electrification, data sciences -Advanced Analytics, Artificial Intelligence & Machine Learning and Crisis & disaster management systems.

Pandemic crisis has presented tremendous learning, challenges and opportunities in the electric power sector. New technologies and business models would emerge rapidly to operate in the new normal. Utilities may need to work with a much smaller workforce, limited supply chain and support services, should the pandemic penetrate deeper. The critical aspect is to help available personnel with the right tools, decision making support and maximize their productivity. While accommodating the drastic changes occurring in the electricity eco system with renewables, distributed power, electric vehicles and energy storage, utilities would have to rely tremendously on digitization and automation since the workforce would be reduced significantly at site.

The organizing committee invites papers from all the traditional areas of power engineering with special emphasis on the following themes

### 1. Grid Transformation

- a. Technologies for enhancing conventional generation Plants
- b. Cross Border interconnections
- c. Renewable resource dominated grids
- d. Hybrid power plants
- e. Ultra-High Voltage AC/DC technologies
- f. Grid level storage technologies and applications
- g. Unification of Markets from Producers to Prosumers

### 2. E-Mobility

- a. Storage technologies
- b. Drivetrains and electric machines for EVs
- c. Impact of EVs on distribution grids
- d. Grid ancillary services through EVs
- e. Charging infrastructure and analytics

### 3. Edge Computing, High Performance Computing and Cyber Security

- a. Computing architectures for power system analytics at the Edge
- b. Security awareness, algorithms and implementations
- c. High performance computing systems and solutions
- d. Security of legacy systems & devices.

#### 4. Situational Awareness and Resilience

- a. WAMS implementation and analytics
- b. Data fusion for resilient systems: Weather, Water, transportation, agriculture etc...
- c. Preventive and corrective control of Blackouts.
- d. Futuristic technologies VR, AR, Big Data, drone surveillance etc.

#### 5. Pandemic Challenges & Opportunities

- a. Impact on Power Sector
- b. Business continuity plan – Power utilities & e-Mobility
- c. Virtual technologies for operation & inspection
- d. Standards for post pandemic technologies

The conference will have virtual invited talks from **eminent speakers, panel discussions, technical paper presentations**. It will have multiple **virtual tracks** on the broad objectives. Interested authors are requested to send the full paper in IEEE format. The topics are not limited to the listed topics. Any area relevant to power & energy systems which are not listed will also be considered.

| Paper Deadlines      |   |
|----------------------|---|
| June 1, 2020         | Paper Submission Closes   |
| July 30, 2020        | Notification of Paper Acceptance  |
| Aug 10, 2020         | Camera Ready paper submission   |
| Registration Details |   |
| July 30, 2020        | Registration opens  |
| Aug 25, 2020         | Author registration closes  |
| Sept 10, 2020        | Registration closes   |
| Conference Calendar  |   |
| Sept 14, 2020        | Opening keynote address, parallel industry sessions, parallel paper presentation sessions |
| Sept 15, 2020        | Parallel industry sessions, parallel paper presentation sessions                          |
| Sept 16, 2020        | Parallel industry sessions, parallel paper presentation sessions                          |

#### Submission Guidelines

Papers with a maximum length of 6 pages prepared as a PDF file in IEEE PES technical conference format can be submitted online on the conference website [www.powercon2020.org](http://www.powercon2020.org) . Instructions for preparing papers in IEEE PES technical conference format can be found at the IEEE PES website as well as on the conference website. The papers presented in the conference will be submitted for inclusion in IEEE Xplore

**Registration fee details:**

| Category                          | Fees in USD | Fees in INR |
|-----------------------------------|-------------|-------------|
| Non-IEEE Member                   | 125         | 9500        |
| IEEE Member                       | 100         | 7500        |
| IEEE PES member                   | 90          | 6750        |
| Full-Time Student Non-IEEE Member | 90          | 6750        |
| Full-Time Student IEEE Member     | 85          | 6250        |
| Full-Time Student IEEE PES Member | 75          | 5750        |
| IEEE Life Member                  | 75          | 5750        |
| CSEE Member                       | 90          | 6750        |

All the above fees are inclusive of 18% GST and gateway charges

**Contact Details:**

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