

O&M agreement gives power producer peace of mind

CASE STUDY: GULF POWER LIMITED



“WE ARE VERY IMPRESSED WITH THE CURRENT PERFORMANCE. SINCE THE COMMISSIONING WE HAVE CONTINUOUSLY MET THE REQUIREMENTS OF OUR KEY PERFORMANCE INDICATORS.”

The Kenyan Independent Power producer, Gulf Power Limited (GPL), entered the energy market in 2009 with the sole intention of selling power. As such, they signed an Operations & Maintenance (O&M) agreement with Wärtsilä Eastern Africa Ltd.

“To be able to focus on our core business, we needed to find a good and experienced contractor that could professionally take care of the operation and maintenance of the power plant. Wärtsilä Eastern Africa fulfils our requirements,” says Mr Norman Wanyiri, General Manager for GPL at Athi River II medium speed diesel power plant in Nairobi, Kenya.

Gulf Power won a competitive bid to finance, construct, own, operate and maintain a power plant, and sell electricity to Kenya Power & Lighting Company as per the Power Purchase Agreement between the two parties. Operating and maintaining the power station themselves would, however, require an experienced operator. In

addition, the power plant should meet certain performance guarantees in relation to operating efficiency, plant reliability and availability, which is only achievable through proper maintenance. GPL therefore needed to sign an O&M agreement with an experienced contractor that could operate and maintain the plant.

CHALLENGE

- Fulfilling the customer’s need to find an experienced contractor to operate and maintain the power plant with required output.

SOLUTION

- Signing a complete Operations & Maintenance agreement for 10 years to ensure that the power plant always delivers the required power output.

BENEFIT

- Peace of mind: the customer can fully concentrate on the core business of selling power
- Optimised operation and guaranteed performance
- Lifecycle cost guarantee and risk management.

Gulf Power is majority owned by Gulf Energy Ltd. The company was founded in 2005 with the goal of providing energy solutions to the energy sector in Kenya. Gulf Energy source, charter, export, retail and stock petroleum products for use in East Africa. The company has retail outlets in all major towns in Kenya, and modern terminals in Nairobi and Mombasa. Gulf Power and the Athi River II power plant are the company's entrance into the power generation market.



– With all this in mind, we decided to contact Wärtsilä Eastern Africa, a local company wholly owned by Wärtsilä Finland, which was contracted by GPL to engineer, procure and construct the power plant, says Mr Wanyiri.

In 2012 Gulf Power signed a complete Wärtsilä O&M agreement for 10 years. This solution allows the customer to focus on their core business – selling power – while resting assured that the 80.32MW medium speed diesel powered thermal power plant, consisting of 10 Wärtsilä 20V32 engines, is always performing as required.

O&M ENABLES THE CUSTOMER TO FULFIL POWER-SELLING OBLIGATIONS

The tailor-made O&M contract was a result of a natural process and the team to operate and maintain the power plant was assigned locally from Wärtsilä Eastern Africa. The plant provides base load power to the national grid of Kenya.

– We have an agreement with the government majority-owned Kenya Power and Lighting, to sell electricity to the national grid. Our Power Purchase Agreement is binding for 20 years, says Mr Wanyiri.

The Athi River II power plant must be available 24/7 because in Kenya there is a system that permits the power purchaser to request energy whenever it is needed. So, any time the plant is not operational, the power purchaser may require GPL to start

up part of the plant or the entire plant at very short notice.

– Because of the dynamic dispatch, the power plant needs to be available at all times, explains Mr Wanyiri.

Mr Wanyiri is very satisfied with the performance of Wärtsilä's people on site and how they have managed to keep a constant high-performance level of the plant. For the last two and a half years, the performance of the plant has been excellent.

– We are very impressed with the current performance. Since the commissioning, we have continuously met the requirements of our key performance indicators. The power plant has been maintained well, and we are satisfied with the performance of both the plant and the Wärtsilä O&M staff.

“NO WORRIES!”

Included in the Wärtsilä operation & maintenance solution are certain performance guarantees for the plant operations. These are guarantees for availability, fuel consumption, efficiency, lube oil consumption and maintenance, among others.

– The greatest benefit with the O&M agreement is that it allows us to leave all the worries about maintaining and operating the plant to Wärtsilä and be able to rely on the power plant to deliver power according to the power purchaser's despatch requirements. We know by now that Wärtsilä's O&M people operate the plant professionally and efficiently, says Mr Wanyiri.

Concerning Gulf Power's business, he adds that Wärtsilä shows great support and understanding.

– Wärtsilä has been around for quite a long time now in East Africa, and they understand the local market and the energy sector. Therefore, it is easier for them to comply with the Kenyan Energy Act, among other regulations. They are also very experienced, having a significant number of O&M assignments in our region, so they have a good general view of our market, says Mr Wanyiri.

EVERY PLANT OWNER SHOULD HAVE AN O&M AGREEMENT

Mr Norman Wanyiri concludes the interview by saying:

– I think that every power plant operator or owner should have an O&M agreement with an experienced operator. Unless equipped with good experience, an owner should not trust themselves to run a plant alone, but to get an experienced O&M contractor to do it instead. I recommend all owners of a Wärtsilä power plant to sign an O&M agreement with Wärtsilä because you must also remember that they guarantee that only OEM parts are used in your plant. Another benefit is that you will always get the latest upgrades and technical improvements that are released during the agreement period, even without requesting them.