Economic Feasibility Analysis of PV Installation for a CES Apartment Complex

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Abstract— This paper analyses the economic feasibility of PV installation for a CES apartment complex in Seoul, Korea. PV installation cost is estimated based on the real PV installation for a building in the complex. PV power generation amount of the complex is estimated based on the real PV power generation data from ETRI, Korea. Real power consumption data for the CES from year 2015~2016 is used for the simulation of power cost saving. The simulation results show that the power purchase rate can be reduced as 34.2% by adopting PV power generation.

Keyword-Microgrid, CES, Smartgrid, photovoltaic, economic feasibility



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