

OPTIMUM CONTROL STRATEGY FOR A μ CHP UNIT

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Keywords: carbon emissions; distributed energy; μ CHP; optimisation.

ABSTRACT

A temperature control strategy for a μ CHP unit was developed to achieve the desired room and water temperature of a dwelling. The μ CHP unit considered is based on a Stirling engine where only full-load and idling (or off) operation are possible. Cost optimisation of the μ CHP unit is performed to determine the economic operation of the unit for different times of the year for a single house. The cost optimisation model was extended to incorporate a μ CHP unit which is connected to two houses.