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THE COLUMBIA RIVER SCANDAL

Political selfishness and public apathy have made the Columbia Treaty Canada's biggest giveaway of natural resources. And the propaganda by which two governments have tried to justify this action has turned a fiasco into a national scandal. The present treaty is a monumental blow to Canada's independence.

The Columbia River Scandal

The Columbia River treaty has been badly handled and the facts concealed from the Canadian people

by JAMES G. RIPLEY, P.Eng., M.E.I.C., Editor

The Columbia development has already become one of the great Canadian controversies of this century and its outcome will profoundly affect the future of all Canadians. Yet it is taking place amid public confusion and unparalleled misrepresentation of the real issues. The outlook is bleak for a solution that will be in Canada's best interests.

The treaty was signed in January, 1961, but has not yet been ratified by Parliament. The extent, duration, and bitterness of the debate so far clearly indicates that it will be ratified only with the strong disapproval of a large section of the population. It is a relatively complex subject and this has slowed public understanding. But as more and more Canadians have become aware of the implications of the deal, there has developed a widespread and growing fear that it will be an economic disaster for Canada.

Heated arguments have been raging across the country about details of the treaty. But the fundamental issues are only slowly emerging. And they are ominous to any Canadian who cares about the future of this country.

The basic question is whether the present treaty is the best one for Canada and safeguards our resources for use by Canadians now and in the future.

The treaty represents completely different concepts to Canada and the United States. Canada negotiated a short-term power sale to the U.S. and set up the physical development in Canada to provide this. This physical set up also happened to satisfy the U.S. objective, which is to obtain the use of Canadian water for industrial and irrigation uses.

By failing to retain control of this water in B.C., the province has lost an opportunity to develop a multibillion dollar industrial empire in the lower mainland area.

The Prairie provinces are beginning to realize that the treaty will prevent B.C. water from ever being transferred to the arid lands of the Canadian plains, where the lack of such a future source of supply may permanently retard the growth of the area.

Two successive national governments have failed to understand that the Columbia is a development that concerns more than one province. Canada surely has passed the predatory phase in our history when a great natural resource can be exploited by ambitious individuals for short term gain. Today, too many people right across the country are affected by the multi-purpose development of our resources. The Federal government has failed to safeguard the national interest on the Columbia.

It has weakly allowed Premier Bennett his own way, on the grounds that British Columbia "owns" the resource. Resources belong to the people of Canada, including those now living and those yet unborn. Provincial governments administer, rather than own, resources. And when a province administers a resource in such a way as to hurt a neighbouring province, or lose it to a foreign country, the federal government has, not only a right, but a solemn obligation to require that the national interest be given first priority.

The government has reversed Canada's historic national policy of encouraging and even insisting on east-west economic development so that the various regions of Canada nourish one another. Instead, it has allowed British Columbia to integrate the Columbia basin southward into a U.S. system. This is economic separatism of an extremely dangerous kind and if continued could lead to a fatal balkanization of Canada.

Political squabbling over unimportant details has led to a failure to grasp these fundamental issues. Neither of the last two national governments have any reason to be proud of their efforts on the Columbia.

At a time when Canadians are becoming increasingly concerned about losing control of their economy and losing resources to foreign ownership and exploitation, it is inexcusable that any Canadian government should turn over a resource as large as the Columbia basin to foreign control. And in spite of official protestations to the contrary, this is precisely what the treaty does.

The intolerable defects of the treaty for Canada have been known for some time now. The present government came to office pledged to correct them. It has not done so, and in fact, has indicated it has no intention of doing so.

The treaty was shaped for narrow political advantage and is being endorsed at present for the same reason. The attempts by both the B.C. and federal governments to justify these actions have produced a volume of propaganda and outright falsehoods.

All the evidence points to the conclusion that this treaty is a dangerous failure for Canada and its ratification by Parliament would amount to a national scandal.



In Sept., 1962, Mr. Ripley analyzed the defects of the treaty. Now he tells how the government has ignored these dangerous flaws. Reprints are available, 25¢ each, from Engineering and Contract Record, 1450 Don Mills Rd., Don Mills, Ont.

At one stage of the desultory debate on a subject described by many members as the most important of this session and possibly of the century, there were only 24 members in the House.

Jack Cahill, Vancouver Sun, March 7, 1964

We have thrown away an empire

The Rocky Mountain Trench cuts through British Columbia from northwest to southeast. It is 1,000 miles long, ½ mile above the Pacific Ocean and contains the greatest concentration of hydro electric potential in the world.

It feeds the Fraser, Peace, Yukon, and Columbia Rivers among others. The rivers are as wild as the mountain country. Man is just starting to tame them, but has not yet fully grasped the extent of the wealth in the Trench.

Water is becoming the world's most valuable commodity, and the Trench is one of the world's richest store-houses of water. And if water is valuable, water stored at high altitude is many times more valuable, because it can be used to generate electric power, before it is turned over to industry, agriculture, and man himself, for consumptive purposes.

The key to the potential of the Trench is in building storages for the water. The current conflicts between the U.S. and Canada, and within Canada itself, mainly concern the decisions as to where the storages will be located, and who will control them.

That is the significance of the Trench. Let us see what it means to the Columbia development, which is the first, and in many ways, the crucial step in Canada's approach to the treasures of the Trench.

No plan for the Columbia can serve Canada properly unless it satisfies the following three principles: 1. All Canadian water must be stored in Canada where it is physically and legally under Canadian control.

2. This water must be stored at as high an elevation as supply permits, to allow the best physical use of the water by both countries and to provide maximum flexibility for future development.

3. The decision as to the use of Canadian water including flood water that can be captured by Canada, must remain in Canadian hands, just as the U.S. insists, rightly, on unrestricted freedom to use its own water to its own best advantage.

If the storages are built and operated according to these three principles, Canada has four enormously profitable uses for its water. At any given time, we could be using the water for one of these purposes, or could set up the most profitable combination of uses.

1. We could sell the downstream benefits to the U.S. By controlling the flows to the U.S. plants, we can increase the firm capacity of those plants by about 2,600,000 Kw at almost no cost to them. Under the present sales agreement, the U.S. has offered us \$275 million to provide this service for the next 30 years. This is the most likely first use for Canadian storage under any plan of development.

2. We could develop about 4 million kilowatts of at site power in Canada. As our load develops and as the U.S. need for regulation declines, we should be switching to at site generation in Canada. This is potentially worth much more to us than controlling the flows for the U.S.

It is a struggle of financial titans for possession of probably the world's largest hydro-electric resources and other natural wealth.

Bruce Hutchison Financial Post, Nov. 22, 1958 and should pre-dominate our thinking in 15 to 30 years.

3. As soon as the salmon problem is solved, our best use of water by far is to divert to the Fraser River system. This gives us almost a duplicate of the U.S. system with a great power river dropping more than 2600 ft to the sea. Estimates of Fraser potential vary, but by any standards it opens up a potential for an industrial empire of staggering magnitude in the lower mainland area. Power available is of the order of 75 billion kwh a year at a cost of about 2 mills. The fishing industry on the Fraser is valued at about \$50 million a year. Industrial development on the scale

this power allows would be valued in the billions, a completely different order of magnitude.

If Canada is to remain in the forefront of the world's wealthy nations we cannot afford to ignore this area much longer. But the Fraser development can produce power at these fantastically low prices only by using a significant amount of Columbia water. So we must retain the right to divert from the Columbia. The water that would be diverted is only excess flood water that the U.S. cannot use without our help. No one has ever suggested that we cut off water that U.S. plants are now using. But the flood excess that is now spilled by the U.S. plants is legally and morally ours if we can capture and use it. This alternative will become profitable in 25-50 years.

4. Probably the most lucrative long-term use for water will be for consumptive purposes, such as for irrigation,

industry, and domestic use.

Water shortages in the United States are already developing and the search is on for new sources of water. So it would be extremely short-sighted for Canada

to commit Columbia waters to the United States for all time at no charge, except for their current value as producers of hydro power.

In Canada, our greatest need for water will be on the Prairies. It is not exaggerating to say that the ceiling on future industrial and agricultural development of this region will depend on how much water it can get and the Columbia is a prime source that is surplus to B.C.'s conceivable needs. The Saskatchewan government feels strongly that Canadian water should be reserved for any forseeable Canadian needs before it is committed to a foreign country. This is not a popular idea in these days of provincial autonomy, but it is a concept we must move back to if Canada is to remain a prosperous economic entity.

Having looked at the three principles for best use

Having looked at the three principles for best use of Columbia water, and the four great uses that could be made of it, let us compare the Treaty plan with the plan proposed by General McNaughton to see how they stack up.

On Principle 1. (Canadian water stored in Canada).

The Treaty allows the giant Libby project on the U.S. section of the Kootenay. This transfers physical control of what is essentially a Canadian river to U.S. hands and represents 25% of the storage capacity of the Canadian basin. High Arrow places another 30% of our storage virtually on the U.S. border where it is of no use to anyone but the U.S. So. more than half the Canadian storage is placed so that it can only be used to regulate U.S. plants. You can see what this does to our bargaining position. When our present sales agreement expires, and with no alternative use for this storage, we are completely at the mercy of the U.S.

ALASKA

YAT

YUKON

N.W.T.

RECHIKA

FINLAY

PEACE

TO FRASER

MICA

TO PRAIRIES

B.C.

CANAL FLATS

OF THE CANADA

U.S.A.

POWER TRENCH—Canada's Rocky Mountain Trench is the world's biggest treasure house of hydro power, with such systems as the Columbia, Peace and Yukon. It could form the backbone of an industrial empire.

They can give us anything or nothing for the continuing use of our storage. And the treaty, with all Canada's obligations, will still have 30 years to run.

The McNaughton plan on the other hand places all the storage in Canada, in locations where it can be directed in any direction, north, south, east or west. Even if we continue to sell flows to the U.S., the price of such service will be determined by the value of our real alternatives.

On Principle 2 (high altitude storage).

The treaty places storage at the lowest possible elevations relative to the U.S. border. The McNaughton plan places it at the highest. It is difficult now to estimate what this might mean to us in dollars, but one can make a rough estimate. Bull River-Luxor reservoir feeds about 1,500 ft of Canadian head; High Arrow about 80 ft. So an acre foot in Bull reservoir is worth 20 times as much as one in High Arrow. Translated into energy and imposed as peaking service on a large system, this would be worth at least \$25 million a year to Canada.

As far as at-site generation is concerned, Mica is supply-limited without storage above it. The Bull River-Luxor storage increases Mica firm capacity by about 500,000 Kw.

On Principle 3 (control of the use)

The treaty places control of all flows in the hands of the Americans. Libby gives them physical and jurisdictional control of the Kootenay. Arrow gives them effective control of the Columbia because of its location and because the criterion for its operation is to optimize output for the system as a whole, which of course, is largely American.

In addition the treaty specifically prohibits diversion for power purposes, or diversion of any kind out of the basin. It is also open to serious doubt, whether we will even be able to make the Kootenay diversion into the Columbia, in spite of a treaty provision for this. If this is prevented, mainly by U.S. vested interests downstream, we will be completely tied in to U.S. needs.

Premier Bennett and his supporters in Ottawa have created what is essentially a short term power sale to the U.S. and have tailored the Canadian system specifically to supply U.S. needs. Their thinking has not gone beyond this concept and within this limited framework, they can say, rightly enough, that the engineering studies support their proposals.

On the other hand, the Americans went far beyond the power aspects in their thinking, and negotiated a comprehensive water development treaty for the U.S. The Americans wanted, and managed to obtain, complete control over, and unrestricted use of, Canadian water for consumptive purposes for all time; firm power now; peaking power later; and flood control always. For this enormously valuable water, they pay us nothing.

The lure of the quick cash from the downstream benefits caught the fancy of our politicians and they virtually ignored the other potential for Canadian water. If downstream benefits had been properly considered as an initial by-product of our development that would supply an early financial boost to the whole development, we would have been well off. When they became the end objective, our physical development in Canada became distorted to this one transient use. The dams we build will produce minimum power in Canada and will locate the water in the wrong places, to our future detriment.

Our politicians, including many who were responsible for the treaty, freely concede the deal is second best for Canada. They also say, just as glibly, that second best is good enough. It isn't.

The Rocky Mountain Trench has the riches and power to become the backbone of a gigantic industrial empire. We are about to give away the lower end (the Columbia) and stand a good chance of losing the upper end (Yukon River) because we are letting the U.S. move in first.

The stakes are measured in countless billions of dollars and are too big to be frittered away for a short-term return, or to avoid unpleasantness with the U.S., or to pacify a short-sighted provincial premier, or any of the reasons that appeal to the average politician.

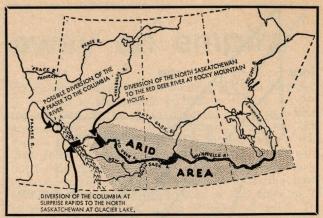
We have missed the opportunity to convert the Columbia into a high altitude source of power and water for Canada and have eliminated any possibility of doing this in the future. This failure could leave Saskatchewan choking in its own dust and retain for B.C. a role as a breeder of fish and a storer of water.

The Fraser diversions are physically possible and legally unassailable. They offer promise of tremendous advantages to British Columbia for decades to come. Any Canadian government which lightly abandoned these advantages would be guilty of the grossest treachery to the long-term future of Canada for which it is responsible.

Michael Barkway Financial Post, Sept. 22, 1956



Canal Flats diversion is essential for all others, Kootenay (foreground) would flow into Columbia (background).



Columbia diversion is ideally located to put water into arid region served by South Saskatchewan River.

The Prairies will get NO water

One of the most frightening implications of the Columbia mess for the future unity of Canada is the callous way in which Premier Bennett has refused to share the abundant water of B.C. with the water-short Prairies.

Bennett has set up the treaty plan so that all the Columbia water goes to the U.S. Canada builds the storage that are necessary to capture the flood flows on the Columbia. The treaty gives the Americans the right to take any or all of this water for irrigation and for water so used, Canada gets paid absolutely nothing, now or ever.

We are paid for the downstream benefits to power production in the U.S. But water for consumptive purposes is being given away free in perpetuity. It is beyond comprehension that a provincial premier would deny another province badly needed water in order to turn it over to another country.

The McNaughton plan would enable B.C. to divert 6,000 cfs of Columbia water into the South Saskatchewan. This would represent about 10% of the Columbia flow and would reduce U.S. benefits only 6%. But it would almost double the flow in the South Saskatchewan and might make the difference between prosperity and relative stagnation of that arid region.

One may wonder why the United States is prepared to insist on getting every last drop of Columbia River water. The reason is that their interest is not primarily for power but for consumptive uses in the United States.

Plans were made as far back as 1949 by the U.S. Bureau of Reclamation to divert the Columbia not only to California but probably to irrigable lands of Arizona and the southwest.

As soon as the Columbia treaty is ratified, these plans will be brought out of their pigeonholes in Washington and we will stand on the sidelines and watch the water that we were denied for the Prairie Provinces being moved to the deserts of California and Arizona.

David Cass-Beggs, General Manager Saskatchewan Power Corporation February, 1964 The story is simple.

1. The Prairies need water.

2. It is available from the Columbia.

3. They aren't going to get it.

E. F. Durant, chief of hydrology for P.F.R.A., says that water is Saskatchewan's most critical problem and will be the limiting factor in future industrial and agricultural development.

Farming on the Prairies always has been a precarious occupation, as anyone who lived through the great droughts of the 1930's can testify. In those years wheat production often dropped from the normal 23 bushels an acre to less than half that.

The uncertain supplies of water have greatly slowed industrial growth and related economic activities in the area. And these are the activities that increasingly will determine prosperity in the future.

It is not necessary to document the increasing concern almost everywhere in the world over water supplies. Billions of dollars are being spent to guarantee water for the future and great political struggles are being waged for possession of scarce sources.

The biggest preoccupation of resource planners in the immediate future will be water supply, if it is not already. Any country or region that fails to safeguard and develop its sources of water is headed for economic oblivion.

The Prairies have two general solutions to their problem. One is to re-route the north-flowing rivers like the Athabaska, North Saskatchewan, and Peace into the populated areas of the south. This would not increase the total supply on the Prairies, but would mean better distribution of the water that is available now.

It is likely that this internal diversion program will be done within the next 30 years. But it will not be enough,

The only real chance to increase the net supply in the southern Prairies, is to obtain water from the abundant sources west of the Rocky Mountains, that is, from B.C. And the prime source is the Columbia basin.

The cheapest and most likely first diversion will be from the North to the South Saskatchewan Rivers at Rocky Mountain House. This is a very cheap diversion but it involves only 2,000 cfs of water. The next most attractive diversion is from the Columbia at Surprise Rapids, above Mica. This would net at least 6,000 cfs that could be moved directly into the South Saskat-

The value of water

	\$ per acre foot
On submarines	\$2,000
Kuwait	1,000
Coalinga, Calif.	470
Freeport, Texas	325
Typical Canadian prairie town in	dry areas 250
Expected cost of large scale desal	lination of
sea water	163
Desalting with atom power	50
Chicago and New York	70
Metro Toronto retail rates	55
California citrus irrigation	50
Vancouver	35

chewan system through the Rocky Mountain House diversion. But it couldn't be done under the present treaty plan, because Kootenay diversion is prohibited in any quantity for 60 years and so no storage is available from which the Prairie diversion could be made.

Engineering studies have shown the plan would deliver water on the Prairies at a cost of about \$7 per acre ft. It would require about 13 billion kwh a year of energy a year to lift the water up 2,000 ft over the rockies. But this energy would be recovered completely when the water moved across the Prairie rivers to Hudson Bay, passing through power installation along the way.

B.C. would be reimbursed for the loss of water or power, either by paying cash for the water or diverting other rivers like the Fraser or Peace into the Upper Columbia to replace what was taken out. In other words, the entire cost of diversion could be met by the increased power generation alone.

A project of this magnitude is not economic at present because most of the power plants on the Prairie Rivers have not been developed. But very shortly, this water and as much more as is available can be used very profitably. Compare the cost of \$7 per acre ft with the chart on this page to get some sense of proportion about what water is worth.

Saskatchewan thinks this water may be needed within 10 years. Under the terms of the Columbia treaty, they will never get it. The location of the treaty dams will make it physically impossible, the terms of the treaty will make it legally impossible, and the vested interests that will be built up in the United States with prior claim on the water will make it politically impossible.

Two clauses specifically prohibit multi-purpose diversions for 60 years. The first clause allows diversion only for consumptive purposes, but specifically prohibits power generation from a diversion. Treaty apologists say that incidental power development is permissable but the treaty does not say this. Anyway, 13 billion kwh is hardly incidental, and anyone who thinks the U.S. would allow such a diversion is dreaming.

The second, and clinching clause, states that no structures may be built in the basin that would change the net flow at the U.S. border. A Prairie diversion requires structures, and the flow would certainly be changed. So, no diversion is possible under the treaty.

What about after that? Many years ago in the House of Commons, during the power export debates,

the Rt. Hon. Arthur Meighen said, "Power is something which, once exported, becomes the foundation of a great vested right and the withdrawal of it—however narrowly and carefully it may have been provided for—becomes a practical impossibility."

If this was true for power, it is a hundredfold more binding with water. It would be inconceivable, after we let the U.S. people in the Columbia basin fill their irrigation systems, and industrial supply lines with our water for 60 years, to hope ever to get it back.

The evolution of government propaganda on this point is interesting. At first, treaty defenders took the position that what B.C. did with its own water was no concern of any other province. When Saskatchewan objected to that, the Hon. Paul Martin repeatedly assured them that the treaty would not prevent diversion to the prairies. No one really believed that and now the official line is to tell the Prairie people that they really don't want the water anyway. On March 3, 1964, Mr. Martin said in the House of Commons, "Diversion from the Columbia basin to Saskatchewan is only a far-distant and remote possibility".

B.C.'s Lands and Forests Minister, Ray Williston, was less polite. After hearing of a proposal by Premier Lloyd to divert water from the Columbia, he ridiculed it in the B.C. Legislature, "Partisan politics can overcome economic feasibility and common sense if there is even a semblance of mystic fantasy to sustain a highly improbable proposition".

Premier Bennett still hasn't changed his original position that it's no business of Saskatchewan what Bennett decides to do with B.C. water. When told of Saskatchewan's concern over the treaty, he is reported to have said, "That NDP government in Saskatchewan had better be told to keep its cotton-picking hands off our resources".

Even the Vancouver "Province", which has supported Bennett's policy on the Columbia, couldn't stomach that approach. In an editorial, the Province said, "As cities grow and land development pushes north, Saskatchewan, looks 30 years into the future and sees a need for more water. It might be argued that getting Columbia water to the wheatland would be difficult and expensive. It would be unthinkable, however, to sacrifice this land, no matter what the cost of saving it".

If the government of Saskatchewan is being ridiculed by Bennett and ignored by Ottawa simply because it is of a different political party, especially when the future and livelihood of millions of Canadians on the Prairies is jeopardized, then partisan politics in Canada have reached the rock bottom level of irresponsibility and have started to tear at the fabric of confederation.

Grand Coulee Dam feeds a territory of 2.5 million acres, of which 1 million are suited to irrigation and about 400,000 are actually getting water. The territory had a history much like that of western Canada's dry belt until the reclamation development got underway in 1933.

Since 1952, the population has risen 1,000 a year. By 1962, some 2360 farmers were operating 345,637 acres of irrigated land and in that year harvested crops valued at \$47 million. Some 500 new industries have been established in the basin and the volume of retail business exceeds \$100 million.

J. S. Cram Family Herald, Feb. 13, 1964



McNAUGHTON PLAN

How to develop the basin for Canada

- 1. Store all Canadian water in Canada under Canadian control.
- 2. Locate the main storage upstream from Mica (in Bull River-Luxor) to provide maximum atsite power at Mica.
- 3. Store the water at the highest possible elevation to provide maximum energy and flexibility for all purposes.

We sacrificed the best power plan

Mica Dam must be the hub of any Canadian development of the Canadian half of the Columbia basin. And the key to profitable development of Mica is to make sure it can be supplied with Kootenay water.

It's as simple as this—on a river such as the Columbia, where storage is essential, you locate your main power generating plants at the high head sites, then arrange for upstream storage to keep up the head of water behind the power plants.

The U.S. recognized this clearly and has seen to it that the treaty fulfills these requirements as far as the U.S. is concerned. The 10 U.S. plants are located between Grand Coulee and Bonneville on the lower Columbia. The treaty gives them Canadian storage directly upstream from Grand Coulee—a perfect combination.

The Canadians missed this fundamental point and accepted precisely the opposite arrangement for Canadian development. Our key plant is Mica, a magnificent

power site located at the centre of our system with enormous live storage capacity (12 maf), 566 ft of usable head, and a location high in the mountains.

If Mica is the key, we should be locating our auxiliary storage above it, namely in Bull River-Luxor. What does the treaty do? Precisely the opposite. The storage is located below Mica, where it is useless for power generation in Canada. This simple failure to understand the basics of the Canadian system will cost us as much as \$25 million a year in lost energy, or several billion dollars over the life of the dams. The concept is so simple and so important that it is almost incomprehensible that our negotiating team could have missed it, or failed to insist on it.

The terrible irony of our failure is that it makes very little difference to the U.S. main stem plants where the storage is located, as long as it is, in fact, upstream. It is entirely feasible to develop the Canadian basin for our maximum output, and have this same system provide the needed upstream storage for the U.S.

That is, we build Mica, and make sure it has all the upstream storage we can put above it. This gives us our best development. Then our system as a whole, including Mica, acts as a great upstream storage for the main U.S. plants.

TREATY

How <u>not</u> to develop the basin for Canada

- 1. Place 25% of Canadian water in U.S. (Libby) under American control.
- 2. Locate the main storages downstream from Mica to reduce atsite power in Canada to a minimum.
- 3. Store most of water along U.S. border at lowest possible elevation in Canada to eliminate energy and flexibility for Canadian needs.



The treaty doubly emasculates Mica by placing the bulk of auxiliary Columbia storage in Canada downstream in High Arrow, and by allowing the U.S. to build Libby, which effectively cuts off the upstream supply from the Kootenay River.

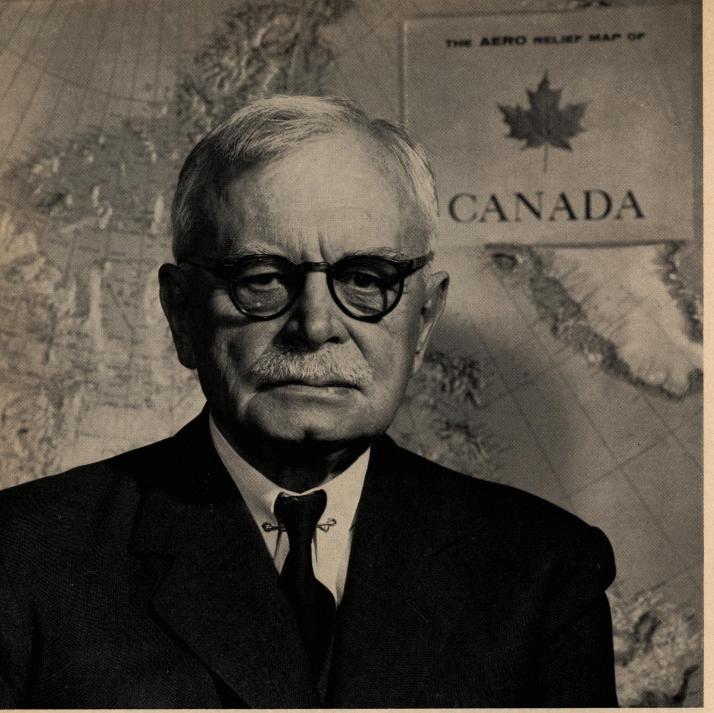
Placing the storage high in Canada, with reservoirs backing Mica, allows Canada to provide everything the U.S. needs in the way of flood control and controlled flows for power, and at the same time, produce maximum benefits at site in Canada. It is true, that Mica would be operated in a different way than the U.S. plants, and might require some sort of re-regulation below it, to convert the flows from our needs to U.S. needs before they cross the border. But a large reservoir at High Arrow is not necessary for this. Now that Peace power will come on line before Columbia power, we won't need Mica generators for at least 15 years. By that time, the Americans will be able to handle much more variation in flow without hurting their output and Murphy can provide all the re-regulation necessary. We spend \$125 million for a useless dam at High Arrow.

The treaty places most of the Canadian storage along the U.S. border, where it serves the U.S. plants but does nothing for generation in Canada. In other words, the system was designed primarily to produce downstream benefits. As the value of the benefits decline, the value of the storage declines as well and there is no alternative use to which it can be put.

Although the treaty includes Mica, it considerably reduces its potential generating ability, and artificially attributes most of the downstream power benefits and flood control benefits to High Arrow. The result is that, on this basis of valuation, Mica looks uneconomical. This is a fantastic conclusion and it led to a B.C. proposal to eliminate Mica and build only High Arrow and Duncan. This would have been the ultimate absurdity and Canada's chief negotiator, the Hon. E. Davie Fulton recognized it.

He said, "To build only the High Arrow and Duncan Dams would be close to the very thing that some critics of the treaty have accused the negotiators of contemplating. That is, to see Canadian territory flooded for no other purpose than to permit the U.S. to generate extra power, with no power ensured in Canada. This would be the greatest dedication of Canadian resources to the benefit of another country and the greatest betrayal of Canadian interests that it would be possible to contemplate".

It certainly would. And the same remarks could be applied, to a lesser degree, to the treaty plan itself.



GENERAL, THE HON. ANDREW GEORGE LATTA McNAUGHTON, P.C., C.H., C.B., C.M.G., D.S.O., M.Sc., D.C.L., LL.D., P.S.C., I.D.C.

Andrew McNaughton was born in Moosomin, Sask., in 1887. He studied electrical engineering at McGill (B.Sc., 1910). On graduation, he worked for Dr. Louis Herdt, professor of electrical engineering, while studying for his M.Sc. (awarded 1912) and instructing in electrical engineering and mathematics at McGill, In 1909 he was commissioned into the Canadian Militia and in 1914 he went overseas as a major. After brilliant war service (won DSO, twice wounded, three times mentioned in dispatches), he returned home in 1918 as a brig. general.

He held a series of staff and command posts, reaching the position of Chief of the Canadian General Staff in 1929. In 1935 he left the army to become president of the newly-formed National Research Council.

In 1939, he returned to the army to lead the Canadian Army overseas. British artillery authorities regarded him as "probably the best and most scientific gunner in any army in the world". An American encyclopedia described him in 1942 as "one of the best, if not the

best officer in the British Empire, one capable of leading the Allied Armies in Europe to victory" but "barred from the highest commands because he is a colonial".

He became Commander of the Canadian Army, but returned home in 1943 because he refused to consent to the army being broken up and attached to other allied groups. He retired from the Army in 1944 with the rank of General and became defence minister for one year in the King government during the "conscription crisis".

After the war, he served as Canadian representative on the United Nations Atomic Energy Commission, President of Atomic Energy of Canada, and Canadian permanent delegate to the UN and representative on the Security Council.

In 1960 he was appointed Chairman of the Canadian Section, International Joint Commission, and he occupied that position during the crucial preparations for the development of the St. Lawrence Seaway and Columbia River.

Who speaks for Canada?

General McNaughton once described the wealth of the Columbia River as "the ransom, not of a king, but of an empire". During the decade of the 'fifties, when few other Canadians had any idea of the gigantic stakes, he was waging a lonely battle to retain control of the Canadian half of this empire for Canada.

Starting from a position where the U.S. claimed it all, McNaughton, by 1960, had hammered out an understanding that the Canadian half belonged to Canada and would be developed in Canada's best interests. This would still produce great mutual benefits to be shared by both countries.

It began in 1951 with the U.S. request to collect the waters of the Kootenay River (most of which originate in Canada) and store them on U.S. territory in the Libby Dam. McNaughton, as Chairman of the International Joint Commission, blocked that. He said that Canada could put its water to much better use at home.

Then the Americans tried to take over Mica, the biggest dam in Canada. They offered to pay the entire cost (then estimated at \$400 million) provided Mica flows would be operated to suit U.S. needs. McNaughton said Mica was Canada's dam and was worth many times as much if we operated it our own way.

Next came the infamous Kaiser deal, when Premier Bennett tried to sell the controlled flows of the Columbia River to Henry Kaiser for \$2 million a year. McNaughton joined forces with C. D. Howe to initiate an Act of Parliament that stopped that sellout.

Canadian best use

The American view was that they need pay very little for Canadian regulation. They reasoned that if we built the dams in Canada for our own use, they would get free regulation, since water flows downhill. McNaughton soon changed that attitude.

He said, in effect, "Sure, water flows downhill, but this water may not flow down your hill". He had realized that Canada's best use of Columbia flood water lay in diversion, either to the Fraser, or to the then dimly-understood Prairie plan. He told the Americans that Canada would use the water in the best way for Canada.

If our best use were the Fraser, we had an airtight legal, moral, and economic case for diverting and using it. If the Americans felt it was worth more to them to buy the controlled flows themselves, we would sell them. But Canada would not turn over our water free to anyone. The Americans conceded this principle of "Canadian best use of Canadian water", and agreed to pay for any use they

made of our storage for controlling flows. This was the concept of "downstream benefits".

The politicians in Canada immediately smelled quick cash and took over, without understanding the delicate balance of economic levers that had made downstream benefits valuable. They negotiated a treaty in 1961 that provided for downstream benefits, but precluded any other use. McNaughton's creation of the concept of downstream benefits had become a Frankenstein monster that turned on him and on Canada to destroy the much bigger potential of the Columbia.

The politicians failed to understand that the only reason the Americans paid us for the benefits was that we had an unassailable bargaining position, that is, we had other equally attractive uses for our water. Even if we continue to sell downstream benefits forever, the price will remain satisfactory to Canada only if we retain a *real option* of using the water for more valuable purposes elsewhere.

Lost bargaining position

The treaty and subsequent sales agreement used our *present* bargaining position, as hammered out by McNaughton, to obtain a cash sale for 30 years. But the terrible forfeit that the Americans quietly extracted from our unsuspecting negotiators was to give up our alternatives, namely diversion of any kind, and the location of dams for maximum at-site power in Canada.

Therefore, when the present sales agreement expires in 30 years, Canada will find that it has no alternative but to give further controlled flows from our storage to the United States, at whatever price they are willing to pay — and it won't be much. The U.S. will revert to its original contention that the water flows downhill, so why pay Canada for it. Only then we will have no McNaughton, but will have a treaty that completely ties our hands for at least another 30 years.

McNaughton is understandably appalled at the short-sightedness of those who have sacrificed the empire he envisioned for Canada. He has spent the past two years in trying to tell the people of Canada how close they are to losing a great heritage.

The impulse to give away the wealth of the future for a few pennies in the present has become so much a part of the Canadian character that one can easily despair of our chances ever to build a lasting nation. Nations are built only by people who want to. It cannot be done by default.

Great nationbuilders have been relatively rare in Canadian history. We cannot afford to ignore the voices and cast aside the efforts of the few we do have.

The Government breaks a promise

"The Canadian people may forgive honest errors in judgement by our treaty negotiators, but they will never forgive governments which know they are wrong and refuse to take corrective action".

That statement was made by B.C. Liberal leader Ray Perrault in 1963, a year in which both his provincial party and the federal Liberal party campaigned for election. One of the clearly stated policies of both groups was that the Columbia treaty was defective and would be renegotiated if either or both parties gained power.

Perrault didn't make it, but the federal party did. Within days of taking office, the federal party had repudiated this promise to the Canadian people.

There was no doubt about the party position, at least in the public mind, before the election. Here's how it was expressed by various party spokesmen on a number of occasions.

FROM MR. PEARSON

"Liberal Leader L. B. Pearson has described the Government's handling of the Columbia River treaty as sheer bad management.

"In a statement issued earlier from his office at Ottawa following Gen. McNaughton's charges Friday night, Mr. Pearson said the treaty should be renegotiated at once by a Canadian government which would pay sufficient regard to Canada's interests. 'Gen. McNaughton would have been a most effective person to act for Canada in the renegotiation of the treaty, which is now more necessary than ever,' Mr. Pearson's statement said." (Globe and Mail, April 9, 1962).

"Your letter of April 12 (1963) has just arrived and I would like to assure you that I agree with you that it is imperative to renegotiate the Columbia River Treaty." (letter to Donald Waterfield of the Nakusp Chamber of Commerce)

FROM DR. JACK DAVIS

(head of Liberal power committee)

"The Columbia River Treaty, as interpreted publicly by the present government, must be characterized as nothing short of a fiasco. It is inconceivable that the government of this country should ever enter into any agreement, let alone a comprehensive treaty with another country to last at least 50 years, which failed to procure any demonstrable advantage for the people of Canada. No man, no government, no party can be proud of this achievement." (House of Commons, October 4, 1962)

"The present Columbia treaty is not good enough. It amounts to a sell-out of our Canadian resources. This embarrassing treaty must therefore be renegotiated." There can be no doubt that the present version ties Canada's hands. Economically speaking it is a poor deal for Canada. Whether Canadians are bold enough to grasp this opportunity (to amend the treaty for our purposes) remains to be seen". (Vancouver Sun, Feb. 28, 1962).

Although the public did not then know it, Mr. Pearson made a commitment to President Kennedy at Hyannis Port that he would not ask for any major changes in the treaty. Thus as late as May 24, 1963, an editorial writer in the Toronto Star could still say:

"The treaty has been sharply criticized by hydro experts. Mr. Pearson obviously shares these misgivings, since his intentions are to renegotiate, not just modify, the present treaty."

But public suspicion was growing and two press reports within the next six weeks, began to indicate

what had really happened.

"B.C. Liberal leader Ray Perrault among others will be embarrassed if Mr. Pearson does not seek to renegotiate the treaty. Mr. Perrault has been attacking Mr. Bennett for months on the grounds the current treaty is a second-best one.

"The provincial Liberal chief has been consistently supported by his four colleagues in the B.C. Legislature and also by several federal Liberal members, including the party's acknowledged power expert, Jack Davis, who once described the treaty as nothing short of a fiasco.

"Mr. Pearson himself has often expressed serious doubts about the value of the existing Columbia agreement. In both recent federal election campaigns, he pledged his party to seek renegotiation.

"However, Mr. Pearson has talked less firmly of renegotiation since he became Prime Minister. When he met President Kennedy at Hyannis Port, the conference communique said he suggested merely certain clarifications and adjustments." (Globe and Mail, May 31, 1963)

"The general impression is that the changes Mr. Bennett has agreed to let Prime Minister Pearson seek in the treaty are only minor ones, and this in turn suggests that the provincial Liberals have foresaken their long-standing and outspoken desire for major renegotiation. Inquiries at Liberal offices here yield only the impression they are both confused and angry over the Ottawa deal" (Financial Post, June 29, 1963.)

The first definite indication of his change of heart came from Mr. Pearson in a letter he wrote on August 2, 1963 to defeated Liberal Candidate George Cady in Trail, when he said: "The physical plan will not be altered to any great extent. We are not adopting the McNaughton plan".

The reversal was finally confirmed on January 22, 1964, when the terms of the actual protocol were released.

Although both the federal Liberals and Conservatives have advocated a full public investigation into the treaty and have promised such a study on many occasions, the hearings that finally did get started on April 7, 1964, appeared to be little more than a formality. The Government had already signed a protocol without public hearings, and the Hon. Paul Martin, speaking on the opening day, made the following statements:

Mr. Kindt: What would the position of the government be if this committee should bring in additional recommendations for improvements? As I understand it, our function here is to improve the treaty.

Mr. Martin: No, not at all. Your function is to indicate whether you approve of what the government has done. Any variation of it would of course involve a repudiation of the position taken by this government or by its predecessors.

Mr. Kindt: Does this not put the committee into the position of being pretty much a rubber stamp?

Mr. Martin (later): There is no law which requires us to come to parliament or to refer the matter to a committee.

The protocol

In our 1962 report on the Treaty, we listed four fundamental flaws, each of which is intolerable to a sovereign country. We also listed 14 serious flaws, any one of which might be acceptable in a treaty, in which some give-and-take must be accepted, but the sum of which places an intolerable burden on Canada. Given the fact that our bargaining position is extremely strong, we should have to accept only three or four of these restrictions as the price for U.S. agreement.

Most critics of the treaty accepted this list as a fair appraisal of the flaws. Dr. Jack Davis incorporated most of them in his "Plan for Action on the Columbia" (a number of them were actually taken verbatim from the Contract Record list).

Since Dr. Davis was the head of the Liberal Committee on Power and Energy, it was reasonable to assume that this "Plan for Action" would form the basis for the present government's attempts to improve the treaty.

Therefore we are reproducing a summary of the Contract Record list, marking with asteriks those points that were included in the Liberal program, in order to compare it with the actual results achieved by the protocol.

It is quite evident even from a quick perusal of the protocol, that of the 18 flaws, 14 remain unchanged, including the 4 fundamental ones. The remaining four have been partially corrected.

Fundamental flaws Protoc

* 1. Integration with U.S. system * 2. No diversions out of the

basin allowed

* 3. Kootenay flows under U.S. control

* 4. Kootenay water stored in U.S.

Serious flaws
* 1. We build too much storage

for price we get

* 2. Flood payments too low

* 3. Unlimited flood control obligation by Canada

4. Period of treaty too long5. Loss of \$200-\$400 million in

construction work

* 6. Wrong location of Canadian
dams

* 7. No payment for U.S. use of water as such

8. No compensation for decreasing benefits
9. Construction schedule too

rigid
*10. Perpetual obligations to

Canada
*11. Unequal sharing of downstream benefits

12. Canada pays U.S. transmission cost for downstream benefits

13. Kootenay diversion rights expire in 100 years.

*14. Overall plan too rigid

Effect of Protocol

No change

No change

No change

No change No change Minor corrections, but serious flaws remain.

No change

No change

No change

No change

No change

Partially corrected

No change

No change Eliminated because downstream benefits not returned to Canada

Partially corrected No change

Comments on the protocol

"The United States Government could not, in an exchange of notes make any modification of the substantive provisions of the treaty, since this would amount to an amendment of the treaty, and, to be effective, would require the constitutional processes applicable to treaties in the United States to be followed."

The above comment was made by the U.S. Senate Committee on Foreign Relations in its March 15, 1961, report recommending ratification of the Treaty. It means that any substantial changes to the treaty would have to be re-submitted to the U.S. Senate for approval.

The fact that this procedure is not being required of the January, 1961 protocol is clear proof that the protocol makes no important changes to the treaty.

There are 12 clauses, whose effects are as follows:
1. Requires that U.S. as well as Canadian storage be used for the prevention of floods in the U.S.

2. Says that Canadian storage may be used to minimize floods in Canada as well as in the U.S.

3. This is a procedural matter connected with sale of benefits.

4. Eliminates standby transmission charge to Canada for 30 years. This is consequential to the sale of benefits.

5. The worst clause of the treaty says that U.S. has complete control over Libby operation and will vary it for Canadian needs only if it does not conflict with U.S. needs. The protocol re-affirms this clause, which means there still is no assurance that Libby operation will increase production on the West Kootenay plants.

6. Re-states the treaty provision for diversion for consumptive purposes, but says nothing about multipurposes diversions, which are prohibited under the treaty. Multi-purpose diversions are the only kind that are of significant value to Canada. The second part of this clause removes the time limit on existing diversions but retains the time limit for starting them.

7. Makes no change in the damaging treaty requirement that our storage be operated for system optimization, and in fact adds the whole Western U.S. to the system, which means Canada's voice becomes even more insignificant. It does however give Canada some flexibility about which storages it will use to provide the U.S. benefits.

8. Incorporates a better estimate of flow probabilities; this means our benefits are increased, but it would mean similar increases to any plan of development including the McNaughton plan. It is a routine up-dating of flow data.

9. Reinforces the objectionable treaty concept of not crediting Canada with peaking benefits in the U.S.

10. Wording completely obscure. No comment possible.

11. Makes construction schedule equitable.

12. Says the treaty is not a precedent. This is impossible. Any act is a precedent regardless of whether it is so called or not.

. . . the Liberal's new protocol looks like the very heavy make-up on the face of an aging actress. It cannot make her beautiful again, but it tries to conceal just how ugly she has become.

Michael Barkway
The Financial Times of Canada
January 20, 1964

The treaty case? Unbelievable

For two years, the Government has tried desperately to justify the treaty. They have lied, exaggerated, misled, and conceived arguments that border on fantasy. Their case remains unconvincing. This is not the fault of the government engineers. The treaty case for Canada simply is indefensible in a rational way. Take for instance the following six arguments.

What are we paid?

The Liberal position before the Protocol was announced was that Canada should get about \$500 million for the sale of the downstream benefits. The actual price was announced as \$275 million.

The press release writers must have scratched their heads over that one, but they finally came up with a neat and mathematically accurate device for converting \$275 into \$500

They added in the price to be paid for flood control (\$64 million) and produced the following astonishing statement: "These U.S. payments for power and flood control, if invested in Canada at the prevailing Canadian rate of 5%, would bring the total value to Canada to \$501 million by 1973".

The figure \$501 made headlines across the country. But H. W. Herridge, neatly deflated the statement in the House of Commons with the following comment:

"The government claims Canada gets \$501 million under the treaty. This is not true. The price for downstream benefits is \$275 million. If this were invested instead of spent on construction, it would be worth \$501 in 10 years and a trillion dollars if the calculation is extended several more decades. The \$501 statement is just as valid and just as meaningless as the statement that anyone who invested \$1 at the time of Our Lord would own the world today. No doubt if we invest the \$275 million in 5% bonds instead of building dams, we will own the universe at the time of the Millenium.

Loss of sovereignty

The Government has repeatedly claimed that the treaty involves no loss of control by Canada over Canadian waters. This statement cannot be reconciled with the terms of the treaty.

The Kootenay for the most part is a Canadian river, although it makes one loop through the U.S. before joining the Columbia in Canada, Kootenay water can be either stored in Canada (Bull River) or in that one loop in the U.S. (Libby). The treaty puts it in Libby. So immediately the physical control of Kootenay water is located outside Canada.

"I can't believe that", said Alice, "One can't believe impossible things".

"I daresay you haven't had much practice," said the Queen. "When I was your age, I always did it for half an hour a day. Why, sometimes I've believed as many as six impossible things before breakfast."

Lewis Carroll (Alice in Wonderland)

The treaty adds jurisdictional control to the U.S. physical control by the following clause. "All benefits which occur in either country from the operation of this storage accrue to the country in which the benefits occur". So all the at-site power generated at Libby belongs to the U.S.

We have plants downstream on the Kootenay in Canada that could benefit if Libby were operated in Canada's interests. Here's what the treaty says about that. "If a variation in the operation of the (Libby) storage is considered by Canada to be of advantage to it, the U.S. shall, upon request, consult with Canada. If the U.S. determines that the variation would not be to its advantage, it shall vary the operation accordingly".

We turn physical control of our water over to the U.S. and agree that we will benefit from it only if it does not hurt the U.S. If that is what the Government means by protecting Canadian sovereignty, God help Canadal

The clauses affecting the main stream of the Columbia are different, but have the same effect. The treaty provides that most of the Canadian storage will be placed in High Arrow and operated for U.S. system benefits.

Kootenay diversion?

Whoever controls the Kootenay storage controls the Columbia River basin in Canada. The treaty gives this control to the U.S. Without the Kootenay diversion, maximum output at Mica, diversion to the Prairies, or low-cost development of the Fraser are not possible because the water supply on the upper Columbia alone is too limited.

The Government claims our rights to make this diversion are protected. But they have failed to look beyond the words of the treaty. To protect a right, three elements are absolutely essential. (1) legal sanction for the right, (2) ability to exercise the right, and (3) an environment where such exercise would be accepted (no creation of vested interests which would be damaged by diversion).

Consider the Kootenay diversion. The legal right is clear in the treaty, although it cannot be exercised to any degree for 80 years, it is not clear whether we are liable for damages to downstream interests.

However the above questions are academic because the vested interests that will be built up over 60 years in Libby flows and power will make it absurd to think of trying to repatriate these assets to Canada, Jack Davis made this very clear when the Liberals were in Opposition. "The treaty would prevent Canada from eventually diverting the Kootenay into the Columbia. The existence of a \$300 million dam at Libby would stand in the way. It would constitute a vested interest and politically would make it difficult for Canada to recapture these flows."

After his party came to power and reversed its stand, Davis's pathetic attempts to reverse his own position only highlighted the weakness of the treaty. His remark on March 5, 1964, in the House of Commons, stands as a classic.

"Does the hon, member not agree that the improvements in the protocol now make it abundantly clear that we can divert these waters and render the Libby dam useless?

Does anyone in his right mind think that the Americans are going to sit by and let us render their \$300

million dam useless, regardless of anything the treaty says? Government attempts to assure the public that we will be able to make the Kootenay diversion when it becomes valuable for us simply are not realistic.

What is a precedent?

Any act is a precedent in the sense that it precedes those acts which follow and influences them. Merely stating that an act is not a precedent does not make it any less so.

The chief effect of a precedent is that it influences or serves as examples in similar situations which follow. It is absurd to say the what we do on the Columbia will not influence our thinking on all future river developments.

The efforts of the government to convince the public that the Columbia is not a precedent-making event indicate that they regard it as a deal they would not wish to repeat.

The impossibility of the Government claim that no precedent has been established was revealed on April 7, 1964 when the Hon. Paul Martin tried to explain it to the External Affairs Committee. At one point, his brief was positive there is no precedent. The protocol contains "a clear statement that the Treaty does not establish any principle or precedent that applies to any waters other than those of the Columbia".

Several pages farther on, the brief contradicts itself. "The Treaty makes a useful and distinctive contribution to the developing program of international river basin concepts".

This is a direct reversal, to the disadvantage of Canada, of the Boundary Waters Treaty of 1909 and 50 years of consistent application of it, mostly against us, up to now.

Mis-use of engineering studies

The flagrant mis-use of engineering studies to support treaty claims should be a matter of concern to all engineers. In general, only the treaty plan has been studied in detail. The politicians have set up the frames of reference for most studies to produce the answers they wanted. Then they have ignored these restrictions when quoting the reports, often taking sections completely out of context.

For instance the highly competent reports by Gibb, Merz & McLellan and by Montreal Engineering do not compare alternative plans of development for Canada. These two firms were asked by the government of B.C. and Canada respectively only to answer two questions (1) Will the treaty plan work? and (2) At what price will it produce power. In each case the answer was, of course, yes, and an expected range of prices was given.

The most outrageous mis-use of an engineering report possibly was the B.C. Engineering Co. report of diversion to the Fraser, which the Hon. Arthur Laing tabled in the House of Commons on Feb. 26, 1964, to "prove" that the Fraser diversion was uneconomic.

There is no reason to question the competence of the studies, given the instructions B.C. Engineering had to work under. They were told to assume the following: (1) development by private company (so costs include taxes and profit) (2) small (10 maf) quantity of water diverted (3) no high dams on Fraser because we still can't get fish around high dams (4) Moran to be considered unbuilt and no diversion from Peace included (5) scheme to be done at present stage of limited development of Fraser.

Under all these assumptions, the power from such a diversion would cost an uneconomic 7.1 mills. But if

you change the assumptions to what they really would be when we are ready to make the diversion, the same data in the B.C. Engineering report would indicate a price for power of less than half the stated figure.

Who to believe

The most bizarre incident of all occurred early this year and led to some revealing reaction from officials in both Canada and the United States.

A Cominco engineer had written to Jack Davis to ask why the government kept changing its publicly announced cost estimates for High Arrow. He got a most astonishing reply.

Office of the Prime Minister February 5, 1964

..... "High figures have purposely been 'leaked out' by the Canadian and B.C. governments with a view to influencing our negotiations with the United States. Now that the lump sum price settlement has been arrived at we are in a position to produce more realistic figures insofar as the High Arrow project is concerned."

Jack Davis, M.P.
Parliamentary Assistant to
the Prime Minister

The public reaction was equally surprising. No one seemed to be concerned that the Government had admitted lying. Instead, Davis was given credit for "outwitting" the Yankees. It didn't seem to occur to most people that if the government was issuing false figures, the Canadian public was the biggest loser, as far as any attempt to judge the treaty was concerned.

The reason Davis gave for government lying was preposterous, as both American and B.C. officials were quick to point out. And their replies, with direct reference to the calibre of the Canadian negotiators, were the most sensational items to come out of the affair.

"Actual costs of the dam and calculations for the sale of downstream benefits were worked out on U.S. computers, Mr. Williston said. "They knew more about the situation than we did — they have been working on the Columbia for 20 years. You can't leak figures to engineers of the stature of the U.S. team'." (Victoria Times, Feb. 27, 1964)

"Elmer Bennett, former chief U.S. negotiator on the Columbia River Treaty, says his delegation was at no time fooled or deceived by Canadian figures, 'We worked from our own figures and from our own engineers'. Bennett said.

"A source close to Bennett said the American negotiators concluded during early discussion that the Canadians had neither sufficient background nor the engineering experience to provide clear-cut figures at the time of the negotiations". (Vancouver Province, Feb. 29, 1964)

This confirmed the widely held fear in Canada that the Canadian team had been outclassed. And yet the Hon. Paul Martin could still say in the House of Commons a month later (March 3, 1964), "The Hon. gentleman seems to imply that we have relied on the engineering advice of people in another country. That is simply not the case".

"Men of high position are allowed, by a special act of grace, to accommodate their reasoning to the answer they need. Logic is required only in those of lesser rank.

John Kenneth Galbraith (The Affluent Society)

Informed observers condemn treaty

Professional Men

"Beyond any shadow of a doubt, I consider the Treaty very disadvantageous to British Columbia and to Canada. I am unable to understand how any Federal Government can give approval to such a one-sided arrangement. Certainly from the engineering and economic consideration there is no possible justification for such an uncompensated give-away of our heritage. There may be political considerations which are to be all powerful, but if such is the case it will be to the everlasting disgrace of the Government.

"Even a casual study of the treaty and the reports will impress any thinking person with the fact that the proposal is unfair to Canada, both economically and nationally. (L. Austin Wright, P.Eng., former General Secretary, Engineering Institute of Canada)

"High Arrow in my opinion is a real sellout of Canadian resources to make a fast buck. Being at the elevation of only 100 ft. above the border it stores very little energy in Canada. High Arrow is really the Kaiser Dam over again only a much worse version. I have been opposing this dam in every way possible." (R. Deane, P.Eng., Cominco)

"E. W. Bowness, a veteran Western Canada Engineer, told the Calgary branch of the Engineering Institute he favours the McNaughton plan.

"There seems to be agreement among British Columbia engineers and economists the treaty in its present form 'is an extremely bad one for Canada'." (Calgary Herald, May 7, 1963)

"The alternative plan for maximum diversion of the Kootenay would undoubtedly be the best one for Canada". (C. B. Bourne, Professor of Law, University of British Columbia)

"This treaty is one of the most important matters facing Canada and B.C. at this time. It is only now slowly beginning to be realized what a disastrous result for Canada and B.C. would follow from ratification. May I suggest that under no circumstances should the treaty be ratified." (F. J. Bartholomew, P.Eng., Consulting Engineer, Vancouver)

"The inescapable conclusion of a critical analysis of the Columbia River Treaty is that it represents an outstanding triumph for the U.S. and a crushing if not humiliating defeat for Canada." (Larratt Higgins, Economist, Toronto.)

Political Leaders

"Another Bennett dodge concerned the Libby Dam—he has gone up and down this province trying to sell the proposition that this was an Ottawa giveaway. The fact is that Libby was inevitable once the Bennett Government vetoed dams on the Kootenay River (Bull River, Dorr) which, together with Mica, the Federal negotiators of the treaty would have preferred." (The Hon, E. D. Fulton, November, 1961)

"We feel that Canada should not tie its hands regarding the premium uses of water from the Columbia River basin by agreeing to a restriction which is designed mainly to assure adequate supplies for hydro-electric power installations in the U.S. There is no way of replacing water for consumptive uses, but there are alternative means of generating electricity." (Premier Woodrow Lloyd of Saskatchewan, September 27, 1963)

Press Viewpoints

"The present Columbia instrument has been subjected to such a barrage of criticism from competent, even distinguished Canadians—engineers, lawyers and economists—as to raise widespread doubts about the protection it gives to Canadian interests.

"It should not be forgotten that the treaty will determine the development pattern, for all time, of North America's last industrial frontier, the Pacific Northwest, which contains some of the last great blocks of cheap power yet unexploited on this continent. An industrial empire is at stake and this treaty should be examined, not rubber-stamped by Parliament." (Globe and Mail, Toronto, July 12, 1963)

"The long and bungled Columbia negotiations are a perfect illustration of the chronic failures in Canadian policy toward the U.S.

"The first can be described bluntly as sheer funk. It goes very deep in the thinking of the federal civil service. Its characteristic manifestation is to ask, 'Will this annoy the Americans'. Yet the Americans do respect a good case when we present it sensibly and stick to it.

"The protocol has the advantage of satisfying Premier Bennett. But nobody—even in the most timorous ranks of officialdom—pretends that treaty-plus-protocol asserts Canada's full long-term interest in the immense future potential of the Columbia River." (Financial Times of Canada, Montreal. January 20, 1964)

"Now is the last chance construction men have to voice their opposition to ratification under present treaty terms. It should be done quickly, and in loud, clear tones." (Heavy Construction News, Toronto. September 21, 1962)

"The value of a lump sum of money is decreasing steadily while the value of an immense source of water like the Columbia is increasing rapidly. Experts like Dr. Jack Davis declare that the U.S. soon will be prepared to pay not millions but billions of dollars for Canadian water, not for power but for irrigation and human consumption. However we look at it, Canada is giving away a lot for half a billion dollars." (Vancouver Province, January 24, 1964)

"We believe that Canada should be sure of its effective right to irrigate a million acres of Canadian land with the Columbia flow not allocated for Columbia basin irrigation. We cannot see that the United States will be any more likely to give our water needs preference over their own 20 years from now than they are today.

"That is why we must not ratify the Columbia Treaty in its present form. It is not important only to people west of the Rockies. It has an important bearing on the future of all Canadians." (Family Herald, Montreal, October 10, 1963)

"The governments of the prairie provinces have an inescapable obligation to weigh the treaty's provisions with regard to long-range effects on this region's water sources." (Edmonton Journal, Jan. 24, 1964)

"Despite appeals from Premier Lloyd and Mr. David Cass-Begg, head of the Saskatchewan Power Corporation, the federal government seems to be unconcerned about the threat to Western Canada's water reserves involved in the Columbia Treaty. It does not seem that the government is acting in the national interest in its haste to ratify the Columbia agreement." (Saskatoon Star-Phoenix, March 21, 1964)

"What is known about the agreement is cause for extreme uneasiness and scepticism. Certainly there is no satisfaction in contemplating the cold fact that Canadian negotiators are about to sign over a great natural resource to foreign control." (Calgary Herald, Dec. 18, 1963)

"What should be examined most carefully by Parliament is not so much the export of power, but rather the export of water." (Winnipeg Tribune, January 23, 1964)

"Canada is making the old mistake of selling control of its resources for cash. The United States is not primarily interested in water power. They wanted, and have got, complete control over Canadian water from the Columbia for eternity. They pay nothing for the use of this water." (Kingston Whig-Standard, January 24, 1964)

"Water for irrigation and industrial use is now the most important resource in the world. It will become increasingly so in the future. It is well to look far ahead when surrendering any rights whatsoever. The extra \$100 million that B.C. receives in the revised treaty would not come close to compensating for any loss of sovereignty over the waterways that rise in Canada and flow southwards into the U.S." (Port Arthur News-Chronicle, January 28, 1964)

"The B.C. Federation of Labour has gone on record as strongly opposed to the draft of the Columbia River Treaty. The Federation sees export of Canadian power to industries in the U.S. as the 'export of half a million Canadian jobs.' The workers of B.C. are the people whom the Columbia development is ostensibly designed to benefit. But they apparently remain unconvinced—and rightly so—that current policies will do this." (Victoria Times, October 30, 1962)

American Opinion

"The stream regulation on the Upper Kootenay could be accomplished at less cost by storage through Dorr-Bull River reservoirs than by means of Libby. It is evident that measured in economic terms, the plan contemplated by treaty is in the nature of second best, since Dorr-Bull River appears to be the superior project." (John V. Krutilla, Resources of the Future Inc., Washington, D.C.)

"A United States river development authority told the B.C. Resources Conference Wednesday controversy is an inevitable part of planning and is much less expensive than building the wrong project at the wrong time and place.

"He believes it is unfortunate that Canada and the U.S. moved ahead so fast in signing the Columbia Treaty. Marion E. Marts, professor of geography at the U. of Washington in Seattle, formerly with the U.S. Bureau of Reclamation and author of many technical articles on the Columbia Treaty, said, 'If I were a Canadian, I wouldn't be concerned about pressure from the United States to get the treaty ratified'." (Kelowna Courier, September 6, 1962)

"There may be occasions (and this appears to be one) where political expediency will magnify marginal benefits out of all proportion to their worth, in an effort to justify an otherwise uneconomical international agreement. If successful and if the costs are carefully hidden, the success may add some glamour to giant storage systems while the property owners along the Arrow Lakes take the beating. Also the public will be denied the right to enjoy one of the most beautiful natural lakes yet untouched by a questionable economic power philosophy." (Lt. Col. George Anthony (ret.), U.S. Corps of Engineers)

Labour Unions

"The labour movement is opposed to the present draft treaty for the development of the Columbia River. We strongly favour the McNaughton plan which includes the Dorr diversion and the exclusion of High Arrow and Libby." (Vancouver Labour Council)

"We have taken a stand of protest against ratification of this treaty." (Regina Labour Council)

"The Hamilton and District Labour Council will ask the Canadian Labour Congress to protest immediately the federal government's stated intention to sign the Columbia River Treaty". (Hamilton Spectator, January 17, 1964)

"The members of this local union stress their strong desire to have the McNaughton plan adopted." (Haney Local, International Woodworkers)

"Be it resolved that Local 200, U.A.W. call upon the Federal government to cease negotiations with the U.S. on the Columbia River Treaty and take steps to institute the McNaughton Plan for the development of the Columbia and Kootenay Rivers". (United Auto Workers, Local 200, Windsor, Ont.)

(Last month the three other U.A.W. locals in Windsor also voted to express disapproval of the present draft treaty.)

"This local union representing 3,500 electrical workers Canadian Westinghouse plants in Hamilton strongly urges rejection of Columbia draft treaty plan. Our members and many Hamilton citizens urge McNaughton plan instead of draft treaty plan." (United Electrical Workers, Local 504, Hamilton)

"We cannot agree that we should have the U.S. control Canadian water storage. We are opposed to the Columbia Treaty in its present form, and urge your Government to abandon the present draft treaty plan and negotiate a treaty with the United States on the basis of the McNaughton Plan." (Nelson Trail and District Labour Council)

"At the last regular meeting of Local 168, a motion was passed that we petition the provincial and federal governments requesting them to do all within their power to re-negotiate the Columbia River treaty." (Tunnel and Rock Workers, Local 168, Vancouver)

Conservation Groups

"Be it resolved that the Federal government be urged not to sign the present proposed agreement with the U.S.A. to develop the hydro resources of the Columbia River until a thorough and exhaustive study of all the rivers involved has been made, and also urged that all waters that can be used in Canada be reserved for the exclusive use of this country." (Western Canada Reclamation Association, June 21, Kelowna)

"Respectfully urge you (Prime Minister Pearson) to give careful consideration to Canada's right to the use of the Columbia River water for development, not merely in British Columbia, but by diversion to the western provinces. And that these rights be protected in perpetuity by any treaty arrangement." (Saskatchewan River Development Association)

"The fundamental problem is the conservation for Canadian use of the high altitude water of the eastern Rockies which is capable of diversion across the Divide into the Great Plains. The proposal to dam the Kootenay and divert the water into the Columbia (which would make this possible) should be urgently re-examined." (David Cass-Beggs, General Manager, Saskatchewan Power Corporation)

When will Canada wake up?

The Columbia Treaty is an irrevocable decision that will bind Canada for 60 years and fix the direction and shape of the Western Canadian economy for all time. We do not have to accept it. If there are serious doubts about its implications now, we must not accept it. We won't have a second chance.

Government spokesmen are wrong when they assure us that if we ever wish to convert to the McNaughton plan we can do so. The large initial commitment to physical structures and the vested interests that will develop around them, make it certain that the first plan will be the continuing one. Therefore we must choose the best use plan for Canada now and make sure all future construction is consistent with it.

Enough doubts of the gravest nature have been raised to condemn the treaty plan. It would be an act of reckless irresponsibility on the part of any Canadian parliament to ratify it in its present form.

It can be proved to the satisfaction of any reasonable man that the key clauses of the treaty can be interpreted in widely different ways. If such ambiguity exists now, the treaty is inherently defective, regardless of which interpretation any individual may support. If difference of opinion as to the meaning is so violent today, it will certainly increase with time and be a source of continual friction and bad feeling between the two countries.

The best interpretation one can put on the terms indicates that Canada just about breaks even. The worst interpretation carries terrible implications for Canada's future. The country cannot afford even the possibility that the latter version will prevail. It would mean:

- Alienation for all time of the water supply of the Columbia basin.
- Permanent commitment to provide dead storage in Canada for U.S. needs.
- No chance of ever providing cheap power on the Fraser or water to the Prairies.
- No flexibility to use Columbia water for new opportunities that we may not be able to foresee at the present time.

The Federal Government must re-assert its clear obligation to frame national development policy for the best future of all Canadians. This requires urgent action to re-state our historic policy of east-west sharing of wealth.

Speeches by present Government leaders advocating integration of resources with the U.S. and massive exports of water threaten the economic independence

"Works built on rivers in Canada and having an effect outside the country fall under the jurisdiction of Parliament, even if they are entirely located in one province. Special legislation will be needed to cope with these questions and to provide guiding principles of policy designed for the protection of the public interest of the Canadian people."

> Hon. Jean Lesage, Minister of Northern Affairs and National Resources, July, 1955.

of the country. Some sort of national policy on resource development is needed, but it should place Canada's national interests before any export plans.

The present treaty is essentially a water export treaty, arranged by one province for its own short-term interests, without any guidance by Ottawa on what our national policy should be on water exports. This present drift toward conflicting provincial development cannot be tolerated if Canada is to survive as a nation. The Federal government has an obligation to define the national framework of our development and the provinces have an obligation to plan their development within that framework.

The governments of Canada and B.C. have completely lost their sense of proportion. Even worse, they seem to have lost touch with the hopes and needs of the people of Canada. They seem determined to ram through a defective treaty against the strongly expressed criticism of almost every Canadian who has given the matter serious thought. The Hon. Paul Martin, in spite of oft-repeated promises that there would be fair public discussion, has instructed the External Affairs Committee to recommend approval and has arrogantly informed them that the Government will not consider any changes in its present draft treaty.

Treaty must be rejected

In spite of this, if Parliament has any sense of responsibility at all, it must reject the treaty. Canada has such a strong bargaining position on the Columbia that we are free to develop our half of the basin in the best interests of Canada.

The present treaty assigns all the risks and obligations to Canada and most of the benefits to the United States. An outsider reading the terms of the treaty could be excused for assuming they had been imposed on a conquered country which had surrendered unconditionally after a war. The terms represent a perpetual erosion of Canada's self-respect, a national characteristic that already is in frail condition.

No country ever became economically secure or wealthy as a supplier of raw materials. Canada tried to build its first century on such a policy. It is time that the country became aware that this approach will not be good enough for our second century.

"Canada has preserved and confirmed the essentials of the greatest of civilizations in the grimmest of environments. It is an accomplishment worthy of a better end than absorption in another and an alien society, however friendly and however strong in its own ideals. In that accomplishment and its continuence lies the relevance of Canadian history."

Professor W. L. Morton, University of Manitoba

Engineering and Contract Record-April, 1964

The Columbia River Treaty

(An abridged version)

- 1. The Canadian portion of the Columbia basin will be integrated with the U.S. portion and operated for the optimum output of the combined system.
- 2. Canada will provide in Canada 15.5 million acre feet of storage available for improving the flow of the Columbia River.
- 3. The U.S. will make the *most effective use* of the improved stream flow caused by Canadian storage for improved power generation in the U.S. system.
- 4. Canada *shall operate* the Canadian storage to achieve optimum power generation *in the U.S.* After Canadian generation is installed, the storage will be operated to achieve optimum output in the *entire system*.
- 5. For as long as any flood hazard exists in the river, Canada shall, when called on by a U.S. entity, operate all storage in Canada to meet flood control needs in the United States.
- 6. Canada gets 40% of the downstream power that would be generated if the system were used to produce firm power.
- 7. Canada gets a *single payment* of \$64 million plus a possible additional payment of \$7.5 million over the 60-year life of the treaty to pay for use of its storage for flood control *for all time*.
- 8. U.S. may build Libby Dam and operate it as it chooses. Canada may request flow patterns to suit its West Kootenay plants. If the U.S. determines that this variation would not be to its disadvantage, it will grant such request.
- 9. No diversions are allowed except for consumptive purposes that do not include generation of electric power.