

## **Stationary Fuel Cell Market Analysis: An Industry Modelling Tool (2001)**

**Client:** The United States Fuel Cell Council (USFCC)

Stationary fuel cells are an emerging source of distributed generation for industrial, commercial and residential uses. They are forecast as an important source of heat and power over the coming decades. The fuel cell industry is currently immersed in research and demonstration to improve the costs and reliability of the technology. It lacks a tool to allow a rapid assessment of the economic feasibility of its technology under a range of cost and operational scenarios. Such a tool would assist the industry in marketing fuel cells to a range of commercial and residential consumers.

SGA was contracted by the USFCC to interactively develop with industry leaders a user-friendly spreadsheet model that would assess the feasibility of stationary fuel cell applications. The model has been developed for decision makers such as building owners, developers, industrial and commercial organizations, and government agencies to assist in making the choice for power and power quality options from fuel cells in new construction and site modifications. Four fuel cell technologies, PEM, SOFC, MCFC, and PAFC, can be tested. The model allows for the optimization of key operating, demand and cost parameters. It delivers and summarizes key operation and financial performance indicators to show least cost grid-tied options.