



REPORT FOR ACTION

Review of electrical systems at Toronto Community Housing: Update on maintenance and upgrade processes for electrical services

Date: August 27, 2019

To: Planning and Housing Committee

From: President and Chief Executive Officer, Toronto Community Housing Corporation

Wards: All

SUMMARY

In February 2019, City Council directed TCHC to review the state of repairs and maintenance needed of the major electrical services in multi-residential, high-rise portfolio. This report provides an overview of the electrical safety measures undertaken by TCHC to ensure that electrical systems are well maintained and are operating as intended.

To enhance the health and safety of tenants, programs and processes to maintain electrical systems and to mitigate fire and life safety hazards are a key feature of TCHC's core work. These include preventative maintenance programs and proactive inspections and audits, all of which support capital planning and our ability to respond to emerging issues and tenant needs.

TCHC takes electrical safety and the safety of tenants very seriously. TCHC's electrical systems are compliant with the Ontario Electrical Safety Code, the Toronto Municipal Code and the Fire Protection and Prevention Act.

TCHC will continue to maintain comprehensive preventive maintenance activities, and make upgrades to systems in compliance with provincial and municipal legislation and regulation.

RECOMMENDATIONS

The President and Chief Executive Officer, Toronto Community Housing Corporation, recommends that:

1. The Planning and Housing Committee receive this report for information.

FINANCIAL IMPACT

There are no financial implications resulting from this report.

DECISION HISTORY

On February 26, 2019, City Council adopted [MM3.4 Review the Safety of Electrical Systems at Toronto Community Housing Corporation Properties](#), with recommendations for TCHC to review the state of repairs and maintenance needed of the major electrical services in its multi-residential, high-rise portfolio.

COMMENTS

Electrical System Maintenance and Upgrades

Electrical Preventive Maintenance Program

To ensure TCHC's electrical systems are adequately maintained and in good condition, TCHC has a robust Electrical Preventive Maintenance (PM) Program. The program was created over ten years ago to reduce equipment failure and emergency work due to electrical system issues.

Under the Electrical PM Program, TCHC's portfolio is separated into three groups, which rotate through a three year cycle:

- Year 1: Infrared and thermography testing is completed on the electrical panels identifying 'hot' spots that need to be further inspected and/or corrected.
- Year 2: No testing.
- Year 3: Tightening and lubricating is completed on electrical panels to identify and correct any deficiencies in the physical operations of electrical systems.

Directed by TCHC's Electrical Services Team, testing and servicing in this program is contracted out to licensed electrical contractors. TCHC receives and reviews reports

from contractors, which details the work completed, the results of testing and any upgrades completed and/or needed to be completed to ensure the equipment is safe and working properly. For 2019, TCHC will review over 350 reports.

In 2015, a third party consultant (McGregor Alsop) reviewed all preventive maintenance programs including the Electrical Preventive Maintenance Program. All programs were deemed to meet or exceed industry standards.

It is important to note, that this program is administered by TCHC for Direct Managed buildings. For contract managed buildings, contract property managers implement their own program for preventive maintenance of electrical systems using specifications set out by TCHC. TCHC ensures that contract property managers are compliant with the preventive maintenance specifications.

In addition to the PM program, ongoing electrical issues are also identified by site staff and tenants. These issues are typically in suite and can range from unit power interruptions, to issues with electrical outlets and switches. Tenants will report electrical issues to TCHC's Client Care service or to site staff. Depending on the electrical issues, repairs or corrections are either made by site staff or a certified electrical contractor.

Implementing a robust electrical PM Program, as well as responding to electrical issues as they arise, TCHC has effectively maintained the quality and longevity of its electrical equipment. Through these initiatives, there is less demand for significant upgrades to the electrical systems, with lower risk of major failure and electrical hazards. Any needed upgrades for electrical systems identified throughout the PM process are addressed as they arise and/or used to inform the Capital Plan.

Partnership with the Electrical Safety Authority

TCHC has partnered with the Electrical Safety Authority (ESA) as part of the Continuous Safety Services Program, which inspects for electrical safety and compliance with the Ontario Electrical Safety Code. As part of this program, the ESA carries out inspections and audits of the electrical systems in TCHC buildings.

Participating in this program ensures that TCHC's electrical equipment is safe and working in compliance with regulation and legislation. Based on the results from the audits or inspections, work orders are created to correct any deficiencies in the equipment within the given timeframe. For 2018, there were over 6,000 work orders completed as a result of Continuous Safety Services Program audits.

In addition to the Continuous Safety Program, the ESA also attends the City of Toronto's Municipal Licensing and Standards (MLS) building inspections. Any electrical deficiencies that are reported in the inspection are corrected within the given timeframe. Depending on the type of deficiency, ESA will return for final inspection and sign-off once the deficiency has been corrected.

10-Year Capital Plan

TCHC has developed a 10-Year Capital Plan approved by Council in 2013 to address its aging infrastructure, including upgrades to electrical systems as needed. Electrical system upgrades are identified using the results from the Electrical PM Program. Key projects for electrical systems include upgrading the main switchboards throughout the portfolio and ensuring that the new systems are in compliance with the CSA Z462-18: Workplace electrical safety.

As part of the 10-Year Capital Plan, TCHC has also launched a pilot project at 200 Wellesley Street East to record power consumption and potential faults in systems. Power monitoring equipment has been installed to record and provide immediate updates on energy use and electrical issues.

Additional Initiatives

Inspections in St. James Town

In response to the electrical system deficiencies in St. James Town, and as a precaution to ensure the safety of tenants, TCHC has initiated a Request for Quotation (RFQ) for an electrical contractor to complete an independent review of electrical systems in TCHC buildings within the St. James Town catchment area.

TCHC in conjunction with ESA, is well aware of issues and deficiencies that happened in other buildings in the area. The independent assessments that will be completed this year will identify if TCHC has any of the same issues and any deficiencies will be corrected. As a precautionary measure, TCHC has also initiated projects to upgrade the main switchboards for TCHC buildings in the St. James Town catchment area. The buildings included in this review are 257, 325, 375 Bleecker Street and 200 Wellesley Street East.

City of Toronto's Electrical Working Group

TCHC is a member of the City of Toronto electrical working group, which is made up of different City divisions, agencies and corporations. The group was established to identify best practices and discuss industry standards for electrical systems across the city, acting as an open forum for professional discussions on issues related to electrical engineering. The working group met for the first time in June 2019.

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SIGNATURE

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