

1 FOR GENERATIONS

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19 **Introduction by Professor Cook**

20 Our guest tonight is the final in our series on Perspectives on the Columbia River Treaty, sponsored
21 by the Canadian studies program, funded by the Alumni Association, and by the division of continuing
22 education. Not to mention politics. Our guest tonight is Dr. Hugh L Keenleyside. Dr. Keenleyside is a man of
23 many careers. He's in retirement now. He's a president of Oxfam of Canada. He's also honorary chairman of
24 United Nations 1976 conference on the Urbanization of Canada Program which was held in Vancouver in
25 1976. I will introduce his professional career. He started as an academic as an historian teaching at UBC. He
26 wrote a book, many historians are familiar with it. Following that he entered the Department of External
27 Affairs rising to, he had a very interesting time in Japan and while there, he spent the basis of his time there
28 writing the history of Japanese education. He served also as Ambassador to Mexico. Following this period at
29 the department of External Affairs, he went to northern resources, he became Deputy Minister of Northern
30 Resources. Following 1950, he sent in his resignation to become the representative of the United Nations
31 technical assistance program. In 1959, he came back to British Columbia to become chairman of the BC
32 Power Commission. In 1962-1969 of course he was chairman of BC Hydro. Dr. Keenleyside is asked to
33 speak on many subjects... I know he's not writing his memoirs.

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35 Well thank you very much. The answer to the question about the book is that I've no intention to
36 writing a book on the Columbia River Treaty. Seeing that Neil Swainson's done that for me, there's no
37 longer a necessity for me to take that job on. Actually I would rather like to do it, because there are a good

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38 many things that I should be glad to say about it but I'll content myself with allowing others to do it for me.

39 Now I thought that as this is the last of the series of talks on this subject which I gather most of you
40 have attended and during which you will have heard pretty well everything in the way of factual and
41 argumentative statements that could be produced on the, this subject. It might be more interesting for you if I
42 do something, which I haven't done before actually, and that is to give you a sort of personal statement of my
43 relationship with the negotiation and the execution of the Columbia Treaty and the sales agreement. And then
44 give you a brief summary of how after all this time, and against my background of experience with it, I have
45 come to certain conclusions about it. Some of which well all of which I expect you will have heard from
46 others, but at least I'll put them into the perspective that I've developed myself during this prolonged period.

47 Now my personal relationship to the Columbia actually goes back a very long way. In 1928 I joined
48 the Department of External Affairs and the first, one of the first jobs I was given, was to go through a large
49 pile of files which must have stood about that high, all of which dealt with the Columbia River. And
50 suggestions that had been made about how it could be developed, either as a single activity for Canada, or as
51 a joint project between Canada and the United States. And as a lowly third secretary my job was to take all
52 this material and try to produce a pricey and brief statement telling those who set the task what was in the
53 pile. Actually, I'm sure that most of them knew what was in it already, but what they were doing was simply
54 trying out this new member of the department to see if I could keep my head in spite of being faced with all
55 this material.

56 I got a certain amount of pleasure out of doing it, and also I got a trip west because it was just about
57 that time that the Trail smelter case came up, came into prominence when it was claimed that the fumes from
58 the Trail smelter on the Canadian side of the border near Trail, were going over the boundary, and killing
59 cattle, destroying crops, and infecting people on the American side of the boundary. As you probably know
60 that case went before the International Joint Commission, and lasted for a long time. And finally over the
61 violent protest of the Cominco organization, they were forced to clean up the effluent from their stacks. They
62 told us, well not us, but told the International Joint Commission that if they had to do this, it would mean that
63 they would have to go out of business and Cominco would stop running its smelter entirely. Actually of
64 course what happened was that when they did clean it up, they used the material that they screened out of
65 their stacks and for some years, it was the only part of their activities that produced a profit for them. Sort of
66 thing that sometimes happens. Anyways that was my first connection with it.

67 Then from 1936 until 1945, after I came back from Japan, I was head of the American division of
68 our foreign office which meant that all of the matters relating to the contacts between Canada and the United
69 States came through this division and I had at least an opportunity to look at most if not all of them. That
70 went on until '45 and I went away for a couple of years and then came back in '47 in the Department of
71 Mines and Resources and found in the 2 years, 3 years that I had been away, the Columbia River problem
72 had taken much more prominent part in the forefront of matters relating to relations between Canada and the
73 United States. And the International Joint Commission had been given the responsibility for making a study
74 of it. And they in turn had set up the International Columbia River Engineering Board and it was at work on
75 the project which resulted in 1959 in the production of their report advocating in effect joint development of

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76 the river and making suggestions about how it should be done.

77 While I was at the United Nations between '50 and '59, the department in which, for which I was
78 responsible, was the one in which the work in the whole field of water and energy was centered. And so I had
79 a little opportunity there too to learn something about the general field. And believe it or not the Columbia
80 River Treaty, rather the Columbia River problem was one that aroused quite a little bit of interest in United
81 Nations circles because it was a unique development in international relations, or promised to become one.
82 And a good deal of interest was being taken in it.

83 Then after leaving the UN and coming back to British Columbia, as Dr. Cook has said, I was for
84 three years with the BC Power Commission and subsequently BC Hydro during all of which time of course
85 the Columbia River Treaty was being first negotiated and then signed, ratified, the sales agreement was put
86 through and the Treaty dams on the Canadian side of the boundary were brought in to ... gradually brought
87 into being.

88 So that all of this is merely recited to indicate that I have had a long connection with an interest in
89 the Columbia. It does not of course necessarily mean that I know a great deal about it because as I'm sure
90 others have pointed out to you, this is one of the most complex problems that can be found anywhere. We
91 went into the subject of the complexity of it one time when the argument was going on about the content of
92 the Treaty, particularly when General McNaughton was standing out against the ranks of those who were
93 supporting the Treaty. And someone at that time, made a statement to the effect that the General was the only
94 person in Canada with an informed opinion, who was opposing the essence, the substance of the Treaty. We
95 sat down one night, and one of our better informed, one of the better informed members of the group I think
96 perhaps that was in fact Gordon McNabb whom some of you heard here day or two ago. Wrote out this as to
97 what would be necessary to have an informed opinion on this subject.

98 "In order to have an informed opinion on the best scheme for the development of the Columbia
99 River, there would be required a comprehensive knowledge on many specialized fields including hydrology,
100 engineering design relationships, costs and general economics, and operating characteristics of hydro electric
101 power developments, as well as a lengthy period of actual experience in these fields in order to recognize the
102 complex relationships in many of the factors involved and their relative significance. There would also be
103 required full access to either the basic data and the resources to use it, or the pertinent engineering reports on
104 stream flows and other hydraulic data existing and planned power installations together with operating
105 characteristics, capacities and costs, site explorations, alternative development schemes of outputs and costs,
106 and also load forecast information for a reliable prediction for future load growth and the various means of
107 meeting this in both Canada and United States. Since some of these studies are so large and complex that
108 they can be adequately carried out only by the use of computer studies, it would also be necessary to have
109 full access to such material."

110 Well on the basis of that, there not very many people who can be considered to have had, or to have
111 developed an informed opinion on the matters at issue on the debate over the elements involved in the
112 Columbia River Treaty. Matter of fact I think that I would be justified in saying that in spite of the fact that

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113 the United Nations and elsewhere had spent a good many years debating with Americans, and Russians, and
114 Chinese, Japanese, Indians and many other and including sometimes Canadians, I have never taken part in
115 any debate that has been so distorted by ignorance, and prejudice and misrepresentation as has been the
116 debate about the Columbia River Treaty in British Columbia. Fortunately, most of the old rubbish about
117 Canada having been sold down the river and giving cheap power to the Americans and saving expensive
118 power for ourselves, and having sold control of the Columbia forever to make a fast buck and having wiped
119 out civilization forever in the Arrow Lakes, these are all quotations, this sort of thing has been pretty
120 generally abandoned except by a few of the more ignorant, or more irresponsible of the critics as the facts
121 become known, and as full length studies by competent scholars begin to appear. Of course I thought this
122 combination out before I realized that this Treaty was quote “rotten to the core” unquote, but I think perhaps
123 that was more a tribute to the philosophy of the young gentlemen who used it than it was to his objective
124 study of the facts of the case.

125 Now I think it perhaps worth while just reciting the sequence of events that took place before the
126 Treaty was signed and then the Protocol was negotiated and the sales agreement was completed. First of all
127 the whole thing, as I have already indicated, was studied over many years by the new personal appointed or
128 hired by the federal government. A number of studies were made not only by the staff of the Water and
129 Power Bureau in Ottawa, but by people from various consulting agencies that were brought in to look at it.
130 The same thing can be said of the provincial department, the Department of Lands, Forests and Water
131 Resources, the Water Resources Branch of it. They also studied it with their own personnel, and then brought
132 in outside experts to confirm, or to upset their own views. Then it went to the IJC, the International Joint
133 Commission, and as a result of their study, the International Columbia River Board was set up to look at it
134 from an engineering point of view. And the IJC itself worked out a set of principles covering the situation in
135 general in relation to the problems that are caused by an international river, and then power principles and
136 flood control principles.

137 Private companies also made studies of it including 1 or 2 from the United States, and BC Electric in
138 British Columbia. As a result of all these studies, as time went on, the specific program that was ultimately
139 incorporated in the Treaty was worked out. And here you have, first of all, the province coming to the
140 conclusion that the selection of components that was put into the Treaty that was the best they could be put
141 together. And this was decided after the study of more than 100 different combinations and permutations of
142 projects that might have been used. And here the great difference of opinion General McNaughton developed
143 of course because the General had his view as to which of the projects, which should be included in the
144 Treaty that should be aimed at. And in this eventually, he stood practically alone, deserted even by the
145 members of his own staff on this particular issue.

146 So the Province and its hired consultants were in agreement on what should be included in the
147 Treaty... what should be aimed at for inclusion in the Treaty. The Power Commission and its expert staff
148 came to the same conclusion and subsequently after '62, when the Treaty had been signed but the Protocol
149 had not yet been worked out, the BC Hydro personnel supported the views that had already been developed.
150 The Canadian government and its consultants, it came to the conclusion that the proposals that were
151 ultimately incorporated in the Treaty, the combination of the three dams that have been built in Canada, and

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152 the one in the United States, provided the best series of alternatives to any of the projects that could have
153 been substituted for them. With this background, the Diefenbaker government approved and signed the
154 Treaty.

155 Then as you know, shortly after that, the Conservative government was defeated, and the new
156 Canadian government under Mike Pearson took office. Now being a Liberal government and having
157 criticized, to some extent, what the Conservatives had done about the Treaty, and having been impressed by
158 General McNaughton's arguments, Mike Pearson said, shortly before he took office, that if he and his
159 colleges won the election, they would take a very serious look at the Treaty provisions and they would
160 hopefully be able to amend it, or to get a new Treaty in which quote, "a man like General McNaughton
161 would be able to support" unquote. The result was then that after the Pearson government came into office,
162 they did take a very serious and very critical attitude towards the Treaty. They had renewed studies made by
163 the federal government offices. They also hired another consulting firm which they considered to be the best
164 available for the purpose, and it was only after the, this critical look had been taken and the conclusion had
165 been reached, that the original Treaty, while it needed some clarification, was the best combination of
166 projects that could be obtained for the development of the Columbia in Canada. And that they did decide to
167 go ahead and get the Treaty ratified.

168 Before doing this, they did however take steps to get a clarification or a strengthening of certain
169 aspects of the Treaty that would make it even more acceptable from the Canadian point of view. The point is,
170 of course, that they would have been delighted to have been able to say that the Treaty was no good, that it
171 had to be renegotiated, and a better one substituted for it, but came to the conclusion after having had the
172 whole thing examined not only by their own experts, but by others that this would not be wise.

173 Then of course it went to the Standing Committee on External Affairs, where it was opposed by the
174 three members of the CCF as it was then who were members of the Treaty, but was supported by both the
175 Liberals and the Conservatives and the ultimate vote in that committee was I think 35 to 3. And perhaps it's
176 worth pointing out here that both in Ottawa and in Victoria, although some members of the NDP / CCF, there
177 were loud in their criticism of the Treaty, that that has never been a unanimous position of the part, of that
178 party either in Ottawa, or in Victoria. It's no secret to anybody that in both capitals, that the party opinion
179 was split. However the three members of the CCF, who were members of the External Affairs Committee,
180 did vote against it. Then it went into the House of Commons where it was passed with again only the CCF in
181 opposition, and finally went to the Senate where it went through and was subsequently signed.

182 This leaves out any reference so far to the sales agreement. Under the Treaty as of course you know,
183 Canada was entitled to half of the downstream benefits that were assumed were a result from storages
184 provided in Canada and their release in accordance with an agreed formula. That was worked out after some
185 considerable difficulty because it meant putting together in the United States, a consortium of I think it was
186 39 different companies. Some of them public and some of them private which came together in order to buy
187 the Canadian entitlement for a period of 30 years. However that problem was solved. The 39 American
188 companies did get together. They raised the money to pay the costs that were involved. Raised it incidentally
189 under the provision in American law, that enabled them to get a very... to sell bonds at a very low interest

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190 rate because the income from the bonds was not subject to income tax. In any even they finally got that and
191 the sales agreement was reached.

192 Now perhaps I should say a little bit more about General McNaughton because he has been the focus
193 the central element in the opposition to the Treaty in Canada. If it had not been for him, I think it's unlikely
194 that there would have been anything like the degree of opposition that did in fact develop in political circles
195 in this country and in some others. And here again, I'll come into it on the somewhat personal basis. General
196 McNaughton had been a friend of mine; rather I had been a friend of his for a good many years. When the
197 war broke out in 1939, we had it all arranged between us that I was going overseas with him as a sort of
198 contact man between himself and the political authorities at home in Ottawa and hopefully between himself
199 and the Americans if and when they came into the war... which he and I and I think everybody else were
200 anticipating in 1939. At least in 1939 we were anticipating that they would come in at sometime ahead.

201 This didn't materialize because the Prime Minister who was head of the Department of External
202 Affairs refused to allow anybody in External Affairs to go into uniform at that time. But the point of this is
203 that he and I were on very good terms. He was a man for whom I had a great admiration. He had done a
204 tremendous job in the First World War when he invented a system of counter battery work that was adopted
205 not only by the Canadian army, but by all of the allied armies before the end of that war. He had had a
206 remarkably successful career as the head of the National Research Council in Canada. He had, in western
207 Canada, the University of Saskatchewan, I think Dean of Engineering and had built for himself a first class
208 record in that field. And he was in general, a man of real quality, and a Canadian of whom we could all be
209 proud.

210 As the head of the Canadian section of the International Joint Commission, he had been responsible
211 for persuading, or forcing, or arguing the Americans into agreeing that half of any downstream benefits that
212 resulted from dams or other structures in Canada, would accrue to the benefit of Canada. He did a
213 remarkable job on that even if some of his arguments, like the proposal to switch water from the Columbia
214 into the Fraser, were pretty phony. He was able to use them with great effect in his debates with the
215 Americans and we should be very grateful to him for the work that he succeeded in doing at that time and in
216 that position.

217 We're also I think indebted to him for the fact that he managed to put together in the principles that
218 were agreed upon, power principles and flood control principles, a great deal that made sense in the
219 negotiations and that will I think be used in the great many cases in the future, where international rivers
220 come under debate between the countries concerned. It was then with a great deal of regret that most of us,
221 and perhaps myself more than almost anyone else engaged in this process of negotiation, found that General
222 McNaughton was going to stick to his guns, and insist that his proposal for taking water out of the Upper
223 Kootenay and diverting it into the Upper Columbia must be the major element in any agreement with the
224 United States.

225 Well I don't need to go into the substance of that, or the reasons why it was turned down by almost
226 everybody else with an informed opinion on the subject. I think that all it needs to be said is that it would

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227 have adversely affected more people very much more land in British Columbia than the Treaty projects did.
228 In fact if the McNaughton proposals had been incorporated into the Treaty, every environmentalists or
229 ecological group in British Columbia would have gone into hysterics. And quite properly so, because of the
230 damage that it would have done to the environment in this province. I'd be glad to substantiate that if
231 anybody has any doubts about it.

232 Unfortunately, General McNaughton was just as tough and just as determined a man when he was
233 wrong, as he was when he was right, and he took this whole thing very seriously indeed. In correspondence
234 with him after and while the decision was being made and then afterwards, found that he was not only
235 impervious to argument, but on the difficult to carry on a reasonable discussion or a discussion in reasonable
236 terms. At the time of the beginning of the hearings before the Standing Committee on External Affairs, I
237 went to Ottawa with the other representatives from British Columbia, and going in the morning when
238 General McNaughton was to be the main witness, I met him and Mrs. McNaughton just outside the entrance
239 to the railway committee room where all these hearings were held, and I spoke to Mrs. McNaughton for a
240 moment, and then I turned to the General and said, "Andy, I'm sorry that we're going to be on opposite sides
241 in this debate that's about to open in here. I hope that in the course of the discussion perhaps we may be able
242 to find our, some way of coming to an agreed conclusion between us." And mistakenly I put out my hand to
243 shake hands with him. He took one look at it and grunted and turned away and never spoke to me again. That
244 kind of feeling involved in his case at least, and it was that sort of thing that led him to make his famed
245 statement about the Treaty if carried out, destroying civilization, destroying all civilization forever in the
246 Arrow Lakes.

247 I think any of you who've seen the Arrow Lakes or Duncan for that matter, since the dams have been
248 constructed, will find that there are still evidences of civilization in the area. Particularly in view of the fact
249 that the BC Hydro, and the provincial government between them have spent something like 50 million
250 dollars to rehabilitate, or to refurbish the area and to provide it with facilities going beyond like for like in
251 that whole region.

252 Well, there's more that one can say of course about all of the things that I've mentioned so far, but
253 now take just a few minutes to try and summarize in my views as to what took place, what the situation is
254 now, and what the prospects for the future are. The details about when the Treaty was signed, when the
255 Protocol was signed, when the two were ratified and so forth are not worth reciting because I'm sure you've
256 got them or if you haven't you can easily find them.

257 One thing that has given some concern to some of those who have been following the debate on this
258 matter has been the statement that has repeatedly been made that the Treaty was unfair to Canada because it
259 did not allow, did not take into account that the great dam at Grand Coulee on the American side of the
260 boundary, could increase it's capacity. It's been suggested that it may even go as high as 9 million kilowatts.
261 It is said that if we had been on our toes and taken more care in the negotiations, we would have foreseen
262 this, and we would have got additional provisions in the Treaty to recompense us for the fact that we're
263 providing the Americans with this possibility of increasing the capacity at Grand Coulee from 2 ½ to 3
264 million, up to 6 or even 9.

265 Well actually of course what happened was that we knew at the time that they were planning to
266 increase it to 6 and that was taken into account in the factors that were involved, in the negotiations. The
267 proposal that it should be increased to a capacity of 9 million has been pretty well abandoned. It's very
268 unlikely that this will be done. What they need in the American side of the line now is more energy, not more
269 capacity. And they would get practically no more energy out of adding to the 6 million kilowatts of which
270 they will eventually carry it to. More than that, if they did put a capacity of 9 million kilowatts in Grand
271 Coulee, they would not be able to use it in any effective way because if they let the water run from a dam
272 with that capacity, it would cause a major flood downstream if it went on for more than about 5 minutes, so
273 that the benefits to be derived from running it up to 9 million kilowatts are very meager in the extreme.
274 There's also the fact that if they do have that kind of an outflow from Grand Coulee they would be
275 interfering with Indian rights downstream and the Indian bands in the area have already gotten an injunction
276 against the authorities, the Bonneville Power Administration which would have to overcome before they
277 could even consider going beyond 6.

278 Now another matter that has been getting a good deal of attention here recently because it has been
279 said in the Legislature in Victoria, and has been repeated by unthinking people quite widely throughout the
280 province, is that the flood control arrangements, the sale, or the provision for recompense to Canada for the
281 flood control being provided by the dams upstream was quite inadequate because in the one year in 1972, it
282 was estimated by the Americans that the flood damage that could have been done but was not done in that
283 year, amounted to \$214 million. And here we sold out the whole of our food control benefits downstream for
284 about \$69 million Canadian.

285 Well, the facts of this case are of course that assuming that the 214 million is accurate, only about
286 20% of that was provided by the dams in Canada... in other words something of the order of \$42 million of
287 protection. Then the flood control principles, I think it was number 4, said that the upstream country in a
288 situation of the sort would be entitled to 1/2 of the benefits that were enjoyed downstream as a result of the
289 structures upstream. In other words of the 40 million, about \$20 million would be Canada's entitlement. Now
290 the flood in 1972 was the largest flood since 1894. It was one of those usually described as a 100 year flood,
291 likely to happen once in 100 years. As a matter of fact, that it's not impossible, that it might be duplicated
292 this year in 1974, but that's one of those chances that have to be taken in any lottery of this sort and of course
293 we don't know if that's going to be the case or not.

294 But in any rate, in that 100 year flood, which took place in 1972, our entitlement for benefits that
295 were conferred in the United States, instead of being the 214 million that some of our friends are talking
296 about, would in fact have been on a monetary basis of about 20 or 21 million dollars. And we received in
297 1969 a total, 1968, a total of about 69 or 70 million dollars for our flood control, the prospects of our
298 providing flood control downstream. And this figure by 1972 given the interest that would have been won on
299 it, would have risen to about 90 million. So instead of having really been entitled as critics say to 214 million
300 for this one year, we were in fact entitled on that kind of a computation to about 20 million. And we had, we
301 received the better part of 70 million dollars, which by 1972, the year in question, would have risen to 90
302 million dollars... on the whole a pretty reasonable result.

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303 Now, coming back to a summary of the developments, in addition to the monies that were paid at the
304 time of the ratification of the Treaty, and then at the time the dams in Canada came into effective operation,
305 we have been receiving additional sums of small amounts, but each year some additional money has been
306 saved because we have been able to provide the Americans, without cost to ourselves, to little more water
307 downstream at useful times, than had been anticipated.

308 Another issue that has some, has been causing some little concern has been the chief stock in trade of
309 Professor McDougal, is the argument that the Treaty does not provide for the diversion of waters in Canada,
310 and we are therefore bound forever to allow the whole of the flood of the Columbia to go into the United
311 States. As it would do in its natural state except that it would be controlled with accordance with an agreed
312 plan of operation.

313 Well I have had some correspondence with Professor McDougal about this, and I must admit, that I
314 can find very little in his argument to offset the fact that both the Treaty itself, and the Protocol... state in
315 very clear terms that Canada does have the right to divert at any time, and at any quantities for consumptive
316 purposes. These consumptive purposes of course include irrigation which seems to be a problem with some
317 of the critics. I suppose that it's not unfair to say that a lawyer who has the prospects of a years employment
318 by a government can make a case for calling black white and I suggest that that is pretty much what is being
319 done in this instance.

320 Now I don't think it's necessary to go over the facts that the 3 dams, the 2 of the 3 dams in Canada
321 were completed before the deadline that had been set for them. If they had been late we would have had to
322 pay penalties of considerable amounts. In view of the fact that in the case of the Duncan project, the dam was
323 finished 8 months ahead of time. In the case of the Arrow project, it was finished 6 months ahead of time.
324 We made an extra 4 ½ million dollars in each case. Mica the hydro went slow on the construction there, and
325 got it finished just before the deadline, but didn't win any additional funds as a result of that.

326 There are several interesting characteristics of the work that was done in the execution of the Treaty.
327 In the first and one of those that gave me personally, and a great many other people at the hydro, enormous
328 amount of satisfaction was that we made what as generally has been accepted for the world record for safety
329 in the construction of the two dams at Duncan and Arrow. Something over 10 million man days were
330 expended in the construction of those 2 dams, and there were not one fatal accident in the whole of that time.
331 In the early days, it used to be a dam construction on the Columbia, as elsewhere, it used to be suggested and
332 accepted as a rule of thumb that for every million dollars spent, there would be 1 fatal accident. In the case of
333 the Canadian dams, we were told by the Workers Compensation Board, that as far as they could find out, and
334 we tried the same tests ourselves, and as far as we could find out, this was a world record. Both the
335 companies that were involved in the construction of the Duncan project and the Arrow project were given
336 awards by the Canadian Association of Consulting Engineers for the excellence of the work that was done on
337 their respective jobs.

338 I've said that the hydro and the provincial government spent something like 50 million dollars going
339 beyond the replacement of like with like in the areas involved, particularly at Duncan and then more

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340 especially still at the Arrow where highways were improved, town sites were built, better ferries were
341 provided, water and sewage systems were improved and diking and golf courses and parks, fish facilities and
342 a great many other developments were put in hand and carried through to improve the livability of the area.
343 It's of interest to know some of you may know it already, that at Duncan the hydro constructed the largest
344 artificial spawning channel in the world. And this has resulted up to the present in something like a doubling
345 of the fish population that is coming into the Kootenay Lake from that area.

346 Then in the year 1971, the American public power association made a survey of all the major
347 projects of hydro electric character on the continent, and they came up with a decision that the Arrow project
348 and one other, the other in the United States, were the two best things of their kind, that had been developed
349 in the years they had reviewed. And to quote what they said in the giving of their decision, "the engineering
350 of the dam and lock and other facilities were of high order. Not only is this a handsome engineering and
351 sound functional solution, but it has contributed greatly to the entire region surrounding the lake. It has
352 created a regional recreation facility in the lake, and brought life back to small communities in that area". I
353 quote this simply because of the statement that I made before about the detriment environmentally that would
354 have resulted from the McNaughton plan if it had been adopted and to show that this is not simply the
355 opinion of some engineers without any feeling for environmental problems. I can point out that the decision
356 was made in relation to the Arrow and the decision was the basis for the award that was given by a panel that
357 was made up of representatives of the American Institute of Architects, the Institute of Planners, the Society
358 of Civil Engineers, and the Society of Landscape Architects. Well I think we're justified in accepting the
359 view that this was an unusually beneficial development for the people of the region.

360 Another matter of some interest and satisfaction to us was, had to do with labour relations. At the
361 beginning of the work on the Columbia projects in British Columbia, we entered into an agreement with
362 labour organizations I think they were all together some 45 labour unions involved in it, which resulted in the
363 fact that there was only one labour difficulty that arose in the whole period of the construction at Arrow,
364 Duncan and Mica. And that one interference with the smooth flow of the work involved 29 men and lasted
365 for only 12 hours.

366 A great deal has been said and written. I hope most of you have read Jim Wilson's book about the I
367 think it's called "Behind the Dam" isn't it [the correct title is "People in the Way"], about the effects of the
368 construction of the dam at the Arrow Lakes on the people of the area. And here it's perhaps worth
369 emphasizing that there were some 3000 properties that had to be acquired for the purpose of the construction.
370 And of all these, there were only 56 cases less than 2%, that had to be acquired by expropriation.

371 One of the contributions, one of the factors that contributed to this, what I consider excellent record,
372 was the fact that an Ombudsman was appointed, to whom anyone who felt that he had reason to complain
373 about the way he was being Treaty by the Hydro, they could address their complaints. Now this Ombudsman
374 was not selected by the Hydro, it wasn't an employee of the Hydro. What we did was to go to the Chief
375 Justice of the Supreme Court of British Columbia, and ask him to nominate somebody who could fill this
376 role. And he did, not only nominate an ex-judge, and ex-county judge, to take on this task, but he also, on our
377 request, drew up the terms of reference of which the judge was supposed to use in his roll as Ombudsman.

378 And up to the time I left the Hydro, and I think it's probably true since as well, every recommendation made
379 by the Ombudsman, was carried out by Hydro.

380 Then we come to the final aspect of this, and it has to do with the financial results. Originally, it was
381 argued and stated that the money received from the United States, would be adequate to build the three dams
382 in Canada, and leave enough money over, to pay for about half the cost of machining Mica. Well this didn't
383 work out because of inflation. What happened in the end was that the money that was received from the
384 United States paid for the dams at Duncan, and at Arrow, and for about $\frac{3}{4}$ of the cost, or slightly more of the
385 dam at Mica. In the end, for something like 70 million dollars, we now have the benefits resulting from the
386 control dams at Duncan and Arrow and the dam which is not only beneficial for the flood control that it
387 offers, but also a great source of power at Mica. For this amount of money, about 70 million dollars, we have
388 something over 15 and a half million acre feat of water under controlled conditions. This is something that
389 obviously cannot be matched anywhere else on the continent.

390 Now one of the reasons that there was a shortfall in the money that was available to build these
391 dams, and that would otherwise be used for the installation of machining at Mica as well, was the fact that
392 the plans for Mica were changed halfway through the job. Originally it was planned that Mica would have an
393 install capacity of 1.8 million kilowatts. It became apparent by 1967, '68, '69, that capacity was going to be
394 far more important from our point of view in British Columbia than energy for as far ahead as we can see,
395 particularly in the area in which Mica will operate. And so the size of Mica from a capacity point of view
396 was increased by about 50%... went up from 1.8 to 2.6 million kilowatts. Now this had the effect on the
397 energy of course, of reducing the load factor and resulting in an increase in the cost of energy.

398 So, whereas the original claim was that energy from Mica, under the conditions as we foresaw them
399 in 1964, would be obtained for about, a little over a mill and a half. When the capacity was increased, this
400 resulted of course in the energy becoming more expensive. By 1970, it was estimated that energy from Mica
401 would cost between 3 and 4 mills. And making provision for the increase in cost between 1970 and late '76,
402 or 1977, when generation will begin, it's likely that the cost of energy from Mica, will be in the order of 6
403 mills. Now this of course is a high cost for energy in relation to what had been customary before. It's not
404 high cost in relation to what energy would have cost if it had been provided by any alternative scheme other
405 than the arrangements that were made with the United States for the development of the Columbia in
406 Canada.

407 I was talking not very long ago with the man who had been the head of the Bonneville Power
408 Administration who subsequently became Deputy Secretary of the Interior in the United States, and is now
409 the head of Consolidated Edison in New York. And I asked him what he would be willing to pay for energy
410 from a dam say 200 miles or 300 miles from New York City, if he could be assured of a continuous flow of
411 energy for use in his area of service in New York. And his answer was that, whereas 2 years ago I might ask
412 a similar question, he had said they would be willing to pay 8 or 9 mills. Today they'd be willing to pay 12 or
413 14 or perhaps even 15 mills for energy.

414 The Energy Board report of 1972, said that under ideal conditions, the cost of the capacity in a

415 nuclear plant in British Columbia, would be somewhere in the order of 600 dollars a kilowatt. And the
416 Arthur D. Little people, one of the big consulting firms in the United States, recently came out with a similar
417 statement in regard to costs from nuclear plants in the United States. The Energy Board report also said that
418 under ideal conditions, in 1970 figures, the cost of energy from a nuclear in British Columbia would be about
419 6 and a half mills, providing that the same kind of escalation that I provided for the 1970 figures for Mica,
420 that would mean, under ideal conditions, which would never exist, the cost of energy from a nuclear plant in
421 British Columbia would be about 9 mills. In fact, according to the experts who were employed by the Energy
422 Board, as ideal conditions could not be stipulated, it would probably be in the order of 12.

423 So, the ultimate result is that the projects in Canada are costing a great deal more than originally
424 expected. This was not forecast, although we constantly said in making the estimates that were made in 1964,
425 and before that, that the... no provision was being made for inflation or escalation. Up to that time, the 10
426 years prior to 1964, the average increase had been about 1.5%. Since then, it has been steadily increasing
427 until the last year or two, had been averaging about 5 to 5.5%. But the point is, that although costing a great
428 deal more than had been anticipated, the relative value of the Columbia project, is if anything, better in
429 comparison with alternatives than it was when we made our early and minimal estimates of what the costs
430 were going to be.

431 Well, I've talked for a better part of an hour, and I'd be glad to hear comments or try to answer
432 questions for any of you who wish to take part in the discussion.

433 **Audience [Tim Newton?]:** Dr. Keenleyside, a various lecturer a few weeks ago, suggested that the Treaty
434 should have been a little more flexible in allowing the introduction of the projects. The argument going with
435 Libby and Mica in existence that really the contribution of Duncan, weighting at the costs and detriment to
436 the area might have been precluded it. Do you have any comment on this?

437 **Dr. Keenleyside:** I'll tell you that was Dr. Marks wasn't it? Well that's arguable. It might have been the
438 good idea to bring them in in that kind of a sequence, but on balance, I would think that it was not a
439 justifiable criticism. It was desirable to get Duncan in as rapidly as possible for flood control purposes in
440 Canada, as well as its contribution in the United States, and the additional 4 million dollars it got us by
441 coming in when it did. And Arrow of course, has to be there in order to make Mica the real benefit that it is.
442 The Arrow project is the centre, is the focus of all the benefits in Canada. In itself, it's the most productive,
443 single expenditure in the whole Treaty complex. I don't say that he was wrong. I think it's arguable that this
444 might have been done. However the same author of that statement, if he was quoted correctly in the press, I
445 think he said in these terms, the best international agreement of its kind ever made, which actually is a
446 quotation from a statement that I made in 1964, when in debate, in the Vancouver Board of Trade. I said that
447 this was the best international commercial agreement in Canadian history. And if that was true then, then I
448 think it's even more true today.

449 **Audience:** Yes Dr. Keenleyside, it's been obvious from comments you've made tonight, and also comments
450 I've heard that you feel that the terms of the Columbia River Treaty are good, and you would not support any
451 moves to renegotiate the Treaty. Now do you anticipate the provincial government trying to renegotiate the

452 Treaty? And have you been in contact any members of the government concerning such moves?

453 **Dr. Keenleyside:** Well, I refuse to answer the last part of your question. But the first part of it, I don't know.
454 I have no crystal ball. I don't know what the government is going to do. I think it would be extremely unwise
455 for them to press any effort to get the Treaty re-opened. If it were, if the proposal were made to the
456 Americans I think they would probably jump at it, because they have more cause to complain than we have.
457 And they made this very clear. If the proposal of renegotiation ever came up, they would come up with
458 waving Krutilla in one hand, and half a dozen other people in the other pointing out that we got much the
459 better of the deal. I don't think we did, I think Krutilla goes too far. But no, I think it's very unlikely that the
460 government would press that very far. Secondly if they do, the Canadian government is almost certain to tell
461 them not to be silly and unless the Canadian government agrees, unless the Canadian government is
462 persuaded that there is a case, they won't agree to take it to the Americans. And I can't be sure of anything in
463 this life, but I'm reasonably certain that the Canadian government wouldn't take part in any such proposal.
464 It'd be a great mistake because the Americans would ask for more than we would.

465 **Audience:** You said earlier that it was McNabb who called for a comprehensive study of all aspects of dams,
466 various combinations. And yet on the whole, the Columbia River projects on the Canadian side, seems to fall
467 short of comprehensive development on a basin-wide basis.

468 **Dr. Keenleyside:** Well coming to the latter part of it. The things that have been done in Canada, have been to
469 provide something like a total of 20 million acre feet of storage, which 15 million is committed to be of use
470 to the Treaty, to carry out the terms of the Treaty. But what has been done also makes it possible to increase
471 at a very low cost comparatively, the total development of the Columbia in Canada to a maximum of
472 something almost 6 million kilowatts by the construction of ... probably a high Revelstoke, if not, a Downey
473 creek, and a Revelstoke and a Murphy creek dam. So that what has been done is a major contribution to the
474 comprehensive development of all of the Columbian resources in Canada. I'm not sure about the first part,
475 about me quoting Mr. McNabb as having said that, but perhaps he did, and perhaps I did.

476 **Audience [Tim Newton]:** As your figures have pointed out on the nuclear plant, the capacity plant costs vis-
477 à-vis with a nuclear plant, but the hydro plant is far more expensive than the energy content. Conversely for
478 an existing plant, it's very economical I gather, to increase the capacity. Do you feel that it would be ironical
479 if in fact that a project with which you were so closely associated in fact justified the introduction of nuclear
480 plants in British Columbia?

481 **Dr. Keenleyside:** I can't see any possible reason for introducing nuclear plants in British Columbia, at least
482 until sometime well into the 90's. We've got perfectly good hydro possibilities, which can be developed
483 without any serious effect on the environment, and we have supplies of coal which could be used for thermal
484 purposes, particularly at Hat Creek, which would produce power at a much lower cost than could be done by
485 use of nuclear. In my opinion, there's no point in our getting into that controversial mess when we don't have
486 to do so. And this by the way, was the position taken by the experts that were employed by the Energy Board
487 before the production of the report in 1972. It's true that the Energy Board on a split decision, went against
488 the advice of their experts, and said that we should put a nuclear plant on Vancouver Island. And that's a

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489 subject I'd be glad to discuss with anybody anytime. But no I think we would be very well advised to keep
490 out of that. Let the other people do the experimenting and carry on the practice, and if eventually they can
491 overcome the problems relating to the disposal of nuclear waste, and protection of the plants against sabotage
492 and other difficulties of that sort. Then if we need them, let us take a look at them. Now when we don't need
493 them, when we've got 2 perfectly good alternatives, which would cost less, and be without the detrimental
494 features that characterized nuclear plants generally, let's stay away from it.

495 **Audience:** I understand that the next three generators that are going in Grand Coulee are going to be
496 increased from 600 to 700 megawatts of their 6 unit third powerhouse. This indicates they are in fact going to
497 go to their 9, their ultimate capacity.

498 **Dr. Keenleyside:** Well, just this last weekend I was in the United States, and I had the pleasure of talking
499 with a man whom I will not identify except to say that he had been one of the top people in the Bonneville
500 organization and he made it quite clear that it is exceedingly unlikely that they will go to 9. I don't profess
501 any further personal knowledge of it than that and what I've read but that seems to be the situation. So far of
502 course, they've haven't been making much progress getting up to 6. I guess I must have tired them all out by
503 talking too much.

504 **Chairman Cook:** I'll ask you a question. I noticed you were co-chairman of BC Hydro. The other co-
505 chairman was here earlier. I wonder if you could comment upon the kind of organization there was in BC
506 Hydro, and how did the apparent conflict of interest over the development of the Peace, affect the
507 development of the Columbia. Did you feel in any way that the apparent concern of the government for the
508 Peace, did it in anyway effect the actual development of the Columbia?

509 **Dr. Keenleyside:** I think probably the availability of the Peace made it possible for us to get a better deal
510 with the Americans on the Columbia than we would other wise had received. We could take our time over it
511 to a certain extent. And in the meanwhile, take care of ourselves with the output of the Peace, which, as such
512 things went at the time, was comparatively inexpensive, despite of the long transmission lines. I don't think
513 there was any, any conflict there. They were both admirable projects, and the fact of the existence of the
514 Peace helped rather than hindered our negotiations on the Columbia. You mentioned the organizational
515 arrangements they, I think they're pretty well known. While both Dr. Shrum and I shared responsibility for
516 whatever was done, both the Columbia and the Peace, organizationally, we each concentrated on one or the
517 other. He on the Peace, and I on the Columbia.

518 **Audience [Professor Cook]:** He did mention I think, your organization developed from the BC Power
519 Commission, and his organization developed from the BC Electric. And one of the comments he made was
520 that the technical assistance that was available to the Power Commission was not as proficient as that
521 available to the BC Electric organization. Would you like to comment on that?

522 **Dr. Keenleyside:** Well of course the BC Electric was far larger than the Power Commission, and it had had
523 much more experience, so I think there is some measure of truth in that. On the other hand, the Chief
524 Engineer at the BC Power Commission, was described by the man who was at that time, the dean of all

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525 electrical engineering in Canada, as the most brilliant, young engineer in Canada of his day. I think there was
526 some truth in that statement. I don't know quite how far you can push it. Dr. Shrum also said of course that...
527 all of the agreement on the Columbia turned out pretty well. In fact I think he went a little farther than that,
528 and that it was a little surprising that he did because the Canadian negotiators had so little experience in this
529 field whereas they were up against a bunch of Americans that were old timers at it, and who had had a long
530 experience and preparation for this kind of negotiation. Well I think it's fair to say that he's a little bit
531 confused on his explanation on what happened. Situation on each side of the line was in fact exactly the
532 same. The negotiating was done by politicians, statesman if you like, done by politicians and administrators.
533 In each case, these were backed up by technical experts. The men of great experience and expertise in this
534 field that Dr. Shrum were talking about in the US were the backup team. They were not the negotiators. The
535 negotiators were the head of Bonneville Power Administration, a lawyer, another lawyer, and the American
536 counsel general in Toronto. The negotiators on our side were politicians, and an administrator or two. He is
537 comparing apples and oranges. The two sides as far as the negotiators were concerned were the same type of
538 people. The two sides as far as the technical backup people were concerned, were identical. Except that in
539 my opinion, we had the better technicians than the Americans did. I spent I suppose a better part of 30 years
540 in international negotiations of one kind or another. Some of them pretty complicated, and long drawn out,
541 and I must say that I have never known three more competent experts in any field with which I have been
542 associated than the three special experts that we had supporting the Canadian negotiators. Those were
543 Gordon McNabb, Gordon Kidd, and Dennis Kennedy. I doubt there are three better people in that field
544 anywhere in the world.

545 **Audience:** [inaudible]

546 **Dr. Keenleyside:** They can do whatever they like with the water once it gets across the boundary of course.
547 They can sell it out of the Columbia Basin which, I think perhaps, they may do at some stage at some places.
548 I think it is very unlikely that much of that will be used for irrigation because using water for irrigation is
549 becoming, I don't quite know what the words are for it, but it doesn't have the sex appeal it used to have. It's
550 being found to be wasteful and expensive in most instances, in most places. And I doubt very much that a lot
551 of this water is going to be used for irrigation. But the flow of the water across the boundary, which is what
552 the Americans are paying us for, have paid us for, of course is based not on its use for that sort of thing, but
553 on its use for generation. And that won't change, so whatever they do with it they're calls on us are going to
554 be made in accordance to a plan which is developed for the purpose of the water's use in the United States
555 for generation.

556 **Audience:** In the length of your international experience, what would you recommend to an underdeveloped
557 country... an underdeveloped country would ask for cooperative river development between another
558 underdeveloped country from the experience of the Columbia Treaty that you know, that you'd like to tell
559 them that can be mutually beneficial to those underdeveloped countries?

560 **Dr. Keenleyside:** I don't think I can give an answer to that in sort of general terms. You would have to look
561 at the individual cases. And of course it was said in the Treaty that the Columbia River Treaty was not to be
562 taken as setting a precedent for any other developments. That, of course, refers to Canada and the United

563 States.

564 **Audience:** It has really been an outstanding example of cooperative development and here is the fortunate
565 situation where you have a rather similar ideological background but it happens to deal with countries.
566 Where, you take for example, the Mekong, where the countries don't have the similar ideological
567 background.

568 **Dr. Keenleyside:** Well, I'm glad you picked the Mekong because I think the last thing I did at the UN was to
569 work on the program for the development of the Mekong on the basis of cooperation between the 4 countries
570 that were involved in it. And if it hadn't been for the outbreak of the war, it might by this time, have been
571 showing some very real results over there. All four countries agreed, I've been told by those who've know
572 them, by people from the country, it's the first time in history that they've ever agreed on anything, all four
573 of them. But at any rate, they did agree on the whole series of studies that were to be made on the Mekong,
574 and had come to an agreement before the breakdown on account of the war, on at least 2 or 3 projects that
575 were going to be undertaken. What's happened to them since, I don't know, whether the war has put a stop to
576 it entirely or not. Incidentally, one man that was more responsible than any other for the guidance that was
577 being given in that area, General Wheeler, of the United States just died a very short time ago. A very
578 remarkable man indeed. He was one of the panel that we brought together here to advise us on the Columbia,
579 on the construction aspects of the Columbia. He and four others were people with no connections with
580 British Columbia at all, were brought in to look at everything we were doing, every step that was taken, was
581 done after scrutiny by these four people. But to come back to your question, I think there's a great deal in the
582 Columbia Treaty that could be looked at with benefit by people in other areas where they have a somewhat
583 similar situation. As you undoubtedly know, the one river that so far beyond any other has been developed
584 on a cooperative basis is the Danube. Where you have, I don't know how many countries, but half a dozen
585 countries down there signed. I don't know what they call it, but the Danube Treaty governing navigation on
586 the river. I don't think it goes much beyond navigation in that case. But the quick answer to your question is,
587 I think there is a lot in the Columbia Treaty that could beneficially be studied by other countries that want to
588 cooperate to their mutual benefit.

589 **Audience:** Do you think this case Canada was able to argue for a 50-50 split for upstream storage? But in the
590 case of the Rio Grand, Mexican's didn't get that.

591 **Dr. Keenleyside:** Well I think this was partially due to the ability of General McNaughton as a negotiator,
592 and partly to the logic of the situation. We were doing, we were in a position to do so much that would be
593 beneficial to them. They were glad to pay 50% of the downstream benefits to us.

594 **Audience:** Is it in the case of the lower Mekong? The lower Mekong, despite the war, because it was the
595 intention of the people who worked on the plan if the lower part of the Mekong was well developed,
596 hopefully maybe this will induce North Vietnam and the people republic of China, to join in the venture.
597 This was part of the risk that was behind it.

598 **Dr. Keenleyside:** Well it's a very complicated situation there as no doubt you know better than I do. I've

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599 been there, but I don't profess to really know much about it. I do know though that a number of other
600 countries, Britain, United States, Canada proportionately more than most, Australia and New Zealand and
601 several other, were all prepared to contribute, and did make some contributions. Canada particularly in the
602 matter of aerial surveying. Australians in the provision of vessels that could be used in the Mekong and so
603 on. As I said, I don't know how much of an effect the war had on it. But I know they did run into difficulties
604 that prohibit, or prevented the carrying out of the major plans that had been developed before that war broke
605 out.

606 **Audience:** You mention General Wheeler, General Wheeler's report came out in 1957 but the present
607 development plan was not really entirely based on Wheeler study. It was based on the United Nation study
608 that was commissioned by the Common Association and Economic Affairs and the three other people who
609 studied it.

610 **Dr. Keenleyside:** One correction. It was done, as far as the United Nations was concerned, by the technical
611 assistance administration with the assistance of the Department of Economic and Social Affairs, and the
612 economic commission of Asian and the Far East. The agreement in fact that started the whole thing at the, or
613 at least concentrated the whole thing at the UN was signed by Nara Seamen and myself. And Wheeler as you
614 say went out there early on in the late 50's, but he went back again as the head of a small panel appointed by
615 the United Nations in 1966, '67... somewhere along there. He went back as late as about a year and a half
616 ago.

617 **Audience:** Dr. Keenleyside, can we come back to the Columbia?

618 **Dr. Keenleyside:** Why?

619 **Audience:** In your long experience long experience in the department of External Affairs, and with the
620 United Nations, and then during the Columbia negotiations, is it, can you say anything about the way in
621 which negotiations are conducted between, or in a situation that involves both the federal government and the
622 provincial government with regard to natural resources? Do you think there are some kinds of legends
623 perhaps which might be applied to other circumstances, to other situations which involve both the federal
624 government and the provincial government and the disposal, utilization, development, export and so on of
625 natural resources? Do you see anything there?

626 **Dr. Keenleyside:** I'm not quite clear as to what your question is. Do you mean did we learn anything from
627 the Columbia that might be useful?

628 **Audience:** Federal and provincial negotiators dealing with say, natural gas, or oil, fisheries, or what. Are
629 there lessons there? Do you think your generalizations that you wanted to make about the way in which the
630 federal government and the provincial government cooperated?

631 **Dr. Keenleyside:** I don't think there was anything that came out of the Columbia discussions that were
632 unique, or brought any new concepts into that whole problem of provincial dominion cooperation. What in
633 need is of course goodwill and common sense on both parts, and good communications. The thing that made

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634 the negotiations between Ottawa and Victoria as successful as they were, was that we were in constant touch
635 with each other. And got to know each other, I mean the people that were directly concerned got to know
636 each other very well indeed. You could talk on the telephone and get things settled without delay or
637 complications, to the extent that, that characterized the Columbia activities, it would be a very good thing if it
638 were to be employed more generally, and most recently, one of the great complaints that's been made about
639 the oil and gas debates between particularly Edmonton and Ottawa is the fact that they keep making speeches
640 without telling each other first. And this has I think contributed I think to the degree of ill feelings that's been
641 built up in that area. But I don't think there was anything in the Columbia that was new, it was simply that
642 there was an intent on both sides to get the job done, to get it done as well as we possibly could, and realizing
643 that it could be done effectively only by this kind of cooperation.

644 **Audience:** Well there are two points of views about what is cooperative. There's a federal point of view, and
645 there's a provincial point of view to what constitutes cooperation. It seems to me that the propositions being
646 put to us in this series is really nothing, but the Conservatives is fairly clear ideas, and fairly definite policies
647 they wish to institute. I think even Mr. Green said that their intention initially was to decide what they
648 wanted, and then negotiate with BC. And then the Liberals had quite a different opinion. And one got the
649 impression through the negotiations that the positions seemed to be changing all the time. I was wondering
650 whether you had any thoughts about the need for federal policies, or federal initiative, or federal...?

651 **Dr. Keenleyside:** Well I think the federal government could make decisions on such things as the banning or
652 the permission to export power. That is a sort of a basic policy. Sure. That's alright. But the description
653 you've given of what Howard Green was describing as his position seems to me to be nonsense. I'm sure he
654 was pulling your leg. They weren't going to lay down the law in British Columbia and tell them what they
655 could do, given the circumstances at that time with the governments that were in office in Ottawa and
656 Victoria. That was just a prescription for a long continuing battle.

657 **Audience:** He didn't use those words certainly, but I think, the message was they were ready to take the
658 initiative. The federal government was ready to take the initiative and then to seek the cooperation of the
659 provinces, whereas one could say, that the federal government should cooperate with what the province
660 wanted.

661 **Dr. Keenleyside:** Well I don't know if their's. I don't think there's any real protocol on this. The natural
662 resources belong to the provinces, and I suppose one would think that it would be natural to assume the
663 provinces might take the initiative. But on the other hand, if the federal government sees an opportunity to
664 make a good international arrangement involving natural resources from one of the provinces, of course it
665 should take the initiative. Just comes back to again, common sense and good will. Common sense of course
666 is the most uncommon thing in the world but you do find it occasionally in politics.... well, diplomacy of
667 course.

668 **Chairman:** I just would like to say that this had been the most enjoyable series for myself, and I hope all of
669 you who have turned up night after night after night to this series have felt the same way.