

## **Abstract:**

One of many power generating sources is the water turbine for electrical power generation.

The study is concerned with the factors affecting one type of these turbines that is Kaplan turbine. Experimental testes have been carried out for evaluating the factors affecting the turbine performance after repairing the experimental instruments for this study.

The runner and guide vane angle have been studied and evaluated. results for factors affecting performance characteristics are obtained from Kaplan turbine test rig and compared with previous studies given by other researchers. The results showed a reasonable agreement.

