



Business Plan Appendix D:

**Basic Specifications for the EDF Generator's
Power Inverter and Desalinization Subsystems**

a) The modular DC-to-AC grid-synchronous solid-state power inverter unit that was designed specifically for Archer Enterprises by Power Paragon, Inc. of Anaheim, CA has the following basic specifications:

input power rating: 889 kW
input voltage (+/- 2%): 700 VDC
input amperage: 1,270 amps
output power rating: 838 kW
output voltage: 660 VAC, 50 or 60 HZ, 3-phase, 4-wire
output amperage: 1,270 amps (rms)
AC voltage THD: 5%
output overload: 200% for 2 sec., 150% for 30-60 sec.
input & output circuit breaker protection provided
efficiency: 94-95%
operating temp.: 0-40°C
air-cooled, with redundant fans
redundant power supplies provided
dimensions: 90" H x 120" W x 48" D
weight: 9,000 lbs.

b) The modular Multi-Stage Flash (MSF) desalinization system that was designed specifically for Archer Enterprises by Aquatech International Corp. of Hartland, WI has the following basic specifications:

product outlet capacity: 1,650 gpm (2,376,000 GPD)
product water quality: < 10 mg/l
steam consumption @ ~20 psig: 196,320 lb/hr
gain output ratio (GOR): 4.2
thermal energy consumption: 60 MW
feed water TDS: 36,000 mg/l
feed flow rate: 13,200 gpm
recovery %: 12.5
electrical consumption: 833 kW