Sandia National Laboratories

Startup Design Features for Supercritical Power Conversion Systems

POTENTIAL MARKET APPLICATIONS

Electric Utility

Nuclear Power

Oil and Gas

Water Supply and Sewage Treatment

Renewable Power and Energy

BENEFITS

Significantly smaller size

Increased efficiency and power

Reduced cost due to compact size

Solution to startup flow issues

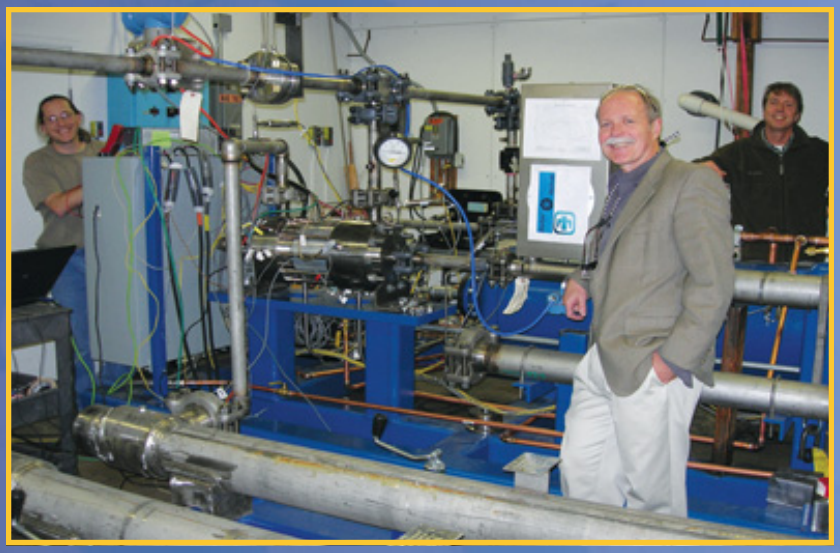
INTELLECTUAL PROPERTY

Patent Pending on SD# 11916

TECHNOLOGY SUMMARY

Sandia National Laboratories has created solutions to startup flow issues in supercritical power conversion systems. The Supercritical Brayton Cycle is a power conversion system that is undergoing extensive testing and advancements at Sandia Labs. The Supercritical Brayton Cycle system has the ability to achieve higher efficiency and more cost effect power conversion than current art forms.

The new design features and procedures will improve the already advanced capabilities of the supercritical power conversion system. The new design features have been developed and tested over many months, with consistent results.



TECHNOLOGY READINESS LEVEL

Sandia estimates this technology at approximately TRL 6. Deliverable prototype testing has been conducted.

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National Nuclear Security Administration

Sandia National Laboratories

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