Triveni TURBINES

Industry Case Study

Utility Power Plant

Case Studies:

Restoration and High-Speed Balancing of a 250 MW Turbine's IP-LP Rotor

The Challenge

Our client, a prominent energy company, encountered a critical situation during their annual turbine overhaul. In their 250 MW turbine, three rows of rotor blades were discovered to be damaged. This unexpected problem led to an extended period of outage, posing a threat to the plant's productivity and profitability.

Seeking a Solution

Given the pressing need to resume operations swiftly, the client initiated a quest for an alternate service provider capable of performing the necessary repairs while adhering to OEM (Original Equipment Manufacturer) standards. With time being a critical factor, securing a reliable partner was of utmost importance.

Identifying Triveni Turbine Limited

Following a comprehensive assessment of potential service providers, the client determined Triveni Turbine Limited as the ideal candidate to carry out the essential turbine work. Triveni's distinguished reputation for turbine maintenance excellence, coupled with its proven track record of delivering results, closely matched the client's expectations.

Triveni's Proactive Approach

Right from the project's inception, Triveni Turbine Limited displayed a proactive stance. They were quick to engage with the client and outline a comprehensive plan for the turbine's restoration. Triveni's commitment to efficient project management and their ability to leverage their extensive network of partners played a pivotal role in expediting the restoration process.

Repair and Restoration

Under Triveni's guidance, the damaged rotor, comprising three rows of blades, underwent a meticulous process of repair and restoration. A team of skilled technicians and engineers worked diligently to restore the rotor to OEM specifications. This process involved:

Blade Replacement: Damaged blades were expertly replaced with new, high-quality components.
Balancing: High-speed balancing was performed to ensure the rotor's precision performance, preventing vibrations and ensuring long-term reliability.
Quality Assurance: Throughout the restoration, strict quality control measures were implemented to guarantee that all work met or exceeded industry standards.

Successful Commissioning

Following the successful completion of repairs and restoration, the turbine was effectively commissioned. Thorough testing and precise adjustments were carried out to ensure its ability to operate at its designated full capacity of 250 MW.

Efficiency and Quality Assurance

The project's efficiency was a notable achievement. Triveni Turbine Limited managed to complete the restoration swiftly without compromising on quality or engineering standards. The client could trust that the turbine would perform reliably for years to come.

Conclusion: Efficient Restoration, Enhanced Performance

In conclusion, Triveni Turbine Limited's proactive response, technical expertise, and unwavering commitment to quality played a pivotal role in restoring our client's 250 MW turbine to optimal functionality. This case study highlights the benefits of partnering with a service provider that not only meets OEM standards but also ensures efficiency and minimal downtime during critical maintenance and repair projects.

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Thank you.