CALL FOR PAPERS - SPECIAL SESSION

"Analytical methods of considering uncertainty in integrated resource planning for electric power utilities"

for CODIT'22

May 17-20, 2022 ▪ Istanbul, Turkey

Session Co-Chairs:

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Session description

This special session explores analytical methods for managing uncertainties in long-term capacity expansion planning for electric power utilities. Given the rapidly changing economic, social and environmental conditions regionally and worldwide, uncertainties are expected to proliferate in future demand, fossil fuels and renewable energy prices, new regulations restricting or prohibiting fossil fuel generation, regulations governing carbon pricing and greenhouse gas emissions, advances in carbon mitigating technologies, effectiveness of energy efficiency programs, flexibility required to integrate higher levels of intermittent renewable resources, resource availability (gas, water, coal, etc.) and so on. Some of these uncertainties have become more prominent in the last few decades, particularly those around renewable resource supply and pricing. Utilities desiring to reduce their susceptibility to risk and potentially benefit from arising opportunities must therefore incorporate in their planning methods of assessing the impacts and mitigating the effects of these uncertainties.

The goal of this session is to explore ideas and investigate current and potential planning methods that can be used by electric power utilities, and to investigate how the planning processes can practically handle uncertainty and risks in long term planning of these complex systems.

Topics of interest for this session include, but are not limited to:

- Stochastic optimization methods for considering uncertainty and risk
- Incorporation of climate change mitigation in electric utility planning
- Exposure of electric utilities to the risk of supply chain disruptions
- Scenario-based planning vs portfolio-based planning
- Scenario generation methods
- Approaches for planning under uncertainty
- Uncertainty quantification methods and modelling

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **January 07, 2022 : http://controls.papercept.net/conferences/scripts/start.pl**. In PaperCept, click on the **CoDIT 2022 link "Submit a Contribution to CoDIT 2022" and follow the steps.**

IMPORTANT: All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).

DEADLINES

January 07, 2022: deadline for paper submission

March 4, 2022: notification of acceptance/reject

March 30, 2022: deadline for final paper and registration