

THE REGIONAL MUNICIPALITY OF YORK

Housing York Inc.
December 8, 2004
Report of the
General Manager

EMERGENCY POWER PLAN PROPOSAL

1. RECOMMENDATIONS

It is recommended that:

1. The Emergency Power upgrades be endorsed as set out in *Attachment 1* and authorize the use of up to \$16,000 in Retained Earnings to fund the 2005 emergency power upgrades.
2. Staff review and report back annually hereafter seeking continued support for the forthcoming year's upgrade plan and funding approval as part of the annual budget process.

2. PURPOSE

The purpose of this report is to outline the existing emergency power capabilities of apartment buildings within the Housing York Inc. (HYI) portfolio, identify potential weaknesses, and propose a range of upgrades designed to enhance the safety and functionality of the buildings during emergency situations and extended power outages. The same issues are not present in townhouse sites which did not form part of this review.

3. BACKGROUND

The wide spread power outage that occurred in August 2003 provided an opportunity to examine the operation of the HYI housing portfolio in a long term power outage situation. During and after the event, input was secured from residents, staff, and contractors to identify the various issues that became evident during the course of the outage. Subsequent discussion resulted in a number of recommendations being made, including the need to examine the emergency power capabilities of HYI apartment buildings.

4. ANALYSIS AND OPTIONS

Of the twenty-one HYI apartment complexes located throughout The Regional Municipality of York, only six currently have emergency generators that can operate the emergency lighting and fire safety systems on a continuous basis during prolonged power outages. Of these six, only two are equipped to maintain elevator service. The remaining 15 buildings have battery equipped emergency lighting that is designed to last one half-hour, as required by code.

4.1 Client Group

All of the HYI apartment buildings house senior citizens including a number of frail, elderly and physically challenged individuals. In particular, two of our properties, Heritage East and Keswick Gardens house a significant number of frail seniors through the Assisted Community Living (ACL) program within the two buildings. Heritage East also houses families and single persons, a number of whom are physically, developmentally or mentally challenged.

4.2 Operational and Safety Issues Identified

In buildings that rely on battery powered emergency lighting, the short duration of the batteries leaves the hallways and stairwells in darkness within a half-hour of a power failure. Although these meet all relevant codes, one half-hour was identified as an inadequate amount of time to determine the cause of the problem and likely time period for repair. Seniors who may wish to vacate the building to stay with family or friends find the darkness an impediment.

Buildings without emergency generators have no active fire alarm monitoring systems during a power failure as a 110-volt current was required to maintain the connection to the monitoring company. During an extended power outage, this becomes a matter of serious concern.

Many residents in the taller buildings that do not have emergency power for the elevators are unable to use the stairs and as such are very limited with respect to travel in, out, and about the building during a power outage. Residents with medical conditions requiring travel in and out of the building to attend clinics/hospitals rely on family and friends to assist them.

4.3 Review Factors

Based on the above findings, a review took place on a building by building basis, taking into account the following factors:

- Existing emergency power capabilities.
- Client groups being served.
- Size and height of the buildings.
- Presence of special equipment dependent on power (such as sewage pumps).
- Presence of essential support services (ACL Program, March of Dimes, etc.).

The review results in a number of recommendations and a multi-year phase-in plan to enhance the emergency power capabilities of HYI buildings to varying degrees as outlined in *Attachment 1*. A multi-year phase-in program is necessary due to the financial impact and the need to balance the workload for available staff resources. The phase-in plan was developed after comparing available emergency power with the vulnerability of the residents and the height of the building.

For properties where the upgrade is relatively small (less than \$4,000) the battery replacement work will be completed in 2005. These upgrades have a nominal impact on staff resources. The year 2005 will also be used as a planning year to develop project specifications for the next year, beginning an annual cycle to allow the overall plan to be achieved.

4.4 Options

All of the HYI buildings currently meet Ontario Fire Code (OFC) and Ontario Building Code (OBC) requirements and do not require upgrading based on the minimum requirements of current legislation. As such, there is no obligation under law to undertake any improvements to the safety systems within the buildings.

However, it is important to recognize the nature of many of our clients who may have limited abilities to cope with unexpected emergencies such as power outages and to undertake a program to better equip our buildings to meet their needs.

5. FINANCIAL IMPLICATIONS

This work falls outside of the definition of appropriate costs to be drawn from capital reserves. It is therefore suggested that these projects be funded from either Retained Earnings or available in year surpluses.

HYI has Retained Earnings of approximately \$2.9 million as of 2001.

Retained Earnings may be used by HYI to meet the needs of the housing program. This can be for planning costs, studies, small land purchase, and other initiatives to meet HYI's strategic purposes, subject to the review and agreement of the Service Manager, The Regional Municipality of York. Retained Earnings can also be used to offset capital reserve shortfalls should they occur.

The capital cost to complete all upgrades as outlined in *Attachment 1* is estimated to be \$910,500. However, phasing the upgrades over a six year period enables HYI to manage the expenditure.

The increase in the annual operating costs related to the servicing and repair of the new generators as recommended in this report is estimated to be \$7,500 per year, which is manageable within existing budget levels.

6. LOCAL MUNICIPAL IMPACT

If the improvements to the fire safety systems as identified in this report were implemented, the fire safety systems would exceed both the provincial and local code and by-law requirements.

7. CONCLUSION

HYI properties currently meet OFC and OBC requirements. The proposed emergency power enhancements will increase services to vulnerable residents.

It is recommended that the multi-year phase-in program be adopted to better equip HYI properties serving an increasingly vulnerable resident population.

The provision of emergency power to accommodate the recommendations above can be achieved through a number of methods, including the installation of fixed generators, provision of hook-ups for portable generators, upgrading of existing generator capacity to include one elevator, and/or the retrofitting of battery powered emergency lighting systems to increase the duration of operation.

The Senior Management Group has reviewed this report.

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November 25, 2004

Attachment -1
KM/sd/dm

Version 4-2003-5-30