

MEMORANDUM

TO: NWABSD Board of Education
Members

DATE: February 27th,2024

NUMBER: Work Session Items revision

FR: Office of the Superintendent

SUBJECT: a) Property Services Report

Property Services Director, Brandon Blackham reports on the following:

AMBLER Heating system through the school has multiple leaks, the glycol has become corrosive and is eating the copper. Ambler needs a complete overhaul by draining the entire school and flushing it out. New glycol will then need to be purchased and pumped into the system.

BUCKLAND Buckland property services are working on quotes for the two new duplexes, **with prices higher than last year so far just with lumber packages and shipping for two duplexes we are around \$500,000.00 this does not include electrical, or plumbing material costs.**

DEERING Deering froze up and our plumber had to redo several pipes and fix the day tank problem.

KIANA no report needs major repairs to the flooring through the school.

KIVALINA no report, other than water conservation

KOBUK Property services are working on a quote for a new generator.

KOTZEBUE JNES froze and the upper bathrooms by the gym have been unusable, they should be back in service this week.

NOATAK Noatak, sprinkler system burst and dumped 36,000 gallons of water on the ground, our plumber went up and made fixes to stop the leak. More repairs will be needed this summer.

NOORVIK Noorvik lost use of the automatic transfer switch, this switches power from normal to emergency power. Property services has parts on order. Needs major floor repairs through the school.

SELAWIK Work continues on the new duplex, with all the issues that came on the cold spell our plumber has had no time to finish up the duplex.

SHUNGNAK has a new generator installed and working, we still need to do some work on the exhaust and fuel to make it permanent.

MEMORANDUM

TO: NWABSD Board of Education

DATE: February 19th 2024

NUMBER: 24-100

FR: Office of the Superintendent

SUBJECT: Kobuk Generator

Funding: Capital improvements

ABSTRACT:

Board approval is required for expenditures that exceed \$50,000.

ISSUE:

At issue is board approval to award the Northwest Arctic Borough School District's purchase of a back up generator for the school and housing in Kobuk to NC Power Systems

BACKGROUND AND/OR PERTINENT INFORMATION:

Kobuk school has not had a back up generator since the new school was built and remodeled. This would give the school and part of the housing back up power during the power outages.

ALTERNATIVES:

1. Approve the administration's request to award the Back up generator for the school to NC Power Systems in the amount of \$53,330.00, With final shipping costs not to exceed \$10,000.00, (Final installation costs to be determined)
2. Disapprove the administration's request to award the Back up generator for the school to NC Power Systems in the amount of \$53,330.00, with final shipping costs not to exceed \$10,000.00, (Final installation costs to be determined)
3. Take no action

ADMINISTRATION'S RECOMMENDATION:

Administration recommends approval of the administration's request to award the Back up generator for the Kobuk school to NC Power Systems in the amount of \$53,330.00, with final shipping costs not to exceed \$10,000.00, (final installation costs to be determined)

02/15/2024

QUOTATION: 31314379

NORTHWEST ARCTIC BOROUGH

**Caterpillar C7.1 Packaged Generator Set, Standby Rated @ 175 Ekw,
120/208V Three Phase, 60HZ, 1800 RPM**

STANDARD CONSISTS:

ENGINE PACKAGE DESCRIPTION

**Diesel Engine 7.1L
Electrical System, 12 VDC
Std Air Cleaner (STDAIR)
Electronic Governor
Available with SCAQMD compliance**

EXHAUST SYSTEM

- Exhaust manifold; dry.

AIR INLET SYSTEM

**- Aftercooler core.
- Air cleaner- Non-Cannister, Disposable
- Turbocharger.**

FUEL SYSTEM

**- Primary fuel filter w/integral water
separator & secondary filter, spin on.
- Fuel priming pump.
- Engine fuel transfer pump.**

GENERATORS AND GENERATOR ATTACHMENTS

GENERATOR SET

**Complete system designed & built at ISO 9001:2000 certified facilities
Factory tested to design specifications at full load conditions
and all protective devices and control functions simulated and checked**

GENERATOR

**- IP23 Protection.
- Insulation Class H
- Terminal Box, IP22 RHS Facing, Bottom Cable Entry
- Cable connections located inside generator housing, RHS cable entry.
- Brushless self excited generator**



- Easy access to AVR and terminals
- Standard winding protection for non-harsh environments with relative humidity $\leq 95\%$
- Certifications, UL etc
- Available in 208V, 480V, 600V (3Phase)

GOVERNING SYSTEM

- Cat Electronic Governor (ADEM A4).

LUBE SYSTEM

- Oil cooler
- Oil filler and dipstick.
- Oil filter, spin on.
- Lubricating Oil, CK-4 (10W-30)
- Oil drain with valve.
- Shallow oil pan.
- Fumes disposal to front of radiator.

PROTECTION SYSTEM

Safety shutoffs for:

- High water temperature.
- Overspeed.
- Low oil pressure.

CONTROL PANEL

- GCCP 1.2 Control Panel (RHS Mounted) refer LEHE2017
- D350 AVR refer LEHE1923

BATTERY

- Battery tray and Cables

COOLING SYSTEM

- Coolant drain valve.
- Blower fan and fan drive with guards
- Thermostats and housing.
- Radiator, Package mounted.
- Radiator sight gauge
- Jacket water pump, gear driven, centrifugal
- Caterpillar Extended Life Coolant.

STARTING/CHARGING SYSTEM

- 12V electric starting motor.
- 12V, 45 amp charging alternator.

CIRCUIT BREAKERS

UL/CSA listed mainline breakers
Optional Second Breakers
100% Rated 3-pole with solid neutral
NEMA 1 steel enclosure

GENERAL

- Paint, Caterpillar White.
- Vibration damper.





- Lifting Eyes
 - Parts Book
- Wiring diagrams included

WITH THE FOLLOWING SPECIFIC OPTIONS:
EPA STATIONARY EMERGENCY
60HZ 208 VOLT (WYE)
Voltage Indicator 60 Hz, 208V
STANDBY POWER APPLICATION
Output available with varying load for duration of the interruption of the normal source power. Average power output is 70 % if the standby power rating. Typical operation is 200 hours per year, with the maximum expected usage of 500 hours per year.
60 Hz, 175 kW
D175GC
Genset Model: D175 GC 60Hz, 175ekW Standby
UL 2200 LISTED PACKAGE GEN SET
IBC SEISMIC CERT OF COMPLIANCE
ENGLISH INSTRUCTION LANGUAGE
ADEM A4 GOVERNOR
PERMANENT MAGNET GENERATOR
Permanent magnet generator provides improved source of excitation to alternators.
ALT SPACE HEATER
Anti-condensation heater. Installed in generator, shuts down on genset start
105C TEMP RISE OVER 40C AMB
ALT M2736L4 KR
GEN MTG & DUCT PLATE
Generator Mounting and Duct Plate
WIDE BASE
Skid Base
NFPA BUNDLE
The NFPA Bundle provides parts and/or functionality to assist the dealer in obtaining NFPA compliancy. NFPA compliancy is an end application requirement and meeting this application requirement is the responsibility of the dealer and / or installer. NFPA 110 application bundle selection will auto-select the following priced items: Local Alarm Horn (PAA1). Low Coolant Shutdown (WSS1). Low Coolant Temperature Alarm (WCA1). Low Fuel level alarm (FSS) Battery Charger (BTC1028). Depending on the local authority having jurisdiction (AHJ), the following options may be required in addition to the automatic selections: Jacket Water Heater (WHH2) Remote Annunciator (ANNR002) 0.8 Power Factor Test (STDTEST / TST0035)
GEN RUNNING & FAULT RELAY
PANEL MOUNTED AUDIBLE ALARM





20A GFCI (CONTROLS SIDE) 20A, 125V Tamper & Weather resistant GFCI Receptacle installed on controls side of package. Refer LEHE1085
NO EXTERNAL EMERGENCY STOP
WET BATTERY Wet batteries 1000 CCA batteries, 90 Amp/hr.
BATTERY CHARGER 10 AMP This 10 Amp battery charger offers accurate, automatic charging of lead-acid and nickel cadmium batteries. The output voltage automatically adjusts to changing input, load, battery and ambient conditions. This prevents battery over-charging and consequent loss of battery electrolyte. Ref: LEHE2022
JACKET WATER HEATER Coolant Heater,1000W, 110/120 Volt (VAC 120) for 60Hz & 240 Volt(VAC240) for 50 Hz AC auxiliary supply
CURRENT TRANSFORMER 800:5
COOLANT RESERVIOR
LOW COOLANT LEVEL SHUTDOWN
600A LSI 100% RATED BREAKER 3-PH: 208V
NO 2ND CIRCUIT BREAKER
SUSE DECALS & FILMS Suitable for Use as Service Equipment (SUSE) decal and ability to disconnect neutral bar.
NEUTRAL BAR 800A W/ DISCONNECT
AUXILIARY CONTACTS Shunt Trip & Auxiliary Contact
STANDARD RADIATOR
NO MUFFLER No Muffler included
PRODUCT LINK 4G LTE TELEMATICS Cat PL444 is a factory installed 4G LTE, Bluetooth capable Telematics hardware used with Cat Remote Asset Monitoring (RAM) to remotely monitor several genset parameters like fault codes, Alerts and notifications, remote start/stop, geofencing and more. ReferLEHE20360/61
REMOTE ANNUNCIATOR
STD TEST - PKG GEN SET 0.8 PF
PGS TEST REPORT @ 0.8 PF PGS Test Report @ 0.8 PF

DEALER SHIP LOOSE ITEMS:	
1	SILENCER
1	EXHAUST FLEX PIPE
1	CAT ATS-TRUONE CG CONTROLLER
1	OPEN TRANSITION
1	STANDARD - NO BYPASS
1	NEMA 3R 400A - 600A





1	600 AMPS
1	MECHANICAL LUGS - STANDARD
1	208 - 480V; 50/60Hz
1	THREE PHASE
1	SOLID NEUTRAL 260A - 600A
1	CONTACTOR
1	CGOL3XX32
1	TRUONE 3-#8-1/0 CABLES
1	2 NO and 2 NC
1	TRUONE HEATER/T-STAT - 208V

FOB TUKWILA, AK

\$ 53,330.00

Estimated lead time 20-22 weeks after order released.

Installation and onsite start up not included.

Thank you,

Rob Collins
 Engine Sales Representative
 907 786 7591 Office
 907 229 6831 Cell
 907 786 7567 Fax
rcollins@ncpowersystems.com



TERMS AND CONDITIONS:

1. The above quoted prices are subject to change without notice; price quoted is valid for 30 days.
2. The above quoted prices do not include state and local taxes, if applicable.
3. All orders to purchase or lease based on this quotation shall be subject to acceptance by N C Power Systems Co. All transactions shall be made on, and subject to N C Power Systems Co.'s standard terms, conditions and warranties, or modified documents reflecting mutually-agreeable terms.
4. Provides Caterpillar Warranty for parts and labor on Caterpillar products. All other manufacturer's warranties apply per their respective warranty statements.
5. N C Power Systems Co. will not be responsible for, or subject to, penalties attributed to force majeure.
6. This proposal represents N C Power Systems Co.'s best interpretation of the project requirements, which may vary from other's interpretation. If equipment or services are not described, they cannot be construed to be included in this scope of supply.





7. Inspection of goods received at the customer jobsite is the responsibility of the receiver. N C Power Systems will make no remedies for damage that is not noted at the time of the carrier offloading.

