COMPUTERISED ENERGY MANAGEMENT SYSTEM FOR BHILAI STEEL PLANT

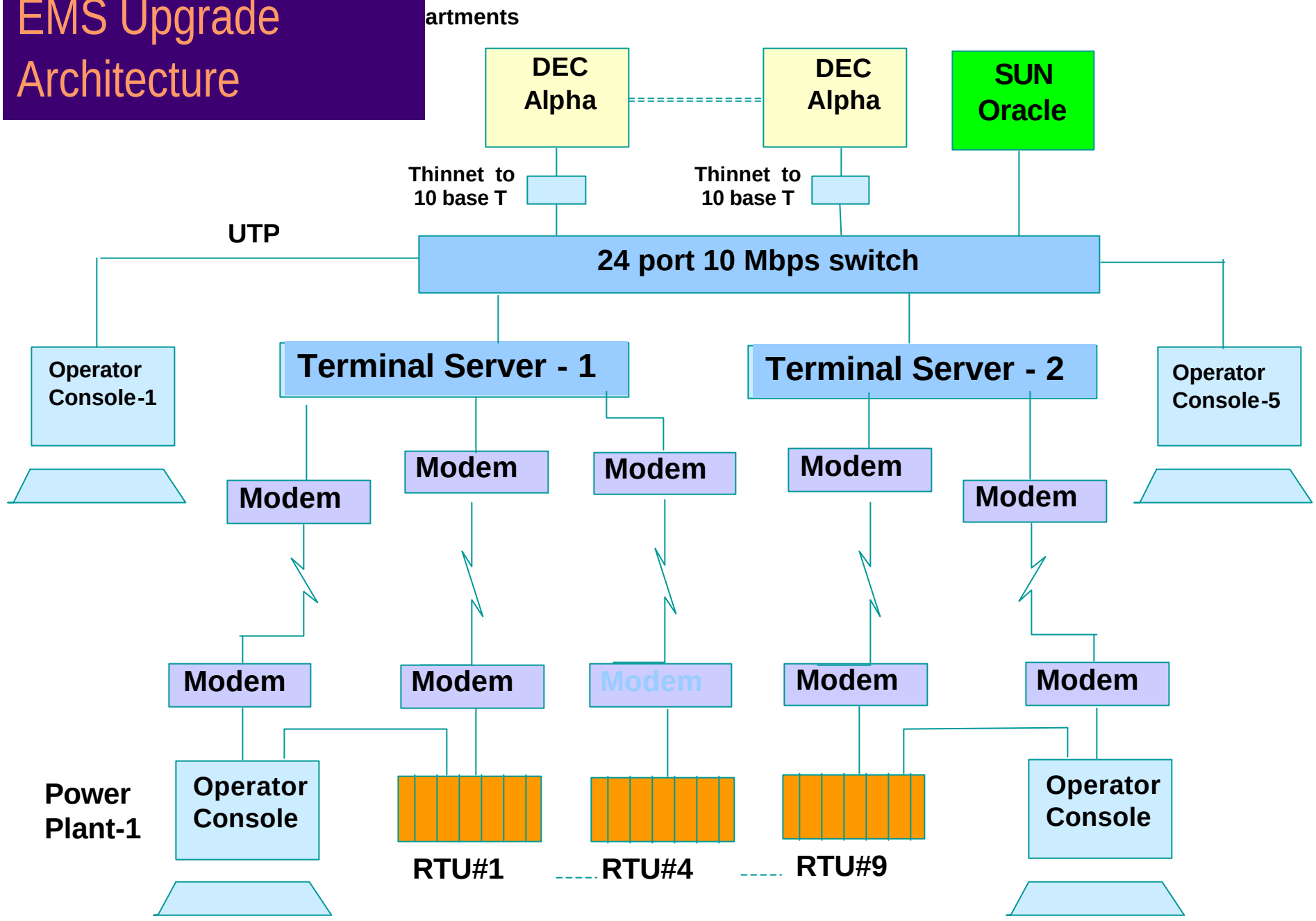
CDAC, Thiruvananthapuram and Bhilai Steel Plant (BSP) had jointly implemented a computerized Energy Management System in BSP to bring down the specific energy consumption in the plant as well as to guide the operators for efficient energy management operations. The system monitors 385 energy parameters, which includes in-house and bought out energy items and offers on-line energy information in terms of dynamic mimic displays, alarms, historic trends, energy predictions, operator guidance and energy control instructions. The total project cost is Rs. 3.17 crores.

The project was successfully commissioned during December 1996 and formal handing over of the system took place on September 11, 1997 after successful operation of the system for 8 months. The system had achieved an energy savings to the tune of Rs. 5 crores in the first year and thus paid for itself during the first 8 months of its operation. The CEMS was made Y2K complaint in Dec 1999.

Benifits

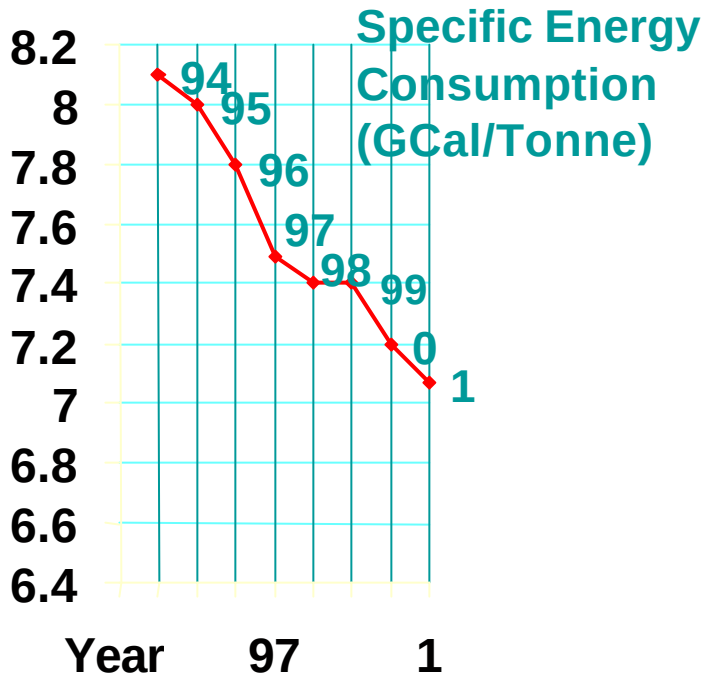
- **Real- time Energy Monitoring**
- **Advance prediction of energy availability**
- **Improved energy utilisation**
- **Reduced energy consumption**
- **Intelligent Guidance and Training**
- **Qualitative improvement in technical level of operations**
- **Operators concentrate more on judgement**

EMS Upgrade Architecture



Impact Analysis for CEMS

Reduction in *Specific Energy Consumption*



Pay-back period of
8 months