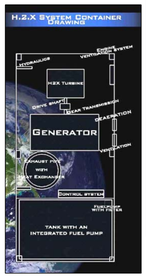
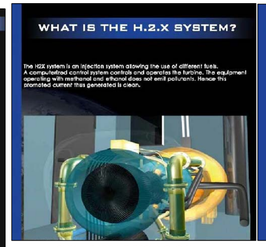




CLEAN TURBINE TECHNOLOGY
FOR BACK-UP OR PRIME POWER GENERATION

BACK-UP ENGINE GENERATOR SYSTEM
SOURCE: BIO-DIESEL OR
HYBRID GAS TURBINE

BUSWAY

UTILITY POWER
SOURCE #1
15kV

UTILITY POWER
SOURCE #2
15kV

SUBA1-S1 | SUBA2-S1 | SUBA3-S1

TSUBA1-S1 | TSUBA3-S1

13.8KV
480Y
HRG
5MVA
Z=5.75%

PML 7650
CT 3

M1 6000 6000 NC (1)
M3 6000 6000 NO (1)
M2 6000 6000 NC (1)
T1 6000 6000 (1) NO
T2 6000 6000 (1) NO

6000A, 480V, 3Ø, 3W & GND
IER = 200,000A RMS SYMETRICAL
MAX S.C. AVAILABLE (APPROX) = 125,000A RMS SYM.

KEYED NOTES

(1) - ELECTRICALLY OPERATED CIRCUIT BREAKER.

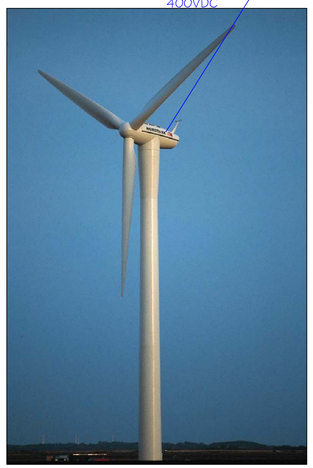
Solar Array
400VDC

RENEWABLE ENERGY SOURCES

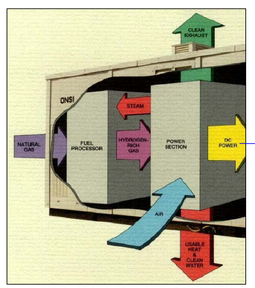
RENEWABLE ENERGY CONTROL SYSTEM

400VDC

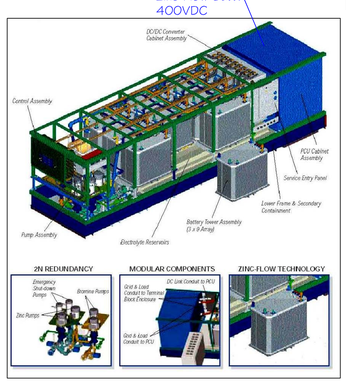
Wind Generator
400VDC



Fue Cell
400VDC



Zinc Flow Batt.
400VDC



2000 1600 | 2000 1600 | 2000 1600 | 2000 1600 | 2000 2000

MECHANICAL LOADS

MECHANICAL LOADS

RECTIFIERS:
500KW NOMINAL EACH
1500KW SYSTEM CAPACITY
480VAC INPUT
400VDC OUTPUT
N+1 REDUNDANT

RECTIFIERS:
500KW NOMINAL EACH
1500KW SYSTEM CAPACITY
480VAC INPUT
400VDC OUTPUT
N+1 REDUNDANT

1500 1600 | 1500 1600 | 1500 1600 | 1500 1600 | 4000 4000

400VDC (NOMINAL) COLLECTOR BUS - 4000A

1200 1600 | 1200 1600 | 1200 1600 | 1200 1600

5 MINUTE BATTERY

DC FLYWHEEL ENERGY STORAGE SYSTEMS
400DC INPUT

1200 1600 | 1200 1600 | 1200 1600 | 1200 1600 | 4000 4000

400VDC (NOMINAL) COLLECTOR BUS - 4000A

5 MINUTE BATTERY

DC FLYWHEEL ENERGY STORAGE SYSTEMS
400DC INPUT

ENERGY STORAGE OPTIONS
ACTUAL ENERGY STORAGE TECHNOLOGY,
TOPOLOGY, CAPACITY, ETC. TO BE DETERMINED
BASED ON STORAGE TIME REQUIRED

DPC-CB101 | DPC-CB201 | DPC-CB102 | DPC-CB202 | DPC-CB103 | DPC-CB203 | DPC-CB104 | DPC-CB204

1200A, 400VDC

A — 600VDC RATED 4-BUS UNIVERSAL BUSWAY WITH DEDICATED DROPS TO SERVER/EQUIPMENT RACKS - 400A — B

EQUIPMENT RACKS

DC SERVER RACK FEED
400VDC IN
5KW SERVER RACK
INPUT = 12.5A @ 400VDC

10KW SERVER RACK
INPUT = 25A @ 400VDC

20KW SERVER RACK
INPUT = 50A @ 400VDC

A — 600VDC RATED 4-BUS UNIVERSAL BUSWAY WITH DEDICATED DROPS TO SERVER/EQUIPMENT RACKS - 400A — B

EQUIPMENT RACKS

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DIRECT POWER TECHNOLOGIES, INC.
Providing Efficient Reliability

THE GREEN DATA CENTER W/ HIGH RELIABILITY DC POWER DISTRIBUTION SYSTEM

CLIENT APPROVAL | DATE

DIRECT POWER TECHNOLOGIES, INC.

THE GREEN DATA CENTER

HIGH RELIABILITY DC POWER DISTRIBUTION CONCEPT

No.	Date	Issue	By
1	8/13/07	UPDATE	DEG
2	11/12/07	UPDATE	DEG

Design: DEG
Drawn: DEG
Approved:

Scale: NO SCALE
Date: 6/15/07
Job. No. ----

Sheet Number
E-DC1