

Staff Report for Decision

DATE OF MEETING DECEMBER 15, 2021

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SUBJECT PORT THEATRE CHILLER REPLACEMENT

OVERVIEW

Purpose of Report

To obtain Council's approval for additional funding to replace the Port Theatre Chiller system with a new heat pump system.

Recommendation

That the Finance and Audit Committee recommend that Council direct Staff to increase the budget for the Port Theatre Chiller Replacement project from \$712,199 to \$1,042,005 funded by a \$74,640 grant from CleanBC and \$255,166 from the Climate Action Reserve Fund.

BACKGROUND

The existing chiller system at the Port Theatre is near the end of meeting operational expectations. At the March 17, 2021 Finance and Audit Committee meeting, Staff provided the Committee with the Port Theatre – Chiller Equipment Renewal and Low Carbon Electrification Options report presenting options and recommendations for its replacement. Option A was in best alignment with the City's 2019-2022 Strategic Plan for Environmental responsibility, however had the highest capital cost of the three options presented. Option A and the necessary budget increase of \$500,799 carried, and was subsequently endorsed by Council on March 29, 2021.

Staff retained an external Consultant to design the new heat pump system. Once complete, a tender was issued for the work, which closed on October 27, 2021. Application for CleanBC construction incentives were pursued, and a \$74,640 grant has been secured, which will be paid upon project completion.

DISCUSSION

The remaining 2021 budget available for this project is \$671,319. The single bid received was \$910,113. Staff recommend a project budget of \$1,001,125 to accommodate contingency, project management and inspection fees.

The budget presented at the March 17, 2021 Finance and Audit Committee meeting was based on the design consultant's opinion of probable cost for the work. Fluctuating market conditions, supply chain delays, inflation, and the impacts of the pandemic being noticeable, opinions of probable construction costs have become less reliable in establishing construction budgets.

This equipment renewal project represents a significant opportunity to minimize greenhouse gas (GHG) emissions at this facility by approximately 90%; electrifying both cooling and heating systems, increasing efficiency and thereby reducing energy costs, and improving operational reliability and user comfort.

FINANCIAL CONSIDERATIONS

Should the Committee accept the recommended option 1, the 2021 budget will be increased by \$329,806 funded by a CleanBC grant and the Climate Action Reserve Fund. The revised projected 2021 closing balance for the Climate Action Reserve Fund will be \$304,255. |

OPTIONS

- 1) That the Finance and Audit Committee recommend that Council direct Staff to increase the budget for the Port Theatre Chiller Replacement project from \$712,199 to \$1,042,005 funded by a \$74,640 grant from CleanBC and \$255,166 from the Climate Action Reserve Fund.
 - The advantage of this option: This project will be able to proceed immediately into construction, maintaining the original construction schedule thereby reducing the risk of potential equipment failure, interruptions to planned performances, and loss of revenue. Completing the renewal will also provide improved user comfort and increase energy efficiency while reducing energy costs and GHG emissions for the facility by approximately 90%.
 - The disadvantages of this option: Additional funding is required to complete the project. Less funding will be available in the Climate Action Reserve Fund to support other projects and initiatives.
 - Financial Implications: The 2021 – 2025 Financial Plan will be amended to reflect the increased project budget.
- 2) That the Finance and Audit Committee recommend that Council direct Staff to cancel the tender, re-budget the project in the next Capital Planning Cycle, and renew equipment at a later date.
 - The advantages of this option: the Climate Action Reserve will not be drawn down, and funding may be used for other potential projects.
 - The disadvantages of this option: Higher risk to scheduled operations if existing equipment fails before future replacement. The facility's reductions in energy consumption and emissions would not be realized until measures are implemented at a future date.
- 3) That the Finance and Audit Committee provide alternate direction.

SUMMARY POINTS

- The proposed new Port Theatre heat pump system would replace the aged chiller system with a new system capable of heating and cooling the building without using fossil fuel.
- This new equipment will improve operational efficiency, reliability, reduce energy consumption, costs, and greenhouse gas emissions by approximately 90%.
- Up to \$329,806 in additional funding is required for implementation of this new system.

ATTACHMENTS

ATTACHMENT A: Report 2021-MAR-17 Port Theatre Chiller Equipment Renewal and Low Carbon Electrification Options

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