**UNIVERSITY OF ENGINEERING AND**

**TECHNOLOGY LAHORE**



**Assignment # 4**

**Dynamic Programming solution to Hydrothermal scheduling**

**Course Title: Advanced Power System Operation and Control**

**Course Code: EE 641**

**Submitted to:**

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**Problem Statement**

A Hydro plant must be operated in conjunction with a Steam plant to serve a time varying load PLoad for a 24-hour period. The minimum and maximum storage limits for the Hydro plant reservoir are given by:

The storage volume at the start and end of the day must be 10000 acre.ft.

The water use rate of the hydroelectric plant is given by:

Where is the generated hydroelectric power and q is the water discharge rate in acre.ft/h.

The natural inflow rate is 1000 acre.ft/h.