

Case Study

National Thermal Power Corporation Ltd. (NTPC)

Highlights

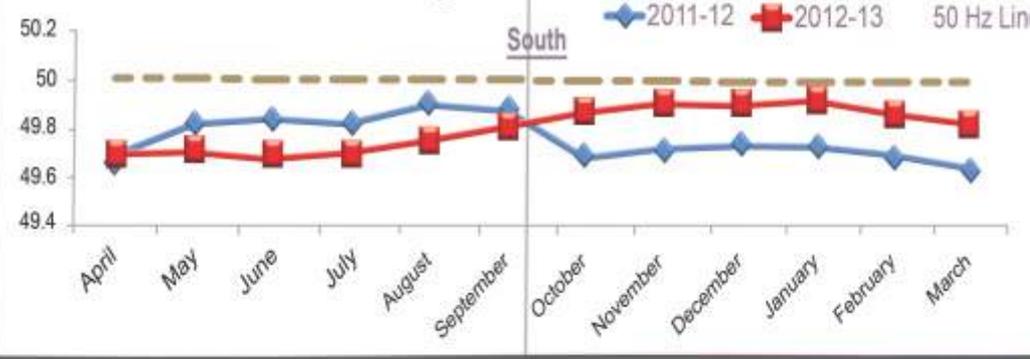
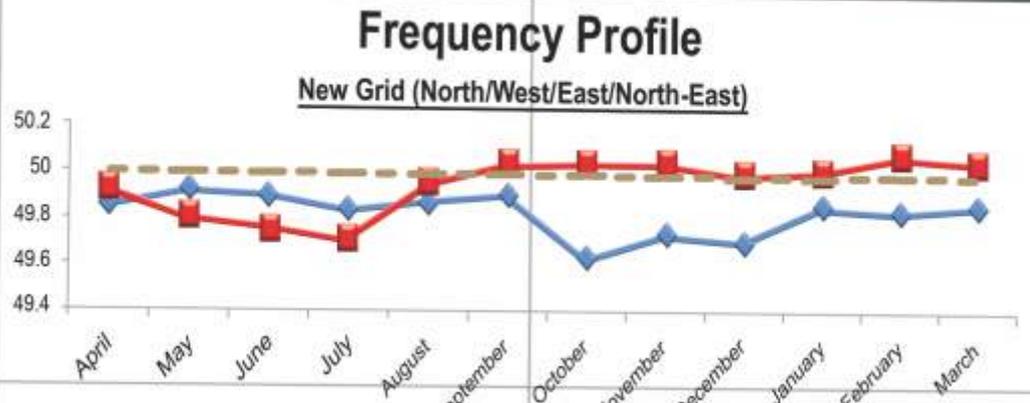
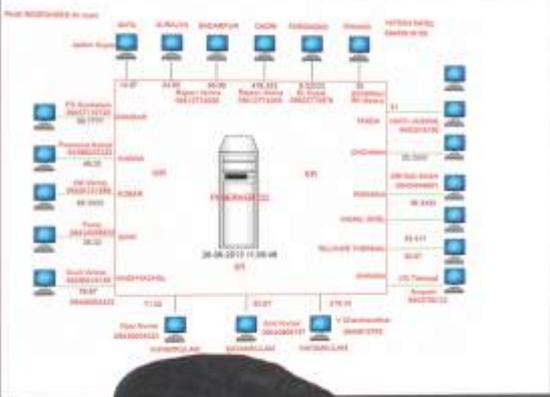
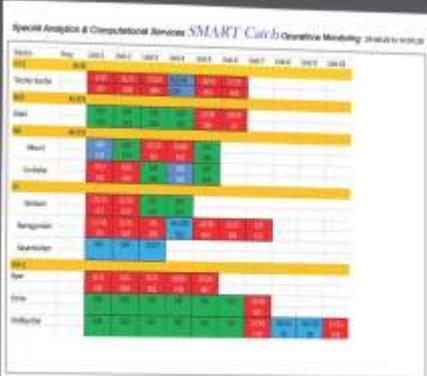
Delta Displays, a leader in providing visual solutions, successfully commissioned its state-of-the-art Video wall solutions at the SACS (Special Analytics and Computational Services) Center of India's largest power company, NTPC Ltd.

Fleet Wide Management is an initiative of NTPC for continually monitoring the reliability and performance characteristics of its key assets. This enables factors effecting reduction in production to be easily identified. Early warning of issues triggers timely and effective action, preventing huge losses.

Technologies Used

- » 50" LED-lit DLP Video wall
- » End User : NTPC, EOC, Noida
- » ICON Pro Controller





NTPC's SACS Center runs on Delta's Video wall

SACS (Special Analytics and Computational Services) Center has been established at NTPC's Noida office to provide an early warning of incipient equipment problems akin to M&D Centers as prevalent elsewhere. The aim of this center is to improve system wide reliability, decrease maintenance costs and reduce outages.

Delta's Video wall solution helped NTPC achieve its visualization demands by creating a central environment to ensure all their operations progress effectively and effortlessly. With the help of Delta's Video walls, applications for equipment condition monitoring, systems performance and benchmarking forming the first shield of analysis can be done. This allows quick focus on the desired process. Multiple Fish bone diagrams and Fault tree visualization on Delta's Video walls quickly narrows the issue for in-depth analysis.

Once alerted, the issue is quickly diagnosed and information is sent to the concerned process owners. Feedback and action taken is inherent to the system and ensures complete closure of the issue. Knowledge base is updated and it is ensured that similar issues do not recur by employing a strict PI based monitoring system. Additionally, every unit startup and shutdown is monitored against design parameters and benchmarks, the process being logged for deviations adding to the knowledge base. Delta's Video wall controllers & wall management software help in parallel monitoring of all such activities.

To ensure all these activities to progress effortlessly, fleet-wide optimization integration was imperative. Delta provided a complete solution for NTPC's initiative. This solution ensures real time specialist assistance in diagnosing, analyzing and resolution of the issues. Real-time planning, collaboration and resource pooling especially in critical issues and startups has made the SACS center invaluable.

With a limited budget and so many activities to be acted upon in real-time, NTPC invested in Delta's

LED based video wall. The 50" diagonal rear projection LED based video wall was the perfect solution offering crystal clear images. With a controller capable of handling multiple inputs and using Delta's wall management software, layout management was a breeze. An additional Matrix Switcher allowed connections from other inputs like cameras and video conferencing equipment. This ensured sharing of information and seamless communication between different focus areas simultaneously.

Delta's Icon Pro and Cube control software provides precise information on the internal workings of the video wall. Independent alerts and warnings can be set for each cube for detailed monitoring and audit. The software also has capabilities to email the alert to concerned engineer.



About NTPC

With an installed capacity of over 41,000 MW, NTPC is the largest power generating major in the country. It has diversified into hydro power, coal mining, power equipment manufacturing, oil & gas exploration, power trading & distribution. With an increasing presence in the power value chain, NTPC is well on its way to becoming an "Integrated Power Major."

NTPC operates a fleet comprising of 23 NTPC Stations (16 Coal based stations, 7 combined cycle gas/liquid fuel based stations), 7 Joint Venture stations (6 coal based and one gas based) and 2 renewable energy projects.

About Delta

Delta Displays a division of the USD 7.1 billion Delta Group, is a pioneer in developing professional display for control room solutions for surveillance, security, traffic, command & control, utilities, process control, telecom and broadcast applications. Delta offers a wide array of display technologies including: rear projection DLP video walls with Gen2013 LED technology, super thin-bezel LCD video walls, and high-resolution indoor/outdoor LED displays with a powerful & highly flexible Wall management Software suite.

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