CISCO ENTERPRISE NETWORKING SOLUTIONS:
BHARAT HEAVY ELECTRICALS SWITCHES ON CISCO!!

Bharat Heavy Electricals Ltd (BHEL) is one of the India's largest Public Sector companies – and the largest engineering and manufacturing enterprise in India in the energy related/infrastructure sector. BHEL manufactures over 180 products under 30 major product groups and caters to the core sectors of the Indian Economy. The company has a country-wide network of 14 manufacturing divisions, four Power Sector regional centers, over 100 project sites, eight service centers and 18 regional offices. The key to the companies continued success has been the insistence on quality & reliability to develop products that enable the company to serve its customers better.

Deploying a campus-wide Controlling System network

BHEL was given the mandate to set up a campus-wide LAN network in TWO Power Plant's – in Ramagundam, Andhra Pradesh and Rihant in Uttar Pradesh. Both these power plants are large-scale & world-class power production centres. The company has invested in state-of-the-art equipment to ensure that production processes are optimally tuned.

The company was keen to deploy a robust, high-available and secure Controlling System network at the two Power Plant campuses. The need to set up such a network was so as to create a communications network that would enable seamless communications in a campus-wide distributed LAN network. Specifically, BHEL wanted DC Power Supply switches with following features.

- Security
- Management
- Availability
- Higher level of Resiliency and Reliability
- Ability to work in harsh environments

To this end, the company invited tender applications from networking equipment vendors as well as network integrators. Cisco – along with its Premier Partner, Webcom Information Technology – offered a LAN network solution that comprised 124 numbers of Cisco Catalyst® 2955T Industrial-grade switches. An end-to-end solution was designed and deployed to not only enable intra-campus

communications, but also to run specific power plant related custom developed applications.

Given that BHEL had invited tenders for this solution, D-Link along with its partner GarettCom also offered a solution to the company. However, BHEL opted for Cisco solution, because of the following reasons:

1. Customised solutions that met and exceed all specifications laid down by BHEL
2. Cisco's 2955T Industrial-grade switches are specifically customised for harsh shop floor environments
3. Cisco's network enabled the seamless running of BHEL's MIB (Management Information Base) solution at the power plants

These specifications ensured that the solution offered by Webcom on Cisco's products was considered superior to the solution offered by the competition.

Opting for the Cisco solution

BHEL choose Cisco because of the value-added features such as DC Power supply controller, high availability, security, scalability, running of the Management Information Base (MIB) variables and QoS along with the basic requirements that were quoted – at extremely competitive prices. B Ashok, Vice President, Cisco Systems India & SAARC said, "We took the effort to understood their needs well – and worked to deliver a solution that is ready for the future. We worked extensively and went beyond the brief to understand the customer needs – and designed a solution that would deliver true value to BHEL. I am glad we have been selected over the competition – it is a testimony to the range and scalability of Cisco's solutions."

Speaking about the BHEL mandate, B Ashok added, "The BHEL contract is an extremely strategic win for us. This deployment is only the first phase of a project to take new-world networking across all BHEL facilities in India. We continue to hope that we will be able to offer solutions that will enable BHEL to network all its locations across India in the near future."

The deployment at the power plants at Ramagundam and Rihant are pilot projects for BHEL's turn-key projects division. Basis the performance of the network, BHEL will look to take up further expansion of the network – to include core switches (Cisco Catalyst 4500 series) – as well as deploying Cisco networks at other power plants across the country.