

CITY OF HAMILTON

PUBLIC WORKS DEPARTMENT
Transportation, Energy, & Facilities Division

TO: Chair and Members Public Works Committee	WARD(S) AFFECTED: WARD 2
COMMITTEE DATE: June 6, 2011	
SUBJECT/REPORT NO: Emergency Generator at Central Utilities Plant (PW11046) - (Ward 2)	
SUBMITTED BY: Geoff Rae, MBA, P.Eng. Acting General Manager Public Works Department	PREPARED BY: Rom D'Angelo Manager of Corporate Buildings & Technical Services (905) 546-2424, Extension 7006
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RECOMMENDATION

That the General Manager of Public Works be authorized to extend a single source contract to Toromont Industries Ltd for emergency generator rental for Central Utilities Plant (CUP) for a term of eight months.

EXECUTIVE SUMMARY

Council approval is required in order to extend the rental term for the portable emergency generator at Central Utilities Plant. This is required due to unavoidable delays in the generator replacement project for this location.

The backup generator at the CUP provides life safety support for CUP, Art Gallery of Hamilton, Hamilton Convention Centre, Underground Parking, and Ontario Government Building in the event of a power failure. The generator at Central Utilities Plant requires replacement due to non-compliance with new code legislation implemented in 2006. This was identified in April 2010 during a review with the Technical Standard and Safety Authority (TSSA) as part of the Quality Assessed Facility Program. As outlined in the TSSA assessment, the generator fuelling system at CUP could no longer be filled due to non-compliance findings. Consequently, the existing system couldn't operate as emergency back up to the building which is a requirement of the fire code and

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necessary for ensuring safe evacuation of the building and life safety in the event of a power failure. Portable emergency generators were installed immediately so there could be continued operations and service delivery at these facilities. Toromont Industries Ltd was engaged for this work as per Purchasing Policy 10—Policy for Emergency Procedures as it was an emergency and they were the only company that could immediately provide a generator of the size and capacity required. Additionally, the City has a corporate generator maintenance contract with Toromont Industries Ltd. The Policy 10 was approved in May 2010 in the amount of \$96,718 for a rental term up to and including December 2010. Subsequently, a Policy 11-Policy for Negotiations was approved in November 2010 to extend the rental term with Toromont Industries Ltd. The total increase was in the amount of \$149,181 and extends the rental term to July 2011.

Council Report PW 10072 was submitted and approved July 08, 2010 with the following approved recommendations: (a) That the City replace the existing diesel generators and associated fuelling systems at CUP and HP with Natural Gas Generators in order to come into compliance with the Technical Standards and Safety Act, 2000 and (b) That the cost of the two generators noted in Recommendation (a), estimated at \$800,000 be funded from the Unallocated Capital Reserve Account 108020.

Engineering designs were completed and the work tendered and closed with work on the new generator system anticipated to commence in May 2011.

Delivery of the new generator has been delayed substantially because parts for generators of this size and capacity are manufactured in Japan. Due to the earthquake and tsunami in Japan on March 11, 2011, these generator parts are now in short supply and, therefore, the generator delivery for this project has been delayed with an anticipated delivery date of November 2011.

Alternate suppliers were investigated but there are few options for generators of this capacity and none with appropriate dimensions that can be accommodated without significant building modifications.

An extension to the portable emergency generator rental term is required to accommodate for this delay. It is beneficial to the City to give this work to Toromont Industries Ltd rather than engaging in a competitive bid process because it is more cost effective and less disruptive. If a portable generator term were entered into with a new vendor, in addition to the monthly fees, it would require an additional cost of approximately \$26,000 to install and connect the new portable generator. Further, it would cause disruption to the CUP, Art Gallery of Hamilton, Hamilton Convention Centre, Underground Parking, and Ontario Government Building while the transition took place.

It is critical that backup power still be provided at this site. It is not only a fire code requirement to have backup power but also critical to ensuring life safety. Without an emergency generator, CUP, Art Gallery of Hamilton, Hamilton Convention Centre, Underground Parking, and Ontario Government Building would have to be shut down.

Alternatives for Consideration - See Page 4

FINANCIAL / STAFFING / LEGAL IMPLICATIONS

Financial:

Temporary generator needs were considered within the scope of the Emergency Generator and Fuel Systems at CUP Replacement Project approved as per PW10072. The delays incurred as a result of the devastating earthquake in Japan necessitate spending beyond \$250,000 requiring Council approval for an additional eight-month term. Although there is an increase to the costs associated with rental generator fees, there is no impact to the overall project budget.

Staffing:

There are no staffing implications.

Legal:

There are no legal implications.

HISTORICAL BACKGROUND

The Corporate Facilities Management Section (CFM) of the City of Hamilton entered into the Quality Assessed Facility (QAF) program with the Technical Standards and Safety Authority (TSSA) in April 2010. The goal is to demonstrate the City's commitment to becoming leaders in providing safe, efficient and compliant facilities. The QAF program involves a partnership with the TSSA's technical experts and City of Hamilton staff. The TSSA is a regulatory body that has the authority to order changes to systems, levy fines and even shut down unsafe operations when necessary. By engaging in the QAF program, however, the TSSA prefers to focus on prevention and to work with their partners cooperatively to enhance safety and ensure compliance rather than levy orders and fines.

The first phase of the QAF program was to review the emergency generators and associated fuel systems under the Corporate Buildings portfolio. The goal of this phase was to ensure compliance of all generators and fuel systems to applicable legislation under the jurisdiction of the TSSA. During TSSA assessment and reporting of Central Utilities Plant, a number of non-compliance items were identified, some of which were considered imminent hazards. The TSSA advised that these deficiencies must be corrected as soon as possible to ensure the safety of employees and the public.

Corporate Facilities Management (CFM) developed a corrective action plan and submitted Council Report (PW10072) Emergency Generators and Fuel Systems at Central Utilities Plant and Hamilton Place that was approved by Council on July 08, 2010. CFM engaged Morrison Hershfield, an engineering consultant, to design the new generator systems. During this time frame, portable generators were rented such that operations and services at the CUP and Hamilton Place sites could remain uninterrupted. (A Policy 10-Policy for Emergency Purchasing was approved in May 2010 in the amount of \$96,718 to Toromont Industries Ltd for a rental term up to and including December 2010. Subsequently, Policy 11-Policy for Negotiations was

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approved to extend the rental term. The increase was in the amount of \$149,181 and extends the rental term to July 2011). The intention was to commence the generator replacement in May 2011. However, due to the devastating earthquake and tsunami that hit Japan in March 2011, generator parts are in short supply and the generator delivery has been delayed until approximately November. As a result, the term of the monthly generator rental needs to be extended and an increase needs to be made to the associated Policy 11.

POLICY IMPLICATIONS

Council must authorize any requests for negotiations with a single source where the value of proposed procurement is \$250,000 or greater. (Purchasing Policy #11 - Policy for Negotiations)

RELEVANT CONSULTATION

Corporate Services, Procurement Section- Procurement Manager

ANALYSIS / RATIONALE FOR RECOMMENDATION

Back-up generators are required as part of the Life Safety System. As outlined in the TSSA assessment on Central Utilities Plant, the generator fuelling system in this facility can no longer be filled. Consequently, the existing system cannot operate as emergency back up to the building which is a requirement of the fire code and necessary for ensuring safe evacuation of the building and life safety in the event of a power failure. A temporary portable emergency generator was connected at Central Utilities Plant while a new system was designed and tendered to address the issues identified. Use of this generator has allowed operations to continue uninterrupted at CUP, Art Gallery of Hamilton, Hamilton Convention Centre, Underground Parking, and Ontario Government Building.

At the time, Toromont Industries Ltd was selected as a single source because they were the only company that could immediately provide a generator of the size and capacity required. Work on the new generator system was anticipated to commence in May 2011. However, as a result of the natural disaster in Japan from which the parts are coming, generator parts are in short supply and the generator delivery has been delayed. Continuation of the portable emergency generator rental term is, therefore, necessary to ensure continued operations and life safety of occupants.

ALTERNATIVES FOR CONSIDERATION

Option #1: Competitively tender for portable emergency generator

This option consists of engaging in a competitive bid process for a portable emergency backup generator. In addition to the approximate \$75,000 to extend the rental term for the generators, this would require an additional first time cost of approximately \$26,000

for the disconnection and installation of a new portable generator. Further, it would cause disruption to the CUP, Art Gallery of Hamilton, Hamilton Convention Centre, Underground Parking, and Ontario Government Building while this transition takes place.

Option #2: Remove the portable emergency generator at Central Utilities Plant

This option consists of disconnecting and removing the portable emergency generator from CUP. Without emergency backup power, the CUP, Art Gallery of Hamilton, Hamilton Convention Centre, Underground Parking, and Ontario Government Building would not be permitted to operate and would have to be shut down until the final replacement was complete. For this reason, it is highly recommended the City not proceed with this option.

CORPORATE STRATEGIC PLAN

Focus Areas: 1. Skilled, Innovative and Respectful Organization, 2. Financial Sustainability, 3. Intergovernmental Relationships, 4. Growing Our Economy, 5. Social Development, 6. Environmental Stewardship, 7. Healthy Community

Financial Sustainability

- ◆ Delivery of municipal services and management of capital assets/liabilities in a sustainable, innovative and cost effective manner is maintained.
- ◆ Reduced risk to the safety of workers, visitors of the facility and the public thereby increasing the ability to avoid incidents of injuries and associated liabilities; increase operational efficiencies; avoid costly shutdowns; and avoid costly fines associated with not being in compliance with regulations.

Intergovernmental Relationships

- ◆ Meeting the requirements of the QAF Program will help to foster the relationship and continue the partnership formed with the TSSA, a regulatory body that oversees the Technical Standards and Safety Act.

APPENDICES / SCHEDULES

None