**Type here the title of your Synopsis Proposal**

**(Times New Roman or Arial, Bold, size 12)**

**Type here the preferential subject which best describes your synopsis**

**(e.g. PS1: Driving towards an enhanced system reliability, security and resiliency)**

**See the list below or Call for Papers on this web site:** [**Click here**](http://cigrekyoto2022.jp/callfor-papers.html)

**Type here the authors’ names**

**(initials, name in capitals, Times New Roman or Arial, bold, size 12)**

**Type here the Company**

**Type here the Country**

**Type here the email address of the main author**

Start typing here your synopsis (about **500 words**: Times New Roman or Arial, size 11 or 12 only).

**Please submit your synopsis in ENGLISH to the paper management system ”Confit”**

**Link:** [**https://cigre.confit.atlas.jp/login**](https://cigre.confit.atlas.jp/login)

**Deadline 3rd September 2021**

**Synopses sent by email will not be accepted**

**Preferential Subjects:**

**1: Driving towards an enhanced system reliability, security and resiliency**

1. Development of methods, models and analytic techniques for establishing dynamic performance of distribution networks such as lightning protection, power quality and EMC
2. Development of new system planning and operational methodologies and tools
3. Activities and methodologies as countermeasures against natural disaster and severe climate
4. Regulatory policies and technical solutions facilitating grid modernization with uncertainty arising from the expansions of DERs
5. Cyber security issues, including network codes, technologies and strategies supporting and enhancing power system security and resiliency
6. Maximizing the use of existing assets through innovative and controllable technologies, such as HVDC, FACTS and smart grid devices

**2: New commercial and technical relations between TSO, DSO, and customers**

1. Application of Information and Communication Technologies (ICT) and actual use cases of activities among TSO, DSO, and customer side including new service providing entities
2. Technological and operational aspects to “Connect and Manage” DERs and actual use cases
3. Latest activities of market and power system operation for provision of ancillary services utilizing DER’s flexibility and sector coupling solutions
4. Technical, operational and regulatory aspects of aggregating and integrating DERs

**3: Innovative developments for a sustainable power network**

1. Advanced technologies for power system planning and operation, including Internet of Things (IoT), big data analysis and Artificial Intelligence (AI)
2. State-of-the-art technologies for field work and asset management, such as drones, Augmented Reality (AR) and Virtual Reality (VR)
3. New trends of ICT for enhancing the utilization of DERs including Blockchain
4. Training and fostering work forces for future sustainable grid operation and asset management