

Case Study

PT Hutchison CP Telecom (HCPT) Installs Over 150 IdaTech Backup Power Fuel Cells on its Telecom Network in Indonesia

Background

PT Hutchison CP Telecom is a well established telecommunications company providing wireless mobile services to 16 million customers in Indonesia, making sure that its 12,000 cell towers operate reliably and with no disruption in service through 24 provinces across the Indonesian archipelago is a critical challenge.

Challenge

The island of Sumatera has poor grid quality where it is not uncommon to experience up to 40 hours a month of power loss during some period of the year. Hutchison's Indonesia standard backup power supply consists of large battery banks which have a limited lifetime in the tropical environment and standby diesel powered generators, which can be unreliable and costly to maintain. Additional disadvantages of batteries and generators include high emissions, hazardous waste, theft and loud noise which create issues with local communities.

Hutchison Indonesia needed to find a reliable, extended run backup power solution that would provide reduced carbon emissions, minimal maintenance and low noise level.

Solution

In March 2010, Hutchison Indonesia chose IdaTech's ElectraGen™ H2-I fuel cell system from Cascadiant, IdaTech's Indonesian partner, who offered a full service backup power solution including installation, maintenance, monitoring and refueling of the fuel cell system.

The ElectraGen™ H2-I fuel cell system was a perfect backup power solution. The system provides up to 2.5kW of power, fueled by hydrogen gas, which produces zero emissions and requires minimal maintenance, resulting in low OPEX. Additionally, it operates very quietly and is less susceptible to theft.

By the end of 2010; more than 100 units of IdaTech's ElectraGen™ H2-I fuel cell systems were already in operation in two regions of Sumatera Island. The systems performed as expected, running up to several times a week in response to power interruptions. Cascadiant installed and commissioned the systems and provides 24hrs/365 days monitoring services and refuels the hydrogen cylinders as needed.

Result

Hutchison Indonesia has deployed over 400 fuel cell systems in Sumatra; Java; Bali and Lombok since 2010 improving its network availability. This sizeable installation confirms the attractive value proposition of backup power fuel cells and demonstrates the growing trend to support eco-friendly solutions.



Overview

Site: Sumatera and Java Indonesia

IdaTech Systems Deployed: +150

Application: backup power for a mobile base transceiver station

Product: ElectraGen™ H2-I System

Configuration: 2.5kW, 48 Vdc

Fuel: Hydrogen gas

Customer Motivations: Improve site availability, reduce community issues (noise and theft) and promote eco-friendly solutions by reducing emissions.