Estimation of EV's Daily Load Profile in Bangkok Metropolitan City under Different Policy Scenarios Invited Paper IE

Date: Friday, Dec 17, 2021 Speaker: Jai Govind Singh, Associate Professor, AIT Bangkok, Thailand

Abstract:

The Thailand government plans to support the increase of EVs in 2025, 2030, and 2036, leading to increased energy consumption problems. Several factors are responsible for EV daily load profile, including charging time, charging level, battery size, type of car, number of vehicles, and driving range. Thus, this work will show the daily EVs of the daily load profile in Bangkok metropolitan city, which could be used in the power development plan to handle this extra demand and avoid capacity shortage. Furthermore, this work used Monte Carlo simulation for the forecasting strategy to sample the starting charging time, charging level, battery size, and type of car to estimate the daily load demand of BEVs. The result shows that the maximum peak demand occurs in the latest case.