

ABSTRACT

The huge penetration of renewable energy sources poses several challenges for the function of electricity markets, such as increased price volatility and massive curtailments. This paper investigates the current structure of the wholesale electricity market in Greece under the Target Model guidelines. Our analysis put under scrutiny the formation and function of both spot and balancing markets by highlighting key challenges and reforms. Empirical evidence reveals that the domestic market is currently in accordance with the European Target Model; however, the anticipated benefits in terms of more competitive prices are not evident yet. The oversupply of electricity accompanied by low demand that is apparent in the Greek market points to the rapid participation of storage units in the system. The paper provides a detailed description of the recent support mechanism to facilitate the integration of BESS into the system. Eventually, this is anticipated to reduce price volatility and smoothen the price curves.

Keywords: Wholesale Electricity Market, Target Model, Spot Market, Balancing Market, Non-Compliance Charges