

through and into Alberta. The branch has had records obtained at two locations on the Peace river in British Columbia—at Taylor, which is near Fort St. John, since 1945, I think, and at Hudson Hope, where there is a period of broken record. There were a few years of partial records, between 1918 and 1922, but there has been a station there continuously since 1949.

Mr. PAYNE: That is Waterton?

Mr. McLEOD: That is Hudson Hope. There has been one on the Peace river, near Fort St. John, continuously since 1945.

In addition, there have been miscellaneous discharge measurements made on the Finlay river and on the Parsnip river. There are also fairly long-term records available of the Nation river, which is a tributary of the Parsnip. Those records, I would say, have enabled the company to assess what water it can get into this reservoir, since the location of the dam proposed by the company is very close to the gauging station located at Hudson Hope.

Mr. PAYNE: Is it the experience of the branch that companies of this nature, envisaging tremendous capital developments, formulate their plans on information such as they now have available; or is it normal to expect them to further extend their information?

Mr. McLEOD: First, I think you must recognize the company, in proposing a development such as the Peace river development, must know what is the water supply to this major reservoir that it might use for power generation purposes. Secondly, they must know what effect the reservoir itself will have on the distribution of the natural flow over the full period of a year or over several years. That is simply because their reservoir will be so large it will provide what we would say is complete regulation of the river at the site of the power plant.

Then, of course, the company must have detailed information—or should have, at least—of the foundation conditions for a major structure of that kind. That is something which certainly is not our branch's business at all.

Mr. PAYNE: I appreciate that, but what I am getting at is what happens when you run into a large public corporation, be it in Ontario or Canada. We will take, for instance, the Ghost river development of Calgary. Was it your experience, within the branch, that the Calgary Power Company did, in fact, look at records for some years from your branch before they laid plans?

Mr. McLEOD: Yes. While the developments there, on the Ghost river, started at a very early period, as you know, the company has been most interested in every bit of stream flow and water level information that could be provided, and it has, in fact, cooperated quite substantially in helping us to get information.

Mr. PAYNE: Is this a pattern you find elsewhere in Canada with respect to developments undertaken by large bodies—say, those undertaken by the Ontario Hydro or the Manitoba Hydro?

Mr. McLEOD: Yes.

Mr. PAYNE: They are not looking for sketchy information: they want a great deal of detailed background?

Mr. McLEOD: That is right.

Mr. PAYNE: Do you feel you have that type of information to provide anyone in the area of the Rocky Mountain trench at this time, or not?

Mr. McLEOD: No. For a good many parts of Canada we do not have sufficient information. If I may say so, I think it could be boiled down to two things—it is the old story of government work, funds and personnel.

Mr. PATTERSON: I think any corporation or company that is interested in initiating a power development at any point has to take into account the period