ASSIGNMENT : 4

1. Show that when number of generating unit are operating in parallel and supplying power in to a transmission network, the most economical scheduling of load is obtained when their incremental cost of received power re equal. Derive an equation coordinating the incremental cost of production, the incremental transmission losses and the incremental cost of received power.

2. Derive the expression for B-coefficients in case of two generating plants connected to an arbitrary number of loads through a transmission network.

3. Describe unit commitment in detail.

4. What is penalty factor? Discuss the criteria for economic dispatch when losses of the system are considered.

5. In a two bus system, If 100MW is transmitted from plant 1 to the load, a transmission loss of 10MW is incurred. Find the required generation for each plant and the power received by the load when the system ƛ is rs 25/MWh.=0.02MWh,=0.04+20.00rs/MWh.