



STAFF REPORT ACTION REQUIRED

Enrolment of Union Station Stand-by Generators in the Ontario Power Authority Demand Response 3 Program

Date:	August 12, 2010
To:	Executive Committee
From:	Chief Corporate Officer
Wards:	Ward 28
Reference Number:	P:\2010\Internal Services\Fac\Ec10015Fac- (AFS 12786)

SUMMARY

In 2007, the Ontario Power Authority (OPA) released its Demand Response 3 Program (DR3) which is designed to pay companies/businesses to curtail electrical use during periods of high demand in Ontario through either the reduction in electrical load or the self-generation of electricity through approved on-site generators.

It is proposed to register the two new stand-by generators being installed at Union Station as part of the revitalization project in the DR3 program. The stand-by generators have a total output of 2.5 MW and are included in the Union Station project budget. The 2.5 MW generators will assist the City in meeting its broader combined goal of 90 MW reduction and/or generation.

RECOMMENDATIONS

The Chief Corporate Officer recommends that:

1. City Council approve the enrolment of the new, stand-by generators to be installed at Union Station in the OPA Demand Response 3 Program.
2. City Council approve the Director, Energy & Strategic Initiatives, in conjunction with the Director, Purchasing and Materials Management to initiate a Request for Proposal (RFP) process to select the Demand Aggregator to coordinate the participation of the City in the OPA Demand Response 3 Program.

3. City Council authorize the Chief Corporate Officer severally to execute an agreement for a period not to exceed five (5) years with the selected Demand Aggregator, on behalf of the City.

Financial Impact

Funding for the generators to provide standby electrical capacity to Union Station is available in the Approved 2010 Capital Budget and 2011-2019 Capital Plan for Union Station. There will be some minor operating expenses for additional metering and monitoring equipment once the generators have been installed. The program can provide annual income to the City in excess of \$350,000. Over the 5-year term, the income stream could exceed \$1.5 million. The income will more than offset the additional annual costs. The additional costs and estimated revenue will be included in the Facilities and Real Estate's 2011 and/or future year Operating Budgets.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

Agreements exceeding 3 years must be approved by City Council.

COMMENTS

In 2007, the OPA released its DR3 program to encourage companies/businesses to decrease electrical usage during periods of high demand in Ontario through either the reduction in electrical consumption or the self-generation of electricity during periods of constrained electrical supply. The stand-by generators to be installed at Union Station would qualify in the latter category.

From the perspective of the OPA, this demand reduction will:

- a) Relieve congestion on the electrical transmission and distribution infrastructure in the province,
- b) Allow the OPA to avoid importing expensive generation from neighbouring systems - often times, coal-fired.
- c) Allow OPA to work toward elimination of coal-fired generation within the province by the planned 2013 target, and
- d) Defer the building of additional conventional generation.

From the perspective of a program participant, DR3 provides an opportunity to utilize existing assets to create a revenue stream while simultaneously generating environmentally cleaner power.

To encourage participation in DR3, the OPA will pay business a stand-by fee simply to make the demand reduction available. It will pay additional amounts when the business is called upon to deliver the contracted demand reduction during periods of constrained supply. If the OPA calls for the demand reduction and the client fails to comply, penalties will be imposed, including a reduction in the fixed portion of the payment stream. In this proposal, the complex process of coordinating the demand reduction resources with the supply portfolio of the OPA is managed by the aggregator.

DR3 is open to direct participants who can provide a minimum demand reduction of 5 MW, or to Aggregators who can pool the demand reduction capabilities of several clients to a minimum of 25 MW. As the demand reduction potential at Union Station is below the 5 MW threshold, this option is not available to the City.

The following Demand Aggregators participate in the OPA DR3 program:

- a) Direct Energy, in conjunction with CPower
- b) Rodan
- c) ECS
- d) Enernoc

An RFP process will be undertaken to select the Demand Aggregator.

Pursuing this strategy will create an income stream that will offset operating expenses and contribute to the goal of enhancing the energy security of the City. This generating capacity will lower the peak demand that must be met by the existing OPG generating fleet.

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SIGNATURE

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