

# POWER PROFILE

**Customer:** Bella Vista Hospital

## Location:

Mayaguez, Puerto Rico

## Customer Business Issue:

Standby power

## Solution:

Hospital:

- One Cat® 1500 kW 3512 diesel generator set
- One Cat 1 MW C32 diesel generator set
- One Cat 500 kW 3412 diesel generator set

Clinic:

- One Cat 500 kW C15 diesel generator set
- Customer Value Agreement (CVA)

## Cat® Dealer:

RIMCO



*Located high in the mountains at 1,000 feet (305 meters) above sea level, Bella Vista Hospital is a source for health and safety for its patients and the surrounding population of 89,000.*

## POWER NEED

Bella Vista Hospital is a major acute care medical center located in Mayagüez, Puerto Rico, serving the people of this area for over 50 years. Situated high in Cerro Las Mesas, at 1000 feet (305 meters) above sea level, the hospital is a source of health and safety to its patients and the surrounding population of 89,000. Bella Vista provides medical services and healthcare facilities of the highest quality to its patients with acute needs, requiring specialized services.

In addition to the main structure of this healthcare facility, Bella Vista counts with other clinical facilities and offers a wide range of services with 12 different specialties units, including radiation, pediatrics, rehabilitation, respiratory, physical therapy and wound care. The hospital offers chaplaincy services that provide spiritual and emotional support to its patients, their families and employees, which has been the central mission of the hospital's original foundation.

Even though the hospital was named for its breathtaking views and the panoramic scenery, due to its high location during season of intense rain and hurricanes, extreme weather causes interruptions on the main power supply. Bella Vista experienced massive outages on September 21-22, 1998, when Hurricane George, a category 4 storm, left the hospital with no power for days. While the Federal Emergency Management Agency (FEMA) helped configure a generator set to serve the critical department, the hospital was forced to operate without air conditioning or elevators. Each minute without air conditioning was uncomfortable for their patients.

Since this disaster, Bella Vista made a commitment to its staff and patients that it would never see a massive outage like this again. Even during Puerto Rico's rainy seasons, the hospital experiences outages of up to one hour from damaged power lines that must be repaired. Because of these events, it became crucial to have backup power for all areas – not only the most important – to guarantee the best possible environment for patients to recover under any circumstance.

## SOLUTION

Bella Vista turned to the most trusted name in power generation – Caterpillar. “For a hospital with hundreds of patients and countless surgeries, we cannot have any issues in a life critical environment,” said Jesus Nieves, Chief Executive Officer at Bella Vista Hospital. “We needed equipment that we were confident in. To us, Caterpillar was the obvious choice because of its longstanding, solid reputation for providing the most reliable products.”

Another main reason for turning to Caterpillar to provide the hospital with standby power was the strong representation that Cat dealer RIMCO had already established within Puerto Rico. “We wanted a brand that offered high quality, durable products as well as a local dealer who provided reliable service we could trust and rely on when needed most,” Nieves said. “RIMCO became our relief after the storm.”

At first, a Cat 500 kW 3412 standby generator set was installed to provide immediate relief in 1999. With the opening of several new clinical facilities, plus expansions and additions, Bella Vista turned to RIMCO yet again in 2010 to install three more diesel units, raising the total standby power supply to 3.0 M, increasing redundancy at the main location and providing backup power to surrounding facilities.

With so many lives always at stake, Bella Vista cannot afford any uncertainties. Having two redundant units is necessary to keep patients safe and reduce any downtime. If a portion of the site is down because of maintenance or weather-related issues, the redundant unit begins to operate at the same level of protection and the load is unaffected. “We save lives every single day, so we cannot take a chance of letting one slip through our fingers because of a problem that could be avoided. We can all sleep a little easier at night knowing that we have Cat systems keeping things running no matter what,” said Nieves.

In this case, redundancy was also used to account for planned growth and greater site reliability. As Bella Vista continues to increase its capacity, these units will be able to handle

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bigger loads. “We would like to continue to develop well into the future, and we are confident that these generator sets will take us there,” Nieves added.

## RESULTS

RIMCO services Bella Vista’s generator sets and provides technical support whenever necessary. The hospital’s CVA includes scheduled oil samplings and other regular maintenance services. The agreement was renewed this year.

“We have been working with Bella Vista for many years to provide power solutions to the hospital and surrounding clinical facilities. Together, we have found solutions that do not falter in times of need,” said Misael Padilla, sales engineer for RIMCO.

The service relationship that RIMCO and Bella Vista have forged is because of the strong local dealer networks that Caterpillar supports. “Cat dealers are always there to support their customers. Service is always excellent and we

trust RIMCO with all of our units,” said Nieves. With several rental locations throughout the island, RIMCO can provide parts or service almost immediately. “Whenever we open another clinical facility, we will always turn back to RIMCO to install a new Cat generator. They will be our answer to any future expansions.”

When looking back to the situation the hospital was in before Caterpillar and RIMCO, Nieves was shocked by the power conditions the hospital was able to operate through. “We started with nothing. We had no way to provide constant power flow to our hospital and clinics when severe weather brought area-wide power outages with a less than ideal disaster preparedness operation plan. With help from RIMCO, we now have three power generation systems that keep our facility running smoothly at all times, despite any weather that comes our way,” Nieves added.

For more information, please visit [cat.com/powergeneration](http://cat.com/powergeneration)



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