World Academy of Science, Engineering and Technology International Journal of Energy and Environmental Engineering Vol:14, No:12, 2020

Electricity Market Categorization for Smart Grid Market Testing

Authors: Rebeca Ramirez Acosta, Sebastian Lenhoff

Abstract : Decision makers worldwide need to determine if the implementation of a new market mechanism will contribute to the sustainability and resilience of the power system. Due to smart grid technologies, new products in the distribution and transmission system can be traded; however, the impact of changing a market rule will differ between several regions. To test systematically those impacts, a market categorization has been compiled and organized in a smart grid market testing toolbox. This toolbox maps all actual energy products and sets the basis for running a co-simulation test with the new rule to be implemented. It will help to measure the impact of the new rule, based on the sustainable and resilience indicators.

Keywords: co-simulation, electricity market, smart grid market, market testing

Conference Title: ICREPM 2020: International Conference on Renewable Energy Policies and Markets

Conference Location: London, United Kingdom Conference Dates: December 10-11, 2020