Abstract

The energy crisis is a situation where there is a deficiency (increase in price) in the supply of energy resources. Factors driving this increase in energy requirement is GDP (Gross Domestic Product) and population. Indirectly it can be concluded, that the high rate of GDP or population will lead to an energy crisis if it is not offset by the provision of sufficient energy. For that, made a system that is able to classify the energy crisis based on the number of energy production and factors driving the need for energy, GDP and population parameters. In addition, statements such as "high GDP and population", "provision of sufficient energy" is one of the human mind that is ambiguous.

FIS (Fuzzy Inference System) is a classification method that is able to perform as well as overcoming problems that are ambiguous. In this research applied FIS mamdani model, where the model is able to dynamically evaluate the condition and produces an output that is intuitive and can be accepted by the human mindset. Average accuracy of the resulting system parameters reach 85,60% of GDP, population reached 80,30% and GDP and population parameter combination (hybrid) reached 80,30%.

key words : classification of the energy crisis, fuzzy inference system