

Energy network optimization for smart micro energy network based on cogeneration system among various building types

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Abstract

Controlled micro thermal energy network is a big issue at the smart energy city. Simulated three types of buildings(a hospital, an officetel, a public building) which have their own heat sources like cogeneration system based on bi-directional heat trading model were analyzed and optimized. Scaled Laboratory facilities have been set and experienced to prove the optimization results. Energy saving effect compared conventional energy supply method (SHP ; Separated Heat and Power) was also analyzed. The output algorithm and program can be utilized for the company which want to manipulate smart micro energy network.

Keywords: *Heat network, CHP, Cogeneration, Prosumer*

Biography

Professional Experience

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