

Memo

To: Village Board

From: Chris Clark, Director of Parks, Recreation, & Forestry

Re: Authorization to Purchase a Backup Generator for Village Hall/Public Works Facility; 2017 Budgeted Item

Date: March 20, 2018

Background Information:

The Parks, Recreation, and Forestry Department is requesting authorization to purchase a large generator for emergency backup electrical power for the Village Hall and Public Works Facility. A natural gas generator will provide for emergency electrical power to the facility during times of need and allow for the continuation of essential government operations and accessibility to the Public Works facility and equipment on a 24/7/365 basis even during times of catastrophe.

Previously staff utilized a smaller portable generator to operate minimal building services such as opening garage doors to access village vehicles. However this generator is also utilized by the water and sewer department, and during times of power outages this machine is needed as an electrical backup for pumping stations.

The proposed backup generator will be installed on the north side of the facility adjacent to the incoming electrical service, has a noise reduction enclosure, and will be able to operate most of the electrical needs of the facility during times of need.

Budget Information:

The purchase of the generator and associated mechanical work was approved in the 2017 equipment replacement budget at \$72,000.00 to come from the Equipment Replacement Fund. Staff is gathering quotes for the mechanical and electrical connections but anticipates that those services will come in under budget.

Staff received two quotes for the generator type and size that was specified.

Equipment Make	Dealer	Quote
Kohler 100REZGD	Total Energy Systems, DePere	\$33,300.00
Cummins C100N6	Cummins Sales & Service, DePere	\$34,822.33

Staff Recommendation:

Staff recommends that the Village Board authorize the purchase of the Cummins generator from Cummins Sales and Service of DePere at a price of \$34,822.33. Even though this quote is higher by \$1522.33, staff recommends the Cummins because it is the same brand as other generators we utilize in the village and is from a local vendor that we currently contract with for annual generator preventative maintenance services. Additionally the Cummins generator transfer switch comes with an extended comprehensive 10 year warranty.

Attachments:

- Information from the Allouez Capital Improvement Program
- Generator Specs Sheet

Capital Improvement Plan

Village of Allouez, Wisconsin

2017 thru 2021

Department General Government
 Contact Director of Parks, Recreation
 Type Equipment
 Useful Life 20 years
 Category Equipment: Miscellaneous
 Priority 3 Important
 Status Active

Project # FAC-2017-01
 Project Name Backup Generator

Total Project Cost: \$72,000

Description

Backup generator for the Village Hall / Public Works facility.

Justification

A natural gas backup generator for the Village Hall and Public Works facility would provide for emergency electrical power during times of need. This would allow for better accessibility to the facility by staff during power outages. In addition, the Village Hall would have power during a catastrophic event allowing for use as the emergency command center for village government.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	7,000					7,000
Construction/Maintenance	65,000					65,000
Total	72,000					72,000

Funding Sources	2017	2018	2019	2020	2021	Total
Equipment Replacement Fund	72,000					72,000
Total	72,000					72,000

Budget Impact/Other

This equipment would require annual inspections and increase natural gas costs during times of use.

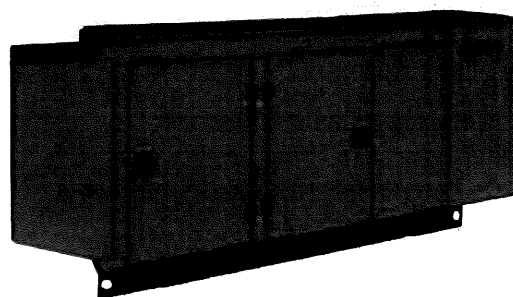
Budget Items	2017	2018	2019	2020	2021	Total	Future
Maintenance		350	350	350	350	1,400	350
Total		350	350	350	350	1,400	Total



Spark-ignited generator set

45–100 kW Standby

EPA emissions



Description

Cummins® generator sets are fully integrated power generation systems providing optimum performance, reliability and versatility for stationary Standby applications.

Features

Gas engine - Rugged 4-cycle Cummins QSJ5.9G spark-ignited engine delivers reliable power. The electronic air/fuel ratio control provides optimum engine performance and fast response to load changes.

Alternator - Several alternator sizes offer selectable motor starting capability with low reactance 2/3 pitch windings, low waveform distortion with non-linear loads and fault clearing short-circuit capability.

Control system - The PowerCommand® 1.1 electronic control is standard equipment and provides total generator set system integration including automatic remote starting/stopping, precise frequency and voltage regulation, alarm and status message display, output metering, auto-shutdown at fault detection and NFPA 110 Level 1 compliance. The PowerCommand 2.3 control is also optional and is UL 508 Listed and provides AmpSentry™ protection.

Cooling system - Standard cooling package provides reliable running at up to 50 °C (122 °F) ambient temperature.

Enclosures - The aesthetically appealing enclosure incorporates special designs that deliver one of the quietest generators of its kind. Aluminum material plus durable powder coat paint provides the best anti-corrosion performance. The generator set enclosure has been evaluated to withstand 180 MPH wind loads in accordance with ASCE7 -10. The design has hinged doors to provide easy access for service and maintenance.

NFPA - The generator set accepts full rated load in a single step in accordance with NFPA 110 for Level 1 systems.

Warranty and service - Backed by a comprehensive warranty and worldwide distributor network.

	Natural gas		Propane		
	Standby		Standby		
Model	kW	kVA	kW	kVA	Data sheets
C45 N6	45	56	45	56	NAD-6093-EN
C50 N6	50	63	50	63	NAD-6094-EN
C60 N6	60	75	60	75	NAD-6095-EN
C70 N6	70	88	70	88	NAD-6096-EN
C80 N6	80	100	80	100	NAD-6097-EN
C100 N6	100	125	100	125	NAD-6098-EN