Evaluation of the minimum operating duration of cogeneration units that could ensure economic viability

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Abstract – This article touches upon the issue of determining the annual minimum economic operating period of cogeneration units, based on internal combustion engines. The calculation of this important indicator for cogeneration plants was performed for the installed power capacities in the range of 5-3000 kWe under local conditions and is based on the analysis of expenditures and revenues. The developed economic model reflects possible dynamics of evolutive

parameters during the lifetime of installations. It has been proven that microcogeneration is practically at the limit of economic attractiveness. Promoting cogeneration in the country requires the launch of a support scheme. Keywords – cogeneration, full-load hours, break-even equation, levelized costs and revenues

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