

doc. d-r Atanas Iliev, dipl. el. ing.  
prof. d-r Vangel Fustic, dipl. el.ing.  
University "Sv. Kiril i Metodij"  
Electrotechnical Faculty - Skopje

## **METHOD FOR EVALUACION AND SELECTON OF POWER SYSTEM PROJECTS UNDER UNCERTAINTY**

### **ABSTRACT**

This paper presents method for Power System Project evaluation and selection considering uncertainty and vagueness in decision making process. For this purpose the basic economic indexes such as: Net Present Value, Profitability Index, and Internal Rate of Return are modeled by triangular fuzzy numbers. Furthermore, economic criteria for acceptance of the project are modified in a fuzzy sense. The paper also presents the method for modeling the Investor's point of view for successful Power System Project defined by appropriate fuzzy numbers.

**Keywords:** Power System Projects, Engineering economy, Project evaluation and selection, Fuzzy numbers, Uncertainty.