

PERC workshop – ONLINE

February 9<sup>th</sup> 2021 – 3-430pm (Palestine time)

Draft agenda:

3pm – Brief Introduction and Start of the session

- Illustration of the main points of the report  
**ALESSANDRO RUBINO – BARI University 30min**
- Power System Production Cost Modeling to Inform Electricity Planning & Regulation  
**Carlo Brancucci, encoord and University of Colorado – Boulder 30min**
- **Q&A session – 30min**

4.30 - Conclusions and next steps

### **Details of the speakers and abstract of the presentation**

Name & Affiliation: Alessandro Rubino – Bari University

Title of the presentation - Least-cost distribution network tariff design – A Rubino

Abstract of Presentation: The electricity systems in Palestine are facing several significant challenges, related with the existing energy security issues.

Utilities and regulators need to either update the current compensation systems and tariff structures or to develop new ones to account for the impact imposed on distribution system operators (DSOs) due to a high penetration rate of distributed generators, including costs related to connecting distributed generation prosumers to the grid. We will discuss:

- 1) Guidelines and standard methodologies to evaluate infrastructure investment planning.
- 2) identify the main technical requirements for investment in infrastructure;
- 3) analyse the electricity system of the Palestinian territories and evaluate the possible structure of a novel multi-part tariff structure that accounts for these costs under the new dynamics in place in the Palestinian electricity system.

Name & Affiliation: Carlo Brancucci, encoord and University of Colorado – Boulder

Title of Presentation: Power System Production Cost Modeling to Inform Electricity Planning & Regulation

Abstract of Presentation: Power system planners, operators, and regulators around the world are facing the challenge of transitioning to a renewable and decarbonized future while maintaining system reliability and ensuring affordable power. The integration of variable and uncertain wind and solar power impacts electricity networks and markets by creating new operational challenges and by enabling new opportunities to reduce their dependence on fossil fuels and to increase system flexibility. Power system production cost models allow decision makers to study how power networks and electricity markets would operate under future scenarios that may vary in terms of demand growth, demand flexibility, renewable integration, short- and long-term storage integration, local and cross-border electricity transmission capacity, etc. This presentation will highlight the potential value of developing and running power system production cost models for the decision

makers of a region or a country whose electricity system is evolving and is expected to transition to a low-carbon future.