

Fuel Cells and the Entertainment Industry

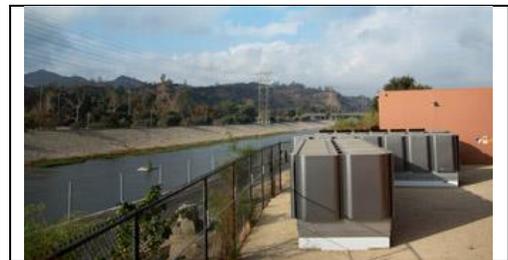
The entertainment industry has long been on the cutting edge of advancing and adopting new technology, as well as pushing for efforts to increase sustainability and reduce emissions. Fuel cells are being increasingly adopted by the entertainment industry to increase energy security to allow operations to continue in the event of a grid outage, while reducing their impact on the environment.

Benefits

Fuel cells generate electricity using an electrochemical reaction, not combustion, and when pure hydrogen is used, there are no polluting emissions, only water and heat as by-products.

Fuel cells can provide primary power, backup power and combined heat and power (CHP) to entertainment sector, powering studios, offices and production sites. Since they can be installed as part of the electric grid, or in parallel to it, fuel cells can provide reliable power without disruption due to grid failure or blackouts. The excess heat can be captured to provide hot water or space heating.

Fuel cells are inherently efficient, so they use less fuel and have much longer runtimes. Fuel cells can provide reliable power to mobile lighting, cameras and have done so at major industry award shows, including the Golden Globe Awards® Academy Awards®, Screen Actors Guild® and GRAMMY awards. Since fuel cells operate silently, there is much less vibration and they can operate without noisy disruptions.



Fuel Cell System - DreamWorks Glendale,
California Campus

Current Fuel Cell Customers

Current customers of fuel cell systems in the entertainment industry include:

- **CBS Studio Center** – has deployed 2.4 MW of fuel cell systems at two locations in California, providing power for a total of 26 sound stages and office space, as well as heating and cooling.
- **Comcast** – has a 400 kW installation at their regional headquarters in Berlin, Connecticut.
- **Cox Enterprises** – has 1 MW of fuel cells installed at Cox Communications in San Diego, 800 kW at Cox Headquarters in San Diego, 800 kW at Rancho Santa Margarita facility in Orange County, and 400 kW at KTVU Television station in Oakland.
- **DreamWorks Animation SKG** – has a 750 kW fuel cell system operating at its Glendale, California, studio.
- **Disney/Pixar** – operates a 1 MW fuel cell at its Emeryville, California studio.
- **News Corp.** – has a 400 kW installed at 1211 Avenue of the Americas, New York City, New York.