

Undergrounding TTC Electrical Infrastructure

Meeting Date: June 18, 2008

Subject: Undergrounding TTC Electrical Infrastructure

Recommendation

It is recommended that the Commission request the Chief General Manager to write the City Clerk stating:

- that the TTC does not have funding to place its electrical infrastructure underground for aesthetic reasons;
- that the TTC will co-operate in placing its facilities underground if all funding is provided by the party initiating the request.

Funding

No funds have been included in the TTC operating or capital budgets for the undergrounding of TTC electrical infrastructure.

Background

In 1991 the Commission addressed the issue of placing its electrical infrastructure underground. At that time, the TTC stated that it could not fund requests to place its electrical facilities underground as part of a Toronto Hydro plan to upgrade and underground portions of their electrical system. At that time, the Commission wrote the City and indicated that it would be prepared to underground its facilities providing the funding was provided by the party initiating the request. (A copy of the June 18, 1991 Proposed Undergrounding of Electrical Facilities Commission report is attached for reference).

On several occasions since then, TTC staff has been requested by City staff to place existing electrical infrastructure underground in conjunction with ongoing City road projects such as resurfacing, bridge rehabilitation, and intersection improvements. Most recently a request has been made to underground electrical infrastructure on Strachan Avenue as part of a City road resurfacing project. The estimated cost of complying with this request is approximately \$1.2 million.

Typically these requests are made by City employees or Councillors in the interest of reducing the visual impact of overhead poles and wires associated with the electrical infrastructure feeding the streetcar network in the city. In most instances, TTC infrastructure is not affected by the road work and does not interfere with the progress of the City project. If it has to be relocated to accommodate the road work,

it can be constructed in an alternate location in the road allowance using our current overhead standard.

Generally, TTC overhead infrastructure is not visually intrusive compared to other overhead installations. A typical overhead feeder installation consists of steel poles carrying two conductors on low profile insulators.

There are no technical reasons or advantages to the TTC that would justify the significant additional cost associated with placing our infrastructure underground.

Discussion

Long-term capital programs, such as the Surface Traction Power Replacement Program, started in the early 1990's, includes the replacement of TTC's Electrical Plant on a one-for-one basis and for additional infrastructure when required.

While TTC does not need to underground its traction power cables, as they are relatively non-intrusive compared to other overhead installations, we will do so when funds and underground ducts are made available.

Justification

Staff cannot justify the cost of providing for the undergrounding of TTC electrical infrastructure in the Commission's Capital budget. TTC staff will work with various parties to place sections of its electrical infrastructure underground, provided all funding is made available by the party requesting the work.

May 29, 2008

6-154-4

Attachment: June 18, 1991 Commission Report – Proposed Undergrounding of Electrical Facilities