

EFFECT OF RTTV AND OTTV VALUE ON ENERGY CONSUMPTION LEVELS

by **Toto Sukisno, Muhfizaturrahmah, Nurhening Yuniarti**

ABSTRACT

The use of air conditioning equipment (AC) that pay attention to environmental aspects is one way that can be used to save electricity. Electrical energy requirements for fulfilling air conditioning are quite large. On the other hand, the government launched an energy-saving program, including in the office environment. The UNY Faculty of Engineering is a PLN electricity customer who is included in the consumer category of government office buildings. One way that can be done to provide potential energy saving opportunities is to know the size of the Roof Thermal Transfer Value (RTTV) and Over Thermal Transfer Value (OTTV). Therefore, research needs to be done to find out how much influence the value of RTTV and OTTV on electricity consumption in buildings in the Faculty of Engineering UNY.

This study aims to determine: (1) the effect of Roof Thermal Transfer Value (RTTV) on the level of energy consumption and (2) the effect of Over Thermal Transfer Value (OTTV) on the level of energy consumption.

This research is a type of qualitative research with a type of experimental research. In this study, it will begin with the identification of the room that will be used for data collection, measurement, and continued calculation of RTTV and OTTV values. The results of this study are expected to produce recommendations both technically and economically on the potential for energy savings in air-conditioned buildings.

Kata Kunci: *RTTV, OTTV, energy savings*