

TECHNICAL PROGRESS REPORT NUMBER 3


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Project Title:

DESIGN, FABRICATION, AND TESTING OF AN ADVANCED, NON-POLLUTING  
TURBINE DRIVE GAS GENERATOR

REPORT PERIOD: 1 APRIL 2001 THROUGH 30 JUNE 2001

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## **ABSTRACT**

The objective of this report period was to continue the development of the Gas Generator design, fabrication and test of the non-polluting unique power turbine drive gas Gas Generator. Focus during this past report period has been to continue completion the Gas Generator design, preparing brazing and bonding experiments to determine the best method and materials necessary to fabricate the Gas Generator hardware and continuing to making preparations for fabricating and testing this Gas Generator. Various designs have been evaluated and analyzed by various engineering analyst specialists for design characteristics and operating conditions. This design and analyses activity should be concluding in July 2001, with the hardware design drawings being released for Long Lead Item [LLI] procurement and commencement of the fabrication process.

Designs have been completed sufficiently such that Long Lead Items [LLI] have been ordered and upon arrival will be readied for the fabrication process.

The keys to this design are the platelet construction of the injectors that precisely measures/meters the flow of the propellants and water all throughout the steam generating process and the CES patented gas generating cycle. The igniter injector platelets have begun the fabrication process because that material is already available for processing.

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