



Town of Newmarket
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Electric Vehicle Charging Station Project – Notification of OPG Grant Partnership Submission Staff Report to Council

Report Number: 2019-106

Department(s): Innovation & Strategic Initiatives

Author(s): Brett Morrow

Meeting Date: November 4, 2019

Recommendations

1. That the report entitled *Electric Vehicle Charging Station Project – Notification of OPG Grant Partnership Submission* dated November 4, 2019 be received; and,
2. That Council supports Newmarket's inclusion in Ontario Power Generation's (OPG) grant application to Natural Resources Canada's Zero-Emissions Vehicle Infrastructure Program (ZEVIP) to apply for funding to purchase and install electric vehicle charging stations in public parking locations owned by the Town; and,
3. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

Purpose

To notify Council of Newmarket's inclusion in OPG's grant application to the ZEVIP program for funding to purchase and install five electric vehicle charging stations in four of Newmarket's most popular public locations.

Background

Natural Resources Canada opened the Zero-Emissions Vehicle Infrastructure Program (ZEVIP) on August 18, 2019 with applications due on September 18, 2019. Newmarket staff were approached by OPG staff in early September with a proposal to partner on a ZEVIP grant submission. The ZEVIP grant will fund 50% of the total project cost for the

purchase and installation of electric vehicle charging stations. Different types of charging stations have different funding contribution limits (see below).

Type of Charging Station	Maximum Funding
Level 2 (208 / 240 V) charging station	\$5,000 per connector*
Fast-charging station (from 20 kW to < 50 kW)	\$15,000 per station
Fast-charging station (from 50 kW and above)	\$50,000 per station

Newmarket staff have coordinated with staff at Newmarket-Tay Power and have come to the conclusion that level 2 charging stations are most appropriate for installation at the public locations outlined in Part II below.

Discussion

I. Ontario Power Generation Partnership Opportunity

Ontario Power Generation (OPG) approached the Town of Newmarket and a number of other eligible site applicants with an offer to partner on a Zero-Emissions Vehicle Infrastructure Program (ZEVIP) grant application. OPG will write the ZEVIP grant and apply on behalf of eligible site hosts to receive the funding to purchase and install the charging stations in the site hosts community. The proposal is as follows:

1. If OPG’s ZEVIP grant application is successful OPG will complete all station deployment (site planning, station procurement, and construction/installation) and on-going operational services (network operations/reporting, servicing/maintenance, and driver support) for the stations in exchange for a fixed annual cost of \$1100-\$2000 per charging station. The cost per station is dependent on the complexity of the construction/installation at the site.
2. In addition to the fixed annual cost per station the site hosts will also fund the electricity costs to operate the charging stations
3. Site hosts are free to set user prices for vehicle charging while OPG collects the revenue and transfers it back to the site hosts
4. Site hosts are responsible for all non-charging station site maintenance (ex. Snow removal)

The benefits of partnering with OPG rather than Newmarket applying independently are:

1. Newmarket avoids the high upfront costs of charging station installation
2. OPG manages the procurement process for the electric vehicle charging stations reducing the workload for site hosts while being in a position to negotiate better prices per-unit through economies of scale (if successful, OPG will be procuring 92 electric vehicle charging stations for all site host partners).
3. OPG manages the reporting relationship with Natural Resources Canada reducing site host staff workloads

II. Newmarket's EV-Charging Stations and Potential Installation Locations

Newmarket has provided OPG with a list of four public Town-owned locations for the installation of five electric vehicle charging stations. The electric vehicle charging stations will be “level-2” which can fully charge a car in approximately 5-6 hours. Each charging station will have two ports which will require two dedicated parking spots (total of ten charging ports with ten dedicated parking spaces). The municipal locations provided to OPG were:

1. Town of Newmarket Municipal Offices (395 Mulock Drive). There will be one charging station (two ports) installed in the north parking lot and a second charging station (two ports) installed in the south parking lot for a total of four charging ports.
2. Magna Center (800 Mulock Drive). There will be one charging station (two ports) installed in the most cost efficient parking spots (likely south-east parking lot at the entrance)
3. Riverwalk Commons (P3). There will be one charging station (two ports) installed at the most cost efficient parking spots in the P3 lot.
4. Riverwalk Commons (Doug Duncan). There will be one charging station (two ports) installed at the most cost efficient parking spots on Doug Duncan Drive, east of Riverwalk Commons.

Conclusion

As of September 19, 2019 OPG has confirmed that they have submitted the ZEVIP grant and received a confirmation receipt from Natural Resources Canada. Natural Resources Canada is now evaluating applications and plan to notify applicants of their funding status by late November 2019. Contracts with successful applicants are currently planned to be signed in January 2020 with all projects being completed 18 months after contract execution. Staff will report back to Council and continue internal consultations if OPG's ZEVIP grant is successful

Business Plan and Strategic Plan Linkages

Well-planned and connected. Strategically planning for the future to improve access and enhance travel to, from, and within Newmarket.

Consultation

Inter-departmental consultations through an EV-Charging Station working group have been on-going since early 2019. Newmarket staff have met a number of times with staff from Newmarket-Tay Power to coordinate future electric vehicle charging station installations. Newmarket-Tay Power are supportive of the proposed locations.

If OPG's grant application is successful additional internal consultations with appropriate Public Works Services and Legislative Services staff will take place to ensure effective project coordination.

Human Resource Considerations

None.

Budget Impact

If the OPG grant is successful there will be operating costs associated with the installation of the electric vehicle charging stations for which funds have already been allocated. Depending on the complexity and cost of installation there will be an annual fixed rate cost of \$1100-\$2000 per station plus the hydro costs associated with operating the stations.

The fixed costs Newmarket will pay to OPG will be in the range of \$5500-\$10,000 per year with the electricity costs to operate the stations estimated to be approximately \$3000-\$5000 depending on usage. The total annual costs to the Town will range from \$8,500-\$15,000 depending on installation complexity and usage of stations.

These costs will be offset by the revenues generated by the charging stations which site hosts are free to set. Internal analysis has been completed that suggests charging \$1.50 per hour coupled with low initial usage of stations would generate between \$4000-\$6000 annually with revenues rising as charging station usage or price charged per hour rises.

Attachments

None.

Approval

Susan Chase, Director, Innovation & Strategic Initiatives

Contact

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