

## Case Study

# SFR powers remote base station with reliable, environmentally friendly ElectraGen™ XTR Skid backup power fuel cell system.

### Background

SFR, a subsidiary of Vodafone, is the second-largest telecommunications provider in France, with 19.6 million mobile customers. The company has nearly 6 million 3G customers, and it competes in fixed-line and Internet service as well. SFR's GSM coverage is available to 99 percent of the population of France, and service area coverage and network reliability are vital to subscriber growth. Accordingly, reliable backup power for the company's remote wireless base stations is a critical concern.

### Challenge

SFR needed to install a reliable, autonomous backup power solution at its mobile network base station in Pigna Corbino, Corsica, France, an environmentally sensitive area where grid failures frequently occur. Space restrictions and UNESCO regulations precluded the use of diesel generators. Similarly, hydrogen storage was not feasible due to the remoteness of the location.

### Solution

In January 2008, SFR chose the IdaTech ElectraGen™ XTR Skid System from Chloride, IdaTech's international distribution partner in France. SFR installed this extended run backup power fuel cell system in its mountaintop Pigna Corbino telecommunications shelter. The system can generate up to 5 kW of 48 Vdc power for over two days of continuous operation.

The IdaTech ElectraGen™ XTR Skid System efficiently reforms HydroPlus liquid fuel (methanol and water) into high purity hydrogen on demand. This eliminates the challenges of storing hydrogen onsite. Significantly, it also eliminates the bulk, noise and negative environmental impact of diesel generators.

### Results

The small footprint of the fuel cell and reformer system easily accommodates the space restrictions of SFR's Pigna Corbino site. The system's ability to generate hydrogen on demand provides dramatic cost and logistical advantages over traditional hydrogen delivery and onsite storage. And it gives SFR the advantage of an environmentally friendly backup power solution that is reliable, quiet and can operate for days without refueling.



### Overview

**Site:** Pigna Corbino, Corsica, France

**Application:** Backup power for a remote wireless base station

**Product:** ElectraGen™ XTR Skid System

**Configuration:** 48 Vdc

**Fuel:** HydroPlus (210 liter tank)

**Customer Motivations:** High reliability, long run times, autonomous operation, minimal maintenance, and low environmental impact