A Study of the National Power Load curve and the proposing of Optimal Solutions to the problem

Hasan Torabi

Email: Torabi1976@yahoo.com Address:Khuzestan Water And Power Authority Golestan Road, Ahwaz _ p.o Box 61235-137, Tel:091333213529 Fax:0098-611-3366421

Abstract:

One of the strategic goals of the national power industry is the production and consumption of energy optimally and in the most suitable means possible. Since the capacity of power genera tin is limited to a large extent by the high power costs of investment, in order to meet the daily demands of consumers it is necessary to optimally manage the grid load and to determine the overall policy and program for its implimentation. In order to achieve the aforementioned goal, it is necessary to have an exact and accurate definition of the amount of energy consumed, the forcast for energy demands in the future and a program for the development of power stations in the future. In this article the primary focus is on the daily load curves for the national grid over the past years. During the reviewing of the daily load curves, the production and consumption of electricity over the years, the energy consumption quota of various years, the time frequency distribution of peak periods, the daily fluctions of peak loads and base loads, the seasonal fluctions of the load, the maximum fluctuations in the load and the produced load's coefficient were all taken into account. The consideration of the load curves are further extended to in the future, and to find optional means of improving the grid's load curves.