

IFS supports NHPC's Project Kiran, the first major ERP Initiative in the hydropower sector in India



Project Kiran, a pioneering project in the hydropower sector in India, aims to increase NHPC's performance, productivity and profitability through greater coordination and increased efficiencies in resource utilization.

ERP solution to drive change

NHPC's vision is to be the leader in the use of information technology (IT) and systems to support corporate objectives. And, with the renewed thrust given to the development of hydropower in the country, NHPC plans to increase its generation capacity to 20,000 MW. With these targets in mind, NHPC decided to implement an integrated ERP system across all its project locations, power plants and head office with the objective of accelerating the construction of hydropower projects and to manage power plants competitively and maximize energy generation & profits. The ERP solution is also expected to strengthen the collaborative environment for project investigation, detailed project reporting, project clearances and other project-related areas to accelerate the construction and commissioning of major projects. It will also monitor critical project lifecycle activities from conceptualization through to decommissioning. Other areas included are contract management, inventory optimization, energy billing, and maintenance and equipment uptime. In addition, top management will be able to monitor organizational key performance indicators in real time.

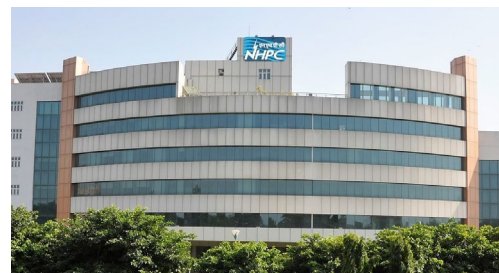
Selection process

Project Kiran was formally launched by NHPC in January 2006. NHPC focused on quality as well as cost in the bidding process. Apart from IFS, a number of leading national and international ERP OEMs and consultancies competed for the contract. IFS offered functionalities specially developed for the energy sector.

About NHPC

NHPC Limited (formerly National Hydroelectric Power Corporation Ltd.), a Govt. of India Enterprise, was incorporated in 1975 and presently has an authorized capital of 150,000 million and the objective to plan, promote and organize integrated and efficient development of hydroelectric power. Later, NHPC expanded its objectives to include other sources of energy such as geothermal, tidal and wind.

www.nhpcindia.com



Implementation step by step

IFS implemented various components in phased manner in line with NHPC's plan. The first phase covered all departments and functions at head office and Banikhet region. The first of the components—energy sales and accounting—was implemented in 2008. Phase II covered the Kolkata, Chandigarh, and Dehradun regional offices, and construction projects and power stations under them. Finally, the third phase covered the Jammu, Siliguri and Subansiri regional offices, and construction projects and power stations under them. The implementation of IFS was carried out at NHPC 31 locations: 1 corporate office, 7 regional offices, 11 power stations, 11 construction locations and 1 liaison office. The complete solution is currently being used by more than 10,000 users.

Benefits quickly apparent

By implementing IFS, NHPC expects improved project management. The solution also facilitates shorter cycle time for contractors' payments thanks to direct integration with financials. Capitalization of commissioned projects is also faster. It will also be easier to monitor estimates, contract costs and the annual budget in line with approval by government regulations. Power plant operations are also benefited. IFS facilitates data transfer between regional load dispatch centres and NHPC with minimum human intervention. Further, reports for statutory or monitoring purposes are generated automatically. Condition monitoring provides a high degree of automation to plant and equipment maintenance.

ERP has been highly beneficial for NHPC and is being successfully utilized for several key operations and functions. These include financial annual closure for 31 locations (including all power stations, projects, corporate office and regional offices), reduction in time for generation of energy bills from 2-3 days to 2-3 hours, synchronization of stores and price stock ledger (PSL) in real time, standardization of formats and processes, universal codification for materials, assets and suppliers, centralization of activities, less paperwork, online bills tracking, payments etc.

Enhanced maintenance processes

Plant equipment history is stored in the solution, making it easier to manage routine maintenance. This also facilitates preventive and breakdown maintenance. In fact, the entire maintenance process can be monitored via IFS, which automatically generates work orders if certain parameters are exceeded. Another benefit is the inventory information in the system so that planners, technicians, etc. can easily see the availability and location of spare parts. Senior management is benefited because having fault-related data so readily accessible greatly facilitates analysis.

Benefits achieved with IFS

- Single database covering all business processes
- Adoption of best business practices
- High levels of coordination and synchronization between key functions
- Increased employee productivity
- Increased quality of performance
- Elimination of data redundancy



Procurement and contracts

IFS enables a centralized vendor database and has automated all activities from purchase requests (PR) to purchase orders as well as the receipt, issue and accounting of store items and assets. Vendor evaluation parameters can be defined in the system. Also, with the tendering process configured in the system, tenders are being monitored at every stage. Similarly, having all the information in one solution enables NHPC to check whether projects are progressing according to the terms of their contracts—and alerts ensure that deviations are highlighted. Further, IFS has been integrated with 3rd party e-procurement software.

Inventory management

With all purchasing activities in the solution and uniform corporate-wide codes for equipment, spares and other inventory, it is now easier to view and check what is in stock and where. Further, vouchers related to receipts and issues are generated within the solution. With relevant account codes mapped to the inventory and asset masters based on the project and the nature of a transaction, accounting entries are generated automatically. In addition, material can be reserved against material requests, and all material transactions are based on storage location, which is configured in the solution. Inventory throughout NHPC can be viewed by all concerned.

Commercial and HR advantages

Commercial processes also benefit; bills are generated with a single mouse click and can be verified in the application, which is integrated with the financials component in IFS. The solution also makes it easier to track errors and ensure that billing parameters and formulas are complied with accurately.

Human resource management has become easier to maintain. Employee records are maintained and managed centrally and are available in real time. Users fill their leave and claims online using the employee self-service component and these are processed online. All NHPC employees use the self-service functionality. This has enabled employees to track on-line the status of their leave and personal claims.

Third-party integration and knowledge-sharing

IFS is designed and built on an open architecture, making integration with third-party software such as Primavera and SCADA smooth and painless. NHPC has trained some of its key executives to implement, manage, and maintain IFS, making troubleshooting easier and more efficient. NHPC IT&C division is progressing towards becoming self-sufficient in managing IFS.



Find out more

Further information contact your local IFS office or visit our web site, ifs.com

