

aggreko

Innovative solution and virtual pipeline to meet seasonal peak demand

CUSTOMER

Energía Solar Cachanilla (ESCO)

LOCATION

Mexicali, Baja California, México

SECTOR

Utilities

APPLICATION

Seasonal peak demand

FUEL TYPE

Natural Gas & LNG



KEY FACTS

48 MW

of reliable energy

2 sites

2 types

of fuel

3.3 million

people benefiting

THE CHALLENGE

Bridge projected power deficit and change fuel type after project installation

Energía Solar Cachanilla (ESCO) is a company with more than 15 years of experience commercialising electrical energy for the Baja California peninsula in north-western Mexico.

Having a reliable energy supply was vital for the economy of the region, namely tourism and key commercial activity.

To cover the projected deficit for the summer of 2020, the customer had to supply additional power to the electrical transmission system.

The generation equipment had to be installed in the city of Mexicali, which registers the highest

temperatures in Mexico, the lowest levels of rainfall and is one of the areas with the highest seismic activity in the country - so operation in adverse conditions had to be guaranteed.

Furthermore, due to the disruption in the supply of natural gas that would normally be used as fuel, the customer needed to have a flexible solution that could operate with gases of different compositions, as it would be supplied by two different routes: conventional gas pipeline and a virtual gas pipeline.

VALUE PROPOSAL

- Mobilisation of equipment and personnel in less than 90 days - even during a global pandemic
- Highly flexible and efficient equipment for power generation from two different natural gas sources
- Contractual flexibility regarding payment terms



THE SOLUTION

48 MW of reliable energy from conventional and virtual gas pipeline

We offered a comprehensive solution, consisting of 62 natural gas generators distributed in 2 locations, which would be operating 24/7 to generate 48 MW of energy.

The installation of our equipment was carried out during difficult times where the movement of people and equipment was restricted globally. At Aggreko, we know how to work in adverse conditions, we excel at effectively coordinating the mobilisation of teams and expert personnel from different countries even with unprecedented restrictions.

We worked together with local and international authorities to meet the installation deadlines of the project.

We mobilised more than 190 equipment containers as well as a multinational group of technicians from Brazil, Panama, the United States, Ecuador, Venezuela, Dubai, the United Kingdom and of course, Mexico to successfully install in Mexicali. Our Quality, Health, Safety and Environment (QHSE) team monitored compliance with all the guidelines and recommendations established to guarantee the health and safety of staff, clients and nearby communities during the pandemic.

In addition to the logistical and environmental challenges (temperatures greater than 50° C), after installing and

commissioning, another situation arose that challenged the optimal functioning of the project.

During the contracted time, our customer faced a bigger unexpected challenge when their permanent fuel supply failed. This unexpected gas shortage meant there wouldn't be enough fuel for us to operate, leaving ESCO unable to meet its end user's power supply terms.

ESCO decided to contract fuel supplier Stabilis Solutions to provide LNG (Liquefied Natural Gas) and thus overcome the fuel shortage that would last around 100 days. The fuel was supplied via trucks, as a virtual gas pipeline and was re-gasified and introduced into the ESCO pipes, from where our generators were connected.

The flexible nature of our technology and approach became a critical benefit for ESCO, especially after installation. We worked closely with Stabilis on behalf of ESCO to determine the LNG specification and adjust our equipment to generate energy from the new type of gas, achieving zero impact on the total quantity delivered.

At Aggreko, we specialise in understanding the changing needs of our clients and thus supporting them to solve all their challenges. We face any challenge head-on to ensure we can provide the energy required for your operations to continue uninterrupted.





At ESCO we work every day marketing energy and supporting our clients with their energy demands for the citizens of Mexicali. Doing so efficiently and safely in times of exceptional demand is a challenge. That is why we add the help of Aggreko, which guarantees us an additional 48 MW so as not to take any risk.

Jorge Valdéz
Gerente General de ESCO

THE AGGREKO DIFFERENCE

Flexibility to provide whatever solution you need, even after installation

THE IMPACT

Successfully meet supply obligations despite pandemic and fuel supply failure

ESCO was also able to seamlessly integrate a virtual pipeline of LNG into the gas supply, enabling them to continue to meet their obligations despite the 100 day gas shortage they encountered.

This ultimately ensured ESCO was able to incorporate 48 MW into the electricity distribution system of Baja California, meeting the seasonal peak demand and enabling 3.3 million residents of the peninsula to enjoy an uninterrupted energy service.

