



FIGURE 26

operating characteristics for household use. Jointly the Pratt-Whitney Corp. and 25 gas companies have invested about \$26 million into the development and marketing of power cells. The forcing function which is permitting the development of this equipment as a marketable household item was the Apollo fuel cell which supplies the electrical power and drinking water for the Apollo Command Module.

This unit, which is an innovation of the Apollo fuel cell technology, is a self-contained system that may provide heat, air conditioning, and electrical power for homes at a higher efficiency than conventional systems while at the same time eliminating much of the air pollution resulting from power generation and home heating. Additionally, it would provide a system that would not be subjected to the conditions that developed in the New York area last year.

The next chart (fig. 27, MC67-5986) shows the relative efficiencies of fuel cell in comparison to a gasoline generator, a diesel generator, and a steam turbine generator system. As you can see the fuel cell is considerably more efficient in the production of electrical power. It has been estimated that if this fuel cell project is successful, then they see themselves marketing this product for homes in about 9 years. They feel that no new distribution lines will be needed to carry the extra gas to the homes because only a 20-percent increase in usage would be involved, an amount which they claim can be easily accommodated with