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The Columbia River System

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to the stipulation of parties to contracts that international law governs. He felt that there was a circularity here that needed exploration. The contract may say that it is governed by international law, but what international law is there that can be applied to the performance of a contract between an alien and a state?

Professor Sohn concluded his participation in the panel by linking the session on contracts held that morning with the discussion regarding the law of state responsibility. In this connection, he said, there is a large measure of agreement that the law of the forum may permit choice of foreign law by contract. However, it is not equally clear that the conflicts rules are as favorable to the application of international law to the terms of the contract as has been implied this afternoon. He expressed his appreciation of the opportunity for discussion of the draft.

Chairman Hyde adjourned the panel with regrets that time had not permitted the articles regarding damages and exhaustion of local remedies to be reached in the discussion.

**PANEL II. CURRENT LEGAL PROBLEMS CONNECTED WITH INTERNATIONAL TRAVERSING RIVER SYSTEMS**

The session reconvened at 2:00 o’clock p.m. in the Chinese Room of the Mayflower Hotel, Professor Charles E. Martin, Vice President of the Society, presiding.

**THE COLUMBIA RIVER SYSTEM**

*By Ralph W. Johnson*

*Associate Professor of Law, University of Washington*

I am honored to have the opportunity of presenting a paper on the Columbia River system in the company of Dr. Charles Martin, Chairman of this panel, and Professor Maxwell Cohen, both of whom have written comprehensive papers on the Columbia River problem in the past. Articles by these and other scholars have more than adequately covered the legal questions concerning the meaning and effect of the Boundary Waters Treaty of 1909. To rehash these matters before this group would be hardly useful. However, in recent months several events have taken place which now seem to justify a re-examination of this problem. In March, 1959, the International Columbia River Engineering Board submitted its report on the co-operative development of the river to the International Joint Commission. In December, 1959, that Commission submitted to the governments of Canada and the United States its recommendations for

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apportionment of benefits if co-operative development is undertaken. And thirdly, in the last two years there has been much attention directed at the Peace River development, which is considered by some as competitive with the Columbia. Let us examine the effects of these events on the Columbia River problem.

First let us take a bird’s-eye view of the geography of this river and its tributaries, and of the Canadian-United States negotiations concerning it. The Columbia is one of the great rivers of this Continent, exceeded in length and average volume of runoff only by the Mississippi, St. Lawrence, and possibly the MacKenzie River. With its tributaries it drains an area of 259,000 square miles. This large basin extends 270 miles north into Canada and 550 miles south into the United States and has a maximum width of about 730 miles. The Canadian portion contains about 39,500 square miles, and the United States portion about 219,500 square miles. The river rises in Columbia Lake in Canada and flows a distance of about 480 miles in British Columbia before entering the United States. In this distance it is joined by the Kootenay River, which starts in Canada, very near Columbia Lake, then dips into Montana and Idaho, and then swerves back into Canada to join the Columbia. The Kootenay contributes about 11 percent of the total Columbia flow. The Columbia is also joined in Canada by the Pend Oreille. Most of this river is in the United States, but it crosses into Canada just 16 miles from its junction with the Columbia, and contributes about 10 percent of the Columbia’s volume. After the Columbia crosses into Washington it flows an additional 745 miles before reaching the Pacific Ocean, making a total distance from its source at Columbia Lake of 1,225 miles, and a total drop in that distance of 2,655 feet. While in Washington it is swollen by its largest tributary, the Snake River, an all-United States river which contributes about 20 percent of the total Columbia volume.

During the past few years the United States has made very substantial hydro-electric developments on the lower Columbia. These have been made unilaterally, without either request or permission from Canada, although certainly under no cloak of secrecy. Canada would like, for her own purposes, to develop the upper reaches of the river. If this is done, there will automatically be a substantial benefit to the United States installations by the leveling of the flow of the river. It is estimated that the downstream benefits to the United States by the construction of upstream storage units in Canada would be in the neighborhood of 1,100,000 to 1,400,000 kw. without construction of any, or only negligible, new facilities in the United States. Canada takes the position that if these benefits are the result of its efforts upstream it should be recompensed for them. Until recently the United States opposed this view. To induce the United States to recognize the alleged Canadian right to compensation, Canada is considering two alternatives: (1) the idea of diverting the Kootenay into the Columbia, and a portion of the Columbia into the all-Canadian Fraser; and (2) the idea of developing the Peace River before the Columbia and thus possibly postponing for several years the upstream
development of the latter. This step would also postpone the time when the United States installations would benefit from Canadian storage.

There is, of course, no legal question involved in the choice by Canada to develop the Peace River prior to the Columbia. There may be some international law problem, either through the 1909 Boundary Waters Treaty, or otherwise, in the question of whether, and how much, the United States should pay for downstream benefits, although the 1909 Treaty certainly does not provide any very clear answers to these questions. The most obvious question of international law arises from the Canadian position that it has the right to divert the Kootenay into the Columbia, and then part of the Columbia into the Fraser so that these diverted waters would never cross into the United States.

Before turning to a discussion of those factors which directly affect the Columbia River problem, let us look for a moment at the broader picture of Canadian-United States relations, at certain aspects of that relationship which, although less directly connected to this controversy, may nevertheless have some bearing on its eventual resolution.

In the next few years Canada will have to make certain basic policy decisions which will directly affect her relationship with the United States in the resources area, as well as the direction she will take for her internal economic growth. Canadians have discovered that they have vast stores of natural resources, including oil and gas, hard minerals, timber, and hydro-electric energy. The Canadian economy at the present time has barely tapped these resources, and probably will not dip into them substantially for some years yet. The United States economy, on the other hand, is at the point where it is seriously looking for new, cheap, resource stores. The nearest such storehouse is Canada. The United States is still a long way from running out of presently usable energy sources. But we are becoming short of readily available ones. During the 1950's, there was a distinct focus of attention by United States interests on Canadian natural resources. The question for United States users is substantially one of price. Will it be cheaper to develop the secondary resource stores in the United States or to buy such resources from Canada? Canada, on the other hand, must consider several other factors. She must decide whether she wishes to sell to the United States, and reap an immediate financial benefit, or to preserve these resources for future Canadian industries. The problem of developing a Canadian policy is further complicated by several other factors. Who in Canada will develop and control these vast stores of natural resources, public or private interests? This conflict is apparent at the present time in some of the jockeying concerning the competing Peace and Columbia River projects. It appears that private interests have the inside track on the development of the Peace River, but that public interests have that track on the competing Columbia development. Then there is the Provincial-Federal relationship which probably will have to be developed on a much broader and more sophisticated scale before full development of the major resources can take place. The Federal Government has, by the International River Improve-
ments Act of 1954,* definitely put itself into the arena of resource control. Provincial governments are still very much in that arena by reason of their ownership of the resources within their boundaries. In March, 1959, steps were taken to broaden the base of Federal-Provincial liaison by the establishment of the Canada-British Columbia Policy Liaison Committee. This committee was formed for the purpose of presenting a united Canadian front in international negotiations concerning the Columbia. A technical Liaison Committee has also been formed to work under that committee. However, these steps are no more than a beginning and it seems that a much closer Federal-Provincial integration is both probable and essential. If analogy to the United States efforts in this field is appropriate, this Federal-Provincial relationship will take place neither easily nor quickly.

There is also the problem of the political attitudes of Canadians and Americans toward each other. On the Canadian side, they are genuinely concerned about the tremendously disparate political and economic power of their southern neighbor, and the threat that this disparity seems to hold for them in the matter of controlling the development of their own resources. This concern is particularly great in connection with hydro-electric power, where Canadians feel that if they once begin to supply power to the United States, it may be politically impossible to recapture it at some later time. It might be observed that much the same kind of fear seems to be present in the United States Pacific Northwest with regard to the request by Californians for a California power inter-tie to the Northwest power pool.

South of the border the United States has not yet solved the problem of how to apportion downstream benefits even from its own upstream installations, much less those from possible Canadian dams. Senate Bill No. 1782, now in Congress, is directed at providing a formula for solving this problem. However, there appears to be a considerable difference of opinion between the Federal Government, the Public Utility Districts, and the private power companies as to the formula that should be adopted. The difficulties that must be overcome in solving this question are in many ways like those that confront the Canadian-United States negotiators in solving the international apportionment. Furthermore, it would seem that settlement of the international question will be unlikely, or at least difficult, until there has been a settlement of the internal United States problem.

The above are only a few of the factors of major significance in the broader area of Canadian-United States relationships that indirectly concern the co-operative development of the Columbia River Basin. Time does not permit a more thorough examination of them. Let us therefore turn to those things that more directly concern the Columbia. Seven items have been selected as a springboard for this discussion. These are arranged chronologically as follows:

1. The Columbia River reference of March 9, 1944, where the International Joint Commission was directed to investigate and report on the

* Stats. Can., 1955, c. 47.
possibilities of co-operative development by Canada and the United States of the water resources of the Columbia Basin.

2. The refusal in 1951 and 1954 of the International Joint Commission to approve the Libby Dam project in Montana, which would have backed up water into Canada, and would have inundated one or more potential Canadian dam sites.

3. The passage by the Canadian Parliament of the International River Improvements Act in 1954 which killed the proposal then under negotiation between British Columbia and Kaiser Aluminum and Chemical Corporation for the latter to construct the Arrow Lakes Dam just north of the border.

4. The development in Canada of the idea of diversion of the Kootenay into the Columbia, and the Columbia into the all-Canadian Fraser.

5. The more recent development in Canada of the idea of starting the Peace River hydro-power projects before those on the Columbia.


7. The December, 1959, recommendations for apportionment made by the International Joint Commission to the Canadian and United States governments.

In March, 1944, the governments of Canada and the United States jointly referred to the International Joint Commission the task of investigating and reporting on the possibilities of co-operative development of the water resources of the Columbia. While this study was being made, the United States continued to develop its installations on the river, and on United States tributaries. One of the projects proposed for construction in the United States during this time was Libby Dam on the Kootenay River in Montana. Plans for this dam were drawn in an interim report of the Joint Columbia River Engineering Board at the request of the International Joint Commission and appear to have been precipitated by a serious flood. These plans, as reflected in the application 4 for approval to the Commission, indicated that the lake to be created would flood about 15,000 acres of land in British Columbia and would extend about 42 miles into that province. The water level at the border would be raised 150 feet. The Canadian section of the International Joint Commission took the position that Canada was entitled to a substantial economic return for the downstream benefits accruing to U.S. installations for this upstream storage. The United States initially offered to pay only for the clearing of the land to be flooded, its value, the cost of relocating highways, railroads, and resettling the dispossessed population. Although the position of the United States was later modified (at the time of the 1954 application), there was still such a gap between Canadian and United States views on

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4 Docket No. 65, International Joint Commission.
5 For a report on these negotiations see Bloomfield and Fitzgerald, Boundary Waters Problems, Canada and the United States (1958).
6 Docket No. 69, International Joint Commission.
return for downstream benefits that the application was never approved. Nothing further has been done toward the construction of this dam.

About 1953, negotiations took place between Kaiser Aluminum and Chemical Corporation and the British Columbia Government toward the construction by the American company of a dam at Arrow Lakes in Canada. This dam would also provide substantial downstream benefits to United States installations. While negotiations were still being conducted, the Canadian Parliament passed the International River Improvements Act which prohibited the construction of any international river project without Federal license. No license having been granted for this project, the proposal died.

The effect of the above and similar Canadian actions has been to hold off further piecemeal international development of the Columbia until all of the engineering studies were made, and until such time as an over-all Canadian-United States master plan is formulated. The wisdom of these decisions can hardly be questioned. Piecemeal development accomplished without a master plan is economically unsound. If a plan is adopted or happens, that calls for less than maximal utilization of basin resources, the loss to the nations involved usually is irreparable. Hydro-electric and irrigation facilities cannot be changed once they are installed. It is in fact unfortunate that the United States has not been able to hold off its own development of the river until appropriate consideration could be given to the integration of possible Canadian facilities. We have already permanently lost some of the potential of this basin. Dr. Marion Marts of the University of Washington recently reported that:

Within the confines of the Columbia Basin itself there are enough difficulties. Take the case of the upstream storage within the basin. Of the many power projects constructed in the past fifteen years, only two are upstream storage projects planned as part of a region-wide, integrated set of upstream storage reservoirs. . . . The planning criteria underlying other storage projects constructed since Grand Coulee Dam was built have been local rather than regional in scope. In 1948 and again in 1958, the Corps of Engineers presented very carefully developed plans for major control of the Columbia River. Both of these plans are representative of the best of American river development planning practice to date. . . . Both plans presented, among other things, proposals for a system of upstream storage reservoirs—all on the United States side of the international boundary. Possible projects in Canada were recognized as possibilities, but were not fully taken into account in the development of either plan. Neither hydraulic integration nor electrical integration with potential Canadian sites such as Mica Creek have been taken into account in the criteria underlying the selection of the recommended projects. It is as if the Columbia surged full-blown from some underground cavern at the boundary.7

About the same time that the Libby Dam and Arrow Lakes proposals were stalled, a new idea was generated in Canada—diversion. This possibility still exists. Certainly there is no doubt that physically it could be

done. There is also no doubt that if the Columbia were diverted, the power potential of the Fraser would be enormously increased, although as yet there appear to be no accurate figures as to the amount of that increase. There are, however, at least three important reasons restraining Canada from making this diversion. First, to do so would be very difficult politically because of the damage that would accrue to the Fraser River fishing industry, and the wrath that would be created among a large body of British Columbia voters. Secondly, there is an apparently unresolved question whether the diversions would be as economically beneficial to Canada as would the development of the Columbia, assuming, of course, that Canada is able to work out some reasonable formula for sharing the United States downstream benefits. Thirdly, a very considerable amount of ill will on the United States side of the boundary would certainly result.

The development of the Peace River in the near future also poses some very special problems for Canadians. Studies in the past two years by the Wenner-Gren interests under agreement with the British Columbia Provincial Government reveal that the initial dam in this project would generate about 750,000 kw. This would be cheap power at site, but the problem lies in the fact that the site is 650 miles north of the border, and about the same distance from the areas of potential use in British Columbia. It has been said that this power could be delivered in Vancouver, B. C., for about six mills per kw. hour, but even this figure may be optimistic. Selling to United States consumers may be difficult because of the probable high price, and may be undesirable to Canadians because of their concern over ability to recapture. Delivery to Canadian points, it has been said, might swamp the available market and thus result in uneconomical use for some years. It is also said that development of the Columbia before the Peace River would not pose such problems because (1) it can be done on a step-by-step basis, and would not produce such a massive first dose, and (2) it would involve shorter transmission to the existing markets.

There is, of course, almost no limit to the potential market for cheap electricity in the Pacific Northwest. However, the present markets in this region are somewhat limited. Thus it would seem that one of the probable results of the early development of the Peace River would be delay on the upper Columbia.

In view of the above problems regarding the Peace River development it may be asked why this proposal is being emphasized in Canada. A partial answer might be found in the remarks of Hon. R. G. Williston, in a speech from the Throne Debate, B.C. Legislative Assembly, on February 3, 1960, where he said:

> When the history of this last few years is written, no one will be able to argue that the Peace River power potential has not had great influence on International negotiations concerning the Columbia River. I first indicated need for a realistic alternative to Columbia River power when reporting to this House on my 1957 meeting in Wash-

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9 Ibid.
ington. I was convinced at that time there never would be interna-
tional agreement on a downstream benefit return related to value
created so long as the Americans felt Canadians would be forced to
develop the River for their own power needs within a period of ten
to fifteen years. Any such Canadian development would have auto-
matically afforded the Americans some of the necessary storage on the
River at no cost and would thus have destroyed our bargaining po-

You will recall that plans were prepared which would allow for the
diversion of part of the flow of the Columbia River to the Fraser.
It was hoped this would bring the Americans to the bargaining table
seeking an agreement to the benefit problem which would be ac-
tceptable to Canada. However, such a proposal only succeeded in
making them angry. When they examined the plan seriously, they
soon became convinced that Canada would not divert Columbia water
to the Fraser because of the very valuable fish runs which would be
affected adversely by any power development constructed to use the
water.

However, as soon as the power potential of the Peace River was
known, a change in American strategy became evident. The desire to
negotiate finally become so keen that it has been difficult to find time
to formulate and adopt a united Canadian position on the best Co-

Quite understandably Canada is now in a position to insist that the United
States give serious consideration to Canada’s demands for a substantial
return for downstream benefits conferred on the United States by upstream
storage. No longer can the United States ignore these demands in view
of the very real alternative of the Peace River project. Furthermore, al-
though it may be true that ideally the Columbia is the better place for
Canada to start, still if the economic return offered by the United States,
in power or otherwise, is too small, then it might be to Canada’s advantage
to develop the Peace River project first. The United States must bargain
with this fact in mind. If it sufficiently desires the early development of
the upstream storage on the Columbia, then an appropriately attractive
offer must be made.

In connection with the 1959 Report of the International Columbia
River Engineering Board it may be appropriate to comment on the ob-
jective that should be sought in the hydro-electric development of any
international river. In view of the ultimate needs of mankind for energy,
that objective must ordinarily be the plan bringing the greatest energy
return. As a prerequisite to such development, there should be a gathering
and analysis of all relevant data. Comprehensive studies of hydrology,
topography, and geology of a river basin are expensive and time-consuming.
However, they are essential if the goal of maximal development is to be
achieved or even approached. The failure to have in hand such data has
already cost the United States permanent loss of some of the potential
of the Columbia. However, it now appears that we have most of the facts
necessary to make an intelligent master plan for the still undeveloped
portion of the basin. At this point the principal danger (although not
the only one) is that a “second best” plan will be adopted because of either
internal or international political pressures. What effect can these pressures have? They might lead to several results on the Columbia: (1) indefinite delay in development of the upper portion of the basin, (2) adoption of an inefficient plan of development, reflecting the strongest internal and international political pressures, or (3) adoption and effectuation of the most efficient plan. If the political pressures are such that the third plan would, by reason of geographical location, give to one nation an “excessive” share of benefits, then the better solution is not to alter the master plan for a less efficient one, but to negotiate for the transfer of power or other benefits to the deficit nation.

We now have substantially all of the facts upon which to base an intelligent master plan for the development of the upper Columbia. These facts are contained primarily in the Report of the International Columbia River Engineering Board of March, 1959.

The objective of the Engineering Board was to investigate and determine the possibilities for co-operative development of the water resources of the Columbia Basin. The official abstract of the report says:

The water resources of the Columbia River basin can be developed for a variety of purposes. Maximum utilization of these resources can be achieved only by implementation of a comprehensive plan of development covering all parts of the basin. Such a plan should reconcile—as far as possible—competing and alternative uses. A key requirement would be the provision of the maximum practical amount of upstream storage. With resulting relatively complete flow regulation [50 million acre feet as compared with present storage of 13.3 million acre feet] increased power output and flood control would be provided and water supplies for most of the other uses would be assured. The plans presented in the report have been formulated mainly on physical and economic factors related to hydro-electric power development.

The original purpose of this report was to present from an international viewpoint the best over-all plan of development, with possible alternatives, for maximum practicable utilization of the water resources of the Columbia River Basin. However, the studies which have been carried out indicate that each of three plans achieves about the same degree of water resource development, particularly with respect to hydro-electric power. The various plans studied and set forth herein are based principally on engineering and economic considerations; they take no cognizance of the international boundary.10

The report then sets out in detail each of the three plans mentioned. Two of them call for diversion of part, or all, of the Kootenay River into the Columbia at Columbia Lake. This water would then go down the main stem of the Columbia for use in both Canadian and United States facilities. The third plan envisions a separate system of dams on the Kootenay, with no diversion. As to whether co-operative development would be better than unilateral action the report concludes:

In the three important fields of water power, flood control, and irrigation, greater use of the waters of the Columbia River system

10 Cited note 2 above.
can be made possible by cooperative development of certain water resources in each country.

The largest and most valuable benefit to be obtained from water resources developments in the Columbia River basin is the production of hydro-electric power. Further, power benefits in both countries can be materially increased by cooperative development and operation of storage and power projects to conform to a plan of basin development.

It is physically and economically feasible to develop a system of power plants that will produce an average of more than 16 million kilowatts utilizing about 50,000,000 acre-feet of storage.

Although the report is reputed to be excellent as far as it goes, it has been sharply criticized for failing to provide adequate information on one very important matter, i.e., the sequence and timing of basin development. Mr. John V. Krutilla, writing for Resources for the Future, Inc., in February, 1960, points out that the excuse usually urged by engineers for this deficiency is their inability at the time of the survey to evaluate a project on the basis of an incremental analysis because of lack of knowledge of which project will be built first and which will be built last. The report of the International Columbia River Engineering Board acknowledges the importance of timing, but nevertheless omits comprehensive information on it. In criticism of such an approach Mr. Krutilla says:

It is true that second-guessing political events is not the function of river basin planning and project evaluation. But their function certainly should be to define a system in which benefits are maximized; this in turn requires specifying the most economical sequence as well as the most economical projects in a system of works. Regardless of whether the most efficient sequence will in fact be followed, the bases for determining the costs of departures from the most economical sequence should be available for consideration by those ultimately charged with responsibility for deciding on a plan of action.

It seems unfortunate that this information was not included in the report in view of the need of Canadian and United States negotiators to have all relevant data at hand for the consideration of a comprehensive plan and treaty. It should also be pointed out that the December 29, 1959, report of the International Joint Commission on “Principles for Determining and Apportioning Benefits from Cooperative Use of Storage Waters and Electrical Inter-Connection Within the Columbia River System” contains no specific recommendation for a sequential or incremental approach to basin development. These recommendations provide in General Principle No. 1:

Cooperative development of the water resources of the Columbia River Basin, designed to provide optimum benefits to each country, requires that the storage facilities and downstream power production facilities proposed by the respective countries will, to the extent it is practicable and feasible to do so, be added in the order of the most
favorable benefit-cost ratio, with due consideration of factors not re-
lected in the ratio.

This same thought is embodied in other recommendations of the Commiss-
ion. These recommendations do not deny the validity of the sequential or incremental approach to basin development, but they nevertheless fall far short of specifically recommending it. It is hoped that as the plans and negotiations for the development of this basin progress, the necessary full-scale computer studies will be made to provide information on the economics of incremental development.

The International Joint Commission recommendations for apportionment referred to above have been adopted by Canada but not the United States. They are now in the hands of the special negotiators for both Canada and the United States and presumably are being considered in the negotiations now taking place toward the formulation of an appropriate treaty. Understandably, these negotiations are being conducted privately and thus little public information is available about them. However, we can inspect the recommendations of the International Joint Commission which were made for the benefit of these negotiators. Their main idea is contained in Power Principle No. 6, and in Flood Control Principle No. 4. Power Principle No. 6 recommends:

The power benefits determined to result in the downstream country from regulation of flow of storage in the upstream country should be shared on a basis such that the benefit, in power, to each country will be substantially equal.

A similar recommendation is made concerning downstream flood control benefits in Flood Control Principle No. 4.

The upstream country should be paid one-half of the benefits as meas-
ured in Flood Control Principle No. 3, i.e., one-half of the value of the damages prevented.

These and the other recommendations of the Commission do not purport to give answers for all questions concerning apportionment. Much of the hard bargaining about allocation of specific benefits was left to the negoti-
tiators now working on a possible treaty. One of the points which was most contentious, and about which no agreement was reached, was whether the division of power benefits referred to "gross" or "net" benefits. As re-
ported by the Honorable R. G. Williston, Minister of Lands and Forests of British Columbia, in February, 1960, the term "gross"

... was implied to mean that the additional power generated through the use of Canadian stored water would be divided equally, with the Canadian share being delivered free-of-charge to the border. "Net" implied that before any sharing, a first charge upon all the electricity generated by the approved and regulated Canadian storage would be the costs of all works constructed to store the water and then generate the electricity.

Mr. Williston argued against the use of the "net" concept as follows:

Such "netting" procedure would be extremely complicated and would create a situation wherein every expenditure of the past or future and all planning in either country would be subject to international scrutiny and approval—which would be highly impractical. Not only would sovereignty over our own resources thus be challenged, but the carrying charges on the vast installations already in place and others still to be constructed south of the border would leave little actual "net" benefit for Canada for many years to come.

It would thus appear that the present negotiators have much to do. It should be pointed out, however, that the "netting" procedure suggested above by Mr. Williston is not the only one available to the negotiators. It is also possible to charge against the gross the cost of all the new Canadian facilities, and only the added cost to United States facilities resulting from the increased upstream storage. This procedure would, of course, weigh in favor of Canada. Then there are any number of combinations of these systems that could be used.

One of the most significant aspects of the recommendations is the degree of international co-operation called for, the quality and range of which would appear to be unprecedented in United States-Canadian relations. The general comments at the beginning of the report suggest that "significant economies and advantages" can be had by both countries "through the cooperative use of generation and transmission facilities." In the discussion of power principles the report recognizes that significant changes in the general setting of power generation may occur during the life of any negotiated agreement, as, for example, that the Pacific Northwest region of the United States may change from a predominantly hydro-electric power system to a predominantly thermal one. This change will necessarily result in changes in the character of benefits that will accrue to downstream installations from upstream storage. Power Principle No. 2 specially provides for a review every five years of power benefits attributable to the upstream storage. The Commission also recommends extensive and continuing co-operation in the matter of transmission. It says:

Although such delivery could be accomplished initially with a somewhat limited degree of interconnection, the Commission is of the opinion that provision should be made for the eventual development of a broader, long range plan for cooperative operation of the interconnected power systems of the two countries.

At still another place the Commission suggests that an upstream storage plan that is to be practicable must be conducted according to an "assured plan of operation," i.e., it must be operated in a way that will permit reliance by downstream units. Thus there will have to be continuing cooperative examination of runoff, conflicting water needs, changing generating capacities, et cetera. In a similar way the Commission recommends a long-range plan of information exchange in connection with flood control. To be effective the flood control aspect of the development will have to be flexible, will have to be adjusted year by year and month by month to
accommodate the variations in runoff and changing storage capacities. Flood control benefits are to be paid in cash, and annual determinations will have to be made of the amounts of these benefits.

Implicit in these recommendations for extensive and continuing co-operation is the idea that there ought to be established some joint administrative body vested with wide powers to collect and analyze information, and to make binding decisions. It would be unfortunate to set up such a program and then shackle it by failing to establish an effective, adequately empowered administrative body. If the International Joint Commission is to be this administrative body, then its powers should be substantially broadened beyond those provided in the 1909 Treaty. Under that treaty it has only limited powers. In practice, on important issues, it has acted merely as a fact-finding body. It cannot make the kind of day-by-day decisions that will have to be made if the co-operative development of the Columbia is to become fact.

Neither the United States nor Canada is likely to engage in co-operative development of any kind, unless co-operation will return to each nation more benefit than unilateral action would. This is not international law, it is simply economic fact, a fact which is expressly recognized in the recommendations in General Principle No. 2, which provides:

Cooperative development of the water resources of the Columbia . . . should result in advantages in power supply, flood control, or other benefits, or savings in costs to each country as compared with alternatives available to that country.

Power Principle No. 6 and Flood Control Principle No. 4, the two key principles in the recommendations, are both expressly qualified by reference to this General Principle. Power Principle No. 6 states that the sharing recommended therein should:

result in an advantage to each country as compared with alternatives available to that country, as contemplated in General Principle No. 2. . . . Where such sharing would not result in an advantage to each country as contemplated in General Principle No. 2, there should be negotiated and agreed upon such other division of benefits or other adjustments as would be equitable to both countries and would make the cooperative development feasible.

The discussion following Flood Control Principle No. 4 says:

In the event that application of this principle should indicate a payment to the upstream country greater than the estimated cost of alternative means of obtaining equivalent flood control in the United States the requirement of General Principle No. 2 that there should be an advantage as compared with available alternatives would not be satisfied and consideration should be given to this circumstance in the negotiations.

Now let us return to the Boundary Waters Treaty. First, it should be noted that there are two places where that treaty is expressly mentioned in the Joint Commission's recommendations for apportionment. The Commission says that it "approached the problem of formulating principles
The treaty is also expressly mentioned in General Principle No. 3. Thus the treaty is being considered, as it must be, in the current negotiations. It will also have to be considered if these negotiations bog down, and Canada and the United States again seriously consider unilateral action.

Does the treaty give Canada the right unilaterally to divert? Its plain wording, as well as its historical background, would seem to say yes. On the other side, some writers have relied on the fact that in Article II the word "party" is sometimes spelled with a big "P" and sometimes with a little one. From this they conclude that the article was intended to bind only private "parties" as opposed to nation "Parties." Yet it seems that if such a significant distinction were to be made, it would have been spelled out more plainly than by the size of a letter. Another United States defense has been "rebus sic stantibus"—the tacit condition said to attach to all treaties that they cease to be obligatory when the state of facts upon which they were founded has substantially changed. Whether one believes that the key facts upon which this treaty was founded have changed sufficiently to justify this argument seems largely to be a question of whether one lives in Canada or in the United States. Somewhat akin to the "rebus sic stantibus" issue is the question involving the remedies under Article II for damage to the United States interests by a possible Canadian diversion. One theory proposed is that the United States interests would have no remedy in Canada as provided in the treaty because the United States party would not be a licensee under the British Columbia Water Act, and thus would have no standing in a Canadian court. Yet it can hardly be seriously urged that the framers of the treaty intended that their provisions concerning remedies would be a nullity. The treaty is woefully deficient on this point. As a matter of fact, even a cursory study of the treaty will reveal that it is woefully deficient on many points as regards the present development of the Columbia Basin. It would seem that to handle this current development on the basis of the 1909 Treaty would be akin to an attempt to assemble a Boeing Jet 707 aided only by the Wright brothers' blueprints for the plane they flew in 1903 at Kitty Hawk.

Conclusion

In conclusion may it be suggested that there are two approaches that international lawyers might currently make to the study of the Columbia River problem. The first is that which concerns itself primarily with the meaning and effect of the Boundary Waters Treaty of 1909, and the rights of the parties arising from that treaty in the event of ultimate disagreement about apportionment. Studies of this aspect of the problem are appropriate and necessary in order that the two nations shall understand fully their ultimate legal rights. A number of such studies have already been made. The second approach concerns itself primarily with the shaping of a new relationship between these two countries. It takes into consideration the 1909 Treaty, but focuses attention on the current social, economic, and political facts which give rise to the present controversy, and to which the