Provision of Basic Utilities

The Way Forward

Khalid Iqbal
Divisional Director (Engineering)
August 29, 2006

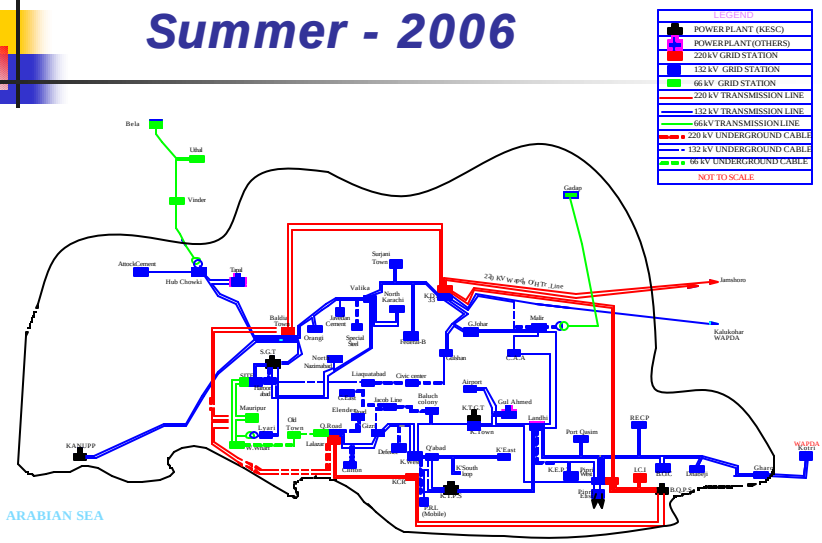
Present Position

- *Shortage of Generation*
- *Transmission and Distribution Network Saturated*
- *Load Extension by Customers*
- *Illegal Connections*
- *Pilferage of Electricity*
- *High T & D Losses*

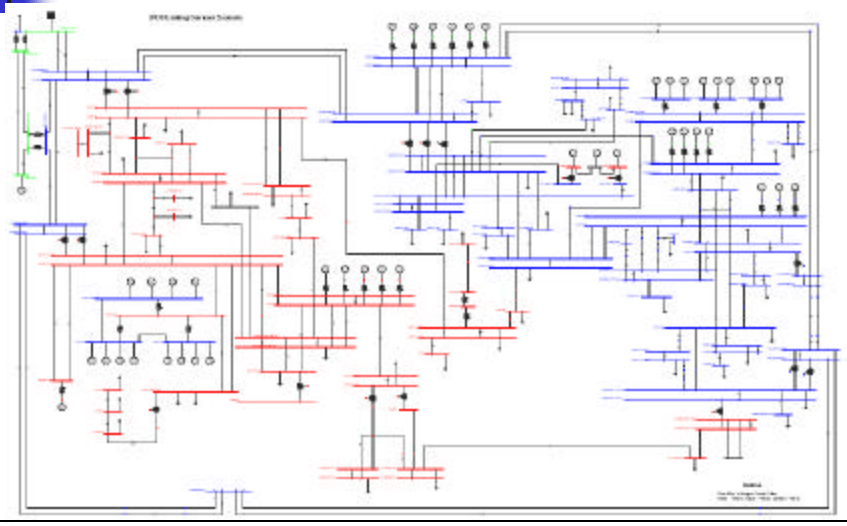
Vision of KESC

- *Stable and Uninterrupted Power Supply to Consumers*
- *Turn over of KESC in Two Years as Profitable setup.*
- *Trust of our Customers with an excellent Service and best supply of energy.*
- *Successful Implementation of Government Policy for Privatization of KESC.*

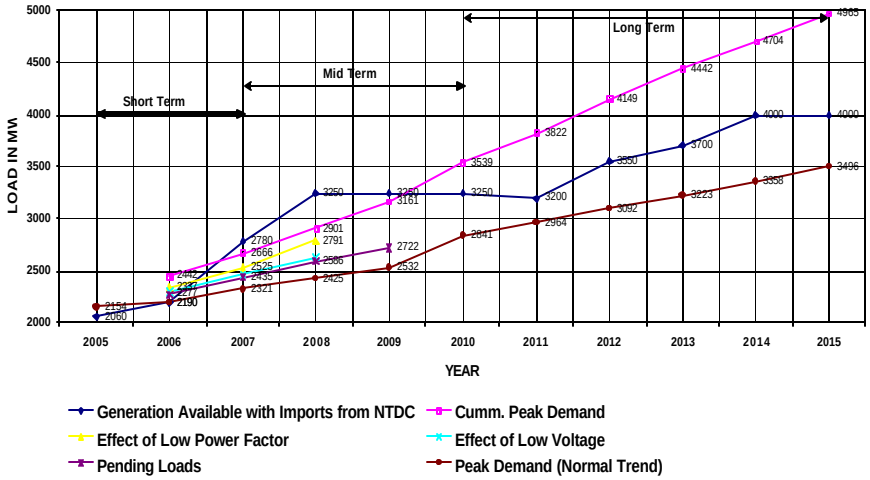
Geographical Layout Summer - 2006



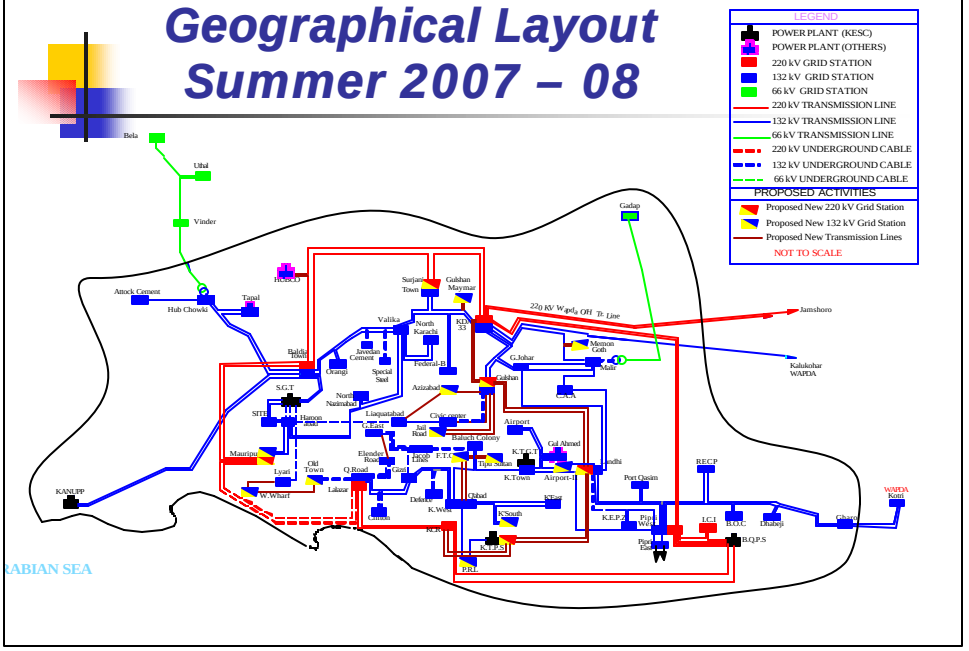
KESC Load Flow Summer 2006



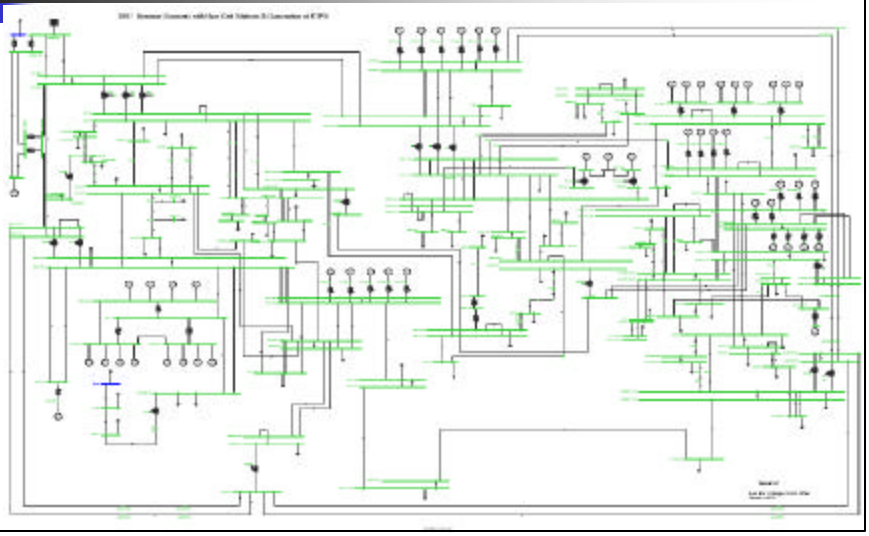
CUMULATIVE PEAK DEMAND / SUPPLY Year 2006 - 2015



Geographical Layout
Summer 2007 – 08



KESC- Load Flow
Summer 2007 - 08



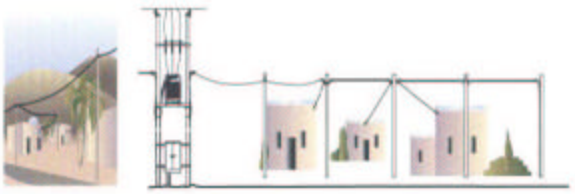
Network Improvement Projects

1	Center for Surveillance, Control and Data Aquisition
54 km	High Tension Overhead Lines 220 kV
5	Grid Stations 220 kV
300 km	Single Core Cable Lines 132 kV
6 km	Overhead Lines 132 kV
12	Grid Stations 132 kV
9	Auto Transformers
2000	Capacitors
180	Feeders 11 kV
250	Substations
2155	Pole Mounted Transformers 400 V
100 km	Lines with Arial Bundled Cables 400 V

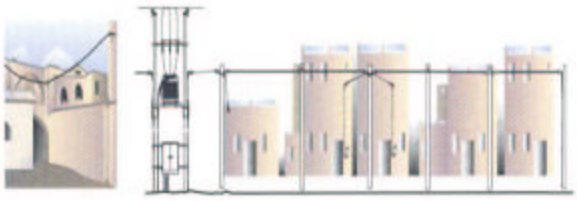
less losses
higher voltage
stable frequency
less breakdowns
less load shedding !

Concept of Installation of Aerial Bundle Conductor

Village
Main Line
parallel to a road



Town
Main Line
parallel to a street



Huge Investment for Improvement

in new Generation

- Gas Turbines in Open Cycle 500MW on Gas / Furnace Oil
- Combined Cycle in 2008 up to 830 MW additional

in Rehabilitation

- Improvement of Generation Capacity up to 228 MW
- Grid Stations, Lines, SCADA, Transformers, ABC, Capacitors

in Network Expansion

- Transformers, Capacitors, Substations, new Connections
- Improvement in all 100 Customer Service Centers, 1 Call Center
- New and more Data Processing Tools at all Levels, SAP