

1 FOR GENERATIONS

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18 *can be reviewed in the SFU Archives located at the Burnaby Mountain campus.*

19 **Introduction by Professor Cook**

20 Professor McDougal describes himself as an environmental lawyer. But there is a long story of
21 him becoming an environmental lawyer, including some time here at this university. He is a graduate in
22 Economics from this university. I took a peak at his transcript before coming in here. I see he had a C on
23 one of his courses. And he lasted 1 week at one of my courses- he took a look how much work was in it
24 and left. However, that didn't seem to prevent him from going on doing greater things, as he
25 subsequently went on to Osgood Hall, and did his law studies there, and then onto Harvard to do a
26 Masters of Law degree, where his thesis was on the National Energy Board. Since then, he has made
27 something as a name for himself, I think, as a critic of the Columbia River Treaty.

28 His topic tonight is called "*The Lessons of the Columbia River Treaty as Applied to Joint(?)*
29 *Energy Development*". I asked him originally if whether he might prefer to use cooperative. And he said
30 under no conditions will he allow the word cooperative to be used. But the question mark was his
31 suggesting that we use the joint with a question mark, because he doesn't feel it was very joint. I hope that
32 when Mr. McDougal has finished speaking, the questions will be fast and furious, and we may have a
33 chance to have a good discussion.

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35 Thank you, if anybody has any questions while I'm going through this, by all means speak up in
36 the middle. In a way my getting out here sort of sums up all that I'm going to say. A 600 mile an hour
37 airplane is a really useful resource, provided you've got an administrative system backing up its use. I

38 was booked on two flights that didn't exist. The trip was rather difficult.

39 Generally, I'd want to start with this thesis, and that is very simple: History repeats itself. And the
40 Columbia, in some respects, is the beginning of what appears to be a very long and very depressing
41 history. In particular, it seems that we've engaged in large scale energy resource developments and each
42 one of them have four common characteristics. They might be summarized as follows:

- 43 • Most of them have been on an extremely large scale.
 - 44 ○ They have evolved entire river basins, or large petroleum and/or natural gas reservoirs.
 - 45 ○ They are national in importance.
- 46 • Second, the developments in most cases have been initiated by the provinces, acting more or less
47 alone.
- 48 • Third, the developments have in almost every case been spurred on by badgering demands by the
49 United States. In other words, the American export market offered the first opportunity to develop.
50 They, as a result, benefited from many oversights on the part of the provinces in respects to the
51 resources that were being developed. They obtained a long-term economic rent from the
52 development, and they managed to export into Canada any associated environmental cost as a result
53 of development.
- 54 • The fourth characteristic is that in almost every case there have been shades of Federal / Provincial
55 conflict. But with the Federal government uniformly failing to assert its own view as to how best to
56 develop the resources involved.

57 Now in a respect, the Columbia River Treaty is perhaps the grandfather of them all. I'm sure that
58 most people here have heard ad-nauseam the details of the Treaty, but there are a couple general points
59 that may be made just to put the whole affair into perspective. The basin itself contains what is estimated
60 to be approximately 15% of the world's hydro electric power potential. And of that potential, Canada had,
61 as a result of flow patterns here and as a result of altitude changes, approximately half. So, in other words,
62 we're talking about roughly 7.5% of the power that could be developed over the entire globe.

63 Now, it was of an enormous potential for a number of other reasons. It was, relatively speaking,
64 near to markets, both domestic and export, and it also offered an opportunity for multiple purpose
65 development which was not true of many other Canadian water resources. We had the chance, for
66 example, to develop this recreational potential rather early. We do not have that chance, with respect to
67 the Peace, and probably won't for some period into the future. Now, there's been a lot of criticism. And I
68 think, even now, it's not all that clear exactly what happened. Even after looking at all the negotiation
69 minutes, and reading all the reports, there is a great deal of ambiguity as to what happened at the critical
70 moment.

71 One interpretation, I'd offer would be this: I think the whole thing began with the extension of
72 the Pacific Great Eastern railroad. When Premier Bennett declared he was going to do this, he did it in an
73 era when governments believed that their corporations should operate on the financial plus side. In other
74 words, he felt his railroad had to be financially justified. And the result of his promise to build the

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75 extension meant that he was very concerned about the potential to earn freight revenues. Because it was
76 through them that he'd justify having made the public investment. When Axel Wenner-Gren arrived on
77 the scene, and started talking about a Peace River development, I think from the standpoint of Prime
78 Minister [sic] Bennett, that offered a enormous potential for that Railroad to make money. And I think for
79 that reason, early support was given to Wenner-Gren's overtures. Now the difficulty is, everybody here
80 I'm sure knows, that Mr. Wenner-Gren as he had done in three or four countries before coming to British
81 Columbia, prepared his studies, talked promotionally about the project, and then left. And British
82 Columbia bought out what work he had done to the tune of \$20 million dollars. So starting with one
83 liability, the province now had two. They had the railroad extension, and they had the studies in the power
84 development.

85 Now the British Columbia Electric Corporation owned shares in the Peace River Development
86 Corporation. And I suppose that the Province assumed, because of that fact, that the British Columbia
87 Electric Corporation would be agreeable to a marketing arrangement for Peace power. And apparently
88 they were approached to that effect and Dal Grauer refused. He argued that Peace River power was just
89 not timely. It was too far away, transmission cost was a major expense involved in power development,
90 it's at site efficiency was questionable, and by comparison, a Columbia development would be half the
91 distance, and would cost considerably less at site. So he basically refused to market, or make an
92 agreement to market, Peace energy. So the result of that was that the province acquired three liabilities,
93 namely they expropriated the British Columbia Electric.

94 Having done that, and having established the marketing vehicle, they then had to turn to the
95 question of financing first, and second, making sure that the market was to be available. And the
96 Columbia, in effect, offered the ultimate solution. If the province opted for an arrangement of
97 development, they would maximize the inflow of short term capital, and yet at the same time would not
98 entail a massive power development that might jeopardize the Peace- every provincial ambition would be
99 secured. And that, for my money at least, is an explanation as to why the Province took the positions that
100 it did.

101 The next question, and I'm sure that this also aired at length earlier, is what's the result of the
102 Treaty. What have we gained, and what have we lost? Well, there are a number of categories of losses,
103 and some of them are clear, others are not clear in terms of their precise quantity. But in every case, they
104 seem to be relatively enormous.

105 First we've lost much of the resources' power potential. There's a great deal of power potential
106 which will never be developed as a result of the development sequence that we opted for. We lost
107 whatever economic potential the Arrow Valley had; we lost the lower segment of the Kootenay Valley in
108 perpetuity, and whatever economic potential it possessed. And just as an aside, in the Kootenay Valley,
109 apparently the land value rises as you move to the south. So in short, in as much, we've lost the 42 mile
110 area extending north from the 49th, we've lost relatively the best part of it. We have lost more or less,
111 whatever costs were involved in the building of Duncan and High Arrow. In as much as they're single
112 purpose projects. We've lost control, and with that loss of control, we've lost first the power to vary, to

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113 any great degree, the operation of the system so as to maximize power generation in Canada; and second,
114 we may well have lost whatever power we otherwise would have had to develop the resources in terms of
115 its consumptive potential. Now, that point, perhaps deserves a little bit of a digression.

116 Water in California is worth upwards of \$200 an acre-foot. On the Canadian Prairies, it's worth
117 approximately \$150 depending on what region you're talking about. For irrigation purposes, it's
118 exceedingly valuable. Now the Columbia spills 180 million acre feet a year. It's said that Columbia water
119 is worth approximately \$39 an acre foot on the main stem. So in other words we're talking about roughly
120 7 billion 200 million dollars a year, in consumptive value. As soon as the energy crisis is over in the
121 United States, the water crisis will take over. It's becoming an extremely serious problem in the south
122 west and the far west. And there's no question but that there will be intense pressure on an inner state
123 level to solve whatever problems presently exist in terms of coming into arrangements whereby water can
124 be moved from one region to another. There are very few areas of water "surplus" anywhere in the
125 country. One of those few areas is, in fact, the Columbia Basin. And it wouldn't surprise me at all that
126 we'll see in 5 years, perhaps a little more, rather active discussion of rather large transportation facilities
127 to make use of the fact that this water is here.

128 We've also lost legal claims, or whatever legal claims we may have had, to an ongoing share in
129 first, the flood control benefits that are provided in the United States. Some of you may have heard the
130 estimate for the period in 1972, the United States obtained, they estimate, approximately \$214 million
131 dollars of real saving as a result of the operation of the Treaty projects. That's in one year. When you
132 compare that figure with the \$64.4 million dollars that we were paid for flood control services which have
133 to be rendered in perpetuity, it makes you wonder a bit. And we've also, in a legal sense, probably, lost
134 any claims that we might have to downstream benefits other than those that directly relate to power. So in
135 other words, referring back to the question of consumptive uses, it's very unlikely that we could claim
136 any share in the consumptive benefits in United States if they in fact appropriate for that purpose.

137 Now when you look generally at the Peace River project and the Columbia project, or this two
138 river policy, it seems to me that it's possible to say a number of things. You look at the Peace Athabasca
139 Delta area. Is anybody in here familiar with that? Well It's turned out to be a full blown environmental
140 disaster. The rate of inflow has been rather seriously disrupted. The entire region has undergone rather
141 significant change. The water table is falling. It's an area of rather great importance in a number of
142 respects. From a naturalist point of view, it's a major stop-over feeding area for one of the Continent's
143 largest flyways. It also has indigenous wildlife which is somewhat significant. It also houses the Woods
144 Buffalo Parks region. We also have seen, behind the Portage Mountain Dam, rather serious environmental
145 effects. The timber clearing appeared to have been rather casual. And we see incidentally the same thing
146 behind the Mica Creek Dam, and behind Duncan Lake. And I think in hindsight it's fair now to question
147 who really benefited from the Two River policy at all. BC got locked into very expensive power; Alberta
148 was given a full blown environmental disaster; Canada lost one of it's greatest opportunities with respect
149 to the Columbia River, which was believed at the time we couldn't support both; and the United States
150 got the best imaginable deal in terms of obtaining long term control over the Upper Columbia and
151 Kootenay.

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152 Now there's been enough criticism since the agreement was signed to strongly deter any project
153 that in anyway was similar to it. But, unfortunately we've gone ahead and involved ourselves in a number
154 of others. The Churchill Nelson is perhaps one of the best examples. The Churchill begins in Alberta as
155 the Beaver River, and it flows to the East to join into Hudson Bay. The Nelson flows out of Lake
156 Winnipeg to the North-east to also join into the bay. Now for sometime there's been consideration of
157 using the Churchill river in the province of Saskatchewan for consumptive applications. There has been
158 very little recent movement on this question, but it's clear that some point in the future they will be
159 looking at it very seriously. Manitoba looked at the Churchill as a method of producing hydro electric
160 power. In particular, they were concerned with the possibility of diverting the Churchill as it flows to the
161 South into a lake called Southern Indian Lake where it would be stored, and then routed through the
162 Burntwood system, into the Nelson River, which would, in turn, be dammed by a structure called the
163 Natalie control.

164 Now Manitoba had a number of difficulties. First of all, the Southern Indian Lake region is
165 inhabited by native people, which gives rise to some Federal involvement. Second of all, the reservoir of
166 Southern Indian Lake, seemed to be unstable. In particular 88% of the shoreline consisted of Lancastrian
167 Clays overlaying permafrost. And it appeared that if they added water to the system, and raised the level,
168 the result would be a cycle of water encroachment, a boiling of the permafrost level, torpidity rises, fish
169 kills, throughout summer, and then autumn, the freeze up, and then a repartition of the cycle each year. So
170 in other words, basically they were looking at the destruction of 80% of its shoreline.

171 They also had this problem from Saskatchewan in as much as they wanted to divert rather
172 significant quantities, it was important to them that a conflicting project not occur upstream. They
173 approached the province of Saskatchewan, and the provincial authorities refused to give any kind of
174 assurance that they wouldn't at some point in the future, move ahead with their own projects not
175 withstanding the power development in Manitoba. Now there was some controversy inside the province,
176 principally because it was a large scale power development far in excess of provincial requirements. The
177 rationale offered by the Manitoba government was that "if we build bigger, we will be able to produce
178 cheaper.", so that domestic power consumers will benefit. In the meantime, it was proposed that the
179 surplus, in terms of production, be exported to the United States. Now there was some criticism, of
180 course, of that agreement, primarily because the agreements they were about to sign were of a long term
181 nature, and involved fixed escalator provisions in terms of cost. There was some very serious question as
182 to whether the cost would provide a return sufficient to justify the undertaking to begin with.

183 Now in combination of the complaints of Saskatchewan, and people inside the province, and also
184 people in the Southern Indian Lake region, the federal government sought to involve itself. Now there
185 was some debate. Manitoba took the position that it was a provincial resource, the federal government had
186 no involvement, or right of involvement at all and the Federal government acquiesced. The total federal
187 contribution to this scheme has been a \$2 million dollars environmental study, which from its very onsets
188 starts with the premise that no matter what it decides, or determines, it will have no significant bearing
189 whatsoever on the project itself. The second contribution by the federal government was to provide the
190 money necessary to build the transmission system to deliver the power to the United States.

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191 Now over and above the fact that the federal government was ineffective, and over and above the
192 fact that the principle beneficiaries of this project will be the Americans rather than ourselves, and over
193 and above the fact that we have an environmental difficulty, there is another rather pressing problem.
194 That is the potential in 20 or 30 years for the existence of an inter provincial crisis that is virtually
195 unprecedented. If Saskatchewan undertakes a pre-emptive diversion, Manitoba will presumably want to
196 bring some sort of legal action. It appears that the Supreme Court, and the Federal Court are unable, the
197 way they are presently stated, to come up with any kind of solution. In particular, because if they were to
198 try and fetter the jurisdictional right of Saskatchewan such that they could not make diversions, this
199 would involve basically an encroachment upon what's legitimately within the legislative jurisdiction of
200 that province. On the other hand, they run into the same difficulty in terms of Manitoba.

201 Now the James Bay project is another we've heard a lot about. It involves three phases. The first
202 being a dam on the Le Grand, followed by the successful diversion of neighbouring rivers into the Le
203 Grand system. And again the theory under which it has proceeded has been "the bigger, the cheaper."
204 Now it's been argued by the Quebec authorities that there will be no power export from the James Bay
205 project. And in terms of the first phase of the project it appears that it's true. However, what they do not
206 say, is that it facilitates a power export from other parts of their power system, in particular Hamilton or
207 Churchill Falls. And after phase 1 is completed, there are agreements between Quebec Hydro and
208 Consolidated Edison to export an amount of power from Churchill Falls, approximately equal to the
209 amount of power being generated by phase 1 of the James Bay project. So, in point of fact, we have more
210 or less the same system again. We have a large scale, environmentally destructive project proceeding
211 principally because the opportunity to sell power in the export market exists.

212 Now once again, native people are affected. And again, a case can be made for rather strong
213 federal involvement on that basis. But the James Bay, and the Nelson projects are similar in another
214 respect. They also involve navigation. And they furthermore involve the potential of interfering with the
215 system which is clearly much larger than any one province. In particular both will involve rather large
216 disruptions of fresh water inflows into Hudson's Bay. This has a tendency to disrupt a process called
217 haline circulation. It's a not very fully understood process but it appears to involve an induced inland
218 transport of salt water in the ratio or 10 to 1. So for every bucket of fresh water that goes into the system,
219 10 buckets of salt water on the surface moves towards the land.

220 From a climactic point of view, this is extremely important. It regulates the time during which
221 spring thaw occurs, which in turn has an impact upon the rates of water inflow. Now, the bath and current
222 flows through Hudson's bay and down the coast, ultimately down off New England. According to
223 research done by an American Coast Guard official called Colimar, an interference of this magnitude
224 would result in anything upwards of a 4 degree centigrade change as far away as New England. Under
225 some conditions a change or 4 degrees is sufficient to turn arable landscape into a desert, and vice versa.
226 In this particular case, it's impossible to predict, without a lot of detailed understanding of what appears
227 to be a very complicated process. But it is clear that the possibility is present of a rather serious
228 international crisis as a result of both these projects together.

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229 Now the James Bay project involves, roughly speaking, 5000 square miles in its total effect. The
230 Nelson Churchill project involves somewhere in the vicinity of 1000 square miles. If we look at the
231 development of Alberta petroleum and natural gas, we see more or less the same thing happening. Again,
232 it's been characterized by enormous development projects, again principally aimed at the export market.
233 In terms of our petroleum particularly, I think it's important to try and lend a little perspective to what's
234 going on right now. We built the industry, but for the existence of decisive federal policy, it wouldn't be
235 anywhere near so developed as is true now. It was done entirely artificially. When we set up the national
236 oil policy, we basically committed Canadian markets into the use of western Canadian crude where
237 otherwise they would have preferred to have used cheaper import supplies. We also found markets, in the
238 sense that we negotiated export arrangements for the private companies.

239 Now the theory under which we did this was to encourage development. And as a result of this
240 encouragement, we would have hopefully realized our so called vast potential as a oil producer. What in
241 fact appears to be our experiences is that we've exported far too much at ridiculously low prices, and
242 we've imported shortage and imminently higher costs that will be very serious in terms of our domestic
243 economy. When production begins to decline from the conventional reserve as it will in a year or two,
244 we'll be forced into a situation where we will have to turn to the tar sands as the only alternative source
245 for oil, and the high arctic. Now at the moment, it appears that in order to extract a barrel of oil from the
246 tar sands, we have to process approximately 2 tonnes of the McMurray deposits with water. The amount
247 of water pollution that will result from a large scale development will be virtually unprecedented. We also
248 have problems in terms of sulphur dioxide, which is a result of developing the sands. And we also have
249 problems relating to surface scaring, although these may not be particularly difficult. The major problem
250 will be economic.

251 At the present, the cost estimates for tar sands plants range from \$1 to \$1.5 billion per plant. And
252 each plant has an output, or an assumed output of 125 thousand barrels per day. Now the range can be
253 accounted for as follows, it appears that the first plant that's built after, after the two that exist now, will
254 be accomplished for approximately \$1 billion, but it's assumed that the capital market pressure will push
255 up the cost for every succeeding plant. And by the time you hit the 8th or 9th, they assume that will be
256 sufficient to add 50% to its total cost. In terms of the arctic discoveries, in respect to oil, they appear to be
257 very disappointing.

258 Now with natural gas, the situation is almost exactly the same. Once again, as a result of federal
259 policy, we made an industry where one otherwise would not have existed. And in particular the Trans
260 Canada Pipeline was, basically speaking, a public undertaking. The segment north of the Great Lakes was
261 built by a crown corporation set up jointly between Ontario and Canada, and over and above that, there
262 was financing assistance given for the completion of the western segment from Alberta to Emerson,
263 Manitoba. Some of you perhaps recall the debate far better than I.

264 Apart from the issue of closure, it brought us Mr. Diefenbaker and the Borden Royal Commission
265 inquiry. We went through a great Canadian catharsis about our involvement with the oil industry, and the
266 natural gas industry, and how best we should deal with our future potential in terms of both these things.

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267 We had good reason for any concerns we might have had at the time. In particular, it looked as if we were
268 on the verge of repeating an experience that we had in 1895.

269 In 1895, there were large, or relatively large, discoveries in Essence County in Ontario of natural
270 gas. And they were allowed to develop without any regulation whatever. The result was, in a matter of 3
271 or 4 years, over 50% of that reserve was exported to the cities of Toledo, and Detroit and 3 or 4 years
272 later, Ontario consumers found themselves unable to get natural gas. As a result of that experience,
273 Canada passed a law called the Exportation of Power and Fluids act. And as a result of that law, it was
274 impossible for any company, without the sanction of the Cabinet, virtually, to engage in any kind of an
275 export. That remained in force, more or less, until the Trans Canada Pipeline debate. So for 50 years, we
276 stopped exporting natural gas because of this one experience, which had been a very bitter one.

277 Now the National Energy Board, was the proposed solution. And under it, export proposals were
278 to be examined on a case by case basis. And in no case were exports to be allowed where they involved a
279 loss of quantity that was, would represent, an encroachment into our reasonably foreseeable domestic
280 requirements. Also the Energy Board has been, supposed to monitor the pricing arrangements in terms of
281 the export of natural gas.

282 Now, immediately upon being set up, it was confronted with three systems. The West Coast
283 Transmission System in this province had been exporting gas found in northern British Columbia and also
284 gas produced in Alberta, to what was then Pacific Northwest, and what is now El Paso Natural Gas. And
285 since its very beginning, there's been some rather serious questions as to the economic rewards for
286 Canada as a result of this natural gas sale. In particular, it appeared that the export trade was so poor in
287 terms of the netback, the price, the British Columbia consumers of natural gas were having to pay an extra
288 premium in order that they could subsidize a losing export trade with the United States. The second
289 system the National Energy Board had to regulate, and one which had already been set up, was Canadian
290 Montana. Canadian Montana exports gas from the Piccadilly Lake in Alberta to Montana Power. It's
291 owned 100% by Montana Power, and it prices on the basis of what is called a 'cost of service'
292 formulation. In other words, they charged virtually what it costs to buy the natural gas, and then to ship it.
293 Now there are some obvious accounting problems involved. The third system that the NEB had to deal
294 with was the TransCanada pipe system. In some respects, it was rather similar to the West Coast
295 arrangement. In particular, it involved, on its way on the route to shipping gas to eastern Canada, a large
296 export from Emerson Manitoba. It appeared as if there were rather significant pricing problems involved
297 in this agreement, and the Canadian natural gas was being landed in that area far below its true economic
298 value.

299 Now, the reason for this is rather complicated but somewhat interesting. The company wanted to
300 make the export agreements, notwithstanding the debate about their price, simply because it seemed to
301 them that was the only conceivable means of building a pipeline. Why was this true? It was true because
302 the only pipe supplies available came from the US Steel Corporation. They wanted to build a 34 inch
303 system, and they could not finance the pipe until they had established firm marketing commitments in
304 Eastern Canada. Now Eastern Canada had never before this time been a significant user of natural gas

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305 principally because it was not available. So the result was, it was impossible for the TransCanada people
306 to obtain the sort of contracts that were necessarily in order to go back to the US steel, and say “Here,
307 look what we’ve got, give us the pipe.”

308 However, the Midwest United States did offer that kind of opportunity. They had long been used
309 to using natural gas. They had systems that transported up from Texas, and they were in the position to
310 absorb the increased Canadian production. The problem was, that the competitive alternative to supplies
311 from Canada, involved domestic American supplies being shipped through lines which were fully
312 amortized, which, in turn, meant that it could be transported to the market at a far lower price than would
313 be true over a brand new system. So TransCanada, in order to be competitive, in order to get their
314 contracts, in order to get their pipe, had to agree to sell at disastrously low prices. And again, the
315 agreements involved long-term commitments, in this company’s case, upwards of 20 years. Now there
316 were some question, and I think there is still some question, as to whether or not the prices that were paid
317 in central Canada did not in fact reflect the losses that were involved in this particular export.

318 The NEB approved one other transportation facility, Alberta Southern which delivers gas,
319 ultimately, to California. It’s wholly export oriented. There’s no domestic markets served on route. The
320 company is also a wholly owned subsidiary of Pacific Transmission, which is, in turn, a wholly owned
321 subsidiary of Pacific Gas and Electric in California. It sells to its parent on a cost of service basis. Again,
322 there are horrendous accounting problems involved.

323 In 1971, the Canada yearbook contained the total volume of exports, and the total revenues that
324 we received. And if you work through the calculation, the average netback per thousand cubic feet of gas
325 is 24 cents. In 1971, the United States was beginning to make long term commitments to import natural
326 gas through cryogenic tankers from Algeria at a cost of a dollar a thousand cubic feet. When this country
327 finds itself running short of natural gas, we will import it from the Mackenzie Delta and we will land it in
328 Edmonton. And by the time it reaches Edmonton, it will cost us approximately \$1.66 a thousand cubic
329 feet. In other words, we see something of a problem of under pricing, to say the very least. In 1970, Joe
330 Green told us, that we had 923 years supply of oil, so basically speaking, nothing to worry about, and 392
331 year supply of natural gas. This year, as you know, we were told that in terms of our total domestic needs,
332 there will be a shortfall in production, beginning in the year 1977, and for that area to the west of the
333 Ottawa Valley line, there will be a shortfall in production beginning approximately 1982. I think one can
334 quite legitimately ask, what’s happened?

335 It seems clear that the National Energy Board, and our federal politicians, and the industry have
336 not paid any attention at all to the relative costs consideration. In other words, they’ve only considered
337 that total quantity that may lie in the ground, and have paid almost no attention to the relative economic
338 value of production from southern Canada as opposed to production from the frontier. In terms of the
339 frontier, they’ve paid no attention to the fact that its existence is really no more than a hypothesis. In
340 terms of its total capacity to produce, it’s apparent even now, we know very little about it. Thus far, the
341 information that we have isn’t particularly encouraging. It seems relatively clear that we won’t find any
342 Prudhoe Bays. As a result of that, we’re going to be looking at rather high exploration costs, high

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343 development costs, and of course high transmission cost. The long and the short of it seems to be that
344 we've exported, in terms of costs, the very best that we have. And we have imported, if you like, a
345 shortage and a substantial price increase.

346 The result of this is that we now basically face two choices. We can, on the one hand, go full tilt
347 into the frontier, and hope that it provides all that we need. Or we can, on the other hand try and slow
348 down the point in time where we rely on the frontier, and phase down the exports of both natural gas, and
349 petroleum to the United States.

350 In terms of the petroleum, we're talking about approximately 50% of our production, and in terms
351 of natural gas, somewhere in the vicinity of 45%. What happens if we chose not to offend the Americans
352 and instead simply say that we'll take the risk and go to the frontier? Well, we have of course, the price
353 increases. And I think that we should be clear exactly what they mean to us. There isn't an article in this
354 room that doesn't in one fashion or another depend upon petroleum, either in terms of the energy
355 necessary for it's creation, or in terms of resins, or in terms of the oil that is necessary for the machinery
356 necessary to produce. If we have uncontrolled cost increases, we're going to pay a very heavy penalty in
357 terms of our real ability to consume, in terms of product prices, in terms of our trading position, and in
358 terms, ultimately, of employment. To site a couple of examples, going to a Halifax drug store is a rather
359 amusing proposition because you have to find whatever drugs that have been given to you in the most
360 unorthodox containers, envelopes, small boxes, and once in a while, in a plastic vial. Their reason for that
361 is that they're basically unable to get the plastic bottles that they normally use. The reason for that is that
362 there has been, for a series of months, a world wide shortage of resin. The reason for that in turn, has been
363 that there has been an increasing emphasis on the production of things like motor gasoline in areas like
364 the United States, because of the shortage of input from the Middle East. So, they have adjusted their
365 refining so that some of the refined product is being excluded. We've also seen in terms of domestic
366 Ontario industry a 300% cost overrun in plastic production.

367 Another amusing thing for somebody who lives in the East coast: It's very difficult to get a quote
368 on building materials, in particular plywood. You can phone up a lumber yard and ask them to order a
369 given quantity and they will refuse to give you a price, and they will refuse to give you a timely delivery.
370 The reason for both things, is not that there is a shortage of the wood necessary to make plywood, because
371 there's plenty, is that there is a shortage of the resins. So that, in turn, has increased their power as sellers,
372 and they've used it to full advantage.

373 Now in terms of both those examples, it's not too serious. But if you look at some of the other
374 illustrations that have come from central Canada, it's considerably more serious. They've noticed there
375 has been a tendency for people to cut down their automobile use where it falls into particular categories.
376 And one of those categories is a trip to the large scale shopping centers. The result of that behaviour
377 response appears to be a rather serious and unusual decline in the retail trades. They've also seen it in
378 terms of the evening use of the central cores of the cities, and it's had an impact upon the restaurants and
379 upon theatres.

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380 What seems to be an issue here, a rather general downturn, and one which would further seem to
381 be eminently avoidable. If we turn to the frontier, we're also going to see the maximum in terms of capital
382 cost pressure. Over the next decade, we've got the following projects coming on stream. We've got James
383 Bay, and the latest estimate for that is \$12.5 billion dollars. We've got the Churchill Nelson, and that's
384 going to involve approximately \$2 billion dollars. We have expansion plans in Ontario Hydro, which will
385 involve \$13 billion dollars. We have with British Columbia Hydro and other systems, approximately \$5
386 billion dollars over the next decade and maybe more than that. We have a commitment to build refineries,
387 which equals approximately \$2 billion. We have Mr. Wilders, wild proposals for a McKenzie Valley
388 pipeline which involves \$6 billion. We have the polar gas route from Kinkister Island that will involve
389 approximately \$8 billion. We have West to East natural gas routes and twinning which are going to
390 involve about \$2 billion, and we have West to East pipelines extensions which will involve \$1 billion.
391 And we have the McMurray tar sands, which if we go for a cash program of development may involve as
392 much as \$20 billion dollars. Now when you add them all together, that comes out to approximately \$70
393 billion dollars, which is an awful a lot of capital.

394 Of all that list, only 3 are variables. We have option in terms of the McKenzie Valley pipeline, we
395 can delay that if again we chose to phase down the exports. The same thing is true of the polar gas route.
396 And more or less the same thing is true in terms of the McMurray tar sands. If we phase down the oil
397 exports, we can defer the point in time where we have no option but to go into a crash program to develop
398 the sands.

399 In terms of all the other expenditures, they're fixed items. If we're going to help ourselves at all,
400 we're going to have to do something about these three. If we do not, we face a perhaps upsetting situation.
401 We're going to have a large inflow of capital, a lot of it foreign, a lot of it from sources like Japan, and
402 possibly the OPEC countries. A lot of it will be in the form of US dollars, of which they have plenty. It
403 will cause a somewhat wholesale appreciation in terms of the relative value of Canadian currency which
404 will in turn have a rather serious impact upon Canadian manufacturers. In short we'll be watching the
405 evaporation of many of our comparative advantages, and our markets will contract rather sharply. For
406 some countries, this might not be too serious, but for a country that's said to be the 4th largest trading
407 nation in the world, it's a disaster. To the extent that there's a decline in secondary sectors, we're looking
408 at the same cycle of unemployment and all the consequence income affects internally.

409 Once again the answer to that problem is to shut off the exports of the conventional reserve area,
410 and attempt to maintain economic energy cost at some degree of stability inside the country. If we're
411 going to go to the frontier, we should do so as slowly as we can. In as much as it will involve bringing on-
412 stream production which is considerably more expensive. In other words, we should be trying to average
413 the high cost of, for example, production from the McMurray tar sands into as large a possible reserve of
414 low cost petroleum in order that we won't feel the cost increases as quickly in the domestic market.

415 There are a few other things that can be added to this list of resource sell-outs. We've got things
416 like Super Ports in the Canso Straight region in Nova Scotia, and of course in Newfoundland. And talk of
417 one in Lawrenceville in New Brunswick. We should perhaps be clear as to why we have these things

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418 being spoken of at all. The United States passed an enactment called NEPA which is short for the
419 National Environmental Protection Agency Act, and by it, America's citizens were given, if you like,
420 access to the courts to stop projects if they had doubts about it. In particular, the statute required that
421 anybody wanting to build a Super Port or thermal nuclear reactor, or any project at all that might in
422 anyway involve an environmental disruption that company would have to produce what is called an
423 Environmental Impact Statement which in turn would be subject to judicial review. As a result, the
424 location costs for any one of these industries rose rather remarkably. When you're talking about projects
425 of \$50 million dollars and more, in case of the Super Ports and the refineries. In some cases \$200 million
426 dollars, financing is a rather difficult and intricate problem and timeliness is essential, and a year or more
427 delay in a project can be fatal.

428 So the result of this enactment was that the companies which were most apt to be affected, or the
429 activities, began to look elsewhere for places to invest, and the eastern seaboard of Canada was a prime
430 target. It was a depressed area, few people would complain if somebody talked about bringing as many
431 jobs as are involved in a 200,000 barrel per day refinery. And in fact, just as an interesting digression,
432 John Shaheen, as I'm sure everybody has heard of, is responsible for the refining operation that is planned
433 for the Canso Strait. He, of his own initiative, asked about environmental studies, and was told by the
434 Nova Scotia government, their department of development, that they weren't necessary, and not to worry
435 about it. His response to that was to say that their absence might be the cause of so much grief in the
436 future, that he insisted that they be completed. So the only reason we know anything about what's likely
437 to happen to this region is not because of good administration on the part of the government involved, but
438 because of Mr. Shaheen's fear that there might be some reaction from environmentalists.

439 We have also a large thermal plant in New Brunswick which is, like most of these projects, much
440 bigger than is necessary for provincial needs. Again, the surplus is going to the United States. Again there
441 are all kinds of issues as to its pricing. And then we have, finally, a couple of smaller and projected
442 things. We have first a plan to build a fast breeder reactor system on Stoddart Island off of Nova Scotia;
443 again it involves an export market; again it involves unknown environmental risks.

444 Of course we have discussion of water export. In particular, three schemes. One by the name of
445 NAWAPA, which some of you may have heard of. It's short for the North American Water and Power
446 Alliance and it involves the routing of most of the waters of the western Cordillera, from the West to the
447 East, into the Rocky Mountain Trench, whereby it will be siphoned off to the South, but not before 20%
448 of the quantity that will be diverted into the trench; will be diverted into the East. In the minds of its
449 proponents, this diversion will facilitate both irrigation in the prairies, and also a navigation system
450 extending virtually from Vancouver, to the Arctic Circle, to the head of Lake Superior. They
451 supplemented this aspect of this proposal with a barge canal operation going into James Bay, and also a
452 barge canal going up as far as Hamilton Falls.

453 Now there are a number of problems involved with this, as I'm sure everybody can imagine. First
454 of all, the trench reservoir itself. There's been some question as to how much total weight is involved in a
455 reservoir that large, and whether or not, if it was built, it wouldn't cause something of a wobble in terms

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456 of the earth's rotation. The second problem is if you pour a bucket of water into the head of Lake
457 Superior, it takes upwards of a decade before you can measure that bucket at Montréal. Now if you add to
458 that fact, the fact that it's impossible to predict with any certainty, precipitation variations from year to
459 year, you come to the conclusion that perhaps there's far greater risk involved in this whole suggestion
460 than is acceptable. In particular, if they pour the quantities of water that they suggest into Lake Superior,
461 and we experience a high in terms of regional precipitation, we may be looking at a flood of dimensions
462 that was virtually unprecedented. If they wanted to deliver the quantity of water that was involved in this
463 project, it would be better off to link up Great Bear and Great Slave Lake with Lake Winnipeg, and take
464 advantage of the fact that the geography, throughout this whole expanse, is flat and ideal for the
465 transshipment of water. He said that we could deliver far more cheaply and with far less environmental
466 cost. He did not mention any economic problems that might be involved, or mention any problems in
467 terms of economic return.

468 The third proposal was to catch water as it flowed into James Bay, and create what was called a
469 freshwater catchment by means of dams, and then reverse the Haricol(?) River so that the freshwater
470 flows that now go into James Bay, would go into the Great Lakes where they can be siphoned off in the
471 United States.

472 Now I think if nothing else, all this shows we have had a tendency really to not pay attention to
473 some of the problems that have been flushed out by our past experiences. And again I'd say that the
474 Columbia is the chief illustration of some of the problems we can get into. It offered us really basic, very
475 simple lessons. We should be careful in terms of when we develop. We should be careful in terms of
476 appraising, as best we can, the value of the resources that we're developing. We should start with the
477 presumption against exports because it appears on balance that the pricing problems and the overall risk
478 to us as the exporting country is simply too great.

479 Apart from that though, I think there is also a lesson in terms of Federalism in all this. There's
480 been a lot of debate about Centralism vs. Provincialism, but it seems clear that in terms of these projects,
481 we are talking about national resources, and they should be managed accordingly. If the history says
482 anything, the Provinces will simply not do that job. In terms of constitutional authority, there doesn't
483 really appear to be much doubt. The Federal government has the power. It seems somewhat reticent to use
484 it. That's all for me. If anybody has any questions or comments?

485 **Professor Cook:** Ladies and Gentlemen, in case you are not aware, the coffee is ready. Please help
486 yourself if you'd like to have one. Please direct any questions.

487 **Audience:** You once said that the Americans were great negotiators with unparalleled skills... [inaudible]

488 **Mr. McDougal:** I think in terms of the Columbia I don't think there was any doubt that they were. But
489 not all of these have involved government to government negotiations. In fact, most of them have not, so
490 in some cases, it just has not involved negotiation. But the answer is that I think that they're very good,
491 and its where it matters.

492 **Audience:** Can Canada quit exporting? Are they committed now to the United States already?

493 **Mr. McDougal:** Depends on which ones you're talking about.

494 **Audience:** In this petroleum, natural gas, and hydro electric.

495 **Mr. McDougal:** Well natural gas, natural gas and oil involve privately made contracts, from one
496 company to the other, again, often between parent and subsidiary. The contracts are made in light of and
497 with notice of the National Energy Board Act. And the Act, under Section 17 and Regulation 11A, sets
498 out the power to review all the export contracts, amend them, vary them, resign them, do whatever it
499 wants. So, in effect I think you can argue that the private parties are in legal notice of the fact that the
500 arrangements that they make may well be subject to diffusions by public authority. So in terms of the law,
501 as respects, private contract, there's no doubt that they can. In terms of the federal provincial problem,
502 Ottawa, and Alberta, or for that matter, British Columbia, it doesn't seem to me there's much doubt
503 either, I mean, exports are clearly within the federal jurisdiction. Yeah I think they can, but if what your
504 leading to is what will the Americans do, I think that's a little more open. I think that it's pretty clear that
505 we can't turn them off over night. Notwithstanding the fact that they only rely upon us in terms of gas to
506 the tune of about 7%. That 7% is a market larger than ours. So we're talking about an enormous vested
507 interest, and they will respond accordingly I would think. But on the other hand, I think phased-in
508 reductions such as, for example 10% per quarter year. Which means the bulk comes in the first year.
509 Phased in reduction that was generic, ie did not aim at any one particular system, and that allowed the
510 total reduced flow from Canada to go into the market of greatest need would be not totally unpalatable.
511 Certainly it would be no more unpalatable than the imposition of the export tax which you may recall,
512 caused a great hue and cry in the United States. And a great feeling that we weren't terribly good
513 neighbours.

514 **Audience:** There's little movement in this direction; it seems to be going the opposite direction. More
515 exports?

516 **Mr. McDougal:** Well since June 1968, the national export policy dealing with oil particularly it's been a
517 bit of a myth. The policy has always been that we balance imports and exports, and from 68 on, you're
518 quite right. The imports fell far short over exports, or other exports rose. But it wasn't that kind of a
519 policy, I mean, the only failing on the theory behind natural gas development and the export market, was
520 that the export market should be used as a means of leveraging up projects that wouldn't otherwise be there
521 and also provide natural gas service to Canadian markets that otherwise wouldn't have it. Now they failed
522 in the sense that we allowed the largest of the export systems to be wholly export oriented, and didn't
523 provide the spin off benefit to any domestic market. So it is perhaps a little different, but in terms of oil,
524 what you said was quite right.

525 **Audience:** Regarding the Columbia River Treaty, what do you think the federal government can do now?
526 Is there anything that can be done?

527 **Mr. McDougal:** I can't tell you how to renegotiate, but what I can say is you know, in terms of what we

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528 want, or what I think what we should want. First, we want more flexibility. Second, we want to make it
529 clear we are not making a commitment for all time to provide or allow the present flow to continue at its
530 historic rate. Third, I think we might like the ability in some point in the future to recover some of the
531 land that's been lost, or obtain compensation which more closely reflects the benefits that are being
532 received as a result of our land being inundated. Is that good enough?

533 **Audience:** Do you think the provincial government will be able to get the federal government to start?

534 **Mr. McDougal:** I don't know. I don't know. I don't think that's the only way though. I think there's a lot
535 of things that could be done, if I could just tempt you with that and leave it, but I think there are many
536 things that could be done. Look it's not giving any secret to say this, there are two basic problems. The
537 first is, trying to decide, as a matter of priority what's wrong with the Treaty. I mean, you've heard all the
538 critics. You've heard 101 different theories as to why it's a bad deal. And in my view, although I'm sure
539 there are people here that will correct me quickly, but in my view, almost all of them are right. So you
540 have to decide as a matter of priority which things you will deal with first. The second thing you have to
541 do is you have to look at the method of achieving it. If you decide the only thing wrong with the Treaty is
542 that, you know, there are clearing costs that were unaccounted, you know you're talking about a few
543 million dollars, and you don't have to do very much to achieve that. I'm sure it would be a lot easier than
544 if you were talking about a wholesale change of the system, and asking for, say, asking for 50% of the
545 flood control benefits received each year, or asking for a reformulation of the payment for downstream
546 power benefits in view of the fact that that power is being used for peaking purposes. So your strategy has
547 to be appropriate to the things you want to correct, and you have as many options as strategies, you have
548 in terms of problems with the Treaty.

549 **Audience (Time Newton?):** Mr. McDougal, you're always appealing to a sort of nationalism, and on an
550 emotional level here that's very difficult to sort of comment on. Half of the total power you say is
551 developed in Canada. I believe the Columbia starts at about 2800ft and crosses the border at 1400 feet?

552 **Mr. McDougal:** Can I interrupt for a second. I didn't say that half was developed. I said that the potential
553 to develop half the potential. I was advocating just so I can flesh out your question. But I was advocating
554 that sequence 9A diversion when I said that, which would have involved both the Kootenay and the
555 Columbia.

556 **Audience (Tim Newton?):** And would it also involve the Fraser then?

557 **Mr. McDougal:** No it would not have involved the Fraser necessarily, but it would have provided the
558 Fraser as a physical possibility, which it certainly is not at the present.

559 **Audience (Tim Newton?):** Going back to the power potential, surely the vast majority of the potential,
560 that building the power in Canada was actually developed by projects in Canada, for generation in the
561 United States?

562 **Mr. McDougal:** That's true now, without question that's true.

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563 **Audience (Tim Newton?):** How could this be developed within Canada, other than damming the Fraser,
564 which we would all agree here is politically and environmentally disastrous?

565 **Mr. McDougal:** I think the largest possible scale development of Mica Creek, with all the projects that
566 have been planned subsequent to Mica Creek, by the largest possible development of Mica Cree, I mean
567 the Dorr-Bull River-Luxor sequence, might well have given us an amount of power generation here,
568 would have approximated half the potential in the total system, as I understand it.

569 **Audience (Tim Newton?):** I think it's quite out of the question, because elementary geography tells you
570 that the lower half of the river has more flow than the upper half, yet there's only half of the drop in
571 Canada, and half of the drop in the United States. And power is a product of drop and volume of water.
572 There must be more generation in the United States.

573 **Mr. McDougal:** Well I think we have more than half the drop... do we not?

574 **Audience (Tim Newton?):** We do not.

575 **Mr. McDougal:** Wait a second.

576 **Audience (Tim Newton?):** We have a great key point here.

577 **Mr. McDougal:** We have 26% of the flow... I think it's even higher than that. I think it's 28% of the
578 flow and in terms of the Kootenay, we've got considerably more.

579 **Audience (Tim Newton?):** [inaudible]

580 **Mr. McDougal:** No but in terms of the development potential of the Kootenay as a shared subsystem, I
581 mean, we've got most of its potential, but I agree of course.

582 **Audience (Tim Newton?):** Its largest potential is actually downstream benefits, and this can only be
583 developed through a treaty.

584 **Mr. McDougal:** But there's no argument that there shouldn't... the point of all this was not to say that
585 there shouldn't be a Treaty. I think a Columbia Treaty makes a great deal of sense, it was really, it only
586 went to the terms of that Treaty. And the degree in which we got the best deal that we could, and I think
587 arguably, a better deal would have involved more power being produced here. We should have tried to
588 capture whatever scale of economies were potential to a large scale power development if we were going
589 to do that at all, and not aimed at an arrangement which vested a preponderant degree of control in the
590 United States, and exercised principally downstream benefits. And furthermore, we should not have
591 gotten involved in the long term sale of those downstream power benefits. The points are no more
592 involved than that. I mean, would you agree or not?

593 **Audience (Tim Newton?):** I agree with the sale.

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594 **Mr. McDougal:** Well no sorry, answer me. Do you agree with that, or don't you?

595 **Audience (Tim Newton?):** Well, the cheapest power was the downstream benefits, from an economic
596 point of view. There's a way of producing power, it was environmentally least destructive over flooding
597 the whole of the East Kootenay Valley.

598 **Mr. McDougal:** But there's no issue of downstream power benefits. I mean if you stop up the dam at
599 Mica Creek, you create downstream power benefits.

600 **Audience (Tim Newton?):** And you can only call them with a Treaty.

601 **Mr. McDougal:** Well I'm sorry.

602 **Audience (Tim Newton?):** You get nothing for them...

603 **Mr. McDougal:** Heaven's above. I mean why would you not try and if you build Mica Creek, why would
604 you not try and recapture some of the downstream benefits. I mean in 1954 when Kaiser suggested we
605 build at Mica, he was offering to return there. It doesn't seem to me that, I mean, what your
606 propositioning it seems to me is to say if we build Mica Creek we don't get any downstream benefits.
607 And frankly I think it's a ridiculous proposition.

608 **Audience (Tim Newton?):** I think that is exactly the position we'd be in if we went to renegotiate the
609 Treaty because they get the rights and the results of Mica being there. The physical structure is already
610 giving them the vast majority of those downstream benefits.

611 **Mr. McDougal:** You know, I have no comment about renegotiation. I mean frankly, I certainly accept
612 this. I mean, if I were the United States, I wouldn't hear of renegotiation. Why the hell would I want to do
613 that? I wouldn't even want to talk about it.

614 **Audience (Tim Newton?):** I'd say great. I'd start by paying you nothing. And they've got all the
615 downstream benefits as a result of the dams being there.

616 **Mr. McDougal:** Ok same point, but made better. I agree.

617 **Audience (Doug Forrest?):** Same point about the accuracy. I think this question has been brought up
618 several times about the, the fact that the US got 200 million dollars in 1972, and we got 69 million and
619 whatever it was for...

620 **Mr. McDougal:** There's an adjustment value...

621 **Audience (Doug Forrest?):** 25% of that was provided by Canadian storage, and 75% of that is by US
622 projects.

623 **Mr. McDougal:** Which, ok...

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624 **Audience (Doug Forrest?):** This has never been brought up in these kinds of statements. And you make
625 a comparison of 69 million vs. 200 million? Where as it should probably be 50 million vs. 69 million. I
626 think this is very misleading.

627 **Mr. McDougal:** No wait a minute, now I really am confused.

628 **Audience (Doug Forrest?):** Ok what I'm saying is...

629 **Mr. McDougal:** The 69 million for flood control represents, that volume of protection, or amount of
630 protection that can be attributed to Canadian projects. The existence of American projects doesn't seem to
631 me has any bearing on that

632 **Audience (Doug Forrest?):** Because you saying...?

633 **Mr. McDougal:** In terms of downstream power benefits I think, well obviously if you haven't got a
634 downstream project, you haven't got the potential to take much advantage of the fact that you've got more
635 storage upstream. But so what?

636 **Audience (DF?):** So what? You said there was 200 million dollars worth of flood control benefits in
637 1972, and of that 200 million dollars...

638 **Mr. McDougal:** Actually 214 million, and...

639 **Audience (DF?):** Approximately, it's been estimated, approximately $\frac{3}{4}$ of that has been provided by US
640 projects.

641 **Mr. McDougal:** Well that's an estimate I haven't seen, but I'll only say this. That Libby Dam in my view
642 is not totally a US project. There are only 3 Treaty projects we're talking about. If that figure was only
643 talking about 3 projects...

644 **Audience (DF?):** The 200 millions...

645 **Mr. McDougal:** Or 4 projects I'm sorry, it was talking about Libby, Duncan, Mica, and High Arrow. But
646 three of them are totally in Canada, and a good portion of Libby is in Canada. So Canadian resources are
647 involved in each one of them. So for you to say...

648 **Audience (DF?):** in the basin to provide flood control.

649 **Mr. McDougal:** But that 214 million dollar future once again was...

650 **Audience (DF):** I don't think that's right. That's the total.

651 **Mr. McDougal:** Well, I'm sure I can check it right now, because I've got the article from the Northwest
652 Utilities publication is in my brief case. And they say particularly Treaty projects, so I'm sorry.

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653 **Audience (DF):** That's not correct.

654 **Mr. McDougal:** As a matter of fact, when I think about it, there's corroboration of it in Bonneville
655 Power's publication, or annual report of last year, you will find exactly the same statement. So, I'll say to
656 you, what you just said to me ... you better check your sources. Any more?

657 **Audience:** You're forgetting that the Treaty has a base system. And the base system, 10 million acre feet
658 of storage, was also included, which is what he just talked about.

659 **Mr. McDougal:** I'm sorry?

660 **Audience:** The Treaty has a base system, and that figure which you just quoted, because I checked with
661 BC Hydro on this very specific, includes the base system. This gentleman is quite right. Canada provides
662 not more than 23% of the storage which has produced that benefit.

663 **Mr. McDougal:** Well, again, we're in a bit of a deadlock because there's certainly no question in my
664 mind that in both those sources, it's not what it says, contribute to the Treaty projects. And certainly we
665 can check it, whether we want to do it right away or do it later that's fine. It wouldn't seem to me to make
666 much sense for the Bonneville Power Administration to produce a document that cites that figure and
667 attributes it to Treaty projects in view of the fact that the Treaty is so controversial. I suspect that they
668 were rather careful about the figure. And I suspect that it's quite true.

669 **Audience:** Even to the extent it was only 50 million dollars, it's still a pretty low payment.

670 **Mr. McDougal:** Sure, sure there's no argument.

671 **Audience (TN?):** Last year we got no flood control benefits, we provided no flood control what so ever.

672 **Mr. McDougal:** There's no question but that it was an exceptional year. I mean it was...

673 **Audience (TN?):** Highest of the century.

674 **Mr. McDougal:** Highest of the century? Sure it was an exceptional year. But it also, the year following
675 where you said there was no flood control benefits, which I find difficult, that is also an exceptional year
676 too. I mean the systems experience extreme fluctuation, which is very, very unusual. The coincidence of
677 those two years is really, very surprising.

678 **Audience (DF?):** We lost the chance to develop a good part of the power potential on the Columbia. I
679 guess what you mean there is that we lost the right to divert the Kootenay?

680 **Mr. McDougal:** Well, we haven't totally lost the right to divert. We've got limited, as you know.

681 **Audience (DF?):** This is the point you're making, or referring to, the fact that we can have addition
682 power on the Columbia if we diverted the Kootenay?

683 **Mr. McDougal:** We can have additional power.

684 **Audience:** And we lost that, or a good part of that because of the Treaty?

685 **Mr. McDougal:** Well, we lost that in terms yeah, we have. We can make diversions from the Kootenay,
686 but they are prescribed as to an amount, and they are prescribed in terms of the times in which we can
687 make them. So you know, it does no good to us to have the capacity to make a small diversion with a very
688 expensive project and add 10 mill power on top of that for which we are producing for Mica. It might be a
689 worthwhile option if we had the capacity to make a very large diversion and thus maximize the inherent
690 scale of economies in that sort of project.

691 **Audience (DF?):** The problem I agree that we lost some potential there, on the other hand you've been
692 crying the fact that part of the most valuable land is flooded in the East Kootenay Valley. If you did this
693 diversion you'd flood probably I don't know how much more of that valuable land. You can't have it both
694 ways I don't think.

695 **Mr. McDougal:** There's no question that you'd flood more, but if you flooded the northern reaches, for
696 the purposes of setting up something such as sequence 9A, you'd have no need to have Libby. I think, the
697 point you're making, it seems to me sort of ridiculous to talk about that now. And, I frankly agree.
698 There's no way that we're going to be able to render Libby dam useless by pre-emptive diversion moves
699 in Canada unless we're prepared to face American tanks. And frankly, if I were an American, I'm sure if
700 anyone else were here, they'd feel that attitude was justified. I'm sure that's quite so, but it still doesn't
701 alter the fact that we had the potential at one time to engage in a project which, on balance, seems to have
702 been far more productive in terms of producing power; productive in terms of providing us with options
703 in which we have not got now. And in particular, the Surprise Rapids question, maybe even the Fraser
704 question. And if they dam the Fraser for flood control purposes, we might just as well go full tilt and use
705 it for power. And also, we could have, as an option preserved the Arrow Valley, whereas now we haven't
706 got it. That's the only point. So the opportunity cost of entering into that Treaty in terms of the alternative
707 is very, very high... intolerably high in my view.

708 **Audience (TN?):** To get back to this power potential, you've obviously gone for flooding the East
709 Kootenay valley, instead of flooding the Arrow. Now, I gather 10 years ago, before environmental
710 lawyers were the vogue; it had been rejected on environmental grounds.

711 **Mr. McDougal:** I think that's right. By the way that title was used by somebody who wrote a book, not
712 me. As a matter of fact, I don't teach environmental law, I teach natural resources law, but that's an aside.
713 From the standpoint of environmental effects, I don't think there's any question but that there'd be an
714 unparalleled hue and cry if anybody talked about diverting into the Fraser. Indeed when the subject was
715 brought up, in 1955, and studied in '56, that's exactly what happened. However, in saying that, not
716 withstanding the fact that there are environmental costs, it seems to me that it makes sense to look at the
717 productivity of those sorts of projects as fully as you can. You know, even as much as they are an option.
718 And that wasn't done with the Fraser diversion. I mean, if you look at the BC Engineering study what did

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719 they assume? They assumed instead of the proposed 50 million acre feet diversion, the cut it down to 10.
720 They assumed there to be no dam in excess of 100 feet in height. They assumed 308 million dollars worth
721 of fish ladders to be incorporated in the dams. They assumed the whole thing would be done by power
722 development, and as a result of that assumption of course the cost factor was escalated enormously. There
723 was no way that that was any kind of real, open, full study of the potentials of a Fraser diversion. To the
724 engineering profession, I think it's just a monumental disgrace. Same thing with the Surprise Rapids
725 question. What did they do there? I believe it was a Montréal engineer company, although I might stand
726 corrected. You know they say, or the Treaty critics say, "Lets divert water to the Prairies". Right, you
727 know that's a little risky saying that, and as much as it's a pretty involved, complicated, expensive project
728 to appraise. And it's fair enough to criticise the critics for that one. But what's not fair is to set up a study
729 that examines: A) power benefits, and concludes on that point that they're not worthwhile, and then; B)
730 separately and independently consumptive benefits and conclude on that basis that they aren't worth
731 while. You know there never was an integrated study of the total multipurpose potential where you used
732 power generating on the east slope of the Rockies as a method of subsidizing consumptive uses. You
733 know we just don't now know anything about the productivity of that project other than the engineer's
734 polemic, and if you read the report that's exactly what it is... a polemic. Written in very, very emotional
735 terms.

736 **Audience:** [inaudible]

737 **Mr. McDougal:** To my knowledge, no it hasn't. The principle provision is section 17 11A is a regulation.
738 And they have said something to the effect of "it's a premise of the Board's approach to the regulation of
739 the oil industry not to have export factual variation of privately made contracts." They felt that if they did
740 so, they'd disrupt the orderly development of the industry in Canada and create something of a relations
741 crisis. Now, it's interesting when you think about that for a bit because, the Parliament of Canada in its
742 infinite wisdom passed that enactment with that provision. And frankly, who the hell are the National
743 Energy Board to de facto repeal a provision passed by Parliament? It's there for a purpose. They
744 shouldn't be saying in open reports that they won't use the powers that they have.

745 **Audience:** [inaudible]

746 **Mr. McDougal:** The ultimate sanctioning of whatever the NEB recommends would be a Cabinet
747 decision. Yup, there's no question. It would have to be, and there would be hearings involved. There's
748 some scope, incidentally, for an administrative law action on exactly this point. Not only is there scope,
749 but there's very good potential that somebody will bring one in the next few months and try and force
750 them to use their statutory power to review.

751 **Audience (Ralph Legge?):** You seem to be rather against large projects of various sorts. I was
752 wondering how it's possible to study all the environmental effects of any projects without looking at a
753 rather large scale. For example, you were mentioning James Bay and that most of these things seem to get
754 down to politics and the politicians in power at the time decide what to do. And usually studies are carried
755 out to prove that sort of thing. But I would agree with you, there needs to be some sort of a National

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756 policy established by the Federal government on any sorts of projects. But how are you going to do this in
757 a little Mickey Mouse sort of way? Or large projects, where they are looked at properly under some body
758 that's a little removed from politics? How do you suggest....

759 **Mr. McDougal:** I don't think there's anything wrong with large scale projects. In fact I don't even think
760 there's anything wrong with arguing that in some cases you should serve the export market because you
761 get scale economies. But the problem seems to have been, that wherever we use the rationale, and the
762 rationale isn't all that bad, it hasn't born out in reality as being true...

763 **Audience (RL?):** Usually it's because the government of the day decides that we're going to do this, and
764 we're going to make sure we get studies or whatever...

765 **Mr. McDougal:** And that's the major problem, but it just seems to me that the experience has been so
766 repetitive, that maybe the only lesson to be extracted from this is that we should never get involved in
767 something like this because the risks are too great. The risks are a viewpoint of a government of saying
768 you know, this is development, therefore it's good, therefore let's have studies to justify what we're going
769 to do.

770 **Audience (RL?):** But you can't be an island in the world.

771 **Mr. McDougal:** What do you mean? It's not a matter of I'm just suggesting that we be an island in the
772 world. I'm just suggesting at the very least we be considerably more efficient at appraising the
773 consequences of our decision-making. I mean there's no argument....

774 **Audience (RL?):** The problem usually seems to be that somehow the lack of Federal leadership,
775 somewhere. Now how do you propose that that problem get solved? In other words, you know, you keep
776 on going, same thing that's been going for the last couple of years....

777 **Mr. McDougal:** What do you mean? I don't understand...

778 **Audience (RL?):** Well, there has to be somebody to say: "Look, you know all these studies have to be
779 done". And the federal government for example: the McKenzie Delta area had carried out studies,
780 probably 15 years or so before the Peace River Development, saying this is what's going to happen... it
781 sort of died there. I guess it's ...

782 **Mr. McDougal:** Your complaint is not as to the fact that you need a body to study it. Your complaint is it
783 having got the studies, and the conclusion from the studies, they didn't act on it. Well how are you going
784 to get them to do it? I don't know how you're going to get them to do it. I suppose by trying to persuade
785 them to use the constitutional authority that they have and build up a tradition of using it.

786 **Audience (RL?):** But they haven't so far.

787 **Mr. McDougal:** But yes they have though. We stopped using 9210C which is a general advantage
788 provision as recently as 1961. There was a tradition of peremptory federal involvement, where they

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789 thought it was worthwhile doing, so what we're talking about is a comparatively recent phenomenon. It's
790 not only in respect of that provision, we have this thing called "peace-oriented" government right, and
791 we've recently had a couple of Supreme Court cases that appeared to expand the authority of the Federal
792 government under that head enormously. So you know, the recent phenomenon on the one hand, is that
793 the federal government haven't used their authority, but on the other hand, we've got this apparent judicial
794 expansion of the authority in theoretical terms. What the answer is, I don't know, except to say that it
795 doesn't seem to me that's a constitutional revision. It's really more a question of getting down to... brass
796 tacks.

797 **Audience (RL?):** You see, the provincial governments have managed to say these are our resources, and
798 go and do what they want. That's what BC did with the Peace... and Alberta with the gas and oil...
799 Saskatchewan with the potash. This goes right across the provinces.

800 **Mr. McDougal:** Saskatchewan didn't do it with the potash to quite the degree they wanted to, not
801 because....

802 **Audience (RL?):** It's all different shades of greys....

803 **Mr. McDougal:** Well this is a really interesting shade of grey because the biggest bar to potash
804 development in Saskatchewan wasn't the government of Canada, but the government of the United States
805 applying its own added trust provisions as against a proposed cartel which involved entirely Canadian
806 operations. So you know, interesting. Anyways, I don't know, it seems to me clear that when you talk
807 about resources of this magnitude you can't leave it to the provinces because sometimes they're
808 physically connected to another province, and in other cases, where they aren't physically connected,
809 they're so important in terms of their ultimate impact on the GNP that they have obviously spill-overs in
810 terms of their economics to other provinces. And it's clear that we need something to accommodate that
811 reality. And to make sure that we don't have a situation like the Churchill Nelson, where Manitoba has
812 chosen to ignore upper riparian interests in Saskatchewan, or like the Columbia where British Columbia,
813 the government of the day really chose to ignore whatever future potential the thing had for all Canadians.

814 **Audience:** Maybe some of the Middle East oil producers are now going to give Canada a good
815 illustration of how to use their natural resources, and are starting to assemble a history against fossil fuels.

816 **Mr. McDougal:** Maybe they will... seems likely that they will. You know it's funny, just on that point,
817 you know that the biggest loop that they could throw us for would be cutting the price in half. You know
818 next year or the year after, if they wanted to. I would think that the economic advisors to OPEC must have
819 a horrendous job on their hands, because they're building up an enormous reserve, and they have, in
820 effect, the power to determine how much those reserves will be worth on the international market. It's an
821 involved problem. You must have 1 or two things for me Dale –what?

822 **Audience:** What about the constitution?

823 **Audience:** I know George would be disappointed if you and I didn't get into a little argument. I think I

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824 disagree with everything you just said....literally! But I don't think it's fair for me to say I even disagree
825 with your economic position.

826 **Mr. McDougal:** With my who?

827 **Audience:** With your economics. But I don't want to pursue you on the topic of oil and natural gas. One
828 of the things that worries me, let me just say 2 things about your position there. I think you forget some
829 economic history. I'm old enough to remember the difficulties we had in getting the West Coast
830 transmission line going 20 odd years ago in the province. We could have built it on our own. We've paid
831 in the last 20 years about 3 times as domestic consumers for that gas. The Americans knew this. They
832 bargained in a very sophisticated way, but also, the American Southwest was fighting at that time, for a
833 Pacific Northwest American. This story, I just suggest it is more complex than you suggest. If we were to
834 accept your argument completely you know, I just can't help but ask myself this question. If your thesis is
835 valid, if you stop to think about the fact that until 1950, virtually all the petroleum we used in this
836 province was imported, most of it came from the United States. Still at best, the amount of coal comes
837 into Ontario. In logic, your argument would have to be applied to the Americans as well, and I find this
838 very critical of the....

839 **Mr. McDougal:** Before you go into the next part, can I just say 1 or 2 things.

840 **Audience:** Sure.

841 **Mr. McDougal:** It's true that most of our oil comes through the United States, rather than from the
842 United States. It's routed through... most of it's through the port of Montreal Pipe facility.

843 **Audience:** That's not my point. My point is from until 1950, there was no domestic oil in the straight
844 except for a few wells. Most of it came from California, Pennsylvania, and Texas. And we got it, for the
845 American price, plus transportation costs. They didn't insult us.

846 **Mr. McDougal:** But they're getting it...

847 **Audience:** With their pricing policy, you're suggesting that we soak them back.

848 **Mr. McDougal:** But they're getting it for less than the Canadian price.

849 **Audience:** I'm not sure that's true.

850 **Mr. McDougal:** Well, it's certainly been true in relation to the West Coast.

851 **Audience:** Well you're comparing apples and oranges. I know a bit about West Coast that you can make
852 a rather tough comparison between the price you select with trade with cost, and the price the American
853 purchaser pays. It's an apples and oranges situation. The American purchaser is a pipeline distributor. He
854 wasn't distributing to domestic customers. US costumers who buy gas didn't pay less.

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855 **Mr. McDougal:** Well, I'm just trying to remember. They used a formula, if I recall, that involved
856 averaging the cost between Portland, Seattle, and a third city, less transportation expenses, so it ended up.
857 So I don't think that's right, they ended up, those cities in any event, ended up paying considerably less
858 than Vancouver consumers.

859 **Audience:** We were out to tap the source that was 600 miles or more away, in some cases, 1000 miles
860 away. Let me come back to the Columbia and make a few observations. I'm just fascinated by your initial
861 reference to Mr. Bennett's *raison d'être* with respect to the Peace. For this reason, I think you will reflect
862 that your conspiracy theory that was developed in Ottawa, in the later part of 1960, which goes something
863 like this. Mr. Bennett didn't really want to develop Mica at all, he did however, go along with the thing,
864 but he did his best to kill Mica, but he wanted Arrow and Duncan... high benefit cost ratio projects that
865 could produce quickly a stream of benefits which were far more than the loan costs. He would take this
866 money and apply it to the Peace. This is in effect what you said. Well you know what, this is just hoax.
867 There was never, any prospect, any prospect at all that the Columbia would produce that kind of surplus.
868 You're as aware as I am, that Mica was in the Treaty. I can tell you where this misconception came from,
869 it's part of the tragedy of the fight that's developed between Ottawa, and Victoria...

870 **Mr. McDougal:** I didn't say it would produce a surplus by the way, I only said it would produce short
871 term capital necessary to accomplish the financing. I agree with you. I don't think that they ever thought,
872 that anybody ever thought, that they would produce the money necessary to cover what was then
873 estimated as \$800 million to build the Peace. So there's no question about that that's true. In terms of the
874 Ottawa conspiracy theory, actually, it didn't really come from there, it, quite frankly came from here, and
875 it was, and I admit it at the onset, a rationalization that was one among many. You know, it may not be
876 right, but certainly *de facto*; we did have those things occurring in sequence...

877 **Audience:** Until the late spring of 1961, Mr. Bennett was hoping that a private corporation, the first
878 Boston Corporation and then in New York and Boston would carry the Peace for him. This hypothesis
879 which you have, although quite sure you developed it impeccably, has been widely held in Ottawa since
880 '60, '61.

881 **Mr. McDougal:** Can I make another point on that though?

882 **Audience:** No, my point first and they you can give yours here. This is where it came from, late in
883 (19)60, chief staff advisors to the British Columbia government said to the provincial negotiators "Look,
884 as we perceive now, the development of the Columbia, after Arrow, and Duncan are built, the sensible
885 thing to do is to come in with the Canal project. And then the next thing wisely probably to do is to come
886 in with the Seven-Mile. In short, let the system go about this." So you see obviously that what they were
887 hoping to do, was to once they built Mica, get it machined as quickly as possible, so they started to say to
888 their advisors in November, December 1960, "Try and get some flexibility in the timing of Mica, built
889 into the Treaty". Now the federal people had 2 responses to this. In the first place, they said to the
890 provincial people not unreasonably, you're assuming you can do that and retain a first added position. It's
891 not at all clear that you can. But the other thing they said to themselves was, this really is the price, trying

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892 to sneak the Peace by the back door. Trying to defer Mica two years, but BC staff advisors were as
893 opposed to the Peace as anybody in Ottawa. The federal government was completely disturbed with what
894 was a very proper staff position here, and came up with the theory that Bennett really was out to defer this
895 darn thing for the purpose of financing.

896 **Mr. McDougal:** For Heaven's above, there are a couple of things that are readily confirmable. One of
897 them is that they operated on an 8% load growth theory, and that came from the advisors, not from the
898 government. And the other was that in view of the projected load growths, they could not absorb a
899 maximum power development on the Columbia, and a maximum development on the Peace. Therefore,
900 they knew from a very early stage, long before 1961, that they were going to have to make a choice. So
901 when you say to me, well, Mr. Bennett, Prime Minister (sic) Bennett was hoping for foreign financing of
902 the Peace, it doesn't really answer the question. In point of fact, regardless who built the Peace, the
903 viability of that project was tied to serving the Lower Mainland. And if you had the competitive entry of a
904 more efficient development on the Columbia... no Peace project. So he never, the Americans, somebody,
905 suggested they were shrewd. You did in relations of West Coast. They were shrewd enough to know that
906 there would be no point in devoting 800 million dollars to a Peace project if you're getting a maximum
907 development on the Columbia.

908 **Audience:** [inaudible]

909 **Mr. McDougal:** Well, but I was trying to suggest that there was a choice involved, that they made it in
910 favour of the Peace, and all else followed.

911 **Audience:** No you said that your theory is that Bennett was out to milk the Columbia to launch the Peace.
912 And that's simply saying, not supportive of what's what.

913 **Mr. McDougal:** Well actually what I said were two things. I said:

914 1. He was interested in ensuring that there was not competitive power development on the Peace, and

915 2. He was interested in using it as a vehicle for short term capital. Which is in fact what he used it for. But
916 there's no arguments that...

917 **Audience:** No Columbia money?

918 **Mr. McDougal:** Much of the \$274 million dollars is in fact invested in the United States. Nonetheless,
919 he's got the asset there, and it made it possible to do financing which otherwise would have been
920 impossible.

921 **Audience:** Let me move on to my second point here. You asked a rhetorical question, what have we lost?
922 In the beginning of your list and the end of your list you referred to power. And what you're saying
923 implicitly is we gave up the opportunity to go for maximizing the output of power potential on the
924 Columbia in Canada, as our basic objective. You'd be interested, the first speaker in this series, Mr.

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925 Green, took precisely the same position, and took it incidentally in 1960. In his opinion that's what we
926 should have done. It just so happens that the government of British Columbia decided fairly early in the
927 game that that's not to be. And that's the sensible objective. And I think federal states have to step up to
928 the implications of conflict of this sort. Particularly when the province said, we believe it vitally necessary
929 to engage in an incremental analysis of the cost of adding increments of power, and we believe also on the
930 importance of considering non economic issues. That's one that Krutilla pointed out. One of the ways we
931 left maximum power equalization was, to put out that clause for 60 years, the prospect of a Fraser
932 diversion. And I'm delighted we did. I hope we never do. As associated with that point, you list the costs
933 of flooding the Arrow Valley, and the costs of flooding the Lower Kootenay. Fair enough. Sure there are
934 costs associated with any reservoir project. But again as one of these fellows pointed out, you do not, in
935 the way you talked cost, the costs of flooding the East Kootenay, and you were obviously implying we
936 create a benefit in additional power. This is again comparing apples and oranges.

937 **Mr. McDougal:** Well I don't think that's quite fair. Maybe I should have gone through the exercise of
938 drawing the major alternatives out, and compared the overall efficiency, or tried to set some comparison
939 in terms of the overall efficiency, and the overall costs involved in each. I think it's clear we had an
940 option in as much as we could have opted for a sequence of development that would not have in fact
941 involved flooding 42 miles into the Kootenay Valley. It's clear that because it is flooded, we'd have to
942 pay an opportunity cost for having flooded it. It's clear in terms of the Arrow, more or less the same thing
943 is true. And I must say, I'm glad that dam is named after Mr. Keenleyside and not me. I think that's a
944 little bit of a disgrace. I mean we know that much of that area's potential is lost for all time. So I don't
945 know how you say that's apples and oranges.

946 **Audience:** Obviously you're talking about putting underwater 150 miles of the East Kootenay... the
947 Upper Columbia. You're not saying anything at all about the opportunity cost up there.

948 **Mr. McDougal:** There's no question, but that's right. There will be losses, but it's also relatively clear on
949 the basis of not very full data, but relatively recent data, that the value trends as I describe them. They're
950 higher as you go to the South, they come close to 0 when you go North. Now the only, it seems to me, the
951 only major consideration, you may in fact like Windermere and there are a lot of rather large interests that
952 are attached to that region. But I don't think when you compare the two, there's really much question.
953 More over, you're not talking about one area of the Kootenay Valley vs. another. You're talking about
954 one area of the Kootenay Valley vs. the Southern Kootenay Valley vs. the Arrow Lakes.

955 **Audience:** You're still talking about 28 000 acres. When you listed your costs, you didn't balance your
956 equations. I don't think it's fair. Let me go on for another one.

957 **Professor Cook:** Ok. That's your last one you know.

958 **Audience:** You talked about the value of water in California and the Prairies. You multiplied 180 million
959 acre feet by either 200 or 150 and came up with an astronomic figure of somehow...

960 **Mr. McDougal:** By 39 dollars I multiplied by which is one estimate of the value on the system. It's a

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961 very uncertain calculation.

962 **Audience:** You some how implied that we were for nothing, handing to the Americans an incredible
963 benefit worth billions of dollars. Let me say just three things about this.

964 **Mr. McDougal:** I'm ready for you.

965 **Audience:** First of all, in the regulation which we're selling which confirms on the Americans capacity to
966 divert consumptive, or any other reason which they didn't already give. The diversion at the moment
967 comes out of the main stream below Trail. We conferred; in fact we made their diversion much more
968 costly than it was formerly. They could conceivably divert out the flowage land beyond Libby, but the
969 flowage area behind some of the dams is planned. Things don't get higher and far closer to the Colorado.
970 And if they went down a little closer to the Snake, they'd be far closer again. It's just not true to say that.
971 To take water values 250 - 1000 miles away from the dam site, just boggles my imagination. Let me say
972 no more at the moment... your turn.

973 **Mr. McDougal:** Ok, I just, the last, I'm really glad you raised the last point. It's really critical. At least it
974 seems to me that it's really critical. I think the first point, which is unquestionably true, that if you're
975 going to make large scale irrigation withdrawals, you're going to make them in the summer months,
976 which as it happens is the same period in which the River's at its highest. So the effect of that is, if this is
977 your flow, your irrigation withdraws might be something like so, and your need for storage is thus
978 reduced to this. This segment is subtracted. So there's no question that there, the physical creation of our
979 structures does not add to their capacity to withdraw. You're quite right, and it's also true, therefore,
980 we've given them nothing under the Treaty that they didn't have before in any physical sense. And I
981 suppose, although I don't precisely recall the chapter and verse of what Mr. Krutilla said on the subject, I
982 don't think he said very much. But there's no question to the extent that it would involve an opportunity
983 cost sense, an expensive alternative, which I'm very sure they're going to make anyways. But, what the
984 Treaty does do, is it guarantees for them Canadian forbearance for a very long period in the future. I
985 mean, there is a possibility to make consumptive diversions on both ends of the basin. And by the Treaty,
986 it appears that we've promised that we will not. Now what that allows them to do, it allows them to
987 perfect appropriations. In other words, they can say we've committed this thing to beneficial use first in
988 respect of irrigation. And therefore, our appropriation is good against all others, for all time. And as I'm
989 sure you'll all recall, that's an argument that was employed at length during the Columbia negotiations.
990 So in once sense, I suppose you're right, but I'd argue in response to that deal, that it's not a very
991 meaningful sense because the issue is a legal one, not physical, and it's a very real legal one I might tell
992 you, and it's one that I'm sure that they will use.

993 **Audience:** Colin, Cameron, Burt Herridge used it only once, ten years ago, I wasn't convinced then, and
994 I'm not convinced now. And the federal government wasn't convinced then. Let me say one thing about
995 diversion. It's often true that by giving up the right to make non consumptive diversion for 60 years, the
996 Americans gave up the capacity of doing something, which would have had no effect on us anyways.

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997 **Mr. McDougal:** The Americans gave up, what, what are you saying?

998 **Audience:** It's often said that by, let me start again...

999 **Mr. McDougal:** The Americans didn't give the right to make diversion.

1000 **Audience:** They gave up the right to make non consumptive diversions and so did we.

1001 **Mr. McDougal:** But you've got to remember in respect of consumptive diversions, you've got to
1002 remember, there's an upstream and downstream position. I mean, the fact that both parties say that they'll
1003 only go for consumptive purposes is highly misleading. Because I mean, it's a matter of which one does it
1004 first. And the United States is in a position without limitation, to make consumptive diversions, we are
1005 not.

1006 **Audience:** That's not true.

1007 **Mr. McDougal:** Well it is true, because if we do, we invite liability for breach of a Treaty that has,
1008 depending upon which terms we're talking about, has a lifetime of upwards of 100 years. And in fact
1009 maybe permanent...

1010 **Audience:** You might think that's true, but the lawyers in the federal government don't agree with you.

1011 **Mr. McDougal:** They may well not agree with me, that's probably quite true but I must say they're a
1012 rather inarticulate lot because they haven't written very much apart from the Government Blue Book and
1013 that I would think, be something no self respecting lawyer would admit to having written, with apologies
1014 to Mr. Colon. I mean certainly in that deal, in all fairness, regardless of how we feel about the Treaty, that
1015 particularly document, from a lawyer's point of view is not what you call 'enlightening'. In fact it's
1016 highly contentious and very, very superficial. The External Affairs Committee on that side of it as well
1017 were pretty sad. I mean, there's a lot, if we really wanted to get into the dimension of it, if it's of any
1018 interest to people, there's a lot we can say. It's an area that's quite a bit less controversial than most of the
1019 economic implications of the Treaty. It's really clear that we went into those negotiations with no sense
1020 either of the sources of international law between the two countries, or the trends the laws have been
1021 taking. We're talking about basically two sources, one being treaty, the Boundary Waters Treaty, and the
1022 Columbia Treaty now, and two probably much more important, the sources if customary law that are
1023 grown out of the precedence of the Commission. There's a measure of inconsistency revealed in those
1024 precedence, which is just positively frightening. The Article 2 of the Boundary Waters Treaty for
1025 example. By the time the Columbia had rolled around, prior to the Waneta dam reference, the status of
1026 Article 2 had been so varied by the customary application, under the Joint Commission, that it was
1027 virtually unrecognizable. But for the American stupidity on the Waneta Dam reference, we would have
1028 been in a much, much poorer negotiation position. I mean the lawyers on this whole thing were not very
1029 good.

1030 **Professor Cook:** One last question.

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1031 **Mr. McDougal:** Keep going as long as you want

1032 **Audience:** What are your opinions of the International Rivers Act 1955? Do you think it still viable?

1033 **Mr. McDougal:** It was passed in '54 first, maybe you're looking at a revised addition?

1034 **Audience:** '55.

1035 **Mr. McDougal:** '55 was it? I thought it was '54.

1036 **Audience:** What is your opinion of the Act, do you think it is still a viable piece of legislation?

1037 **Mr. McDougal:** Well, I mean, first of all, there's some difficulty in terms of characterizing what it was as
1038 to begin with. The history books seem to write it up as a 92-10, or the thread of it, or involving the thread
1039 of a 92-10 declaration. It's just really unclear. As best as I can recall it, I think it's unnecessary but not
1040 sufficient control, which is kind of a general answer. First of all, I don't think it's been followed all that
1041 much anyways. There's a requirement for federal license for projects that affect. It's a statute which,
1042 something like the International Rivers Improvement Act has to be passed in order to put into effect the
1043 Canadian obligation under the Boundary Waters Treaty. You've got to have something like that. You've
1044 got to have some degree of federal regulation of projects that involve questions that are being covered by
1045 a Treaty. But my understanding is that the licensing requirements of the statute haven't been filled in every
1046 case anyway. But I have a suspicion that you wanted more than that from me.

1047 **Audience:** Sorry I didn't hear you.

1048 **Mr. McDougal:** I said I have a suspicion that you probably wanted more than that from me by way of
1049 comment. Maybe if you were more, well, what do you think of it?

1050 **Audience:** Well I would like to know whether it means very much at all. To some extent I'm confused
1051 about the Kaiser deal.

1052 **Mr. McDougal:** Well it was used to prevent the Kaiser deal. Again, I don't think very much.

1053 **Audience:** [inaudible]

1054 **Mr. McDougal:** Well I can think of one problem. It's, if I can just draw an analogy between that
1055 enactment, and using a specific head of jurisdiction, let's say fishing, as a device of impeaching a project.
1056 One problem it seems to me, it's sort of the thin edge of the wedge. You're using one aspect of a project
1057 as a means of overturning the entire project. And in a sense, that's kind of objectionable. It seemed to me
1058 that the federal government has a different view than the province, it's best that it should come up with a
1059 full blown statement as to why they think it's bad and debate the thing on it's merits, and not simply say
1060 well, as it happens your project may be good, but it effects one thing in our jurisdiction therefore we're
1061 going to wipe it out, notwithstanding the fact that it's good. In other words, using say, the federal
1062 jurisdiction over native peoples, or using it's jurisdiction over navigation, or fishing, or using the

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1063 International Rivers Improvement Act hardly is any guarantee that you'll have debate over the project
1064 over its merits. And instead, we seem to guarantee that you'll debate one particular, and stay away from
1065 its merits on a national basis. So on that sense, I think it's inadequate. What we want is some kind of
1066 comprehensive federal involvement, not just on details.

1067 **Professor Cook:** That is the last question.

1068 **Audience:** I have one bit some more in layman's terms about what you started to tell us about legal kind
1069 of things to do with the international boundary thing, and the International Joint Commission that's been
1070 doing all these things. And when the government gets politicians here, I've tried to get them a bit
1071 historical and to see if there weren't some things that they were reacting too, that in the past had been
1072 regard to a good influence or a bad influence because things have worked out badly. But all I've ever
1073 gotten to get them to say is that "it's our policy. " And I wondered if maybe there were things in the
1074 International Joint Commission that really had some bearing? It just seemed to me that people have gone
1075 cold over it.

1076 **Mr. McDougal:** Well you know, I think in some ways it did. A two minute summary of a Joint
1077 Commission precedence, for what it's worth. Everybody knows about Article 2, that's been talked about
1078 at length. Article 2 is something that the Americans insisted upon. It consists of basically two parts. One
1079 that you've got the unqualified right to divert; and the other being that you've got a legal liability if you
1080 make a diversion that causes injury. I assume somebody's told you that the legal liability of that
1081 provision is a fiction, or is certainly arguably a fiction. What the Joint Commission did through four
1082 references that are pretty critical, and they were the Waterton and Belarus, Sage Creek and, I guess, the
1083 Waneta, was that they, and more recently the Pembeen. They attempted, and are continuing to attempt, to
1084 try and establish some principle of international law that involves, on its face, an accommodation of
1085 conflicting interests, rather than the assertion of one over the other. And they've introduced, well now
1086 we've got basically three competing principles. We've got Article 2, we have the Principle of Power
1087 Appropriations which confers priority of right on that person first in time to develop which is in the case
1088 of our two countries, usually United States. And then we have this absurd thing called Equitable
1089 Apportionment. In a cyanide desert, Equitable Apportionment is defined as who has the most tanks and
1090 meant to use them. And I don't think really much different in terms of relation between peaceful countries
1091 also. If you've got an international basin, and there are heavier reliance's in the southern part of it,
1092 because the southern is more developed, equity would hold that most of the potential from development
1093 should flow to that area. It just makes common sense. But in any case, Article 2, Power Appropriation,
1094 and Equitable Apportionment are all in mutual conflict. And the Joint Commission, it appeared, the
1095 Canadian section in any event it appeared, was very reticent to ever come out and firmly assert Article 2
1096 and more than prepared to accept these weakening principles. And they were, unfortunately if you like,
1097 perfected as precedence in as much as we had settlements in the Commission. And it thus became
1098 possible to say, in regard to something like the Columbia, "well Article 2, fine Canada, but remember
1099 Canada, power appropriation on the Waterton and Belly reference and you know, surely if you can argue
1100 it there, we can argue it here. And surely it has to constrain the rights that otherwise exist under Article
1101 2." If they had been more attentive to the Treaty, the Boundary Waters Treaty, and less concerned with

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1102 these other arguments, and just stuck to the Treaty law, we would have been a lot better off then and now.

1103 **Audience:** [inaudible]

1104 **Mr. McDougal:** Sorry?

1105 **Audience:** I wonder how that fiasco is balanced politically.

1106 **Mr. McDougal:** How do you mean?

1107 **Audience:** What party can we blame for what?

1108 **McDougal:** Well I mean, for the petroleum and natural gas, I think you better blame both. For the
1109 Columbia, you better blame both too. You had Mr. Diefenbaker and then Mr. Pearson. Mr. Diefenbaker
1110 said he wanted a Treaty before he went to the hustling, and Mr. Pierson said that's damnable and as soon
1111 as he got into office said "That's just great, we've got a Treaty, and now we'll revise a Protocol." The
1112 revision will take time. It's symbolic reassurance, everybody will feel fine because we're still talking
1113 about it. But basically it really didn't change all that much. Blame everybody. Certainly both governments
1114 were equally reluctant to use whatever jurisdictional authority they had over it. Both governments didn't
1115 really want to fight Prime Minister Bennett.

1116 **Audience:** I think we should be in the habit in the future of breaking our historical leaders that disserve
1117 blame or deserve criticism and reminding the electorate that these are the people that did it.

1118 **Mr. McDougal:** Well maybe a good idea but just to go back to one general thing which I think maybe
1119 these gentlemen here would call hysterical and emotional and everything, but there's not a lot of time on
1120 the natural gas and oil question. And the implications of that stuff running out are really clear; they're
1121 not a matter of emotional conjecture, they're a matter of fact. The Ontario Hydro people, this precise
1122 minute are starting to obtain a very, very clear picture of what it means. They'll resort to things like
1123 Kentucky Coal by the way, that resorts under duress and they don't want Kentucky Coal, anymore than
1124 we want it in British Columbia. There's just very little option. Something with thermal nuclear power
1125 expansion. Both those things involve substantial increases in terms of energy cost. But in terms of the
1126 manufacturing sectors, that information is all being fleshed out very quickly, and it's a very, very serious
1127 problem. And there's only one answer. It's conservation of the conventional reserve area and we've got at
1128 very most three years to do it. And if we don't do it, it's a settled question. We'll have to accept whatever
1129 comes, and it looks as if whatever comes in as much as it'll be from the Athabasca Tar Sands in the High
1130 Arctic will be very, very expensive. So we better pray awful fast.

1131 **Professor Cook:** Thank you very much Ian. He mentioned federal politicians and provincial politicians,
1132 and it gives me the opportunity to mention that the next speaker is Mr. Ray Williston who was principle
1133 negotiator for the province of New Brunswick, sorry, that's where he is now, for the province of British
1134 Columbia. And his topic will be the Position of the Government of BC in the Columbia River Treaty
1135 Negotiations. That's Wednesday March 20th, 8:15 pm. Thank you very much.