**Minutes – Executive Policy Committee – March 13, 2023**

**Report – Standing Policy Committee on Water, Waste and Environment – February 27, 2023**

**Item No. 2 Escalation and Bid Validity Period Recommendations for the North End Sewage Treatment Plant (NEWPCC) Upgrade – Biosolids Facilities Project**

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

The Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Water, Waste and Environment and submitted the following to Council:

1. That the use of escalation clauses as a negotiation option in the NEWPCC Upgrade Biosolids Facilities Project be approved.

2. That the Public Service be directed to request special meetings of the Standing Policy Committee on Water, Waste and the Environment, Executive Policy Committee, and Council for the advancement of the award of the Design Build Agreement.

3. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

## Report – Standing Policy Committee on Water, Waste and Environment – February 27, 2023

DECISION MAKING HISTORY:

Moved by Councillor Mayes,

That the recommendation of the Standing Policy Committee on Water, Waste and Environment be concurred in and forwarded to Council.

| | | |
|---|---|---|
| Yea: | Gillingham, Browaty, Lukes, Mayes, Orlikow, Rollins | 6 |
| Nay: | | 0 |

Carried

STANDING COMMITTEE RECOMMENDATION:

On February 27, 2023, the Standing Policy Committee on Water, Waste and Environment concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

# ADMINISTRATIVE REPORT

**Title:** ESCALATION AND BID VALIDITY PERIOD RECOMMENDATIONS FOR THE NORTH END SEWAGE TREATMENT PLANT (NEWPCC) UPGRADE: BIOSOLIDS FACILITIES PROJECT

**Critical Path:** Standing Policy Committee on Water, Waste and Environment – Executive Policy Committee – Council

## AUTHORIZATION

| Author | Department Head | CFO | CAO |
|---|---|---|---|
| C. D. Wiebe, P. Eng., CAMP, Manager of Engineering Services | T. W. Shanks, M. Eng., P. Eng. Director, Water and Waste Department | C. Kloepfer | M. Jack |

## EXECUTIVE SUMMARY

To ensure the NEWPCC Upgrade: Biosolids Facilities project attracts potential bidders, a market sounding was completed to canvass interest, solicit feedback on the form of procurement and key Design Build Agreement (DBA) terms, and identify concerns that would limit industry participation in this project.

The results of the market sounding indicated that, to create a competitive process and obtain a fair price for this project, the City will need to change its risk allocation by negotiating the following non-standard terms:

1. Escalation Clauses – all respondents interviewed identified that a traditional Design Build (DB) model with a firm fixed-fee would not be acceptable to the market. If they bid at all, they are currently adding significant price contingencies (up to 40-50% of the project cost) to fixed-fee projects to protect themselves from the recent market volatility. To mitigate this risk, the Public Service will be including escalation and de-escalation clause(s) as a negotiation option as part of the DBA.

2. Bid Validity Period – During the market sounding, respondents stated they include extra price contingency for long bid validity periods to protect themselves from fluctuating market conditions. To mitigate this risk, the Public Service intends to shorten the bid validity period by requesting special meetings of Standing Policy Committee, Executive Policy Committee, and Council for the advancement of the award of the DBA.

## RECOMMENDATIONS

1. That the use of escalation clauses as a negotiation option in the NEWPCC Upgrade: Biosolids Facilities Project be approved.

2. That the Public Service be directed to request special meetings of the Standing Policy Committee on Water, Waste and the Environment, Executive Policy Committee, and Council for the advancement of the award of the Design Build Agreement.

3. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

## REASON FOR THE REPORT

The Public Service is recommending the use of escalation clauses in the Design Build Agreement as a negotiation option. Escalation clauses may cause the contract to exceed the approved capital budget. Council approval is required to enter into a contract that may incur unapproved budgeted funds, requiring a modification of the capital budget of a project.

## IMPLICATIONS OF THE RECOMMENDATIONS

Through the approach described in this report, the Public Service intends to mitigate project risks by:

- Including escalation clauses as a negotiation option to make the contract more attractive to the market and encourage multiple bidders for competitive tension.

- Including escalation clauses as a negotiation option to mitigate inflated costs associated with excessive DB contingency.

- Expediting project award by limiting delays to project timelines and the risk of increased project costs during the bid validity period.

## HISTORY/DISCUSSION

A market sounding was conducted in August 2021 to determine potential procurement models for the Biosolids Facilities project. Results confirmed the viability of Design Build (DB) and design-build-finance procurement models for the Biosolids Facilities project.

On July 21, 2022, Council approved that the NEWPCC Upgrade: Biosolids Facilities Project be delivered using a DB procurement model.

The July report to Council also highlighted cost uncertainty related to current market conditions. The Public Service identified that project costs will likely be higher than the current approved $552 million and that they would undertake due diligence to mitigate cost increases by, among other items, creating as much industry interest for this project as possible to get competitive bids.

To ensure the project would attract potential bidders, a second market sounding was completed in October 2022 to canvass interest, solicit feedback on the project’s form of procurement and

key terms of the Design Build Agreement (DBA) and identify concerns and risks that would limit industry participation in this project.

Respondents identified their biggest concerns and level of interest to bid on this project. Overall, they confirmed:

- If risks were not assigned to the most appropriate party to manage, they likely will not bid.
- If they are pre-qualified and cannot come to an appropriate risk transfer allocation with the owner, they will inflate their price to cover their perceived risk, or will remove themselves from the procurement process.

Many recommendations from the market sounding are being incorporated into the key terms of the DBA. However, two significant risks, outlined below, require Council approval to incorporate into the procurement documents.

### 1. Escalation Clauses

All respondents stated that, if they bid at all, they are currently adding significant price contingencies (up to 40-50% of the project cost) to fixed-fee projects to protect themselves from the recent market volatility. The long construction timeframe for this project adds additional market uncertainty.

To encourage the market to bid on this project, and to protect the City against overly-inflated contract prices, the Public Service recommends the use of escalation clauses as a negotiation option for this project. This means the City only pays for objective and supportable price escalation in accordance with an independent price index or indices rather than an upfront inflated fixed-fee with no transparency into the DB's contingency. It also significantly reduces the risk of procurement failure due to no bidders or no competition.

The details of any proposed escalation or de-escalation clause(s) have yet to be finalized and will be negotiated during the procurement process with the pre-qualified proponents as part of the commercially confidential meetings.

The City's consultant has reviewed various approaches to escalation in recent DB procurements. It is envisioned the escalation framework in the DBA would include parameters around:

1. The duration of escalation
2. What should be escalated
3. What index should be used
4. The frequency of escalation adjustments

A conceptual framework could work as follows:

- The selected index (closest published value available at the time of bid) is written into the DBA.

- At the prescribed frequency, the new index value would be recorded and the difference used to calculate the applicable contract adjustment.

- Any changes to the contract would be via formal change order and would be paid on the subsequent progress draw. For simplicity, it is proposed that all calculations be based on original contract value so that escalation is not compounded over the life of the contract.

Table 1 provides a comparison of a few composite escalation indices. This is not an exhaustive list of indices and others may form part of the DBA negotiations.

Table 1: Comparison of some Indices

| Organization | Index | Location | Time Period for Escalation Value | Dates for Escalation Value | Escalation |
|---|---|---|---|---|---|
| Stats Canada | Consumer Price Index (CPI) | Canada | 1 year | Dec 2021 vs Dec 2022 | 6.3 % |
| | | Manitoba | 1 year | | 8.0 % |
| Stats Canada | Non-Residential Building CPI | Canada | 1 year | Q3 2021 vs Q3 2022 | 12.5% |
| | | Winnipeg | 1 year | | 7.8 % |
| Engineering News Record | Building Cost Index | United States | 1 year | Dec 2021 vs Dec 2022 | 9.4 % |
| Engineering News Record | Construction Cost Index | United States | 1 year | | 5.6 % |

A year-over-year review of the Engineering News Record Construction Cost Index since 1990 has shown an increased escalation rate every year, with an average annual increase of 3.23% and a cumulative increase of 103.45%.

Table 2 shows an example of how a contract escalation that uses a single index, updated annually, for a conceptual $1,000,000 project could work.

Table 2: Escalation Example

| Year | Annual Expenditure (sum of progress draws) | Annual Published Escalation Rate | Cumulative Escalation Rate | Change in Contract Value | Contract Value |
|---|---|---|---|---|---|
| 0 | - | - | - | - | $1,000,000 |
| 1 | $100,000 | 4.0% | 4.0% | $4,000 | $1,004,000 |
| 2 | $200,000 | 3.5% | 7.5% | $15,000 | $1,019,000 |
| 3 | $300,000 | 3.0% | 10.5% | $31,500 | $1,050,500 |
| 4 | $200,000 | 2.5% | 13.0% | $26,000 | $1,076,500 |
| 5 | $200,000 | 3.0% | 16.0% | $32,000 | $1,108,500 |

As the City will be accepting the escalation risk if escalation clauses are negotiated into the DBA, an escalation allowance will be assigned to the project budget. The value of this will be

determined with the assistance of industry experts. Since the City would be contractually obligated to pay escalation, price adjustments exceeding the approved contract value or capital budget would require Council approval.

### 2. Bid Validity Period

Typical bid validity periods for City projects are long due to the length of time required for Council approval. For example, during the NEWPCC Upgrade: Headworks Facilities Project, the City's bid validity period was six months. In the current market, this adds a significant risk of fluctuating conditions for the bidder. During the market sounding, some respondents stated they include extra price contingency due to the bid validity period required.

To mitigate this risk, the Public Service recommends shortening the bid validity period. This will require approval from Standing Policy Committee on Water, Waste and Environment, Executive Policy Committee and Council for special meetings to enable timely project approvals.

**FINANCIAL IMPACT**

## Financial Impact Statement Date: February 6, 2023

## Project Name:

**ESCALATION AND BID VALIDITY PERIOD RECOMMENDATIONS FOR THE NORTH END SEWAGE TREATMENT PLANT (NEWPCC) UPGRADE: BIOSOLIDS FACILITIES PROJECT**

**COMMENTS:**

There are no immediate financial implications arising from the recommendations of this report.

The use of escalation clauses in the Design Build Agreement may exceed approved capital budget, however, Council approval will be required if there is a modification to the capital budget of a project.

*Lucy Szkwarek, CPA, CGA*

Lucy Szkwarek, CPA, CGA
Manager of Finance and Administration

## CONSULTATION

This Report has been prepared in consultation with:

- Legal Services Department (as to legal issues)
- Corporate Finance, Materials Management Branch

## OURWINNIPEG POLICY ALIGNMENT

This report aligns OurWinnipeg 2045, Policy 2.17 Regional Water Resource Management, by addressing long-term capacity of water-related systems including wastewater management.

> Objective: Protect and value ecosystems as essential components to quality of life through municipal activities and urban environment.

## WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

NEWPCC Upgrade: Biosolids Facilities Project aligns with the Strategic Opportunity #6 Waste Reduction and Diversion found on page 51 of the Climate Action Plan approved by Council on September 20, 2018, Key Direction 6.3 and 6.4.

The Water Protection Act requires the City to reuse the wastewater biosolids, and to recover the nutrients from the biosolids to the maximum extent possible. The intent is for the facility to produce Class A Biosolids which can be reused resulting in diversion of biosolids from the landfill.

## WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

On February 24, 2022, Council directed that bidders for the Biosolids Facilities Project include the following in their submissions:

- Specific commitments to engage skilled labour including targets for employment of Indigenous peoples and other under-represented groups within the Manitoba market

- Proposed plans and partnerships with organizations to promote employment and training initiatives for Indigenous and other under-represented groups within the Manitoba market

This aligns with Goal 1 - Equity and a Culture of Caring are Demonstrated through Strategy Implementation and Systems Change; Topic- Community Benefits in City Projects; of the Winnipeg Poverty Reduction strategy Implementation Plan.

**SUBMITTED BY**

Department: Water and Waste
Division: Engineering Services
Prepared by: Lana Obach, P. Eng., MASc., PMP
Date: February 13, 2023
File No.: S-1192