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Report 2024-139

Report Title: Back-up Power Generation for Public Works Depots

Committee Name: Public Works

Committee Meeting Date: November 4, 2024

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Approved by: Jennifer Moore, CAO

Council Meeting Date: November 20, 2024

Strategic Plan Priorities: Innovate for Service Excellence
 Ignite Economic Opportunity
 Foster a Thriving Community
 Propel Sustainable Growth
 Champion a Vibrant Future

Recommendation

“Whereas at the October 16, 2024 County Council meeting, Council adopted the recommended motion from the September 30, 2024 Public Works Committee meeting to direct staff to bring forward a report to a future Committee / Council meeting regarding ‘Cobourg Yard Fuel System’;

Now Therefore Be It Resolved That the Public Works Committee, having considered Report 2024-139 ‘Back-up Power Generation for Public Works Depots’ recommend that County Council direct staff to continue to seek funding to carry out the proposed upgrades to the backup power systems at the Cobourg Depot, followed by the Morganston Depot.”

Purpose

The purpose of this report is to provide County Council with information regarding the current state of the back-up power generation systems at the Cobourg and Morganston Public Works Depots.

Background

Road Operations Division's staff works primarily out of two Public Works Depots, being the Cobourg and Morganston Depots.

At the Cobourg Depot there is a main building which houses three plow trucks, four mechanics bays, a parts room, a wash bay, office space, a lunchroom, a locker room and washrooms.

At this depot there is also a separate four bay garage for plow trucks, storage buildings, a fueling station, a sand dome and a salt shed.

At the Morganston Depot there is a main building which houses five plow trucks, a wash bay, a parts room, office space, a lunchroom, a locker room and washrooms.

At this depot there is also a separate four bay garage for plow trucks, storage buildings, a fueling station, a sand dome and a salt shed.

During winter storms, or other critical circumstances, when there is an extended power outage, staff are required to retrieve a large generator from the storage building and hook it up to a tractor (due to the fact that the large generator is powered by the tractor through a Power Take Off (PTO)). The large generator is then connected to the main building and provides power for some lighting, the building's heating system and the fuel system controls.

A secondary, smaller gasoline powered generator must then be retrieved from the storage building and hook directly up to the fuel station. This smaller generator strictly provides power to the fuel pumps.

Ensuring that we have power during these electrical outages is critical to maintaining our levels of service. The County is legislatively required to meet Minimum Maintenance Standards throughout our road system. In order to do so we require our on-site refueling systems to be operational during prolonged power outages.

We also require power to the main building at the Cobourg Depot, so that our mechanics are able to complete emergency repairs.

It is important to note that the County of Northumberland has entered into a Memorandum of Understanding with the Cobourg Detachment of the Ontario Provincial Police (OPP) which allows the OPP to use the refueling system at the Cobourg Works Depot if the OPP cannot obtain gasoline locally for their vehicles. Because of this obligation, staff have prioritized upgrading the backup power system at the Cobourg Depot, ahead of the Morganson Depot.

Consultations

We have consulted our in-house Facilities staff and local contractors to understand the needs for the Cobourg Depot to be upgraded to meet today's standards for backup power.

There has also been consultation with the County's Health, Safety & Emergency Risk Manager and the Grant Writer to seek and secure funding to complete the proposed upgrades.

Legislative Authority / Risk Considerations

The current backup power systems, although not ideal, are workable. There is a certain amount of time and labour involved in setting up the systems and this can delay responding to the weather event that likely caused the power outage. Additionally, the mobile generator and tractor need to be monitored for refueling throughout the outage.

The current generators are approximately 12 years old, and the average lifespan of a portable generator is 10 years, so there is some risk that our generators may fail.

Discussion / Options

The County has an 8 Kilowatt (KW) portable generator and a 22 kW PTO driven generator at each depot.

At the Cobourg Depot staff are proposing to eventually install a natural gas fired 22.5 KW generator and 200 Amp automatic transfer switch for the main building. A second natural gas fired 22.5 KW generator with 400 Amp automatic transfer switch would need to be installed to feed the second garage, storage buildings and fueling system. The cost for completing this project would be approximately \$100,000.

Investigations have not yet taken place for the Morganston Depot, but it is anticipated that a system, similar to what is proposed for the Cobourg Depot would be required.

Financial Impact

In collaboration with the County's Health, Safety and Emergency Risk Manager and the County's Grant Writer, staff are striving to secure funding that will cover the full costs associated with the proposed upgrades at the Cobourg Depot.

In light of existing financial pressures on the County's budget and competing priorities, staff are recommending that the proposed backup power system upgrades at the Cobourg Depots not proceed until such time as funding from an outside source(s) has been secured.

Member Municipality Impacts

N/A

Conclusion / Outcomes

It is recommended that the County maintain the status quo with respect to the backup power systems at the Cobourg and Morganston Depots, until such time as the County receives funding for the proposed upgrades, and / or an Issue Paper for these upgrades is approved by County Council at a future date.

Attachments

N/A