

ITEM 11

MANAGER'S REPORT NO. 15

COUNCIL MEETING Feb. 25/74

Re: Underground Power Distribution  
(Item 33 (Supplementary), Report No. 94, December 17, 1973)

When the above-noted report was considered and adopted by Council at its meeting of January 8, 1974, it was suggested that there are instances where hardship has been imposed on developers who are being required to install underground electrical facilities pursuant to Municipal policy in that regard.

Following is the report of the Director of Planning provided in response to Council's request of January 8, 1974, for a staff report in this respect.

This is for the information of Council.

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PLANNING DEPARTMENT  
FEBRUARY 14, 1974

SUBJECT: UNDERGROUND WIRING  
"BURNABY ELECTRICAL CONNECTION REGULATION BYLAW 1973"

At the January 8 meeting of Council, a report on cost sharing for underground power distribution in developed areas was considered, at which time Council resolved to not embark at this time on a program of placing underground wiring generally throughout the Municipality on existing streets, but to recognize in long-term physical and financial planning, the desirability of ultimately replacing poles and overhead distribution lines with underground works on existing streets. During consideration, it was requested that the possibility of hardship arising from Municipal regulations requiring the installation of underground electrical facilities be studied, and that a report on cases of possible hardships be submitted.

The Municipal Council has a number of policies concerned with the general subject of underground wiring, including the following:

1. General support for the prohibition of new major overhead transmission lines in the metropolitan area;
2. A requirement that new subdivisions, whether residential or non-residential, be provided with underground power distribution services; and
3. A requirement that no further overhead distribution services should be located on existing streets.

Moreover, the Council on July 16, 1973 adopted an amendment to the Burnaby Building Bylaw 1969, requiring new electrical and telecommunications service connections to be placed and maintained wholly underground, and prohibiting overhead service lines and transformers. Specific exceptions to this bylaw, which clarified and stabilized in the form of a Municipal bylaw what had formerly been Council policy, are existing poles and overhead distribution lines of the utility companies on dedicated roads or on rights-of-way, and overhead electrical or telephone service lines and overhead electrical transformers placed or maintained in connection with the single-family or two-family dwellings and accessory buildings within the R, RM, A1, or A2 Districts.

(On August 23, 1973 the amendment to the Building Bylaw was replaced by adoption of its contents as the "Burnaby Electrical Connection Regulation Bylaw 1974", in order to facilitate adoption of the uniform National Building Code.)

This bylaw has now been in effect for eight months, and over 1800 electrical permits were issued between the date of adoption and December 31, 1973, many of which involved the placing of service connections underground. On the basis of this experience, it has been possible to review and evaluate performance, and to this end the Chief Building Inspector, Electrical Inspection Division staff and Planning Department staff met recently with representatives of B.C. Hydro. The meeting was to determine whether serious problems are being encountered by electrical users due to the application of the bylaw, and whether any changes in administration or application of the regulations should be contemplated at this time.

We are advised by Hydro's representatives, who are closely involved in the design and costing of all electrical service connections, that by and large the bylaw is working well and being applied fairly and equitably. In the early months of the Bylaw's existence there were frequent instances requiring special staff attention due to the newness of the regulations, but as knowledge of the Municipality's standards has become common and widespread, these instances have been greatly reduced. At this time, only cases which may be considered "borderline" (such as special temporary connections and conversions or minor capacity increases in existing electrical or telephone services) are requiring particular attention or creating peculiar hardship.

There is no doubt that an element of additional cost to the developer is involved in providing underground service connections in comparison with overhead wiring. This is a fact that Council fully recognized when the initial policy was created, and the matter has been brought to the attention of Council on several occasions over the past two or three years by applicants who requested exemption from the requirements. However, on each such occasion the Council has upheld the policy, or more recently, the Bylaw, in recognition of the long-term benefits to the community by removal of unsightly overhead systems, of the need to begin at some point in time to commence the change-over, and of the need to be consistent in application of the bylaw's regulations in order to maintain a level of servicing equity for all applicants in the Municipality.

In the case of new developments or major building expansions, the Planning Department makes a practice of advising the applicant for PPA of the underground servicing requirement at an early date, and making the appropriate notation on the approved drawings. This is done in an effort to make applicants who might not have had recent development experience in Burnaby or might be otherwise unacquainted with the regulations, aware of the requirement and to allow this factor to be taken into account at an early stage of design and project costing. It is proposed that this practice be continued until the Bylaw has been in effect for at least a year, or until there is widespread general knowledge of the requirement.

As mentioned above, instances where peculiar hardship is being encountered are generally related to special circumstances such as system conversions and temporary connections. In general, the rule that is applied in issuing electrical permits is that conversions or expansions to existing electrical services which would involve significant changes or increases in existing external overhead plant (conduit, service entry, aerial conductors, or on-site overhead transformer installations) are considered to be new services requiring undergrounding. With the cooperation of the utility company, the electrical inspector is now able to determine whether or not proposed changes will involve significant change or increase in the external plant and to apply the Bylaw accordingly. Problems which had been experienced in the past in making judgements in this area have been overcome and a uniform application of the requirement should now be possible.

In the case of temporary connections for special circumstances, the Building Inspector has provision under the temporary structures section of the Zoning Bylaw and the temporary connections section of the Electrical Bylaw to control genuine temporary installations on a strictly limited-time basis, thereby eliminating potential hardships brought about during construction, system change-over, or extraordinary temporary electrical demands. Individual borderline cases have generally been worked out in an acceptable way respecting the intent of the bylaw and the respective policies.

In the case of telephone and cablevision services, the B. C. Telephone Company applies the Bylaw regulations in approving new connections. Only minor inquiries and no cases of hardship to developers have been reported to date in this regard, and the Bylaw seems to be operating effectively and without serious problems.


SUMMARY:

The Municipal policies and Bylaw respecting underground power distribution and service connections have now been in existence for some time and are proving to be effective as the logical first step toward the long-range objective of eventually eliminating poles and overhead wires.

The present requirements have generally achieved acceptance and the application of the Bylaw is now generally understood by those involved in development activity or electrical installations. The instances of objection to or confusion resulting from the regulations have been all but overcome as public knowledge has increased and experience has been gained in administering the controls. At this time, it is fair to state that underground servicing is generally being accepted as a normal cost of new development, similar to the cost of connecting to water or sewer services. Questions relating to conversions, temporary services and other complications are being handled on the fairest and most equitable basis, achieved through day-to-day experience in administering the Bylaw over recent months. Technical difficulties occasionally encountered in determining the best and most economical means of complying with the requirements are worked out by the electrical inspector, the applicant, and B.C. Hydro, with whom a good working relationship has been established. Where genuine hardships arise, efforts are made to minimize the hardship in any way fully consistent with the intent of the Bylaw.

In general terms, many of the early difficulties encountered by developers prior to and immediately upon passage of the Bylaw have been overcome, and B.C. Hydro authorities, who deal on a daily basis with individual developers in many municipalities, state that the regulations are operating smoothly and equitably, and are unable to suggest any improvements in the Bylaw or its method of application. This is for the information of Council.

Respectfully submitted,

  
A. L. Parr,  
DIRECTOR OF PLANNING.

DGS:cm

c.c. Chief Building Inspector