

STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

IN RE:

APPLICATION OF ECO-SITE AND T-MOBILE  
NORTHEAST, LLC FOR A CERTIFICATE OF  
ENVIRONMENTAL COMPATIBILITY AND PUBLIC  
NEED FOR THE CONSTRUCTION, MAINTENANCE,  
AND OPERATION OF A TELECOMMUNICATIONS  
FACILITY LOCATED AT 248 HALL HILL ROAD,  
SOMERS, CONNECTICUT

DOCKET NO. 476

November 15, 2017

**SUPPLEMENTAL SUBMISSION**  
**REGARDING BACKUP POWER FOR T-MOBILE**

Eco-Site and T-Mobile (together the “Applicants”), submit the following information to the State of Connecticut Siting Council to provide revised details regarding the backup power technology planned for the captioned facility.

T-Mobile will be installing an Auxiliary Power Unit (APU) at this site to provide seamless back up power in the event of a power outage. The Auxiliary Power Unit (APU) is a propane fueled DC generator and generally quieter in operation than diesel technology. Physically the APU “box” itself is a small form factor (27” x 42”) and can fit on the proposed concrete pad.

Operationally, the APU uses the cell site backup batteries to start, even if those batteries are only 5% charged. Please note however that the APU is programmed to detect if a telecommunications service is available and will not start if such link is not available.

The LP tank is a vertical 120-gallon tank 54” in height and 30” in diameter. The APU will provide approximately 80 hours of runtime at average 5Kw load. The tank will be refueled to insure the site stays on air. In the case of a serious disaster and prolonged power outages, T-Mobile’s Disaster Recovery Team is engaged days before the event (when possible) to prepare for outages. Diesel generators can also be deployed to the site to provide reliable, long term backup power for the duration of extended power outages if necessary with refueling efforts continuing until commercial power is restored.

Specifications of the APU are attached.



# PowerGen 7500

## DC Generator

### Product Feature

- Reliable 52V DC backup solution
- Extremely simple installation
- Extended run times
- Automated exercising routines
- Intelligent control panel monitoring
- Minimal maintenance

# Specifications

1. General	
Construction	Aluminum enclosure with Pre-galvanized steel base
Dimensions (W x H x D)	27 x 40 x 42 in (686 x 1016 x 1067 mm)
Weight	350 lbs (159 kg) (without optional start batteries)
Mounting options	Pad-mount
Finish	Polyester Powder Paint (Gray)
Fuel options	Propane (LPG) or Natural Gas
Safety	UL2200 Listed
2. Environment	
Operating temperature	-20°C to +46°C (-4F to +115F)
Protection class	IP55 electronics enclosure
Altitude	< 4000m above mean sea level
Acoustics	76 dB(A) at 23 feet (7m)
3. Generator Specifications	
Output Power (W)	7500W
Output Voltage (V)	52V DC
Output Voltage Regulation	≤ ± 250mV
Engine	570cc Air Cooled Engine
DC Motor	Permanent Magnet Brushed DC Motor
RPM	3450 to 3750
Fuel consumption	1.2 lbs/hr @ 5kW, LPG
Gas inlet pressure	11 in-H <sub>2</sub> O (0.40 psi)
Output connections	¼"-20, 5/8" C-C threaded stud interface for 1/0 2-hole lugs
Output protection	200A Circuit Breaker
4. Batteries	
Site	Start-up from site batteries (50A@49V for <2min)
Start-up (optional)	Start-up with no energy from site batteries
5. Control and Interface	
Controls	Auto, Run, Stop
Alarms	Critical, Major, Minor alarm relays (Form-C)
Craft Interface	RJ45 Ethernet
Automated Exercise	Automated periodic exercising with weekend and holiday blackout
6. Ordering information	
ESOG150-PCA01	PowerGen 7500 with Large Oil Reservoir
5100266100	2.5 gallon jug of Special Oil for PowerGen 7500 – Required for EPA emissions
3799485900-S	Battery Heater Kit
0999142400	Battery String, 48V, 100Ah

\*All specifications are subject to change without prior notice.

Delta Group Website:  
[www.deltaww.com](http://www.deltaww.com)

Product Website:  
[www.deltapowersolutions.com](http://www.deltapowersolutions.com)

## United States of America & Canada

Delta Greentech (USA) Corp.  
2360 Campbell Creek Blvd. #530  
Richardson (Texas) 75082

Phone: 972-437-7900

[DLDGASales@delta-corp.com](mailto:DLDGASales@delta-corp.com)

## Central America

Delta Electronics International  
Mexico, S.A. de C.V.  
Via Gustavo Baz No. 2160  
Col. Industrial La Loma Tlainepartla  
CP 54060, Edo de Mexico

## South America

Delta Greentech (Brasil) S.A  
Rua Itapeva, 26 - 3 andar - Bela Vista  
01332-000 - São Paulo - SP - Brasil

## Asia Pacific

Delta Electronics, Inc.  
3 Tungyuan Road, Chungli Industrial  
Zone,  
Taoyuan County 32063, Taiwan

## China

Delta Electronics (Shanghai) Co., Ltd  
No.182 Minyu Road, Pudong  
Shanghai, P.R.C., China

## Japan

Delta Electronics (Japan), Inc  
2-1-14 Minato-ku shibadamin, Tokyo  
105-0012, Japan

## Russia

Delta Energy Systems LLC  
Vereyskaya Plaza II, office 401  
121357 Moscow, Russia

## Europe

Delta Energy Systems (Switzerland)  
AG  
Freiburgstrasse 251  
3010 Bern-Bümpliz, Switzerland