



UTC Power

A United Technologies Company

**SUMMARY OF
TESTIMONY BY
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SUBCOMMITTEE ON TECHNOLOGY, INNOVATION AND
COMPETITIVENESS
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Fuel cells provide an opportunity to address a variety of US energy needs including:

- Reducing dependence on foreign oil;
- Delivering assured, high quality reliable power;
- Decreasing toxic air and greenhouse gas emissions; and
- Improving energy efficiency.

UTC Power does not see any “show stopper” technical barriers to the advancement of fuel cell technology, but continued U.S. commitment to research, development, demonstration and market transition initiatives are essential to continue the progress already made. Hydrogen storage and infrastructure requirements represent challenging obstacles for transportation applications, but near term opportunities exist with fleet vehicles such as transit buses that minimize these concerns. Fuel cells for both transit bus and stationary markets are available today and represent opportunities for near term commercialization at lower cost targets than the more demanding auto sector.

Near term fuel cell successes are required to create public awareness and acceptance, establish a viable supplier base, and stimulate continued investment. Last year’s Energy Policy Act provides the basic framework for a comprehensive strategic focus, but a national sustained commitment to robust funding will be critical to our success.

Hurricane Katrina reconstruction efforts represent an opportunity to deploy fuel cells in schools to serve as emergency shelters, hospitals and other critical facilities. As we enter the summer hurricane and electric grid blackout season, concerns regarding reliable assured power increase. UTC Power believes there is an opportunity to enhance the value of fuel cell vehicles by enabling them to deliver power to the grid or other critical infrastructure such as emergency shelters. We are currently working with the Department of Defense to validate this concept with our heavy duty vehicle PureMotion™ 120 fuel cell power plant system.

Fuel cell cost, durability and performance requirements vary by application. For example, autos have a life requirement of 5,000 hours, and transit buses need more than 30,000 hours versus 80,000 hours for stationary units. Significant progress continues to be made in extending the life of fuel cells, enhancing performance and reducing costs. Based on real world operational experience and promising laboratory testing, we are confident that the respective goals will be met.