

REGIONAL MUNICIPALITY OF OTTAWA CARLETON
 MUNICIPALITÉ RÉGIONALE D'OTTAWA CARLETON

REPORT
 RAPPORT

Our File/N/Réf. 19-95-0007-V
 Your File/V/Réf.

DATE 09 September 1996

TO/DEST. Co-ordinator
 Corporate Services and Economic Development Committee

FROM/EXP. Environment and Transportation Commissioner

SUBJECT/OBJET **ROBERT O. PICKARD ENVIRONMENTAL CENTRE
 DIGESTER GAS UTILIZATION
 CONTRACT CS-6088 - PRE-PURCHASED COGENERATION
 EQUIPMENT CONTRACT AWARD**

DEPARTMENTAL RECOMMENDATIONS

That the Corporate Services and Economic Development Committee and Council approve:

1. **The award of Contract CS-6088 to the firm of Toromont Industries Ltd., Concord, for the supply of Cogeneration equipment for the R.O. Pickard Environmental Centre for a total contract provision of \$2,493,907.79;**
2. **An increase in project authority for the Digester Gas Cogeneration Facility from \$3,800,000 to \$4,772,000. Funds in the amount of \$972,000 to be transferred from the Sewer Capital Reserve Fund.**

RATIONALE

In June 1996, Council approved the establishment of a Cogeneration Facility Capital Project. The initial component of this project is the pre-purchase of the Cogeneration equipment package. The purpose for this is twofold. Firstly, due to the specialized nature of the equipment, it has an unusually long fabrication and delivery time. Secondly, the detailed design of the structure which will house the units cannot begin until the designers are certain of which type of equipment will be selected. Therefore, in order to expedite the project to ensure maximum savings for the Region, the pre-purchase of equipment was put to tender in July 1996.

Tenders were received from the following Manufacturers (excluding G.S.T.).

| | |
|---|-------------|
| Toromont Industries Ltd., Concord | \$2,237,297 |
| Pamco Atlas Ltd., Scarborough | 2,375,000 |
| Jenbacher Energiesysteme Ltd., Montreal | 2,592,000 |
| Departmental Estimate: | \$1,600,000 |

With one exception the tenders were in order and contained no irregularities. The exception was the tender submitted by Jenbacher Energiesysteme Ltd. which did not contain a Bid Bond. The bond was received subsequent to the opening of the tenders. As they were the high bidder of the tenders submitted this has no impact on the recommendation of the low tender.

The consultant has completed a detailed review of the packages submitted including a technical review of the proposals and a lifecycle analysis/present value analysis of the packages submitted. A rating system was established to rank the options with the highest point value being scored by the submission from Toromont Industries Ltd.

The discrepancy between the Departmental estimate and the actual tendered prices was reviewed and can be explained as follows. The budget estimate was based on information provided by various equipment vendors during the preparation of the pre-design report. The costs provided were for their standard systems available at the time. During the development of the design package it became apparent that by replacing some of the standard pieces of equipment with that of a slightly higher quality, you would ensure longer equipment life and easier maintenance. As well, our specifications require stringent testing and commissioning in order to ensure that projected savings can be realized. As a result of the additional requirements, the units provided have a significantly higher efficiency which will result in higher annual savings once the facility is operational.

We have evaluated the economic impact of the increase in capital cost of the Cogeneration equipment combined with the increased electrical efficiency to be realized. The preliminary concept estimated a 2 Mega Watt (MW) generating facility however the recommended supplier is providing a 2.4 MW facility with a corresponding increase in electrical production. The resulting increase in the payback period is approximately 4 months (5.6 years to 6 years). It is therefore clear that the higher tender cost has not adversely affected the project economics.

Based on the review of the tender documents, the Department recommends that the contract be awarded to Toromont Industries Ltd. The requested contract award of \$2,237,297, plus an allowance of \$100,000 for contingency for contract variations due to unforeseen conditions, and \$156,610.79 for the G.S.T allowance, brings the total contract award to \$2,493,907.79.

Also, the Department is requesting that the overall project budget be revised from \$3,800,000 to \$4,772,000. This amount is made up of \$700,000 for increased equipment cost and \$272,000 for emergency work to install the methane gas flare.

CONSULTATION

Public consultation is not required.

EXPENDITURE JUSTIFICATION

A detailed economic analysis has shown the most cost effective use of this energy source is the construction of a Cogeneration Facility. The revised capital cost is \$4,772,000 which results in an increased annual net power savings of \$107,000 (\$685,000 to \$792,000). This equates to a discounted payback period of 6 years.

FINANCIAL STATEMENT

| | \$ |
|-------------------------|------------------|
| Approved Budget to Date | 3,800,000 |
| Total Paid & Committed | <u>(209,767)</u> |
| Balance Available | 3,590,233 |
| THIS REQUEST | (2,493,908) |
| Additional Funding | <u>972,000</u> |
| Balance Remaining | <u>2,068,325</u> |

Encumbrance No. CS 4088 - \$2,493,908.

Funds in the amount of \$3,800,000 have been provided in the 1996 Budget year under Account No. 932-42128, Digester Gas Cogeneration Facility. The additional amount of \$972,000 are available for transfer from the Sewer Capital Reserve Fund.

*Approved by D. Brousseau
on behalf of M.J.E. Sheflin*

SF/jb

FINANCE DEPARTMENT COMMENT

Funds in the amount of \$972,000 are available for transfer from the Sewer Capital Reserve Fund. Subject to Council approval.

*Approved by T. Fedec
on behalf of the Finance Commissioner*