



Electricity disruptions directly impact businesses and homes, hence a speedy solution to fix power outages is critical. Mitsubishi Power helps its customers to get back online fast through its quick response, even through COVID-19 restrictions as attested to by its customers in Luzon, Philippines.

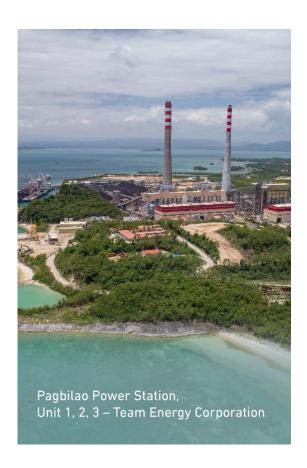
Challenge

Many coal-fired power plants in Luzon, the main island in the Philippines, suffer from rotational and unplanned outages. Part of the reason is due to ageing coal power plants, typically 20-30 years old, experiencing unplanned outages. It is difficult to upgrade them as this means being offline for several months, which plant operators cannot afford due to contractual delivery obligations. Luzon's constantly growing energy demand has left little spare grid capacity.

This situation has led to regular outages which can cause blackouts if too much electricity production is lost from the grid. Blackouts necessitate the use of backup generators which use more expensive fuels such as oil and therefore raise generation costs. This makes a speedy response time to outages crucial.

Mitsubishi Power delivers prompt and effective responses to Boiler Tube Leak Repair emergencies, ensuring adherence to plant requirements and protocols. They are easy to reach and prepared to handle emergencies with qualified personnel, appropriate services for different tube leak situations and reporting requirements.

Dr. Larry "LT" Medrano VP-Operations/Pagbilao Station Manager Team Energy Corporation





I would like to commend Mitsubishi Power for your immediate response to our call when we had issues with our boiler. You provided us with very exemplary and quality service during the repair of our boiler. It was a good experience working with your team and we are more than happy to recommend you to other power plants.

Artemio Boado Jr. Plant Manager, GNPower Mariveles Power Plant

Solution

The year 2021 was especially challenging due to COVID-19 movement restrictions.

Mitsubishi Power was able to mobilize the Quick Response Team (QRT) that was set up to ensure timely response to customers. Between 20-100 local members could immediately be dispatched, depending on the severity and scale of outage.

Mitsubishi Power responded and deployed personnel within 24 hours to address emergency incidents at a power station, such as boiler tube leakage.

The company has nearly 1,600 staff in the Philippines. It houses the only boiler manufacturing plant in the country, including facilities such as a fabrication shop that can quickly produce and install equipment like pipes.

Results

The following are some of the repairs that the team did in 2021, all which were responded to within 24 hours of an incident report being filed:

| Work done | Number of days to fix issue after mobilization |
|-----------------------------|--|
| Convection bank tube repair | 3 |
| Tube leak repair | 4 |
| Boiler tube replacement | 4 |
| Economizer tubes repair | 6-7 |
| Header repair | 8 |

Minimizing outages and reducing plant downtime is important for power plant operators, and Mitsubishi Power has the data, technology and resources to help plant operators rapidly identify issues and to resolve those issues quickly.



Mitsubishi Power completed the tube replacement scope in our U2 cyclone within the given timeframe, with acceptable quality. The welders were very skilled and passing rates were high, resulting in a positive outcome from the engagement.

Venkata Siva Reddy Jaddu, Chief Technical Consultant, SLTEC Power Plant

Mitsubishi Power is a power solutions brand of Mitsubishi Heavy Industries.