

OUTAGES HAPPEN. IS YOUR BACKUP POWER READY?

Upgrade your backup power solution with modern, reliable Altergy fuel cells

Electricity at substations and telecommunication networks is required in order to maintain grid operations. Utilities often cannot control when weather or other unforeseen events can cause the grid to go down. Because outages do occur, utilities have historically protected their operation by backing up networks and switching centers with batteries and generators. However, these antiquated solutions are no longer the best solution for the imperative job of keeping critical infrastructure functioning during an outage.

Altergy's Freedom Power fuel cell systems have been providing the most reliable, cost effective, extended runtime back up power solutions to telecom operations, emergency response and homeland and government applications for almost two decades. These clean power solutions allow utilities to replace both batteries and/or generators to modernize backup power to critical infrastructure in their substations. These systems feature Altergy's revolutionary Freedom Power Technology with extremely robust construction, delivering power conditioning and regulation capabilities that increase efficiency and keep electricity flowing.

With more than 8.3 million watts deployed and 32 million operational hours logged, Altergy fuel cells have provided continuous power during grid outages caused by events like Hurricane Sandy, the earthquake in Napa, CA and the most destructive fire in California history in Paradise, CA. Altergy has been a trusted backup power partner since 2001.



Altergy's Freedom Power System





The unquestioned workhorse and durability leader

- Eliminate well known issues with batteries and generators
- 99.999% Reliability
- Low cost maintenance leading to a significantly lower total cost of ownership
- Zero-emission fuel cell certification supports sustainability initiatives
- Made in USA

Altergy's Freedom Power fuel cells provide freedom from:



Better Backup Power with Altergy's Fuel Cells

	 VS. 	 VS. 
	Altergy Fuel Cells vs. VRLA Batteries	Altergy Fuel Cells vs. Diesel Generators
	End the cycle of constantly buying replacement batteries	Eliminate noise and see how clean outperforms dirty
Cost	Altergy fuel cells have lower CapEx costs, lower ongoing maintenance costs, and lower total cost of ownership than batteries.	Altergy fuel cells have lower CapEx costs, lower ongoing maintenance costs, and lower total cost of ownership than diesel generators.
Space Allocation	Batteries often require conditioned indoor space while fuel cells can operate outside with no enclosures.	Toxic and noise emissions limit deployment of diesel generators while fuel cells are clean and extremely quiet.
Environmental Impact	Batteries tend to be replaced every few years, and must be disposed of through a heavily regulated process; fuel cells produce clean power and have a design life of more than 20 years.	Diesel generators face ongoing regulatory restrictions in an effort to decrease noise and greenhouse gas emissions, and address climate change; Altergy fuel cells are CARB-certified to produce zero emissions.
Durability	Heat, other environmental conditions, and discharge cycles decrease battery performance and lifespan; Altergy fuel cells maintain their performance in extreme hot or cold temperatures and have provided uninterrupted power where legacy battery systems have failed.	Strenuous start cycles, extreme temperatures, prolonged periods of inactivity, and extended continuous runtime can degrade diesel generator performance; Altergy fuel cells maintain their performance in extreme hot or cold temperatures and have provided uninterrupted power where legacy systems have failed.
Runtime	Batteries typically deliver two to four hours of performance, insufficient runtimes to adequately back-up critical systems for the required 8 to 24 hrs.	Altergy fuel cells can provide from hours to months of continuous runtime on a single fuel fill-up.
Maintenance	Batteries require constant charging and field maintenance conducted by skilled technicians; while the primary maintenance required for Altergy fuel cells is replacing air filters once a year.	No complex maintenance schedules, fuel filtering or expensive replacement parts; mostly simply replacing air filters about once a year.

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