



ADMINISTRATIVE REPORT

Report Date: May 24, 2018
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Meeting Date: June 6, 2018

TO: Standing Committee on City Finance and Services
FROM: General Manager of Engineering and Chief Procurement Officer
SUBJECT: Contract Award for Supply and Delivery of Medium and Heavy Duty Electric Trucks

RECOMMENDATION

- A. THAT Council authorize City staff to negotiate to the satisfaction of the City's General Manager of Engineering, City's Director of Legal Services, and the City's Chief Procurement Officer and enter into contracts with BYD Motors, Inc. (BYD) and Cullen Western Star on behalf of Mitsubishi (Mitsubishi), for supply and delivery of medium and heavy duty electric trucks, for a term of three (3) years, with the option to extend for two (2) additional one(1) year terms, with the current combined estimated value of the contracts expected to be \$10,700,000, plus applicable taxes over the initial three-year term, to be funded through the approved Vehicle Replacement Capital budgets.
- B. THAT the Director of Legal Services, Chief Procurement Officer and General Manager of Engineering be authorized to execute on behalf of the City the contract contemplated by Recommendation A above.
- C. THAT no legal rights or obligations will be created by Council's adoption of Recommendations A and B above unless and until such contract is executed by the authorized signatories of the City as set out in the above Recommendations.

REPORT SUMMARY

In November 2015, Vancouver City Council committed to achieving 100% renewable energy use before 2050, extending an existing goal mandating departmental reductions of vehicle and equipment greenhouse gas emissions by 30% from 2007 levels by 2020. The City issued a Request for Expression of Interest (RFEI) PS20172110 in November 2017 for Supply and Delivery of Medium and Heavy Duty Electric Trucks. The RFEI was advertised on the City of Vancouver website and the work was called in accordance with the terms and conditions of the City's Procurement Policy ADMIN-008. City staff on

the RFEOI evaluation committee, and subsequently the Bid Committee, have considered the responses received, and on that basis recommend that the City negotiate, and if such negotiations are successful, enter into a contract as described above with with BYD Motors, Inc. (BYD) and Cullen Western Star, on behalf of Mitsubishi (Mitsubishi).

44 medium and heavy duty diesel and gasoline trucks have been identified at this point for replacement with electric. The savings in fuel and operating costs will offset the added capital cost with an additional savings of 1,200 CO₂ anticipated.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

The City's Procurement Policy ADM-008 requires that contracts with values over \$2 million must be approved by Council following review and recommendations by the Bid Committee. The Bid Committee has considered, and recommended BYD Motors, Inc. (BYD) and Cullen Western Star, on behalf of Mitsubishi (Mitsubishi), as the successful proponents.

REPORT

Background/Context

Equipment Services (EQS) within the City's Engineering Services department manages the City's \$200M fleet, which is used for core services such as street cleaning, garbage collection and emergency response. To shape the path to a zero carbon future and grow the City's renewable energy usage, EQS is pursuing key sustainability initiatives:

- Electric Vehicles – replacing existing end of life diesel and gasoline powered vehicles with electric vehicles where feasible
- Low Emission and Renewable Fuels – transitioning to fuels that contain a higher proportion of renewable, biologically-derived content

Currently the City has 385 medium and heavy duty trucks among its fleet size of 1,860 units. Due to the wide range of work that the City fleet supports, there are multiple vehicle types that the City uses including work vans, dump trucks, cube vans, tractor trailers, sweepers, automated garbage trucks, and various other speciality vehicles.

The introduction of medium and heavy duty electric trucks will allow the City to replace the use of medium and heavy duty diesel and gasoline trucks, which generate the bulk of the City's fleet emissions.

Strategic Analysis

The RFEOI was issued in the accordance with City's Procurement Policy ADMIN-008. The City received responses from four (4) vendors: BYD Motors, Inc. (BYD), Cullen Western Star, on behalf of Mitsubishi (Mitsubishi), First Priority Green Fleet (First Priority), and Enviro-tech Drive Systems (Enviro-tech). The responses were evaluated through a team comprised of representatives from Equipment Services and Supply Chain Management to ascertain if the responses offered overall good value to the City, using quantitative and qualitative factors in the evaluation.

The City reviewed the respondents' submissions and conducted interviews to determine whether, in the City's opinion, each respondent demonstrated that it had the required experience and qualifications to meet the City's requirements. In doing so, the City based its decision with respect to each respondent's ability to meet the City's evaluation criteria listed below:

- a) Qualifications, relevant experience & ability to supply required chassis types;
- b) Proven track record substantiated by recent & relevant client references & projects;
- c) Knowledge of medium & heavy duty truck industry;
- d) Local service and support;
- e) Pricing

Based on the overall evaluation, the team concluded that the proposals submitted by BYD Motors, Inc. (BYD), and Cullen Western Star, on behalf of Mitsubishi (Mitsubishi) best met the City's requirements and provided best overall value to the City.

Equipment Services used the results from the RFEOI to conduct an analysis of units at end-of-life which are planned for replacement in the current 2015-2018 Fleet and Equipment Replacement Plan and the planned 2019-2022 Fleet and Equipment Replacement Plan to identify units that would be best candidates for transition to electric. Through this analysis, EQS identified 44 units that should transition to electric upon replacement resulting in a net neutral overall impact on the City's annual fleet operating costs.

By replacing end-of-life medium and heavy duty diesel and gasoline powered trucks with medium and heavy duty electric trucks, it is projected that the City will see a 1,200 tonne reduction in annual fleet CO₂ emissions.

Establishing contracts with BYD and Mitsubishi will give EQS the ability to transition additional end-of-life medium and heavy duty diesel and gasoline trucks as required. EQS will evaluate and replace fleet assets with electric vehicles as projects are undertaken over the life of the capital plan.

Currently, the City has an agreement to lease 6 electric medium duty trucks from Mitsubishi for 2019-2021. Establishing a contract with Mitsubishi will allow the City, upon the end of this lease, to purchase those 6 units if the data collected during the lease period indicates these units would be good candidates for permanent additions to the City's fleet. Currently there are no planned purchases from Mitsubishi in the identified 44 units; however, the established standing contract will provide the City with the option to make future purchases.

Financial Implications

The total expected cost of the electric trucks is \$10.7 million and will be split between multiple capital plans with \$2.0 million in the approved 2015-2018 Fleet and Equipment Replacement Plan and \$8.7 million in the proposed 2019-2022 Fleet and Equipment Replacement Plan. If these units were to be replaced like-for-like with diesel or gasoline trucks, the expected capital cost for the chassis would be \$6.6 million. The transition of these 44 units will have a net neutral overall impact on the City's annual fleet operating

costs as the increased capital costs are balanced by the decreased fuel and maintenance costs.

Financial Planning & Analysis (FP&A) has reviewed the potential cost of the goods and/or service and concurs that funding is available from the approved 2015-2018 Replacement Plan and will be prioritized as part of the 2019-2022 Replacement Plan.

As a result of the RFEOI, the City is able to achieve cost certainty for the proposed initial three (3) year contract term.

Legal

The City's Procurement Policy requires that all contracts that have been awarded by Bid Committee plus Council will be signed by the Director of Legal Services.

CONCLUSION

In summary, City staff recommends that the City of Vancouver negotiate and enter into a three (3) year contract, with the option to extend the contract for an additional two (2) one (1) year terms, with BYD Motors, Inc. (BYD), and Cullen Western Star on behalf of Mitsubishi (Mitsubishi), for Supply and Delivery of Medium and Heavy Duty Electric Trucks.

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