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The influence of electricity deregulation on the design, operation and management of the power plants owned by strategic and non-strategic producers. After a sensitivity analysis aimed at finding market conditions of profitable operation for thermal and hydroelectric power plants, a Nash-equilibrium market model is used to determine producers' optimum strategies, depending on their relative market power and overall production characteristics.

The various ranges of power projects, varying from the captive power plants to those in the utility sector, Power division has been segregated into four verticals.

â€¢ Small Power Plant (SPP) Group - power plants in the range of 3MW - 12MW.

â€¢ Medium Power Plant (MPP) Group - power plants in the range of 12MW - 75MW.

â€¢ Large Power Plant (LPP) Group - power projects in the range of 75MW and above.

â€¢ International Business Group â€” international projects

During plant mobilization, the systems and processes needed to run the plant effectively are in place, and that team has the skills and competencies to take full responsibility for the plant from commercial operation date. Activities include they are, Reviewing plant requirements and plant familiarization, Staff training and development, Developing and installing management systems and procedures, Participating in plant commissioning activities

Power Plant Commercial Operation Maintenance for operating and maintaining the plant in line with the owner's business objectives. Activities include:

â€¢ Day-to-day operations and maintenance

â€¢ Plant performance monitoring, diagnostics and efficiency enhancement

â€¢ Management and evaluation of maintenance contracts.

â€¢ Managing interfaces with market operations and trading

â€¢ Technology evaluation and spares management

â€¢ Health, safety and environmental management

â€¢ Planned and unplanned maintenance (including overhauls)

â€¢ Plant performance and efficiency enhancements

â€¢ Asset management planning

â€¢ Site management

â€¢ Management of fuel contracts

â€¢ Management of O&M budget and costs

Benefits of Online Plant Thermodynamics Identical thermodynamics code for plant design and online monitoring provides highest accuracy Online Thermodynamics detects as well decreases in performance of plant components failures, degradation as also drifting measurements which can have an impact on operation due to the settings.

Power plant operation is the basis for all the work, which has a vital role for the benefits the power plant. The main goal of the plant is to generate electricity, while the operating work means the monitor, open parking operations, incident handling, load adjustment, inspection checks and circumstances of the accident record deal and other work of the jurisdiction of the generator set and auxiliary equipment according to its own security requirements.

Operation management is the management of the above work. The overall goal of power management is to ensure safety in production, to detect hidden dangers of the equipment, and to achieve the goal of few people on duty in obedience to dispatching, the general operation of power system to meet the goal of maximum economic efficiency. We should complete the task the power system assigned, dispatch rationally, make full use of resources, use and dig the potential of various types of equipments and techniques, complete the main technical and economic indicators, obtain the most benefits.

In the current power generation plants, commonly used management methods are as follows: set up the operation workshop in which we set shifts. Keep the management work away from switching operation and equipment inspections. Monitor disk onstage and do switch operation and equipment inspection backstage. This model is a modern operation management framework. The prime task of maintenance of equipment service is to maintain the power plant the electricity generation, the production equipment situation, guarantees the equipment normally, the stable revolution.

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