

BRIGHTON BEACH POWER MAXIMIZES ASSET PERFORMANCE AND SETS THE STAGE FOR IMPROVED RELIABILITY WITH IVARA

Brighton Beach Power L.P. is a natural gas-fired, combined cycle power plant established by a limited partnership between ATCO Power Ltd and Ontario Power Generation (OPG) in 2004. The 580 megawatt power generating station is located in Windsor, Ontario.

The Situation

Brighton Beach Power is one of the largest natural gas-fired combined-cycle plants in Canada. The plant consists of two state-of-the-art natural gas-fired turbines coupled with electricity generators, a heat recovery system and a single steam turbine coupled with a third electricity generator.

The waste heat from the gas turbines is captured in the heat recovery system and used to produce steam which runs a steam turbine connected to a generator. The high efficiency configuration, referred to as a “combined cycle” plant, began commercial operation in July 2004.

In order to achieve their primary business goal of providing reliable and efficient electric power, reducing operating risk and maximizing generation reliability is critical.

Long before commencing operations, the organization recognized that asset reliability was vital to their long term success. Capital assets represent the single largest investment at Brighton Beach Power and their continued availability and reliability is fundamental to their bottom line.

The Challenge

Brighton Beach Power required a solution that would offer both the traditional capabilities of a CMMS to meet their immediate work execution needs and the ability to enable them to grow into a reliability-focused approach to maintenance.

As a new power plant, there were also many unknowns about how an asset reliability solution would work, as no operating precedent was yet established. Brighton Beach Power required a vendor with extensive experience in the utility industry to get in at ‘the ground level’ and implement a seamless work

execution system as well as establish a foundation for future reliability initiatives.

In addition, as their new power plant was being commissioned, Brighton Beach Power collected vast amounts of asset data ranging from engineering drawings to equipment specifications. They needed a solution that could quickly capture this critical data as it would be valuable information for maintenance once the plant went live.

Brighton Beach Power also recognized the need to build internal support for the solution to ensure success. This could only be achieved if the solution was user-friendly and scalable. Likewise, an effective implementation and training process was vital to secure ‘buy-in’ from maintenance and operations alike.

The Solution

After an extensive evaluation, Brighton Beach Power selected the Ivvara Reliability Solution to optimize asset performance and maximize generating capacity.

The Ivvara offering was the only solution that combined both CMMS functionality with the industry’s leading reliability software.

From project definition and planning, to testing and execution, Ivvara’s Reliability Practitioners ensured that the implementation met the needs of the Brighton Beach team. The large amount of equipment data collected during the plant’s commissioning was captured and available in the CMMS when the plant began operations. The implementation was completed in only 56 working days and allowed Brighton Beach Power to quickly prioritize and plan maintenance work.

Ivvara’s training services ensured that all types of users with varied levels of computer experience were fully equipped with the knowledge and skills required to sustain the solution.

Similarly, the ease of use inherent in the Ivara software was critical to securing acceptance for the initiative. Users were quickly up and running with the software and it was easily adopted into their everyday work. In addition, the software's flexibility and scalability allowed Brighton Beach Power to tailor it to meet their unique needs.

The Result

Since the plant's commissioning, Brighton Beach Power has experienced industry leading commercial availability levels. The combination of Ivara's reliability technology and expertise has helped to ensure that asset performance is optimized and the plant is consistently able to deliver the required power generation capability.

With the Ivara Reliability Solution, Brighton Beach Power got more than just a work management tool. They now have a solution that combines the best in class CMMS functionality with the industry's leading reliability software. Ivara satisfied Brighton Beach Power's immediate need for a work execution solution while supporting their long term strategy for improved reliability.

Conclusion

In today's market, where the demand for power is at an all time high, asset reliability is critical to a power generators' success. With Ivara, Brighton Beach Power continues to maximize equipment performance and plant capacity by avoiding costly unplanned outages, while maximizing the effectiveness of planned outages. Maintenance and operations teams are working together to proactively manage the health of the company's assets and support the primary business goal of providing reliable and efficient power.