

Consolidated Clause in Works Committee Report 3, which was considered by City Council on April 12, 13 and 14, 2005.

7

Performance Bonding for Deep Lake Water Cooling

City Council on April 12, 13 and 14, 2005, adopted this Clause without amendment.

The Works Committee recommends that City Council adopt the staff recommendations in the Recommendations Section of the revised report (February 17, 2004) from the Acting Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer.

Purpose:

This report recommends a further modification to the performance bonding requirements of the Energy Transfer Agreement between Enwave Energy Corporation (“Enwave”) and the City for the purposes of completing the Deep Lake Water Cooling project using City infrastructure.

Financial Implications and Impact Statement:

Based on data provided by Enwave and confirmed by the City, the total remaining cost of completing Enwave’s DLWC project using City infrastructure is estimated at \$6.5 million, representing the City’s remaining risk exposure. While City staff believe that it is imperative to maintain adequate performance bonding to cover the City’s risk exposure, it is agreed that the performance bonds from Enwave may be reduced to \$6.5 million, a reduction from the previous performance bond amount of \$19.4 million. As a pre-condition of providing the performance bonding, Enwave’s insurance broker continues to require the provision of 100 percent collateral. This report recommends that the City continue to provide collateral in support of Enwave’s performance bond to the City in an amount to be limited at 43 percent of the required amount (i.e., 43 percent of \$6.5 million), consistent with the City’s current shareholding in Enwave, and representing a reduction over the previous Council-authorized collateral of \$7.3 million.

Recommendations:

It is recommended that:

- (1) Council authorize a deferral to June 2006 of the requirement under the Energy Transfer Agreement (“ETA”) between Enwave Energy Corporation (“Enwave”) and the City for the installation of diesel generators at the extension to the John Street Pumping Station (“JSPS”);

- (2) City Council permit Enwave to substitute for the \$19.4 million performance bond it provided to the City in 2002 in relation to the ETA for the Deep Lake Water Cooling Project (DLWC), a performance bond in the amount of \$6.5 million, with such bond to have a content satisfactory to the City's Chief Financial Officer and Treasurer and the Acting Commissioner of Works and Emergency Services and to be in a form satisfactory to the City Solicitor.
- (3) Recommendation (2) be subject to the following conditions:
 - (i) the provision of an indemnification and release document from Enwave to the City in relation to the deferral of the diesel generators in the event of a power outage at the JSPS extension for the period of the deferral, in a form satisfactory to the City Solicitor;
 - (ii) that Enwave agrees to be responsible for the completion and submission of any and all applications and payment of all associated fees that may be required due to changes in any Certificate of Approval arising from the delay in the installation of the diesel generators;
- (4) the City's Chief Financial Officer and Treasurer, be authorized, if required, to provide an irrevocable letter of credit or any other acceptable financial instrument on behalf of Enwave to its surety, to satisfy that portion of the financial guarantee requirements that may be necessary to permit Enwave to obtain performance bonding as set out in Recommendation (2), such letter of credit to be in an amount not to exceed 43 percent of the total amount required by the surety provided that:
 - (i) Enwave reimburses the City for all costs that may be incurred by the City in obtaining and maintaining this letter of credit or other collateral; and
 - (ii) the balance of the collateral requirements be arranged by Enwave; and
- (5) the appropriate City officials be authorized and directed to take all actions necessary and execute all documents required to implement the foregoing recommendations.

Background:

Deep Lake Water Cooling:

DLWC was originally approved as a concept plan in September 1997 by Councils of both the former City of Toronto and Metro Toronto. Enwave currently offers district cooling services through its DLWC system, which uses the cooling extracted from Lake Ontario water to cool the buildings of its customers.

The DLWC process requires the use of City infrastructure. Water drawn from deep in Lake Ontario is subsequently treated at the City's Island Filtration Plant and then diverted through an energy transfer loop and heat exchangers located in a facility constructed as an extension to the City's John Street Pumping Station. Following this process, the water is returned to the discharge mains at the JSPS for distribution to City water customers.

Although DLWC became operational on July 29, 2004, construction has not yet been completed.

Energy Transfer Agreement:

For the purposes of facilitating DLWC using City infrastructure, Metropolitan Council, at its meeting of September 1997, authorized staff to execute an Energy Transfer Agreement (“ETA”) with Enwave, setting out general terms and conditions. Subsequently, City Council at its meeting of July 24, 25, 26, 2001 (Report 12, Clause 1 of the Works Committee), authorized the execution of an ETA on modified terms and conditions.

Performance Bonding:

The ETA was executed on January 18, 2002, including a provision requiring Enwave to provide the City with performance bonds for the purposes of undertaking DLWC.

Performance bonds are insurance instruments that guarantee contractual obligations involving an obligee (the City), a surety (the insurance company), and a principal (Enwave). The purpose of performance bonds under the ETA is to provide financial protection to the City in the event of a default on the part of Enwave, resulting in its inability to complete its obligations under the contract. In this case, the performance bond would provide the City with a financial guarantee allowing for the completion of all of Enwave’s construction obligations under the ETA, or for the restoration of City buildings, land and plant to their existing condition as of the date of the ETA.

Performance bonds are issued once underwriters have analyzed a project and set premium and collateral rates based on their assessment of the likelihood of failure and stability of the principal.

Performance bonding requirements under Section 2.18 (b) of the ETA are as follows:

“From the date construction of the Project Works commences, up to and including the Operational Date, Enwave shall provide performance bonds in a form suitable to Toronto that assures Toronto that the Project Works shall be completed or Toronto’s property restored to the condition existing as of the date of this Agreement. The amount of such security shall be equal to 50 percent of the capital cost to complete the Project Works.”

Subsequently, at its meeting of October 1, 2, and 3, 2002, Council (Report 13, Clause 4 of the Policy and Finance Committee) permitted Enwave to provide the City with a performance bond in a reduced amount (\$19.4 million) from that required under the ETA, corresponding to the City’s risk exposure at that time.

Comments:

In mid-August 2004, Enwave approached City staff requesting that the City waive or further reduce its performance bonding requirements under the ETA, citing the near completion of the DLWC project. City staff have reassessed the City’s remaining risk exposure relating to the DLWC project, and maintain that the performance bonding requirements are essential for the protection of the City from potential liabilities. However, City staff agree that the amount of risk

exposure has been reduced as a result of Enwave's having completed some of the DLWC project work.

The maintenance of proper performance bonding from Enwave is essential for the following reasons:

- (i) the project works involve City lands and City water supply infrastructure. In the event of a default on the part of Enwave, resulting in its inability to complete its obligations under the ETA, funds would be made available to the City to either complete the portion of the project works that may have been partially constructed, but not yet completed, or to restore the underlying City property to its pre-existing condition; and
- (ii) in accordance with the ETA, Enwave will irrevocably transfer to Toronto the title to the new intake lines ("NIL") upon commissioning, free and clear of all claims, liens and encumbrances, and risk of loss of or damage of the NIL. Thus it was a requirement that the City's name (rather than Enwave's) appears on both the easement allowing Enwave to construct in Lake Ontario, and on the Certificate of Approval ("CofA") permitting the construction of the NIL. In the event of a default on the part of Enwave, funds would be made available to the City in order to allow it to fulfil a requirement to complete the installation and backfill of the intake line in Lake Ontario, or to remove the completed portion of the intake line and to restore the lake-bottom and shoreline, as may be required by the Ontario Ministry of Natural Resources.

In the absence of adequate performance bonding, and in the event of a default by Enwave, any of the required restoration, repair, or completion costs as outlined above would be at the sole expense of the City.

It should be noted that Enwave's general contractor Necso Canada Limited ("Necso"), has provided Enwave with similar performance bonding, guaranteeing Necso's obligations under its construction contract with Enwave, and that Necso, in turn, has received similar performance bonds from its project sub-contractors. However, this performance bonding is not to the benefit of the City and the City has no right to claim on it and therefore does not provide any protection to the City in the event of a default by Enwave.

This report recommends that Council permit the further reduction of performance bonding under the ETA to \$6.5 million. The determination of this amount was based on the following:

- (i) backfilling of the new intake lines installed in Lake Ontario as required under the C of A has not yet occurred;
- (ii) the purchase and installation of a fifth water pump by Enwave at the Island Filtration Plant as required under the ETA and C of A remains outstanding;
- (iii) City staff have expressed serious concerns relating to the types of fasteners installed in the JSPS extension. Work undertaken by Enwave's contractors for the purposes of constructing DLWC has required a modification to the City's existing potable water system. In making these modifications, bolts manufactured from improper materials have been used. In particular, bolts used to connect the potable water pipes are rusting

significantly due to an extremely damp environment and material incompatibility. While this is not a water quality concern at this time, this represent a significant long-term maintenance issue for the City;

- (iv) City staff are concerned about the formation of condensation on the piping and equipment inside the pre-existing JSPS facilities and JSPS building extension (“the JSPS facilities”). While the condensation results in a damp environment, giving rise to health and safety concerns, it is also a cause for premature corrosion, leading to operational and maintenance concerns. In accordance with the ETA, Enwave shall be responsible for any risk of loss or damage to the system that is attributable to the construction or design. City staff have thus informed Enwave that all the piping in the DLWC system at the JSPS facilities must be properly insulated immediately; and
- (v) City staff noted that the paint was peeling off many of the new potable water pipes and connections in the JSPS facilities. The City required Enwave to properly prepare and repaint the pipes and fittings with insulation to follow. Enwave is making progress on the deficiencies with repainting completed, insulation on-going and rusted fasteners yet to be addressed. Although some deficiency work has been completed, this had not yet been fully inspected and accepted by the City.

Due to the above deficiencies, an operational date for the DLWC cannot yet be determined. Finally, Enwave has indicated its desire to defer the purchase and installation of the diesel generators for the JSPS building extension (currently included in the ETA) until calendar years 2005-2006, to be undertaken in a separate project, and that this project be excluded from the performance bonding requirements currently under review. City staff have advised Enwave that there are no objections to this deferral given that the diesel generators have a minimal impact on the production of potable water and is not a requirement in the CofA, however, the City will require Enwave to indemnify the City against any liability in the event of a power outage at the JSPS extension during the period of this deferral.

Conclusions:

This report recommends a further reduction in the performance bonding requirements of the ETA between Enwave and the City. City staff have reassessed the City’s risk exposure relating to Enwave’s DLWC project, and agree that the level of risk exposure has been reduced as a result of Enwave’s having completed more of the DLWC project work. However, City staff continue to maintain that adequate performance bonding is essential for the protection of the City from remaining potential liabilities.

Based on the estimated amount of work remaining on the DLWC project, it has been determined that the City’s remaining risk exposure is approximately \$6.5 million, assuming no cost overruns. Therefore, this report recommends that Enwave’s performance bonding requirements be reduced to this level from the current requirement of \$19.4 million.

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