Re PROPOSED STREET RAILWAY AND ELECTRIC LIGHT PURCHASE

John Mackay & Co., Toronto,
Toronto General Trusts Building, 85 Bay Street,
17th November, 1913.

His Worship the Mayor, City Hall, Toronto:

Dear Sir,—You have, on behalf of the Corporation of the City of Toronto, instructed me to advise the City upon the financial and the general merits of the proposed purchase of the Street Railway and the Electric Light and Power interests, as such are set forth in the governing correspondence which you submitted to the City Council on the 13th instant. The general lines of an agreement are laid down in the said correspondence, subject, however, to the settlement later of a large number of most important questions and details. You have also furnished me with copies of these documents, with copies of the Arnold-Moyes report on the Street Railway Systems, with R. A. Ross & Company's valuation of the physical assets of the Toronto Electric Light Company, Limited, and with copies of Mr. Forman's valuations of the real estate of the respective companies; and you have instructed me to accept the conclusions of these gentlemen on the particular questions submitted to them, subject, of course, to the right which I reserved of questioning any conclusion with which I might not agree.

(2) During the first interview we had on this matter, I informed you that while I approved of the general policy of purchase, I would none the less require to advise against it in the event of investigation indicating that it would be disadvantageous to the City on the terms proposed, or in any way. You instructed me definitely at that time, and also on later occasions, that you did not wish the proposed scheme of purchase carried through unless it could be shown to be clearly in the interests of the City that such should be done.

(3) The project, if carried out, involves an immediate expenditure of $30,000,000 and the obligation to expend additional capital in large amounts, from time to time, to develop the properties proposed to be acquired, in respect of all of which sums the public credit must be pledged. The transaction in question is therefore one of great magnitude, and of great moment to the interests of the City and the ratepayers. It should neither be lightly undertaken nor lightly rejected. If the transaction is capable of conferring substantial benefits upon the City, a rejection thereof on mistaken or on insufficient grounds would be a most serious mistake by reason of the forfeiture thereby of such gains; while on the other hand, if its completion should be injurious to the interests of the City, an acceptance thereof on mistaken or insufficient grounds would involve the City in the heavier positive penalties. The responsibility attached to a sound decision is therefore heavy. It is doubtful if, in the corporate history of the City, any single transaction of such moment to its interests has ever been dealt with. I am very sensible of the responsibility of advising under these conditions. I

have, therefore, so far as the limits of time and facilities permitted, carefully investigated and considered the whole matter. I have also had the benefit of personal consultations with Messrs. Arnold and Moyes, with Mr. R. A. Ross, and with Mr. H. H. Couzens, the General Manager of the Toronto Hydro-Electric System.

(4) The purchase price of the railway properties has been fixed at $22,000,000. The physical assets have been valued by Messrs. Arnold and Moyes at a little over $10,000,000, thereby leaving a little less than $12,000,000 of the purchase price as applicable to the franchise rights that would be surrendered to the City. I am advised that the principal franchise, namely, that of the Toronto Railway Company, expires definitely on the first of September, 1921, and that the principal franchises of the Radial Companies expire in 1921 and 1929, subject to varying terms of renewal. One of the most important questions therefore that falls to be decided in connection with the railway purchase is that of the reasonableness of the $12,000,000 which has to be paid for the surrender by the Railway Companies of the net income which the operating of their systems under their respective franchises expiring as above would yield. I found it necessary in this connection to have the inquiry into the street railway situation carried further than it had been under the Arnold-Moyes report. In that report the value of the future earnings of the Toronto Railway Company and of the City sections of the Radial Companies had been estimated "to their present owners" upon the assumption that the properties would be operated subject to subway competition by the City.

In view of the fact, however, that the completion of the transaction would, for obvious reasons stated hereunder, do away, certainly for a long time to come, with any question of building subways, it became necessary to ascertain the value of these earnings, under the conditions that will prevail if the City takes over the system under the present proposals. The capital cost of increasing the track and equipment of the Toronto Railway Company to accommodate the increasing traffic until 1921, had also been estimated and allowed for in determining the franchise value in the said report. The Toronto Railway Company's system, however, is substantially confined to the limits of the City as it stood in 1891, and therefore these additions and their cost were limited to this restricted area. Large territorial additions have been made to the Municipality since that date, and in these districts the street railway facilities are notoriously inadequate. The Assessment Department estimates the population of the districts which have been annexed since 1891 at nearly 75,000, and in all probability when the transient visitors at certain seasons of the year are taken into account, it will be found that not less than 85,000 people reside therein, who are very imperfectly served by the existing transportation facilities. That is to say, that a community as great in numbers at such times as the City of Ottawa is without street railway facilities except in so far as such are furnished by the limited radial systems and by the limited civic car system recently established, and, of course, the use of the different systems on a continuous journey involves the payment by the traveller of as many fares as there are systems.

The independent construction and operation by the City of adequate transportation facilities in the districts in question is, under present circumstances, a costly and unprofitable undertaking. The consummation of this transaction, however, would obviously leave the City free to carry out a well-conceived and symmetrical plant of street railway extension adapted to the needs of the whole of the City, including the districts mentioned, and by reason thereof, would do away with any need, in the meantime, for building the Yonge Street tube or subway. The financial effect, therefore, upon the whole project of carrying out such an extension and unification of the transportation systems of the City, had to be ascertained in order to determine whether the transaction as a whole would or would not be profitable. To put it shortly—would the ascertained value of the future earnings till 1921, of the Toronto Railway and the other systems, be increased or decreased by the added income and charges arising out of the necessary extensions!

I have, therefore, had additional estimates prepared by Mr. Bion J. Arnold of Chicago, of:

(*a*) The capital cost of enlarging and consolidating the whole surface traction system of the City, on a scale adapted to the requirements of its population up till the year 1921;

(*b*) The net income therefrom which should accrue to the City up till the year 1921, from the ownership of the consolidated system;

(*c*) The capital cost of providing the necessary additional street railway facilities in the outlying districts, upon the assumption that the proposed purchase is not carried out; and

(*d*) The annual loss up till the year 1921, that would probably accrue from the independent operation by the City of such lines in conjunction with those of the existing Civic Car System.

I am bound in honor to state at this point, that these additional estimates would have been prepared by Mr. Arnold and submitted in his original report had he understood that his instructions covered them. He did not, however, so understand his instructions. I had ample opportunities while engaged on this work in Chicago with Mr. Arnold to ascertain his status in that city, and to appraise the calibre of the man himself and of his assistants. I came to the conclusion that he is a gentleman of the highest standing and competence—absolutely trustworthy—and that his assistants who were associated with the detail work are men of like type. The fullest confidence, therefore, may, in my opinion, be placed in any estimate or conclusion for which Mr. Arnold assumes responsibility.

I should state at this point that the real estate of the Railway Companies has been valued by Mr. Forman, the Assessment Commissioner, and that it is included by Messrs. Arnold and Moyes in their total valuation of the physical assets at a little over $10,000,000, as above mentioned.

(5) The purchase price of the Toronto Electric Light Company's interests has been fixed at $8,000,000. The physical assets located within the limits of the City have been valued by Messrs. R. A. Ross & Company, of Montreal, and the real estate by Mr. Forman, the Assessment Commissioner, at the total sum of $6,045,000, thus leaving the sum of $1,955,000 as the price payable for the surrender of the Company's franchise rights. I am advised that the Company owns, in effect, a perpetual franchise, which can only be acquired by the City under an amicable bargain, or by arbitration in November, 1919, and at stated periods of twenty years thereafter.

The principal questions, therefore, to be considered in connection with the purchase of this undertaking are as to whether the purchase would promote or retard the interests of the local Hydro-Electric System, and as to whether the total purchase price can be justified by the earning power of the business under the governing conditions of City ownership, operating at cost.

(6) I have had full and free access to the books of the Toronto Electric Light Company, Limited, and I have had full access to the books of the Toronto Railway Company, in so far as such was required to supplement the information furnished by the Arnold-Moyes report.

(7) After careful consideration of the underlying facts, I have reached the following conclusions, which I now respectfully submit, namely:

(1) That the gross income of the Toronto Electric Light Company on the level of the rates in force during 1912—which were lower on the average than the Hydro-Electric rates—allowing for a minimum rate of annual increase in sales and after allowing for administrative savings resulting solely from consolidation of $100,000 per annum, and further administrative savings of the Hydro-Electric System to the amount of $50,000 per annum proceeding solely from the economies attendant upon consolidation, should provide for

(*a*) The cost of electric current supplied under the existing contract, which terminates in 1919, at the average rate shown by the books of the Company for the present year and the cost of like current from 1919 on, under a proposed new contract, which should reduce the cost thereof to substantially the same rate that the Hydro-Electric System would now be under, if it operated under like load conditions;

(*b*) All operating and administrative expenditure, including taxes;

(*c*) The entire replacement at the end of its useful lifetime, out of income, of the whole of the existing plant;

(*d*) An accumulating fund to replace at the end of its useful lifetime, the new plant which will take the place of the existing plant as it wears out;

(*e*) Interest and sinking funds on the thirty-year debentures proposed to be issued to cover the purchase price;

(*f*) Interest and sinking funds on the additional debentures which will require to be issued from time to time to cover the additional capital expenditure which will require to be made periodically to take care of the increasing business;

(*g*) An accumulating replacement fund to renew at the end of its useful lifetime the new plant acquired by means of the said additional capital expenditure,

and should yield a net surplus in thirty years at the maturity of the $8,000,000 of purchase price debentures (and after the redemption thereof by means of the sinking fund) of over $11,000,000. If the rates were reduced from time to time to prevent the accumulation of this surplus, the net reductions thereof would run from 6 per cent. in 1925 to 14 per cent. in 1943.

(2) The above surplus takes no account of further considerable savings that will accrue from economies that will be effected by the combined operation of the physical plants after the systems are completely linked up and reduced to their ultimate engineering conditions, nor for the additional substantial savings in the cost of power that will be realized if the total quantity purchased on behalf of the consolidated Street Railway System, and the consolidated branches of the Electric Light and Power System, is made available under the contract conditions for the common use of these services.

These additional savings which cannot be reduced to figures until after the exact terms of the power contracts are finally agreed upon, nor until after the practical work of consolidation is finally accomplished, should permit of further reductions of rates in addition to, and commencing earlier than, the foregoing.

(3) The consolidation of the System with that of the Hydro-Electric System will yield like economies in the latter branch of the combined undertaking. That is to say that in addition to the initial savings in administrative expenses, which have been taken credit for to the extent of $50,000 per year in the above estimate (because they result exclusively from the proposed consolidation), there should be further substantial savings to the Hydro-Electric System in the operating expenses, and in the cost of current under the contract conditions above assumed.

There is, further, the very great advantage which cannot be easily measured or expressed in monetary terms, of the cessation of duplicate construction, and of the installation of duplicate plants, the effect of which will greatly limit the new capital expenditure of the combined systems as compared with that which would be incurred under independent concurrent operation. This, in turn, reacts advantageously upon the annual income, by reducing the depreciation, the interest and the sinking fund charges that would otherwise have to be provided.

(4) The consolidation, therefore, of the two Systems under a single management, under a common scale of rates fixed in accordance with the cost of the various classes of service, under the reduced operating costs that would follow, and especially under the greatly reduced capital expenditure attendant thereon, would, I think, with the growth of the business, lead to common reductions of rates for the benefit of all consumers and arising from substantially equal contributions to the common good from each branch of the combined System.

(5) That failing the completion of the proposed purchase the City would probably have to pay at least about $2,000,000 extra for additional physical assets if it elected to buy in 1919, under the franchise agreement, and in addition, it would require to compensate the Company for the surrender of its perpetual earning power. Failing purchase then it would have to wait for twenty years longer for another compulsory chance. Like results would then follow, as in my opinion after specially investigating the point, the competing power and resources of the Toronto Electric Light Company are quite equal to any strain that the Hydro-Electric System may place upon it. In the final analysis, therefore, I think that lower rates will in the long run follow from consolidation than could by any possibility be obtained without it.

(6) That if the existing Toronto Railway Company's system is linked up with the existing Civic system and the existing Radial lines and enlarged from 147 miles of track (the combined City mileage of all tracks at present) to 283 miles in 1921 with corresponding increases in car capacity, etc., and operated as a single consolidated system, to give a proper and an adequate unified service throughout the whole limits of the City on a single fare basis from any point to any point with the usual transfer privileges, the net annual surpluses thereof when set aside and invested as a sinking fund—after providing for all operating costs, including taxes and replacement charges, for interest on the purchase price and interest on the new capital required for the extensions (including all like charges resting on the existing Civic System), and after paying to the City upwards of $13,000,000 in respect of the share of traffic receipts it is entitled to under its existing agreement with the Toronto Street Railway Company—should amount, by the 1st September, 1921, to the sum of substantially $11,500,000. That is to say, that the City should, by the 1st September, 1921, have received upwards of $13,000,000 in cash in lieu and as the equivalent of the percentage of gross receipts which it is entitled to receive from the Toronto Railway Company, and in addition thereto it should have received

surplus cash income which, invested as a sinking fund, would amount to sufficient to redeem at par by the date named $11,500,000 of the bonds issued in respect of the whole railway undertaking. This is the equivalent of a return to the City of $11,500,000 of the $12,000,000 paid for the franchise rights after providing for a replacement fund to renew track and equipment as they wear out.

On a stationary traffic from 1921 on, the net receipts should, after bearing all operating, replacement, interest and sinking fund charges, and after paying $2,300,000 yearly into the City Treasury in continuation of the existing arrangement with the Toronto Railway Company, leave a surplus of over $2,000,000 yearly. If this surplus of $2,000,000 were applied to the reduction of fares, the average fare per passenger would at once be reduced to about 3⅓ cents. Of course the traffic, as a matter of fact, will continue to increase yielding in return additional surpluses and, in consequence, further reductions in fares.

For the past twenty years the annual cost to the City of constructing and maintaining the railway pavements and track substructures over and above the compensation paid therefor by the Railway Company, has been less than 20 per cent. of the City's share of annual receipts. Therefore the above continuing payment to the City of $2,300,000 would be subject, on the basis of past experience, to a pavement charge of less than 20 per cent., and the balance would go permanently to the relief of the ratepayers.

(7) That failing the completion of the above purchase, the net loss of the existing Civic System till 1921, together with the additional losses involved in an adequate extension thereof, if such is made, will amount, excluding provision for sinking funds, to approximately $3,750,000.

(8) That therefore the completion of the railway purchase will save the City the sum of $3,250,000, without mention of other substantial collateral advantages.

(8) The above is based upon a continuation of normal industrial conditions, upon an assumed monopoly of traction in the City, upon competent management freed from all municipal and political influence or interference, upon a contract of purchase satisfactory on all points being entered into, including provision for the payment of the purchase price of $30,000,000 by an issue to the vendors of a like amount of 4½ per cent. thirty-year debentures at par, upon a satisfactory interpretation of the existing power contracts between the Toronto and Niagara Power Company on the one hand, and the Toronto Electric Light Company and the Toronto Railway Company on the other hand, upon a satisfactory new power contract being entered into to become effective in the case of the Toronto Electric Light Company from 1919, upon 4½ per cent. investments being secured for the sinking funds by issuing the initial bonds subject to call at par for sinking fund purposes, and upon the usual forty-year 4½ per cent. debentures being

issued for all additional capital required at a price costing the City not more than 5 per cent., with the right of redemption at par for sinking fund purposes. I am unable to measure or allow for, because I cannot limit the effects of, bad or mediocre management. Bad management eats like a cancer into the whole organism of an enterprise. The City must choose between high class commercial management, with the results indicated herein, and inferior management, with losses I am not competent to measure. But unless it chooses the former it should abandon the proposal.

The values herein are computed as from 1st July last, corresponding to the date of the physical valuations. If the transaction should be completed as from the 31st December, 1913, the net advantage to the City would be reduced by about $250,000. The execution of a satisfactory power contract as from 1919, under which the cost of power is reduced to the basis above stated, is vital. Subject to the degree in which the special savings accruing to the Toronto Electric Light purchase, but not included in the above estimate, may influence the earnings of the early years, the anuual surpluses of the first six years will fall in diminishing annual degree below the requirements of the annual sinking fund, but thereafter the deficiency will be rapidly made up.

(9) In the foregoing I have summarized a few of the principal facts underlying and the principal conclusions I have reached upon this important matter. A fuller statement thereof will be presented with all necessary supporting data in my formal report now in course of preparation; and in that report proper acknowledgment will be made to all whose assistance I have had.

(10) I have no hesitation in advising the completion of the transaction on the conditions stated herein, nor in my judgment is there any need for the ratepayers or the light and power consumers of the City entertaining the slightest doubt or fear as to the outcome, provided the basic conditions stated are observed.

Respectfully submitted.

JOHN MACKAY.