

How the Cost of Electricity in Your Home is Made Up

To arrive at a proper conception of the power situation in the North, or anywhere else, it is necessary to understand various factors which enter into the cost of power. Many people confuse electric power with other commodities, such as wheat or potatoes. Some think that if energy can be sold in one place at a certain price it can be sold at the same price in another.

In order to show the fallacy of some ideas, a knowledge of the true items of the cost of power is necessary.

The first item is by no means the greatest. It is the cost of generation. It is divided into two parts, one consisting of interest on the capital involved in the plant, the dams, etc., and it is an item often entirely overlooked by the layman. It is a variable item, too, for the question of market for power enters in. For instance, assuming for argument's sake that a 10,000 h.p. plant can be built for a million dollars, it follows that interest on this amount must be met whether the plant is running part time or full capacity. Assuming that there is a market for full capacity of 10,000 h.p., the cost of this item alone would be \$5 per h.p., assuming further that money could be borrowed at such a rate.

However, such an ideal combination of capacity and market is almost an impossibility, and often a power company must be content to run a plant at half capacity, in which instance the interest cost runs up to \$10 a h.p.

Then in respect of the capital cost in the generating of power is the second point that money must be set aside each year against the depreciation of the plant and its eventual renewal, and against the retirement of the initial capital. The power plant that serves a big city may continue in undiminished operation for fifty or one hundred years. It is plain that the power plant which serves a mining field may be in an altogether different category.

The actual cost of generating power is only a small proportion of the total incurred by the time the customer takes delivery. In practice the ratios vary, as one company may serve a few large users whose plants are close

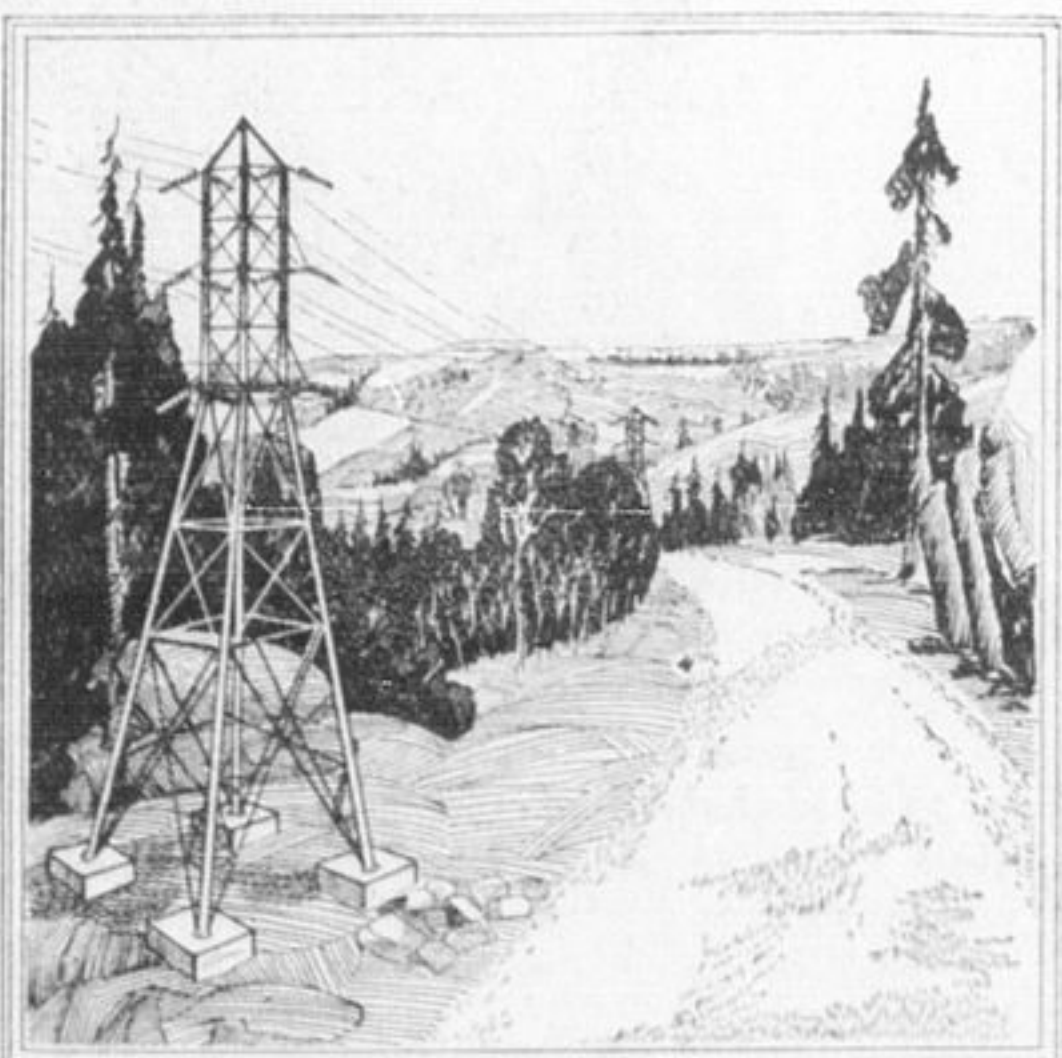
to the power station, while another may supply a multitude of consumers spread over remote areas. With a company serving an extensive mining district the expense of transmission and distribution rapidly assumes proportions which greatly exceed the cost of producing power. The experiences of a large number of power producers have made it possible, though, to arrive at an average proportion of the total cost, as illustrated above.

In the industry a clear distinction is made between transmission costs and distribution costs. The first term is applied to the system of transmission lines over which power that has been stepped up to a high voltage in order to avert excessive line loss is conducted from the generating station to the sub-station which acts as a distributing centre. Where power has to be sent long distances, as in the North, voltage has to be stepped up very high, entailing the installation of heavy and expensive transformers as well as costly lines adapted to such higher voltages. At the other end costly transformers and sub-stations are required to step down the power.

It is at this point that the heavy expenses of distribution begin to mount up, for in order to serve the residents of a town many poles, lines and transformers must be provided in order to deliver the small quantity of electricity used in an ordinary house. These lines require to be maintained in all kinds of weather, against the ravages of sleet, wind and lightning, and ordinary decay. Even after the line has been brought to the street in front of the customer's house the expense has not ended. Service wires must be installed, a meter provided and this meter read periodically. Offices must be maintained for the preparation of bills and collection of accounts.

By the time all these items are added together an impartial observer will see that there are a host of costs which cannot be avoided and are never suspected by the layman.

We had almost overlooked the matter of taxes—where the power supplier pays taxes. This company last year paid taxes at the rate of a thousand dollars a day.



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Actual Examples of Bears Killing Moose

M. U. Bates, of Metagama, Tells of Cases Where he has Seen Bears Killing Moose. Also Gives Some Natural History Pointers.

Last week The Advance published a review of the findings of the Fish and Game Committee of the Ontario Legislature. It will be remembered that the committee did not seem to be very clear in regard to the bears and their effect on game. M. U. Bates, of Metagama, Ont., who is a noted hunter and guide, is quite clear about the question. He is not judging from what he has heard or read. He speaks from a lifetime of experience and knowledge, and he makes the matter very plain indeed. He knows the bears destroy moose, because he has actually seen them at their evil work. This is the very same reason as that given at Timmins by F. M. Wallingford when asked about the matter. Mr. Wallingford did not guess nor tell what someone else told him. He simply quoted cases where he had actually seen the destruction caused to game by the evil activities of the bears. When Mr. Wallingford concluded telling the fish and game committee of the Legislature just what he had noted in his own personal experience, the audience was fully convinced, whatever may have been the attitude of the committee as a whole.

M. U. Bates, of Metagama, is not content to let the fish and game committee of the Legislature have the last word when he thinks that the truth needs to be told and emphasized. Most people feel that when others interested seem to be against them it is incumbent on the advocates of any theory to let the opinion of the majority or of some so-called expert pass for fact. Mr. Bates does not consider that attitude a good one. He thinks that truth should be repeated time and again until people in general are seized with the facts of the matter. Mr. Bates has repeatedly written pointing out that bears do kill moose and other game. Last week he sent the following letter to The Sudbury Star:—

Editor, The Sudbury Star: I again note with some surprise Game Warden Mulligan's statement in Saturday's Star that the bear is not a predacious animal where moose are concerned. Mr. Mulligan should read pages 44 and 45 of the report of the special committee on the game situation 1931-1933. In this report the only responsible defender of the bear as a harmless pet is Dr. R. M. Anderson, chief of the biological division of the National Museum of Canada, and his remarks are based on the report of the Bureau of Biological Survey of Washington, U.S.A.

The source of the information is in itself sufficient to condemn it in the eyes of experienced woodsmen. We are getting in a bad way when we have to go to Washington, Detroit and Kingsville for information on the habits of big game in Northern Ontario. That Mr. Mulligan has never seen a bear kill a moose is of no particular significance; Mr. Mulligan has probably never seen a bank robbery, but that is no proof that they do not occur. Mr. Mulligan's report of how a moose fights is also not good natural history. As it is well known to many old-timers, it is very often in the water that the bear tackles his moose, riding on the victim's back and butting down into the moose's neck from the top, the same way in which a bear kills a large pig. What good are the moose's front feet to him possibly a half mile or more out from shore. Furthermore a bull moose has no horns in the spring of the year nor a cow moose at any time.

M. U. BATES,

Metagama, April 24.

COLLECTING POKER MONEY THROUGH BANKING CHANNELS

Many business men use the banks as a sort of collecting agency, through the use of drafts and so on, but that interesting columnist, Gorman of "Grab Samples" fame, suggests a new service that may be given the honest creditor in the way of service. Of course, it indicates the necessity for an honest debtor as well, but when banks stand to cash poker chips everybody will have to be honest, "Grab Samples" tells it this way:—

"Those who indulge in the pastime of buying and selling mining shares are acquainted with the practice of brokers and others of delivering stock certificates through banking channels. The familiar draft, with the notation, 'documents on payment,' is the financial vehicle that brings to many a man's desk his morning frown or smile, as the case may be.

"One night not long ago a number of the leading lights of the mining fraternity engaged in a little game of 'Cliff Moore's Special,' a pastime which involves the use of small coloured discs. When one of the participants went through his clothes the morning after he discovered a red chip, value, five dollars. As one of the party had acted as 'banker' throughout the game the possessor of this token decided it would be feasible to collect on it. So, going to his bank he drew a draft on the 'banker,' clipped the chip to it and sent it out in the regular way, 'documents on payment.' In due course the bank credited his account with the money.

"The banking business has many critics in these days, yet it would appear that the foregoing demonstrates the flexibility of the Canadian banking system to a remarkable degree."

Huntingdon Gleaner:—Harry Shonfield, Albany, N.Y., wants his marriage annulled. His wife, she told the court, had promised him \$6,000 with which to go into business if he would marry her. They were married, but Mrs. Shonfield could not produce the money. She said she had intended to borrow it from an aunt, but was refused. Looks as though she slipped one over on Harry.