“OUR SOLUTION WITH TROJAN BATTERY BACKUP HAS CONSIDERABLY REDUCED THE HIGH OPEX AND CO₂ EMISSIONS PREVIOUSLY PRODUCED AT THIS SITE. THESE SAVINGS SHOULD RESULT IN THE SYSTEM’S ROI IN LESS THAN FOUR YEARS.”

GEORGE MATHEWS  †  TEAMSUSTAIN

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>CHALLENGE</th>
<th>SOLUTION</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>To provide reliable power to Base Transceiver Stations.</td>
<td>Solar-based system with a properly sized battery bank to power remote telecom sites.</td>
<td>More reliable, affordable and “green” power for telecom stations critical for providing communication services to rural, off-grid areas.</td>
</tr>
</tbody>
</table>

24 BATTERIES

10 SITES

4 YEARS ROI
LOCATION

10 Base Transceiver Stations (BTS) in rural India.

CHALLENGE

BTS has many telecom network sites located in remote areas where no grid access is possible, or access to the grid is unreliable. These sites were previously powered by diesel generators, which were expensive, loud, and had high CO₂ emissions.

SOLUTION

A solar-based system with a properly sized battery bank to power remote telecom sites was installed. For the telecom market in India, Trojan’s project integrator, TeamSustain, has developed a unique climate-controlled battery enclosure to house a Trojan flooded battery bank for American Tower Co. The enclosure protects the flooded batteries from the elements and provides easy access for routine maintenance such as battery watering.

SYSTEM SPECIFICATIONS

- Batteries: (24) Trojan SPRE 06 415* deep-cycle flooded batteries, Premium Line
- Battery Bank: 48V 1021 Ah
- Installed Solar Capacity - Phase 1: Five sites with 6.6 kWp, and five sites with 5.88 kWp
- Charge Controller: OutBack

*The Solar Premium SPRE 06 415 battery was previously known as the L16RE-B battery.

OUTCOME

More reliable, affordable, and “green” power was provided for telecom stations key to the provision of wireless communications to rural, off-grid areas of the country.