



---

Decision: Green Bus Technology Plan

At its meeting of November 13, 2017, the Board adopted the staff recommendations, amended as follows:

1. The Board delegate authority to the TTC CEO to negotiate and enter into up to three contracts for the supply of a total of 30 long range battery electric buses not to exceed the total project cost of \$50M based on the following:
  - a. The award of contract(s) will be based on negotiating an acceptable agreement, satisfactory to the TTC General Council with the only three qualified long range battery electric bus suppliers, New Flyer, Proterra and BYD that are compliant with Transport Canada Motor Vehicle Safety Standards; and
  - b. All 30 battery electric buses are to be delivered no later than March 31, 2019 in order to ensure that the buses are eligible for PTIF funding.
2. The Board delegate authority to the TTC CEO to enter into a contract(s) with up to two suppliers for the supply of 230 new generation hybrid electric buses not to exceed the total project cost of \$230M based on the following:
  - a. The award of the contract(s) will be based on negotiating an acceptable agreement, satisfactory to TTC General Council with the only two bus suppliers, Nova Bus and New Flyer, capable of manufacturing hybrid electric buses that are compliant with Transport Canada Motor Vehicle Safety Standards; and
  - b. Hybrid electric buses are to be delivered no later than March 31, 2019 in order to ensure that the buses are eligible for PTIF funding
  - c. TTC staff consider weighting consideration of the hybrid electric bus order to those companies who would be prepared to build an assembly facility in the City of Toronto.
3. Staff return to the TTC Board in Q1 of 2018 with an information report providing award details with respect to recommendations 1 and 2.
4. That staff be requested to consider and report back to the Board on increasing the battery electric bus procurement quantity from 30 to 60 buses based on the following conditions:
  - a. One (1) year extension to the existing PTIF funding program is granted;
  - b. Toronto Hydro confirms ability to support and implement electrical infrastructure upgrades required within the extended PTIF timeframe;
  - c. Procurement is subject to availability of funding for the portion of expenses not funded through PTIF.
  - d. In the event that one of more of the three qualified suppliers is unable to meet the TTC's requirements, then the quality of buses awarded to the remaining qualified supplier/s can be increased to achieve the approved limit.



5. In consideration of the Board's decision at its meeting on September 5, 2017 to award up to 325 low floor clean diesel buses to Nova, that the Board delegate authority to the CEO to negotiate a contract change with Nova Bus to maximize the number of 2<sup>nd</sup> generation hybrid electric buses that can be delivered under that contract, based on the following conditions:
  - a. All 325 buses, both clean diesel and hybrid-electric, are to be delivered no later than March 31, 2019 under the existing contract conditions in order to ensure that the procurement remains eligible for PTIF funding; and
  - b. Procurement is subject to availability of funding for the portion of expenses not funded through PTIF and negotiating an acceptable agreement with Nova Bus for the cost premium, if any, associated with the hybrid electric propulsion system.

In addition, the Board adopted the following member motions:

Staff consider new technologies in the construction of the McNicoll Garage and any future bus garages.

That staff report back in one year on the transition from end-of-life diesel buses to CNG to ensure a mix of vehicle fleet energy types into the future.