PETROLEUM INDUSTRY ORAL HISTORY PROJECT
TRANSCRIPT

INTERVIEWEE: Roland Priddle

INTERVIEWER: David Finch

DATE: February 2003

DF: Today is the 8th day of February in the year 2003 and we are with Mr. Roland Priddle at his home in Victoria, at 1889 Gonzales Ave. And your postal code?

RP: V8S 1V2

DF: Good we got that right. Could you start by telling us when and where you were born?

RP: I was born in Glasgow, Scotland. My father was an immigrant to Britain from British India. He was sort of Anglo-Indian. He was the son of an Irish-Goannese??? mother and a kind of itinerant, thought to be English, father. Mother=s name was Luis Farrell. Farrell was the Irish, Luis was the Portugese-Goan name. And we don=t really know where Priddle came from, because he appeared, married this lady and was off the scene almost immediately afterwards, with her sister. So that was pretty unpleasant stuff for my father. And in the 20's, as a young man, he realized that there wasn=t a long term future for the British in India, and although he didn=t have any family or relatives or any kind of ties with Britain, he migrated from British India to Britain. He was a kind of itinerant engineer and he ended up in Glasgow and he met my mother, who was a Swiss born lady, again, without any ties in Britain. She already had a child, that was my step-brother, and I was born in 1933. He was in the engineering trades associated with building the equipment, ships, and also, in a different incarnation, steam locomotives. Just lived in Scotland for I think, about 5 years, to >38 or >39, when we moved to the northeast coast of Britain, to an area called Teeside, that=s the River Tees, and we lived there for about 5 years. Then in 1943 he got another job and we moved to where I was really brought up, got my accent and so on, that was south Yorkshire, coal mining area. He was though, in the so-called metal bashing trades. We moved there in >43 and I lived there until I went to university in >52 or >53.

#030 DF: Could you tell us about your education before you went to university?

RP: Yes. I had a very standard British state education in primary school. The secondary school was a so-called, grammar school. I got a scholarship to university. It was difficult to get university without a scholarship there unless you had substantial private means. I was fortunate to get a so-called state scholarship, and that let me into Cambridge and I did a 3 yr. geography degree at Cambridge, from >52 to >55. In >55 I went to University of California at Berkeley with an idea of getting a Master=s degree in geography but just before I left I=d had a sort of job offer from the Shell group, and I chose, without completing that degree, to come back to Britain in September >56 and join the Shell company. I worked there in London for 5 years til 1961, and then, from >61 to >65, in Shell in the Hague. Basically doing, in London, energy studies, and longer term supply

planning for the international industry. Then in the Hague I was working as an analyst in the early days of European economic integration. That=s when the European Union consisted just of the 6 original members, the original signators to the 1957 Treaty of Rome. The Shell folks saw this as an opportunity for economies and efficiencies in the 6 European countries. So I lived in the Netherlands and was a sort of management trouble shooter on European integration issues, as they affected the Shell group, for that 3 year plus period.

DF: How did a geographer get that kind of work?

RP: It was at a time David, when Shell was a very sort of eclectic organization. I can think of people I worked with who were history graduates, linguists, not too many geographers, except Dr. Peter O=Dell, with whom I worked and who subsequently became quite a well known sort of, geo-politics of energy person. Professor of, probably, energy studies at Erasmus University in Rotterdam after he had left Shell. It was a time when, for instance, another co-worker was Napier Collyns, who with an American called Peter Schwartz, and a Frenchman called Pierre Wack, since deceased, those three people established the art of scenario forecasting in Shell in the early 70's. Collyns must have been a linguist or historian or something like that, from Oxford or Cambridge and then Brown University in the USA. They founded this extremely successful enterprise called the Global Business Network, which are world wide exponents of scenario forecasting or scenario analysis of policy and business problems. I=m mentioning that David, because it shows how kind of eclectic the intake of people to Shell at that time was. You=ve got to remember that Shell has always been very strong on not just the science and engineering side of energy, and they=re very good at that, but also, the relationship side, government relations, taking policy views in a very broad sense. I notice for example, Mr. Tim Faithful, who=s just retiring from running Shell Canada for the last 3 or 4 years, he=s probably a linguist or something like that rather than an engineer.

#077 DF: So what else can you tell us about your time with Shell?

RP: It was extremely formative because I was fortunate enough to be working in a head office function. I fear David, that it=s quite possible to work in the oil industry, it was certainly possible to work in the Shell group headquarters, enormous headquarters, without really knowing what went on. I was able to be in a sort of overview position and could take a broader view of oil and energy. That was the period of time when certainly, outside of Canada and the USA, the name of the game in the oil industry, because I was strictly on oil at the time, natural gas was only just developing. . . Although I do recall David, writing a paper, perhaps in the late 1950's and borrowing some geo-science expertise within the company, which argues that there might be just as much natural gas in energy terms, as there was oil, in energy terms. I think you=d have to exclude the Orinoco tar belts and the Athabasca oil sands from the oil side of that equation. So there might just be as much conventional oil and conventional gas. One of my urgings was the Shell should get after the gas business. Obviously I was kind of thinking about that because the Gronign gas field in northern Holland had been found in1959. The good overview positions, and the name of the game of the world oil industry at that time was integration.

It was to get your own crude oil, so-called equity crude oil, from your concessions in Kuwait, your participation in the Iranian oil participants that had been formed after the Musudaic revolution in 1953, and from Venezuela particularly, Shell was strong in Venezuela, get it from your own sources in your own tankers or long term leased or chartered tankers from the Onassis or Nearkis group, to your own refineries, into your own gas stations. Part of that game, that was the sort of technical chain, behind that was of course, a commercial and tax chain. It involved generating profits to the greatest extent possible in the up stream, where, once you had paid your 50%, it was the 50-50 era of profit splitting on up stream oil with the host countries of the Middle East and Venezuela, you didn=t pay any further taxes. So you tended to charge a lot to your subsidiaries for the sale of the oil from the overseas sources. That made refining relatively unprofitable, concentrated profits up stream and kept newcomers out of the relatively, easier to enter, businesses, which would be products marketing and refining. It was clearly a lot easier to build a refinery in those days than to find new equity crude oil up stream. However, if you could make refining rather unprofitable by ensuring a high level of price for the relatively small volumes of oil that got out of your control and into sort of, arm=s length international trade, you could minimize competition there. So outside of Canada and the USA, the world oil industry was dominated by the 7 sisters. Of course, they=ve greatly shrunk in number. Standard Oil of New Jersey, Shell, BP, Chevron, Texaco, I think people tended to throw Total into that group, I=ve missed one and I can=t remember which it is. That may come back to me later on . . .oh, Gulf. One forgets about them because they=ve disappeared. Remember Anthony Sampson=s book, the 7 Sisters, that sort of popularized that idea. And that situation of course, lasted until the nationalizations that followed the 1973, >74, apprehended world energy crisis. So I got a good overview of the way that the oil industry at that time worked. Now that wasn=t much use to me, say. . .

#130 DF: 30 years later.

RP: And it wasn=t much use 10 years later because it was said, in the 1970's, that anybody who had grown up in the old vertically integrated oil industry was out of date. You needed the new blood then, who was used to a completely different sort of world oil view, where the up stream was dominated by the state companies. That was the start of the era of the Petro=s. ??? Petro-Van, Petro-Min, Petro-Nassan, you know, that grew up after the nationalizations from roughly, 1973, >74 onwards. Got a good picture on world energy. Shell was very early on in world energy forecasting. That developed of course, into scenario planning because it was very apparent, even in my time, that single point forecasts were not the way to go. That they would be invalidated by the next year=s experience and you=d have to change it again.

DF: Explain what single point forecast means?

RP: That is saying that, in 1960, that energy demand and from energy demand, coal and oil and gas demand in 1975 would be certain finite numbers, and you=d plot the numbers in between 1960 and 1975. But you=d have to change that all the time. It was a good place to meet people, to understand a little bit about government relations. Of course, as we

looked at North America, we in Shell outside of North America, developed a fairly sort of jaundiced view of what was happening there. Because the world of integrated oil demanded markets and what was happening was that, in 1959, in the USA, they had introduced the mandatory import control program, April >59, and Canada had followed in about February 1961, with the National Oil Police, which were both policies aimed to use more rather than less, indigenous oil and to a degree, to keep foreign oil out.

DF: So how did you at Shell see that?

RP: We saw that as adverse to the Shell interest of getting low cost Venezuelan and Middle East oil into every place you could. And David, it was a period of just enormous growth of the oil business worldwide, including of course, in North America. At the upstream end, you could call up what seemed to be infinitely large, they weren=t infinitely large of course, it seemed only to be the case, volumes of oil from those concessions. The incremental cost was quite small, Shell=s supply from the Middle East had an integrated tax paid cost of say, 90 cents a barrel. So supply was no problem. In fact, the only problems on the supply side were to keep the host governments, let=s take Iran, happy, with an extremely low level of development. Because the fields were relatively young, enormously prolific. I remember, I wasn=t involved myself but one would see memoranda between members of the Iranian oil participants, Shell, a group of American companies, BP, discussing what was the minimum number of active rigs that would be acceptable to the Iranian government, say, in the early 1960's. It was a fantastically small number, I mean, 5 rigs or something. And that still yielded much more supply than could be absorbed by the participants. So those were heady days. There didn=t really have to be much emphasis on upstream exploration and development because there was such a prolific supply of oil it seemed, from the Middle East and Venezuela. Then it was the era when there were enormous efficiencies being achieved in ocean transportation of oil. It was the start of the super-tanker era. Refineries could be built very cheaply, there were no great concerns about environmental impacts. And because of growing oil demand in domestic heating, the automobile, we didn=t even look very carefully at where to put service stations. You could, in Canada, build a service station and you knew that you were going to sell, and it sounds a ridiculous number now, 250,000 gallons of gasoline a year. 250,000 gallons was just fine to determine favourable economics of the 2 bay service station. I wouldn=t have thought that you could get by with less than 2 2 million gallons now for a viable service station. But it was a good experience, a very broadening experience.

#196 DF: From the perspective of being over at the Hague in Shell, why were the North American governments putting this import control?

RP: Basically, it of course, started in the USA, because there you had a large, significant independent sector to the oil industry. The majors of course, the North American affiliates of the 7 sisters, wanted to see more rather than less foreign oil come in because it was cheap. Coastal refining was well developed and developing even further on the USA east coast. It was a very good way to make money, to take 80 cents cost crude oil, transport it for say, 40 cents, to the US east coast and sell it in competition with North American oil

that was probably costing you $2.50 a barrel. But it was political pressure by the independent producing sector and the Texas Independent Producers and Royalty Owners, TIPRO, and the Independent Petroleum Association of American, IPAA, which put political pressure towards the end of the Eisenhower regime which resulted in the 1957 voluntary crude oil import control program, which was breaking down by the end of >58. Then, for so-called, national security reasons, President Eisenhower, in April >59 brought out, as I=ve mentioned the mandatory oil import control program, which lasted until the early 1970's. Then Canada really, had to follow suit, in order to maintain her access to USA markets. It was seen by the Americans as sort of unfair that she should maintain a completely open border to cheap foreign oil in the east. So Canada sort of straddled the fence in a fairly typical way, left the Atlantic provinces and Quebec open to foreign oil, restricted the movement of foreign oil west of the Ottawa Valley line. The Ottawa valley including the city of Ottawa was in the area accessible to foreign oil and products refined from foreign oil. West of the Ottawa Valley line was essentially reserved for the products of western Canadian oil and that gave Canada preferred access to the USA market. So it was a very valuable concession which Canada got the overland exemption for her exports to the USA.

DF: The independents in Canada were also part of that, like they were in the States.

RP: That=s correct. The Canadian industry had gone into recession, as has happened actually, after every major world oil crisis. After the >56, >57 Suez Crisis, international oil prices fell, there was a huge decline in Canadian oil exports, which had been growing very rapidly in the mid 1950's and there was some loss of market for Canadian oil in Ontario. People like Jack Gallagher and a British chap, Charles Lee, who was running a company called Western Decalta. I suppose Gallagher already had Dome. And a few others formed IPAC, Independent Petroleum Association of Canada, and led a charge in the late 50;s to extend the Inter Provincial crude oil Pipeline system to Montreal.

DF: Home Oil was in on that too.

RP: That=s right, of course, it was, and Bobby Brown. Yes. In fact, he would have been the leader of that David. So that National Oil Policy was a compromise which avoided sticking expensive western Canadian oil into Montreal, and potentially upsetting the always important Quebec lobby, federally. So it gave some protection to the domestic market, but without extending that protection eastwards to include Montreal refineries. Remember, there were 6 refineries by that time in Montreal, it was a very important refining centre, entirely running on overseas oil.

#261 DF: And who would have owned those refineries?

RP: Imperial, Shell, Gulf, Petrofina had built a refinery there in the 50's, Texaco, BP. And now there are only 2, there=s just Shell and Petro Canada. Petro Canada basically, growing out of the old Petrofina refinery. So we went from 6 to 2 refineries. Now that was a consequence in large part of natural gas and hydro electricity driving heating oil out of the Quebec market. Also a consequence of the building in 1970, of the Golden Eagle refinery, Ultramar refinery at Quebec City. So Quebec has 3 modern, fairly large, refineries but nothing like the refining industry that she had in the 60's.

DF: So at this point you=re still back in the Hague though?
RP: That=s correct.
DF: Are we ready to come to Canada, what got you interested in coming to Canada?
RP: I visited Canada in the summer of 1956, found it an interesting place and a very exciting place. That was when the seaway I think, was just being completed. Kitimat was being constructed in British Columbia, the Trans Canada Gas Pipeline was just being worked on, it seemed a very exciting sort of place. I may have made a kind of promise to myself to try and come back. But Shell was an exciting place and even though I was very junior, I didn=t supervise anyone, it was, by the standards of the time, very well paid. However, the person I was working for in the Hague was a brilliant but lazy man. He was keeping me in my job for longer than I should have been. In Shell you=ve got to really, in those days, when you=re a younger person, you needed to change your job every 2 years to get on and to show that you were a person capable of getting on. Shell would give you a very varied experience. But I wasn=t getting that experience in the Hague. I was getting very well rewarded but I wasn=t moving and I got resentful of the person who was keeping me there. I saw an ad in The Economist newspaper for positions in the National Energy Board. Now, I was broadly aware of what had happened. The National Energy Board had been formed by law in the fall of 1959. It was responsible for the studies that led to the National Oil Policy of February 1961 and a couple of people came over and did some interviewing. David, that was at the time when it was very common for the government of Canada to look in Britain and France for public servants. They=d offer sort of 50 Brits jobs and 40 of them would take the jobs and they=d offer 50 French people and 2 of them would take the jobs. And it was at a time when the National Energy Board, the industry wasn=t super prosperous in Canada but it was very difficult to attract capable young people from western Canada to work in Ottawa. They were looking for somebody with a kind of global perspective or worldwide perspective to help Dr. Howland, the vice-chairman of the National Energy Board, run the National Oil Policy. Somebody from External Affairs and very able official from the Energy Board called Bob Pfister, Bob was from Winnipeg, and that was also the time David, when there was a much sort of freer exchange of people between the industry and government. Bob must have been kind of asked by Bill Twaits, the legendary president of Imperial Oil, to resign from Imperial, which he did, in about 1960, and apply for a job at the National Energy Board. He was sort of given a job by a nod and wink between Twaits and Dr. Howland, the vice-chairman of the Board and responsible for National Oil Policy. Bob was a talented commerce graduate from Winnipeg and a few months after I arrived, and I arrived there in March 1965, Bob left to rejoin Imperial. Then he went from Imperial to Standard Oil of New Jersey and later, Exxon. He became, in the end, a vice-president of Exxon Minerals and Bob=s retired and living in Williamsburg now. Probably a bit older than me. Another interesting person, I was a division chief, special projects division or something like that, that fairly quickly became the Oil Policy Unit and then the Oil Branch at the NEB. It was a place with some interesting people. One of the fellows there was Bill Hopper. Bill was a geologist, went to Georgetown University in Washington, DC. His father was a prominent agricultural scientist and was I think, agricultural attache,

which was a very important job in those days, at the Canadian embassy in Washington.
End of tape.
Tape 1 Side 2

RP: So Bill Hopper was another division chief in what was called the economics branch. Bill had got his MBA at London, Western Ontario, worked with Imperial Oil, worked with Foster Research in Calgary and then perhaps, got bored, and his parents were living in Ottawa and he came back to Ottawa where he had been born incidentally, and got this job, division chief at the National Energy Board. He went again, shortly after I arrived, perhaps 6 months to a year after I arrived, went to work for A. D. Little, in Cambridge, Massachuset and that was his formative experience. We might catch up with some of that later. But the Board was a good place to work, and again, it provided one with an oil industry overview. Dr. Howland was a very talented person.

DF: You got to the NEB just shortly after it was created so you weren=t coming in to so much, an existing position, you were creating one. So tell us about that?

RP: That=s right. The staff of the Energy Board was about 70 strong. The National Energy Board, I must say, I give a lot of credit to the founders at the Board, that was before I arrived and that was the original Board members. I might just go through them. Ian McKinnon had been the first permanent chairman of the Oil and Gas Conservation Board of Alberta. He was really Premier Manning=s choice to head the new national body. Alberta being very suspicious of the creation of a national board. It was very much modelled, in terms of its practice, on the Oil and Gas Conservation Board. The vice-chairman, Bob Howland, had been a member of the Borden Royal Commission on Energy, which had recommended the creation of a National Energy Board, among its many other recommendations. There was a very able French Canadian, I=ll come back to his name. There was the person who had headed the energy studies section at the department of trade and commerce, that was C. D. Howe=s department in the 1950's. Again, that name escapes me, and there was a person who=d been head of Manitoba Hydro and B.C. Electric. So it was a very strong initial board. Do you want to turn the tape recorder off, we=ll get those names right. The name I=m missing from the person who=d run the energy studies group in trade and commerce is Doug Fraser, he was an economist from Winnipeg. Lee Briggs was the engineer from Manitoba and later, from B.C. Electric. And Maurice Royer was another very fine, he was an electrical engineer, the French Canadian member. So the board started out with 5 absolutely first rate people. I also give credit to the fact that some of the best staff, Jack Stabback, who later became a board member and chairman, had been the chief gas engineer at the Oil and Gas Conservation Board. He must have come to the National Energy Board about 1963. Another 2 capable people were Bill Scotland, who worked with Texaco Canada, and Jack Jenkins, who=d been one of the most promising young engineers, Bill Scotland was also an engineer, Jack Jenkins was a very promising engineer at the Oil and Gas Conservation Board. So several very capable Albertans, there were others whose names I forget, joined the Board. There were some engineers from the Board of Transport Commissioners of Canada, which had been the body which had previously overseen, certificated and so on,

inter-provincial and international oil and gas pipelines. So that was the core of the Board. But the Board was a bit week on the sort of economic side, so they hired Pfister as I mentioned, Hopper, a very able mathematician who later became head of the department of mathematics at Carleton University at Ottawa, I think Doug Carson was his name. He passed away a few years ago. So the Board in those days was really the centre piece of energy in the government of Canada. There was no energy department. The department of energy, mines and resources was formed in January 1966. I might say, somewhat to the consternation of the folks at the National Energy Board. There was inter-departmental committee on energy, privy council office, finance, trade and commerce and from time to time other departments would be brought in but those were the core departments. McKinnon and Howland as the sort of head people from the National Energy Board, sort of reported from time to time and got kind of policy assent, more than policy guidance, inter-departmentally from this committee, which lasted for about 10 years. So it was a slightly bruising experience for the Board when the Energy Department was formed. The Board had difficulty in seeing that there=s a contradiction in being both the policy advisor to government on energy and the regulator. You know, you got situations where, after the Board decided to issue a certificate or long term gas export license, both of which required approval of the governor in council, that is the federal cabinet, you=d have Mr. McKinnon sending in a submission saying that the National Energy Board was prepared to issue this license or to approve this certificate. And then, putting another hat on and going to see the minister and saying that it was in the interest of the government to approve what the National Energy Board in a regulatory sense, was prepared to do. So gradually, and now completely, the Board has got sort of weaned away from the policy role. Although, you will remember David, that part 2, that is the advisory part of the National Energy Board Act has never been changed. In fact, the Board=s act has not been fundamentally changed since the Board was created. Some things have been added but not much taken away from the Board since 1950. So that was an interesting experience.

#070 DF: What specifically did you do?

RP: I was the head of this group that advised Howland. What I did was a lot of careful, almost month to month liaison with the oil industry because this was a voluntary program. The American program was a mandatory one, you had to have a license to import crude oil or refined products, except I think, residual oil to the USA. In the case of Canada, there was no licensing imports or exports for about 5 years. So it was a program of suasion, a program that certainly couldn=t work today. I don=t think the competition authorities would allow it to work. Basically Dr. Howland used to write down, literally on the back of an envelope, after a bit of consultation with the staff, how much people would be allowed to export to meet a target number per year. And then as things got more difficult with the Americans, as our exports rose, per quarter. So there was an allocation of oil exports by American receiving refiner, and by Canadian exporter. But there were very few exporters at the time because only a few companies maintained a system of buying, field buying of Canadian crude oil. It was basically, Imperial, Shell, Gulf, Texaco and Great Northern Oil Purchasing, GNOP, which later became KOCH Oil. Those were really

the only actors in the business. There was a growing number of American refiners because Canadian crude oil, despite being more aligned with American crude oil than with international crude oil, was nevertheless, very competitively priced. Especially for serving inland refineries, than was foreign oil or USA domestic oil. So there was a lot of pressure from the American side of the border to increase imports from Canada, exports from Canada to the USA.

DF: But there was a lot of pressure from those refiners to do that?

RP: That=s right.

DF: But from producers further away in the States, they didn=t want it.

RP: No, that=s right. Canadian producers very much wanted to grow their production. It was a period of greatly underutilized developed well head capacity in Canada.

DF: So tell me about your liaising, what literally did you do to keep this thing working?

RP: There was monthly reporting of the volumes and there was a lot of trouble shooting. For example, the Ontario refiners were constantly bitching about being forced to take the western Canadian oil by suasion and when some eastern refiners, well really only one, that was Petrofina, which did not have an Ontario refinery, was shipping product across the Ottawa Valley line, product that was lower cost, having been refined from foreign oil at Montreal, and there were also at least one. . .

DF: Was that mostly gasoline?

RP: Yes it was, gasoline and heating oil, because those were the high value products. We didn=t much bother about movements west of line of the residual oil. Gas was getting strongly competitive in Ontario and it was seen as reasonable for water fed, tanker fed industries and so on, in the Great Lakes area to continue to have access to either, overseas or eastern Canadian refined residual oil. So there was lots of tension over these transfers across the line, or imports across the line and we ran a system of so-called valuation for duty purposes of imported motor gasoline. So each summer or spring, as the open season on the Seaway started, the government would introduce a minimum value for duty purposes of motor gasoline, saying that you couldn=t import gasoline unless the price were a certain, relatively high price. Now, people were easily able to fiddle that, simply by invoicing it, getting phony invoices at prices which conformed with the minimum values for duty purposes. So that didn=t work out at all well. Then these imports started to take off, I recall, in 1970. They were being made by a company called CalOil, which was actually a subsidiary of the New England Petroleum Corp. which was an American products importer. It was run by a chap called Pierre Senecal, a Quebec businessman. Pierre Senecal went on to a much, much better career running a very well known chain of restaurants in Quebec, whose name escapes me. It was a sort of upscale chicken restaurant, something like Chalet Swiss. Interesting thing David, was that his economic advisor was a slightly dishevelled long haired young man with I noticed, rather dirty fingernails. His name was Jacques Parizeau. He was, at that time, a professor of economics at the University of Montreal. Jacques would come along and lobby on behalf of CalOil to be allowed to make these movements. He did that quite persuasively. He sort of wrapped himself in the Quebec flag and wrapped CalOil in the Quebec flag, even though it was a sub of an American company. So, in 1970, the government decided to

use, for the first time, its authority under the National Energy Board Act, to have the National Energy Board license, that is, put restrictive quotas on imports of motor gasoline. That was to shore up the National Oil Policy.

#146 DF: And that was after almost all of the 60's, trying to do it voluntarily?

RP: That=s right. Eventually you know, voluntary schemes tend to break down. The American voluntary scheme broke down after 2 years, >57 to >59. The Canadian voluntary scheme lasted about 10 years. It shows how much more kind of responsive, if that=s the right word, Canadian businessmen at that time were to government, than were American businessmen. It wasn=t long after that David, I can=t remember the date, when it became impossible to contain, by voluntary means, the flow of Canadian oil into the USA. I think it was probably almost simultaneously, the Americans brought Canadian oil under the mandatory import control program and Canada brought her oil exports under mandatory licensing.

DF: Wasn=t there some. . .?

RP: No, David, I=ve got that wrong. The Americans brought us under their program and then it would probably have been. . .

DF: About >69 or something.

RP: No, it was probably after 1970, that then we brought our exports under mandatory control in round about, perhaps, April or March 1973, when, despite the controls on imports to the USA, demand for Canadian oil in the USA was so strong it looked as if it would not be possible for one Canadian refiner, and that was Shell Canada, to meet its requirements of Canadian oil for refining in Canada. So the system of licensing was instituted and it was month to month licensing. It basically said, Canadian refiners, declare what your requirements are for, here we are in February, for March and we will estimate what is the pipelineable productive capacity of western Canadian oil, deduct from that, Canadian refiners requirements, and license, on a monthly basis, the surplus, in quotes, for export to the USA.

DF: Okay, but that=s in >73, when the international oil crisis was . . .

RP: That=s right, yes.

DF: But in the late 60's, early 70's, there=s still this formal, informal, voluntary. . .

RP: Yes, that is correct.

DF: The Canadian western producers still wanted to ship to the American Midwest. The Midwestern refineries still want the Canadian crude, but the rest of the States is arguing against it. That has been going on, there have been these overland exemptions and pushing and shoving on that too.

RP: Correct.

DF: So there=s the formal mechanism and then there=s the informal one.

RP: Yes.

DF: And that was very messy.

RP: Yes, it was. And there were many attempts to patch it up. I remember Jean Luc Pepin, since deceased, who was probably I believe, the first minister of Energy, Mines and Resources. He was also the first French Canadian to have a senior economic position in a

Canadian federal cabinet. There had been associate minister of National Defence, there had been ministers of Public Works, there had been ministers of Agriculture who were French Canadians, but this was the first one to get a senior economic portfolio. Or medium level economic portfolio. So he would negotiate with his American counterpart. At that time, American energy policy was essentially, oil import policy, there wasn=t much more to it than that. That was in the hands of the Department of the Interior. Stuart Udall was the secretary of the Interior. I remember, they had a major negotiation while Mr. Pepin was taking him round Expo >67 and reached an agreement which the Energy Board still couldn=t hold exports back to the agreed numbers. The numbers at that time, for the area east of the Rockies, districts 1 through 4 of the USA, as I recall in that agreement was about 280,000 barrels a day of crude oil exports. Just a tiny fraction of what our exports are, let=s say, now.

#202 DF: So the reason the Canadian government wanted to keep too much oil from going was twofold wasn=t it, so that we=d have enough for Canada, but also so that we wouldn=t insult the Americans because they were asking us to be restrained.

RP: That=s correct. Now, when you say, to see that there=s enough for Canada, that was really on a month to month basis. The idea of, as it were, stockpiling or holding back exports with a view to securing longer term Canadian supply didn=t develop until I had left the Board and that would have developed under Jack Stabback in about 1975 or >76. So David, the sort of developing oil crisis, or let=s say, great apprehensions about the supply of western Canadian oil were developing in the early 1970's. There were concerns about the long term viability of Canadian oil supply. For example, Prudhoe Bay had been discovered in 1968. It took a long, long time for it to develop and the choice of the Trans Alaska Pipeline, which eventually became ALYESKA was not made until the early 70's. There was great concern about the potential for marine oil pollution on the west coast of Canada resulting from that flow, from Valdez down to the Pacific Northwest and California. Canada at one time made an informal offer to keep the Pacific Northwest, the Puget Sound refinery, so-called, fully supplied with Canadian oil in order to avoid any Alaskan oil coming in by sea to the Strait of Juan de Fuca and Puget Sound. But the National Energy Board said, hey, wait a moment, let=s just see if we have enough oil to be able to do that. Looking at the proven fields, and remember, there weren=t any large new fields being found in Canada after Swan Hills, which had been about >57 or >58, and we were basically drawing down the prolific discoveries of the late 40's and early mid 50's. So the engineers, headed by Bill Scotland at the National Energy Board did a very exhaustive examination of productive capacity curves of these fields and concluded that Canada couldn=t afford to promise to supply, say, 300,000 barrels a day of light crude oil to Puget Sound forever in order to avoid this marine transportation. So there was some looking ahead at oil supply, with really, very strong regard to engineering, not too much regard to economics. Just a couple of other things from my time at the Board. It was the time when Howland, the vice-chairman was a considerable sort of advocate, he wasn=t a very neutral person for Canadian oil into the USA. He recognized that the American pipeline systems feeding north, into the Great Lake states, into what we call the lower

Midwest were bottle
#246 necked and they=d have to be expanded and that there was an opportunity to get Canadian oil into Chicago. He in a sense, was an advocate for the extension of the Inter Provincial Oil Pipeline system to Chicago. That was just a straight lateral pipeline. It didn=t at that time, sweep back as it now does, into Sarnia. It was also the time on the gas side, of the equivalent development in regard to Canadian gas exports. The creation of the Great Lakes Pipeline system. That was around 1966 and it was the first and only time that the federal cabinet refused the recommendation of the National Energy Board to grant a certificate for a pipeline expansion in Canada. It was the Trans Canada expansion that was needed to support the Great Lakes Pipeline. It was very controversial in Canada because the folks in northern Ontario, who had only started to get western Canadian gas in sort of the late 50's, were concerned that that gas would sort of be drained off into the USA. So there was an agreement worked out under which Trans Canada undertook to maintain the northern pipeline, the pipeline across northern Ontario as its mainline. And that more than half of the gas flowing eastwards from Winnipeg would flow through the northern line at all times. That was interesting that it=s coming up now to 36 years since that was the first and last time that the government refused a certificate. The early 70's at the National Energy Board were also the time when there was lots of interest in a Mackenzie Valley oil pipeline from Prudhoe Bay. The idea, and it might have been a sensible idea, was that Prudhoe Bay oil should be concentrated in the interior of the continent, and the coastal areas left open to foreign oil. That logistically, that was the best way to go and that the Canadian pipeline system was the best way of distributing the Prudhoe Bay oil in Canada and the northern USA. A little bit like the thinking presently in regard to the movement of Prudhoe bay gas. Again, the National Energy Board was perceived, probably rightly, as both an advocate of this and later on, it would have to be the regulator. The decider of whether a pipeline was in the public interest. That was playing a little bit fast and loose on the policy side by a regulator. I think those are the main points from my time at the Board.

#289 DF: Yes. So yes, before we get to >73, any other details about the administration or the overseeing of the NOP, the National Oil Policy?

RP: I think we=ve covered it David. Voluntary program, lots and lots of liaison with industry, close relationships between the NEB staff and industry. We had some good people there who later went on to very interesting things. A young chap, Kerry Mattilla, he=s now a senior official with the Canadian Petroleum Products Institute. Bill Porter joined us from Shell Canada, a very able Newfoundland born engineer who had worked for Inter Provincial Oil Pipeline and for Shell. He was a great assist, had a good industry understanding. Rob Stevens came to us from Shell, we took a lot of people from Shell. Bruce Wells, another Shell employee, took a lot of Shell people, not really my influence at all, who formed the core of the group who, that with Peter Scotchmer sort of saw the Board through that very difficult period of oil import and export licensing from 1973 onwards and after I left. So the Board used a lot of oil industry people and had a good reputation for having a sound understanding of the industry. It helped a lot.

DF: In those early days, I know both Alberta and the Canadian Petroleum Association in those days, actually opposed the creation of the Board. How was the relationship and how did it evolve?

RP: Good questions. I think it evolved quite well. To a very large degree because Ian McKinnon and Jack Stabback and Jack Jenkins were Albertans, and maintained reasonably good ties with Alberta. But remember David, Alberta was not at all aggressive in regard to oil and gas matters until the Lougheed government was elected, which might have been around >71 or >72. The Manning government and the Stromm government, the very short lived Stromm government, the last Socred Premier, was sort of defensive rather than, aggressive is the wrong word, I greatly respect the Lougheed government and that would be perhaps the wrong ticket to put on them.

#344 DF: Proactive or something?

RP: Yes, yes. Manning wanted to keep the Energy Board out of anything to do with the Nova system and Alberta pipelines. There were so-called, I was never able to find them, Howe-Manning agreements, Howe being the minister initially responsible for the creation of the Energy Board, although he had left Trade and Commerce by the time that. . . George Hees was the minister when the Board. . .I think Hees was the minister when the Board came into being in September >59. He was certainly the minister in February >61. There was supposedly a Howe-Manning agreement to keep the Board out of interfering with Alberta pipelines. I was never able to find such an agreement.

DF: It would be interesting to find it if there was one. Very interesting.

RP: Yes. I think David, if there was one, it would have been found by now. Especially with the current discussions which I=m in no sense party to, about pipeline jurisdiction.

End of tape.

Tape 2 Side 1

RP: David, as I=ve commented elsewhere, the Board was pretty responsive to the Alberta government. For instance, when the Rangeland Pipeline system in southwestern Alberta, was going to be extended to join up with the Glacier system and go down to Billings and Laurel, Montana, the National Energy Board didn=t try to take jurisdiction over the Rangeland system in Alberta, but simply approved just a few hundred feet of border crossing pipeline called Aurora. That was really the start of the sausage link era, and that was Mr. McKinnon=s doing. Sausage link simply wouldn=t stand up in any court appeal, it was something that McKinnon created, I think to avoid a confrontation with Alberta. So relations with Alberta were sort of quiescent during the many years. Relations with the industry, now CPA was essentially representing the upstream producers. The producers were happy as long as the government was contributing to, administratively, an expanding market for western Canadian crude oil. The Board, then as I think it now does, kept good contacts with the industry. I think that the CPA was happy to work with the Board despite its original position, I think in the context of the Borden Hearings, of opposing it.

DF: But the biggest supporter of moving of oil out of western Canada was IPAC, not CPA.

RP: That=s correct, yes. Because CPA David, was seen as sort of dominated by the . . .

DF: Majors.

RP: That=s right, by the integrated majors, yes.

DF: Let=s see if there=s anything else from that period. When was the Energy Department, was it >64 you said?

RP: >66, January >66.

DF: Okay. Because you=ve told us what it was like before they were created, but in that 4 years from >66 or. . .to >73, how did things . . .?

RP: What happened David, is that the first ADM of Energy in EMR, Claude Isbister, very able economist and a very nice man, was the first deputy minister and the first Assistant Deputy Minister was a very young man called Gordon McNab. He was basically a hydraulic engineer, he=d had a formative role in the Columbia Basin Treaty negotiations, advising General McNaughton. So you know, relations at that time still sort of inter-departmentally in Ottawa can be difficult and somehow Howland, who was a kind of grizzled old public servant, although he hadn=t been a federal public servant for long at all, he=d been a Nova Scotia deputy minster probably of employment or something like that, or manpower in Nova Scotia and he=d been on early energy commissions, the Carroll Commission on coal a long, long time ago. But nevertheless he was influential and he persuaded Mr. Pepin, the energy minister, not to allow Isbister to have much of a budget for his energy sector. So there was a bad relationship with the energy department and Isbister, while he was a nice man, wasn=t all that forceful. It wasn=t until Trudeau became Prime Minister in >68, and perhaps a year or two later, he brought in a complete outsider to be deputy minister and that was Jacob Austin. Later Mr. Trudeau=s secretary and later a Senator, and he=s still a Senator, Jack Austin. Jack was born in Calgary and was basically a mining promoter from Vancouver, with close ties to the Liberal party and to Mr. Trudeau. Very much trusted by Trudeau, a very able person, a lawyer. He wasn=t going to let the National Energy Board stand in the way of developing the energy department. He had, it is rumoured, met Hopper in the departure lounge of an airport and Bill Hopper at that time was working for A. D. Little in Boston, Cambridge. He took Hopper on basically, to come to Ottawa and talk to him about the oil and gas industry, because Jack didn=t know much about the oil and gas industry. Then he made Hopper, first some kind of director, and then, when, in the early 70's, Gordon McNab moved up from ADM, Assistant Deputy Minister for Energy, to Senior Assistant Deputy Minister for the department, Hopper was brought on board as the Assistant Deputy Minister for Energy. At that time, so we=d had Mr. Pepin, then Joe Green, then I think briefly, Otto Lang, and then Donald Macdonald as EMR ministers. Macdonald, Austin and Hopper hit it off very, very well together. They were working on a document called, Towards an Energy Policy for Canada, which must have come out round about mid 1973. That document, while ostensibly saying, let=s have a more or less free market energy approach, had some quite strong statist elements to it, including a discussion of whether there should be created a state oil company. As you know, a couple of years later, and by

that time in the reign of Alistair Gillespie as minister, Petro Canada was created and Bill Hopper became, probably executive vice-president. It=s often overlooked David, that the first CEO of Petro Canada was Maurice Strong. But Maurice did not last too long because, basically, I think, Bill Hopper so managed things that

#056 Maurice, who wasn=t too much for detail of running an oil company, kind of got elbowed out and Bill Hopper started his long and formative reign as president, later chairman and CEO of Petro Canada. But Hopper, whom remember, I had known from my early days at the Energy Board, was very short of people, because thanks to Howland=s intervention, the growth of the energy sector had been sort of strangled through lack of funds. Hopper wanted to staff up a core competency there. He attracted Bill Scotland, he had basically, 3 or 4 senior people. They were called Senior Advisor, Canada-USA Oil and Gas Relations, Senior Advisor, Canadian Oil and Gas and a Senior Advisor, International Oil and Gas. So the first 3 people in those jobs were Bill Scotland from the Energy Board, Phil Hooper, a Canadian who=d been working for Gulf in Pittsburgh, and Ralph Toombs. Ralph Toombs was a very long standing official from Ottawa, Ralph is still alive in Ottawa at a great age. He was a mining engineer from British Columbia, actually in the gold mining business and he=d been mining advisor at Mines and Technical Surveys which was the predecessor department of EMR. So they had those 3 people. Then round about 1973 Bill Scotland was offered a Board membership back at the National Energy Board, after a relatively short time working in EMR. And Austin and Hopper asked me if I would be interested in moving from the Board to take Bill Scotland=s place. I did that round about March 1974 but for some months I had been working with Hopper on all of the kind of midnight oil stuff connected with this huge run-up in international oil prices that had developed from about September 1973. With the domestic manifestations of that, which stemmed from the Liberal government=s Labour Day >73 measures. It froze the price of bread, it got the striking railway workers back to work and it asked half a dozen companies, which were posting prices for western Canadian crude oil, that is buying western Canadian crude oil, not to increase the price any more without government approval. That was after prices had risen by $1 a barrel between about August >72 and August >73. So the price of oil was frozen from Labour Day, September >73, at a time when it was rising very, very rapidly on international markets. There were all sorts of problems flowing through the international price. Disequilibrium was developing between eastern Canada and Ontario and the west.

#110 DF: So in a situation like that where does that request from the government come from, to freeze the price?

RP: That was at a time, on the Tuesday after Labour Day, there was a statement in the house and the heads of the oil companies simply responded to it by agreeing to it. There was no legislation, I don=t think there was any kind of official communication.

DF: But where did that kind of policy idea come from, from the civil servants?

RP: I fear David, that so many policy ideas get cooked up so very quickly. I remember sitting in . . .you know, the idea of a pipeline to Montreal had been around for a long time. As international prices rose in the summer of >73, Gulf decided that it would be

commercially attractive to ship western Canadian oil by tanker from Clarkson, Ontario to its refinery in Montreal. So it started an eastwards flow in the Seaway during the remainder of the navigation season. I remember being at a meeting in the minister=s office, with Macdonald, Austin and Mr. Jack Armstrong, the then head of Imperial Oil. Mr. Armstrong sort of made a chance remark, perhaps Jack Austin asked Mr. Armstrong, how does a pipeline to Montreal look now. Mr. Armstrong made a sort of innocent response saying, well, we might want to take another look at a pipeline to Montreal. The next thing that happened was that Mr. Trudeau was making a speech saying, we were going to build a pipeline to Montreal. So I fear, David, that quite often, very, very important policy decisions were made, at least in those years, I don=t want to extend any of this to the National Energy Program, which was a very carefully thought out set of policy decisions, wrong headed but certainly carefully thought out. . . In those days, things were done on an extremely sort of expediency basis with very little analysis because there were very, very few people to do the analysis.

DF: And it was a very new situation.

RP: It was, absolutely.

DF: The price of oil was going who knows where, the Suez Crisis was on, all these things were happening. And we=ve seen them happen several times since but at that point it was all new, wasn=t it?

RP: Yes.

DF: What did it feel like to be in the job that you were in?

RP: Like so many of these. . .David, can I just go back to the fall of >73. So the prices have been frozen by the Labour Day measures and then international prices were still rising. Because our oil exports were under license and because the Part 6. . . Part 6 of the National Energy Board Act is the part of the act that has to deal with exports and imports of oil and gas. It had been proclaimed to apply to oil, to bring our oil exports under license and our gasoline imports under license in the early 70's, in separate steps, with gasoline coming first. The act said that the National Energy Board had to satisfy itself that the exports were surplus to reasonably foreseeable requirements for the use in Canada. And, this is something that=s been taken out of the National Energy Board Act now, that the price was just and reasonable in the public interest. As international prices rose, the frozen Canadian domestic price yielded an export price which the Board staff felt was not in the public interest. It went to the Board with an analysis of this, I gave it to the Board, and the Board then decided, perhaps in late September >73, that it couldn=t approve any licenses for October >73 unless the price were, let us say, 70 cents higher than the price that would eventuate from the frozen price of western Canadian oil. So oil exports were at a very high level, they=d gone up enormously and they probably peaked at about a million and a quarter barrels a day of almost entirely light crude oil in the spring of >73, and they were still well over a million barrels in the fall of >73. So here you had a crisis, a sort of overnight crisis, the Board wasn=t going to issue any licenses. The government stepped in and said that it would raise the price by some kind of a tax. That of course, greatly upset the Albertans and there was a great deal of toing and froing over this. The government simply said it would apply a tax. It didn=t have any legislation. So I think that started in

#157 October >73 and the tax was increased to match the growing, rising price of international oil. So there was just a tremendous amount of work being done at short term decisions. I have actually, for another purpose, looked back over the Board=s administration of this, starting in September >73 and I must say, looking at the minutes of what was called the Oil Panel, a group of Board members designated to look after oil matters and chaired by Mr. Jack Stabback. I=d have to say that given the pell mell rate that things were being done at, the Board kept very good records. The minutes have been thoroughly made and it did, to the greatest extent possible, a very good job. That=s one thing I have noticed, David, reconstructing history on the basis of government records is very, very difficult because you don=t, with the exception of a few departments, I think there may be a departmental historian at External Affairs/Foreign Affairs, and Jean Luc Pepin when he was head of the anti-inflation board, had a historian on hand all the time to create a record. I do think that=s worthwhile but we never did in sort of the line government departments. The foundation that McKinnon laid for doing things at the Energy Board was maintained and built upon. The Board=s records are really very, very good compared to any other stuff I=ve seen from government departments. I do think that=s greatly to the credit of the pioneers at the Board.

#193 DF: So obviously Alberta didn=t like this export tax. But the government saw that there was this growing differential between Canadian prices and world prices, what=s going to happen to that money?

RP: Yes, that=s right. David, you will remember, that much later on when gas prices were being forced up by the government, through the National Energy Board or really the National Energy Board at the request of the government, stipulating gas export prices which were much higher than domestic gas prices, a system was created to flow back to gas producers, with enormous help and cooperation of the Alberta authorities, the difference between the domestic price and the export price. There was an expert flow back that went to all producers, whether they were supplying domestic or export markets. I suppose, there was a ghost of a chance, that instead of having a two price system for our oil in 1973, with the export price being created by a tax added to the domestic price, it might have been just possible, I=ve often wondered about this, to have created some kind of a blended price system. The problem though was. . .no, I was going to say, the money from the export tax was needed to subsidize imports. But the idea of subsidizing imports didn=t develop for about another 3 months, not until the January >74 First Ministers Conference.

DF: And that would have been in reaction to the producing provinces saying, what are you doing?

RP: Yes. So they went with a tax. It greatly annoyed, Mr. Getty was the Alberta energy minister, Mr. Lougheed of course, was the Premier, they had come to power a year or two previously and they were very angry.

DF: Are we about ready to get into your EM&R?

RP: Yes.

DF: Why don=t we take a break at this point.

RP: Yes, we will.

#223 DF: Okay so we had a little break. We=ve got you to 1973. How did you come to move over?

RP: So I was kind of moving backwards and forwards between the National Energy Board, which was struggling with oil export licensing and telling the government each month what was the difference between the frozen Canadian price and the just and reasonably export price. Then the government was issuing ways and means motions, probably, indicating that it would provide a tax later on when it got parliamentary authority. Remember this was the time, David, of the minority Liberal government, the 1972 government. So the Liberals were running scared as it were, of the NDP. It was the era of the corporate rip-off that Tommy Douglas and David Lewis, the NDP leadership were sort of propagating. At the same time, in terms of events, there was the Labour Day measures of 1973, a lot of bad blood with Alberta, the first federal-provincial, First Ministers Energy Conference in about probably early January >74. They decided that the price of oil would remain Afrozen≅, and that the government would compensate, subsidize, somehow, keep eastern consumers of foreign oil whole. So Hopper didn=t have the horsepower to work on that himself in his staff and EMR and I found myself working more and more at EMR. Then probably in March or April, moving over there. There had been a federal-provincial First Ministers meeting again, say in March, that had approved an increase of I think, it was $2.70 in the price of Canadian oil that brought it up to about $6.50 a barrel. That was still $4 or $5 a barrel below the then prevailing international level. So we had to dream up quickly, a scheme, to subsidize, but we chose the word compensate because it seemed to be less emotive than subsidize, the eastern consumer and decided to do it by giving payments to the oil importers to bring down the price of their oil to the domestic level. So I went over there to take Bill Scotland=s place, remember he=d gone back to the National Energy Board as a member and I took his job ostensibly as senior advisor, Canada-U.S. Oil and Gas Relations. Which were tremendously important, remember, exporting more than a million barrels a day of oil, and quite a lot of gas. Although the gas prices were so low that the revenue from gas wasn=t all that great. So for awhile, until I think about October >74, I was the first director of the OICP, the Oil Import Compensation Program. That program was then taken over administratively by something called the Energy Supplies Allocation Board ESAB, that had been created probably in the spring of >74 to deal with the apprehended oil shortage to allocate scarce supplies of oil among consumers and also, with the power to ration oil products. They weren=t very busy by the fall of >74, the immediate crisis had passed. They=d got an interesting group of people as members, headed by the chairman, Neil Stewart, who had come from Amoco Canada, probably about 1971, as an associate vice-chairman of the National Energy Board. In 1970 it was seen that the Energy Board needed strengthening at the Board member level and they created a curious organization of a chairman, a vice-chairman and at least 3 associate vice-chairmen, and then ordinary board members. One of

#276 the first things I wanted to do when I got to the Board was get rid of the associate vice-

chairman because it was a mistake to have a group of members who sort of ranked above ordinary members. Because you were trying all the time to find interesting, or more interesting or more important jobs for them to do when they were all really in the same decision taking category under the Act, as regular board members. It was a way of paying higher salaries and attracting people from industry. Geoff Edge came from probably, Chemcel. That was a Montreal chemical manufacturer. I think it was a subsidiary of a British company called Celanese, which had started out as a manufacturer of basically, rayon and got into other chemicals. So Neil Stewart, a very able person, a lawyer, lots of industry experience was chairman of ESAB. There was a chap called Bill Archibald who=d been an Imperial Oil executive, vice-president for marketing I think and a couple of other people. So they were given the job of running the Oil Import Compensation Program. Then I sort of carried on with different jobs at EMR, eventually becoming something called Director General of Petroleum. Then Ed Clark had shown up with Mickey Cohen as deputy minister and assistant deputy minister energy, Ed Clark, in probably 1978 or >79, that=s a few years later therefore. I became assistant deputy minister for petroleum in the energy sector. Ed Clark was the assistant deputy minister for policy. That would have been >78 because Ed had been there at least a year at the time of the infamous Crosby budget that brought down the Clark government that had been elected in May >79. So in between the fall of >74 and the restart of the second oil crisis that really started with, I think, the strikes and eventual shut down of the Iranian oil industry beginning I think, in the fall of >78, I was doing all sorts of jobs at EMR. Working on the policy side of the Alaska Natural Gas Project, Canadian Arctic Gas, American Arctic Gas, the Foothills Project. The essentials there were all in regulatory hands, that=s the National Energy Board. Gas export pricing, the gas export flowback, all of the efforts that were concentrated, somewhat unsuccessfully, on getting . . .well, successfully I guess, the Syncrude deal was put together in probably >75 or >76 and that was very successful. Suncor expansion and so on. So I was doing sort of trouble shooting at the Energy department in that slight lull between the >73, >74 crisis and the >79, >80 crisis.

End of tape.

Tape 2 Side 2

DF: The Mackenzie Valley Pipeline hearings were during this time period.

RP: That=s correct, yes.

DF: Were you in any way related to that?

RP: No, that was really essentially in the Energy Board=s hands. And they culminated with the decision, which I think was in July, I think it was even July 4th, 1976, the decision to certificate what was seen as the politically acceptable project, that was the Foothills project, and to nix the project sponsored by all of the big boys, Imperial, Trans Canada and so on, that was the Arctic Gas project. So I tended to just be watching the file back at EMR. Then after that decision was taken by the Board, the next steps were somewhat outside of EMR=s hands. It tended to gravitate to External Affairs because it was a big

Canada-U.S. thing. You may remember that the government decided that even though the NEB had issued a certificate, the certificate ought to find expression in a act of parliament. So the certificate was actually granted by the Northern Pipeline Act, and then there was the Pipeline Treaty and so on. And the first people who were dealing with the pipeline tended to be some important Indian and Northern Affairs people, like Big John Macdonald, the deputy minister about that time, or Indian and Northern Affairs, and the External Affairs people. And really, so it has tended to be since. I mean, Mr. Mitchell Sharp was one of the early northern pipeline commissioners. The deputy minister of External Trade has always been, since we had specialized commissioners, northern pipeline agency tended to be somewhat External Affairs oriented rather than Energy oriented.

#021 DF: So you=re about to go to 1980 and the second oil crisis.

RP: Yes. So Ed Clark had shown up, probably in the fall of >78, a remarkable young man. At that time he was about 31 yrs. old, Ed was born in 1947 and had come out kind of top of his class in Harvard Economics, PhD. Was seen as something of a left winger and came in to dramatically change the energy sector. It was probably a sensible move by the Trudeau government. Energy was not getting the attention that it should have gotten. So Mickey Cohen came over to his first DM ship as, he had been the assistant deputy minister for tax policy in finance. They were both heavy hitters. David, it=s interesting as you look around, how well the people who were involved in the NEP have subsequently done. You think about Nancy Hughes-Anthony, she is president of the Canadian Chamber of Commerce. Mickey Cohen went on to a business career, first with the Reichmann=s, he was chairman of Gulf Canada when the Reichmann=s took control of it. Then he was CEO of the Molson companies. Ed Clark is head of the TD bank. Paul Tellier, but this is considerably later, who succeeded Cohen as deputy minister of energy is now head of Bombardier, was a very successful head of CN. Sort of, everywhere I look, very able people graduated from that NEP era. They were people who were attracted to work on the NEP by Mickey Cohen. Clark brought about a lot of changes, including making me an ADM. And faced up to the fiscal problem, they both had a very strong fiscal orientation, both had come from finance, and decided that the federal government was kind of losing out on the energy sector. There had been enormous growth in energy revenues and they=d gone largely to the corporations and to the provincial governments. They were determined to hack out a large share for the federal government because the federal government got extra burdens because of the energy price run-up. Oil exports were being largely phased out by the NEB, so there was less and less oil export charge revenue to balance the growing requirements for oil import compensation. So in the Conservative government of Mr. Clark it proved impossible to bite off any upstream revenue. The Conservatives would not allow that. So Ed Clark came out with the scheme for a huge, was it 18 cents a gallon addition to the excise tax on motor gasoline. Basically, that brought the Clark government down in mid December, 1979. Then the Liberals were reelected in February 1980.

#058 DF: Do you know if there are any documents around to document more of that proposed federal, like the Joe Clark government, the agreement that was being worked out with the provinces on pricing and so on?

RP: Yes. It failed. You know, there were negotiations during the few months of the Clark government. I tend to think that those negotiations were made very, very difficult. Now Mr. Hnatyshn, the energy minister, was frankly, not a very strong minister. I think that the Conservatives were somewhat spooked by Mr. Lougheed coming to them and saying, look, we=re both Conservative governments, you=ve elected a good number of members in Alberta and you=ve got to be responsive to Alberta=s needs. Lay off, probably a number of the measures that the government had already obtained. And certainly Mr. Lougheed would not agree to the federals taking a larger tax bite out of the upstream industry. So the only way that the officials could find and recommend to get the additional revenue that the government needed was to go the consumer tax route, the gasoline excise tax route. Because Ed and Mr. Cohen very much wanted to start a series of programs, they didn=t have them carefully worked out, something like those under the National Energy Program, of curtailing oil demand by conservation and that kind of thing. And sponsoring alternative energies. But didn=t have the money to do that. So there was the inter-regnum during the election campaign, Mr. Trudeau offered the country a very ambitious energy program. I think in the campaign he had promised to try and separate Canadian from international prices and isolate Canada from what was seen as adverse tendencies on the world oil market. It is said, I don=t know with what truth, that Tommy Shoyama, who I think was probably living in Victoria at the time, he was a Saskatchewan born person I believe, he=d been interned as a person of Japanese origin during the Second World War, may have been actually from the west coast by origin, perhaps got interned in Saskatchewan, probably went to University of Saskatchewan. He had been a deputy minister of energy during the mid 1970's. It is said that he had assisted the Liberals in the energy component of the election manifesto, coming up to the February 1980 election. Anyway, Mr. Trudeau came back, Mr. Lalonde was appointed energy minister and there was some negotiations, completely unsuccessful with Merv Leitch, the then, Alberta energy minister. Meanwhile, Mr. Cohen and Ed, by the way, Ian Stewart had been the deputy minister of energy during the Conservative government. Yes, Mickey had been moved out when the Conservatives won in May 1979. So for some months, perhaps for a year, Ian Stewart was there, then Ian Stewart went to finance and Mickey Cohen came back to EMR. Then the NEP was launched at the end of October 1980. That was a full blown program on the fiscal side and promising all sorts of special measures, to curtail energy demand, to encourage gas substitution, encourage renewable energies and so on. so it was an enormously ambitious, over-arching program. Really, the story David, you know there are enormous ironies, that the NEP was promulgated at almost exactly the point in time when international oil prices, that is, spot prices, peaked. Crude oil prices did increase nominally, again, in 1981 but the increase didn=t hold. I think they were then moved up, Arab light went up to $34 U.S. a barrel but it couldn=t stick because spot

prices were falling. So one of the ironies of the NEP is that it came out at just the wrong time. It came out at the peak of prices but its whole underpinning was that prices would continue to increase indefinitely in real terms, something actually, that was economically impossible. The world and the Canadian economy were tending towards recession about that time, caused by high oil prices. When you get an oil price spike, >56, >57, >73, =74, >79, >80, generally speaking, you get some kind of recession following it as purchasing power is taken out of important sectors of the economy, goes into the energy sector of the economy, causes distortions, leads to recession. The story really, from October 1980 onwards, is one of measured retreat from the fiscal and other ambitions of the NEP. The first stage of retreat was the agreement, very unpopular in Alberta, with Alberta, that came about in early September >81, which sort of legitimated, in a sense, the NEP. Put Alberta in charge of the multiple pricing of her oil, gave her some small victories in the sense say, that the oil export charge was going to be shared, I think 50-50 with Alberta. But there was very little export charge because there were very little exports. There were a succession of agreements following that, almost annually. Lalonde moved out of the portfolio within a couple of years, Mr. Chretien had it from 1982-1984 I think. It was a series of retreats by the federal government, in large measure because the price of oil was tending to retreat. Then you had the change of government in Mr. Mulroney being elected in September >84. In about May >84, Mr. Wilson had announced the Prince Albert Declaration, very important document, saying that the federal government would adopt a market based oil and gas and energy policy, would try and achieve energy reconciliation interprovincially and I think implicitly, internationally. One of the problems with the NEP was that it took on too many powerful forces. It took on the USA, in a sense it took on the Europeans in the international energy agency context, and it took on the multi-national oil companies. The instruments that were being used, like Petro Canada, were fundamentally fairly weak instruments because they lacked financial clout. So you had the Mulroney election in September >84. The Prince Albert Declaration preceded it. Then you had, in >85, probably in the summer of >85, the Western Accord, then in Halloween >85, the agreement on gas markets and prices. I had been working away as the chief factultum on all of these programs, the so-called alphabet soup of oil pricing and gas pricing because I was operationally, the person who implemented all of them. Implemented the, I=ve forgotten the names of some of these, Canadian Oil Substitution Program, COSP. I didn=t do the Home Insulation Program but we were giving a large amount of money as a cash grant to individual householders who would switch away from oil. So we had a huge program which involved writing thousands and thousands of cheques for these programs. Eventually that went to an ADM, non-petroleum but I started all those programs. David, I=m rather proud that, especially in the light of subsequent problems in recent government, of giving away money that the Auditor General never found any fault with any of the programs that I ran. I might say, talking of the Auditor General, very sensibly, the Trudeau government, and that was Gordon Osbaldeston, who was secretary of the treasury board, he saw an immediate vulnerability when we started the import compensation program in >74, that we were dishing out huge amounts of money to people who were fairly suspect. That was, the Canadian subsidiaries of international oil

companies. There=s a little used section of the act that regulates the Auditor General enabling the government to ask the Auditor General to come in and do special audits. We had a lot of help from the Auditor General, he hired a couple of the public accounting firms, Coopers and Lybrand I think and another one, and they were absolutely first rate in setting up systems and we never had the slightest problem. There were special reports every year from the Auditor General, it was a very sound move by Gordon Osbaldeston, to recommend to government that the Auditor General be brought in right from the start, to supervise us, as well as, in a separate function, to audit us. So this was an extremely busy period, from the fall of >74 till the deregulation in >84, >85. I look back on that period with very mixed sort of emotions. One was tremendously busy, energy attracted enormous media attention. I remember our press clippings would be sort of 2" thick every day, but at the same time, it was frustrating because it was simply mistaken, wrong, for officials to be setting basically, the price of oil and gas in pretty well every transaction. It was far too big of a job and it wasn=t market sensitive at all. It was bound, it was doomed to fail. And it=s imposed a lot of distortions.

#193 DF: I want to interrupt you here because you say, yes, Canada was doing a lot of things that weren=t market sensitive but the international price of oil was not being driven by economics either, it was being driven by politics.

RP: That=s a very good point David, and it=s a point that=s difficult to argue with. If the international price of oil was driven, not by market factors but by OPEC=s happening to be in a very strong position as a result of the cut-backs and embargoes following the Yom Kippur war and the Iranian crisis and subsequently the Iran-Iraq war in the early 1980's that took a lot of oil off the market. Put OPEC in a strong position, it wasn=t truly a market determined price, that=s true. Except that, to add another non-market determined price on top of that, was in a sense, doubly wrong.

DF: Or, as apparently the Clark and the Trudeau government saw it, to allow Canada to go to world price would have taken an enormous amount of money out of the pockets of the Canadian consumers. And gone where? Well, gone out of the country, most of it. And so, yes, the NEP was put in just at the wrong moment. However, both the Clark government and the Trudeau government said, if somebody is going to make a lot of money some of it should stay here, isn=t that what they would think?

RP: Yes. But David, I think what the mistake was, and I don=t know if it would have been possible to do this, the surplus that was created by these politically driven, international prices could have been recovered in taxes on the oil and gas producers. You could have gone to a $30 price and taken 90% of the increment in terms of taxes and retained it for Canadian fisc, federal and provincial and distributed it. And allowed the oil system, the flows of oil and so on, to be directed by prices. So even if prices were, let us say, twice at let=s say, $34 a barrel, the level which the market, a fully competitive international oil market, would have conferred, even at that $34 price, compared to say, the $17 price that should have been, the system, the flows of oil, could have functioned better if the market had been allowed to work. The flows of oil would have been more rationally distributed. And conceptually at least, the bulk of the rent could have been captured by advanced

fiscal systems, by very aggressive fiscal systems.

#229 DF: And neither the Conservatives nor the Liberals considered this?

RP: I don=t think they did. I think that they felt that it was politically more acceptable, to allow the rent to be collected as consumer rent in the form of lower than otherwise oil prices, than taken by governments as a tax. Now that was partly because of the way things had grown up. Once you had frozen the price of oil, September >73 it became increasingly difficult to move it to, they kept talking about moving it towards, to the international price. And it was really only doable without any political discomfort, when international prices were falling in the Mulroney government. I mean, the oil price basically collapsed in the fall of >85 and early >86, it fell as low as $9 a barrel at that time. That was enormously helpful to the cause of the deregulated oil market, there was no price shock. The price simply caught up to international levels, which were falling, without rising hardly at all in Canada. But David, the problem in all this is that I=ve got excellent hindsight and so does everybody else. The NEP gets very mixed reviews. Generally speaking, even for people who see a major role for government, they tend to give the NEP poor marks. But remember that I think we must keep reminding ourselves that governments were acting in conditions of great uncertainty. And in uncertain times politicians, generally speaking, don=t behave flexibly. They will take courses of least resistance, courses that will cause them least political angst, lose them fewest votes.

#261 DF: And as you=ve been saying, oftentimes, the Petro=s were very much in fashion in this time period. So explain what you mean by that?

RP: Look at the broad sweep of things. In the early post war years the market was oriented towards the production end because it seemed that oil was relatively scarce, prices weren=t all that high, demand was very strong and to have oil supply was very important. That would be say, in the >45 to early 50's period. But then, even after the Mosadeque??? nationalisation, and loss of Iranian oil, which failed, nationalization failed, it brought on Kuwait oil tremendously strongly in the BP organization. So you=ve got a period of surplus supply of oil. I would say, from the mid 50's onwards and it was that international surplus pressing on American independent producers in the mid 50's that brought about, first the voluntary and then the mandatory import control programs in >57 and >59 respectively. So I would say, from the mid 50's, to about 1970, what was scarce was markets. There was great pressure to find markets for oil. But then by the early 70's the surplus producing capacity had been sort of mopped up. It was made much scarcer by political actions in the aftermath of the Yom Kippur War and that put the producers in the saddle again, in the way that they had been in the very early post war years. But this time the dominant producers were not the international majors but the owners of the concessions which had been nationalized. Their actions in creating their Petro=s in every one of the OPEC countries, was sort of mirrored in most other countries which had some oil or oil prospects by creation of mini Petro=s. And of course, Petro Canada was created, probably in >75. What became scarce then, was access to upstream oil. So the world flipped from looking for markets, now to looking for supply. And the access to supply

was being limited as host governments tended to sort of reject the international majors as partners in developing oil. The international majors then went off and developed several million barrels a day of North Sea oil and opened up oil in Kabinda and Angola and so on. so that era lasted until about mid 1980's when, as we=ve discussed not on the tape, the developing countries again started to solicit international investment but on different terms than had taken place in the 50's and 60's.

#315 DF: Before we get to 1985 and the dismantling of the NEP, tell me any other details about that busy period as you call it, between mid 70's and >85, when you were so busy administering all these programs?

RP: It was basically, somewhat unsatisfactory because you knew that I think, it appeared to one that the programs were getting more and more difficult to administer. Alberta, even though she had sort of hitched up with the federal government from September 1981 onwards, under people like Wayne Minion, the chairman of the Alberta Petroleum Marketing Commission, tended to make things more difficult for the feds in administration. Tended to be looking, quite understandably, for every possible opportunity to get a better deal for Alberta and conversely, a worse deal for the feds. So there were those episodes. There was dealing with, in 1979 I became responsible for something called the Resource Management Branch at EMR. That was the branch that dealt with the federal oil and gas rights south of 60 degrees. That was kind of a tense period. Mercifully it had passed out of my hands by the time of the Ocean Ranger disaster. But you know, things I fear, were not being done at a properly arms length basis at that time. It was the time of the Petro Canada back-in. There was lots of ministerial discretion in giving exploration permits and provincial premiers, like for instance, Mr. Buchanan in Nova Scotia, tended to back their particular favourites in getting offshore oil and gas rights. I fear that Petro Canada was slightly bullying of federal officials during this period. That was under Bill Hopper. Just a little bit of an aside on Petro Canada. The ideas for the Petro Canada had come from Hopper but he didn=t really develop them. There was a very able Montreal lawyer working as a consultant in EMR over an extended period name of Joel Bell. He later went on to be president of the Canadian Investment Development Corporation, CIDC, it was sort of a successor to CDC. It gathered together all the CDC type of investments that the federal government had made. But at that time he was putting ideas together for a state company. I remember one evening, I was just going home, perhaps in >75 or >76 and I was packing up for the day and the phone rang and it was Bill Hopper, the assistant deputy minister for energy and he said, Roland, the second reading of the Petro Canada Act is going to be tomorrow afternoon and Alistair Gillespie needs a policy speech, we haven=t got one, you=d better write one.

End of tape.

Tape 3 Side 1

RP: So he said, go and talk to Joe Bell, talk to Tom Tushack, talk to anyone you want, look up some of this Petro Canada stuff that we=ve been writing and give me a good policy

speech. So I went home, had my supper, phoned up my secretary, asked her to come back at 8:00, read through all this stuff and it fell to me just in a few hours time, basically in the middle of the night, to write what was the government=s policy on Petro Canada. I let my imagination run wild and that sketched in policy terms what was the mandate, or the mandate for Petro Canada was given in the act but that speech set out, through the government=s policy mouth, Mr. Gillespie, the minister of the day, the basic policy parameters for Petro Canada. So that was one little item. I remember there was another time when there was some kind of . . .yes?

DF: How do you go about writing a speech like that when you=re not necessarily ideologically . . .?

RP: Yes, I know. David, it wasn=t just not ideologically plugged in, I hadn=t really been plugged in to the work that Joe Bell had been doing. Because he worked away in a corner in conditions of considerable secrecy. He should have written the speech, I don=t know where he was that evening. It was also a little bit reflective of Bill Hopper=s style that he wasn=t ready with a speech when he must have known that the bill had run into first reading a few weeks previously, that the reading was coming up.

DF: So that=s how these things get done?

RP: Yes, I=m afraid. I remember once, Mr. Macdonald, who had been the energy minister, let=s say, from >72 to >75, he left that portfolio to become finance minister when Mr. Turner wasn=t prepared to endorse the anti-inflation program that Mr. Trudeau decided upon following the >74 election, that gave us another majority Liberal government. I remember once, Mr. Macdonald announced some set of oil and gas measures. We had developed this over, literally a few hours, got it out in a press release and then Mr. Macdonald was holding a little press briefing in his offices in the centre block. I remember some wag came in, one of the newspaper reporters and he said, Donald, I want to congratulate you on being inducted into the order of Short Order Cooks, thanks to the stuff that you and your officials have cooked up. So David, I had been asked by Gordon Osbaldeston, who was by that time clerk of the privy council, on behalf of Mulroney, I guess I was asked perhaps in August >85, if I=d be interested in being the chairman of the National Energy Board. So that was the Mulroney government, after the Western Accord, I think, and before the Halloween agreement on gas pricing, which I helped negotiate. That would become effective in January >86, when Mr. Jeffrey Edge, remember he had come to the Board as associate vice-chairman round about 1970 or >71 and he=d become vice-chairman to Mr. Jack Stabback and then he became chairman in probably 1980 or >81. He was retiring and that was known to come up in January and for some reason they decided in August to announce the next chairman, so I was sort of chairman in waiting for a few months.

#039 DF: And how does that process come about, how is it they came to choose you?

RP: I don=t know. I don=t really know how the chairman of the National Energy Board is extruded or intruded or whatever. It=s a cabinet appointment. I would have thought it owed a great deal to Paul Tellier, with whom I had worked when he was deputy minister succeeding Mickey Cohen from about 1982. Paul became Clerk of the Privy Council,

probably in late >84 and we=d kept in touch. He was interested in my I guess, and recommended me to Mr. Mulroney for the NEBship.

DF: So the challenges that you faced when you took on this new job?

RP: It was about a dozen years since I had left the Board and I had a lot to learn about the operations of the Board. Jeff Edge had done a good organizational job of the Board and he=d brought in a retired Admiral called Stevens. He had done a first rate organizational job and did a lot of briefing material for me. I was of course, still running the ADM side of EMR for oil and gas, got involved of course, in the negotiations leading up to the Halloween agreement on oil and gas. It was also the start of the opening up of the world=s first free market in natural gas. That started before I joined the Board, after the Halloween agreement but it=s an event that I=m very interested in. When a small fertilizer manufacturer in Ontario, Nitro Chem, Brockville, ammonia fertilizer manufacturer, couldn=t get a competitive supply of gas, the regulated price of gas was too high for it to conduct a successful petro-chemical business and there were some suppliers in western Canada who couldn=t get markets for their gas. Nitro Chem applied to the National Energy Board in November >85 for an order to force Trans Canada Pipelines to carry gas for it. That order was granted by a majority of the Board. The Board didn=t vote unanimously, I was there when the Board took its vote. Jeff invited me to come along. That was the first opening up, I think anywhere in the world, of a gas transmission system, to transportation by others. Trans Canada was required to give them the contract by an EB order.

DF: So this was a ground breaking decision. Why did the Board decide that, or the majority?

RP: David, it=s always been my view that a regulatory body must act completely independently when it=s dealing with individual regulatory decision, to build a pipeline, export some gas, to deal with an application for an order of some kind. When it=s dealing with an individual corporation or a person or a government or whatever, it must be entirely independent of the policy side of government. But at the same time, I think it=s essential in a democracy that an appointed body, not an elected body, an appointed body, the National Energy Board, or the Federal Energy Regulatory Commission in the USA, must take account of the general policy environment that the government of the day creates. The new policy environment had been the general market oriented oil and gas policy of the Mulroney government, enunciated in the summer of >85, in the Western Accord and given very specific application to the gas industry in the Halloween agreement, October 31, >85. And the majority of the Board sensibly took account of that. That opened, not a floodgate, opened a gate to a whole succession of applications, granted by the Board, for orders to transport gas for others. Up until that time Trans Canada had essentially been a bundled supplier of both gas and of the transportation service to Canada gas. And had sold local distribution companies gas plus transportation in one package. This was the start of the separation of the transportation function from the gas supply and marketing function. That was a very, very important event. And it took place long ahead of the similar event in the USA.

#088 DF: Because of this one company=s request?

RP: That=s right. Taken in the light of the Halloween Agreement. And Trans Canada, that company said, was very helpful to them. Trans Canada resisted the order, the next year took the Board to court over this, unsuccessfully, but at the technical level was very helpful to Nitro Chem and to other early shippers of gas on own account.

DF: But this certainly changed the whole concept of pipeline. . .

RP: Yes it did. And that idea of course, has spread worldwide in the 80's and 90's.

DF: But it did cause complications in the working it out didn=t it?

RP: Oh it did. So there was a major hearing then started, in Jeff Edge=s time, not in my time, to determine how a pipeline should deal with its already committed gas purchase obligations and how it should deal with demand charges already paid or being paid by local distribution companies under existing contracts when some of that gas was being displaced by gas in direct sales like the sales to Nitro Chem. It took some time but the Board, in about the spring of >86 came out with something called the Operating Demand System. Which basically said, and it wasn=t a stroke of genius, it was an interesting idea but not a stroke of genius, and I think it came from Consumers Gas at that hearing, that the local distribution companies contractual commitment to the pipeline should be rolled back, pari pasu, with the growth of direct sales volumes. So that was an expedient that applied for quite a few years. It was also the time David, later on in 1986, that the Board introduced the Market Based Gas Export Policy, which has lasted. I like policies that last. I was kind of proud, although I didn=t have anything to do with originating it, of the National Oil Policy which lasted for about a dozen years, from >61 to >73. Gordon Jaremko formulated an aphorism, he called it the Priddle Principle. I once said that the durability of a government policy is inversely proportional to its length, in terms of words, and to the quality of paper that it=s printed on. So the National Oil Policy was promulgated as 2 sheets of type script on rather poor quality paper that lasted for a dozen years. The Halloween Agreement was basically a series of press releases that came out, I think November 1st, >86, on very simple paper. And it has lasted 17 years since then. The National Energy Program was done on glossy paper in nice books and it lasted 4 or 5 years. So I like policies that endure. The National Oil Policy endured and the Market Based Gas Export Policy endured because there had been all sorts of aggravation, wear and tear in successive National Energy Board gas export control policies. Even as recently as May >86, the Board brought out yet another new gas export policy that would have regulated gas exports relative to a pre-defined ideal reserves production ratio. Exports would have been allowed freely until the RP ratio fell to a pre-defined level, say 15. After which you wouldn=t get additional permits. That was worked out by basically, Bill Scotland, chairing a 3 person panel with Bill Stewart, I don=t know who the third member of the panel was. That clearly wasn=t sufficient to give expression to what the Mulroney government wanted. I did one man hearings in 1986 and we brought out the Market Based procedure in the fall of >86. David, I have attributed . . .you know, the Board members don=t work by themselves and the Board has had some very good staff people. Sandra Fraser was an excellent general council for the Board for its Ottawa years when I was with it. Dr. Peter Miles, now a vice-president at Seary???, was the brains

behind the Market Based Gas Export Policy. Ken Volman, who was senior staff person, now the chairman was the brains behind the Board=s policy on negotiated settlements which came out in the early 90's. The Board depends tremendously on it staff for generating ideas and generally being helpful to it. So you=ve got to recognize that any busy regulatory commission needs a strong dedicated staff that gets a reasonably housing, pay and is generally looked after and encouraged. I think the Board over a long sweep of time, have been well served by its staff. Got a lot of loyalty out of the staff and at the same time has provided the staff with excellent opportunities for learning about Canadian energy. And a lot of staff people have gone off to very interesting jobs. Dennis Cornelson who was the founding president of Alliance Pipeline was a National Energy Board person. Michel Scott, who=s vice-president for frontiers of Devon Canada was an economist at the National Energy Board. Laurie Smith who is the vice-chairman at Bennett Jones was a lawyer at the Board. Ken Macdonald who was president of Pro Gas before it was acquired by the BP Canada organization, he=s a National Energy Board graduate. Rob Stevens, who ran oil marketing at Pan Canadian, similarly.

#168 DF: Anything else you want to say about the dismantling of the NEP?

RP: No, it=s time had gone by the mid 1980's. It was the Reagan, Thatcher, Mulroney freer trade, withdrawal of the state. The apprehended oil crisis had disappeared.

DF: Why do you say apprehended because there . . .?

RP: Well, you see David. . .

DF: You don=t think there ever was one.

RP: The crisis in >73 and >74, was to an important degree, a crisis of politicians and business leaders. I should have said that when I earlier referred to politicians acting in the face of uncertainty. Business leaders were acting in the face of uncertainty. There was only a tiny, tiny fraction of the amount of information about world oil available then, compared to now. So as you look back, the selective embargoes against the USA, Germany, possibly Britain, that were being put on by OAPEC, the Organization of Arab Petroleum Exporting Countries, were not nearly as effective as one might have thought. Saudi Arabia said that she would cut back each month a certain proportion of her oil production. In retrospect it was seen that she probably didn=t but there was so little information. Also David, there weren=t many smart people around gathering information. So there was the famous incident, probably in the winter of >74, when the Economist newspaper rented a helicopter and flew over the oil tank complex at Europort and noticed that the tanks were fairly full. Whereas, on average they should be sort of half full and in a European winter, they should be less than half full. So there was no basic data on oil in inventory at the time. But they could see, it looked as if there was more oil in inventory than people thought. People were biting their nails about how much oil was actually being exported by Saudi and it was almost a capital offense in Saudi Arabia to say anything about levels of production or exports. Aramco was absolutely forbidden, no Aramco official and no Aramco owning company, Chevron, Mobil or Exxon, was allowed to make any comment. I think again, it was the Economist, went to the insurance market and looked at the volumes of oil that were being insured and found that they were surprisingly high. So to

an important degree, it was an apprehended crisis. But when you think that you=re going to be short of anything, toilet paper, whatever, you are very careful in not letting it go faster. So oil companies were instituting measures to conserve their supplies. They didn=t know what the global supplies were.

#213 DF: You say, somebody used a helicopter to fly over the tanks, how can you tell. . .?

RP; The tanks have floating roofs and you can see very easily.

DF: Okay. Because that=s not the case in all places. Many tanks have a solid roof.

RP: Fixed roof, that=s right.

DF: So at Europort they were. . .

RP: They were floating roofs, yes, they were these huge crude oil tanks, yes. So the situation was not nearly as bad in physical volume flows. Something I ought to mention to you David, two of the very good things that came out of that first oil crisis were the Energy Information Administration in the USA, which is a wonderful source of free information about world energy.

DF: You=re talking about >73, >74?

RP: That=s correct. And it=s a product of the U.S. Department of Energy that was created a little bit later in the 70's. The other very good thing that came out of it is one of the few international organizations that I greatly admire, and that=s the International Energy Agency. Originally an offshoot of the oil committee of OECD, but now really, a stand alone agency. Bill Hopper was the first chairman of, there were 3 organizations in the original IEA. SPC, that was standing committee on producer-consumer relations; SLT, standing committee on the long term, that was looking at long term energy supplies, bringing on new oil, renewables, conservation and so on; and the SOM, the standing group on the oil market. I don=t know if the SOM still exists but it was very important in the 70's in creating information flows about oil supplies globally. Those flows might now be available commercially but they weren=t available commercially at the time. So Bill Hopper was the first chairman of the SOM, I was the vice-chairman. In fact, I chaired, because of Bill=s absence, the very first meeting of it. Canada played an important role in the IEA. There were several Canadians who were important on the staff there and it was a very formative period. It was the creation of a fine, very useful, international organization in my view. Now the second oil crisis was really much more severe. But at the same time it was still not as bad as people thought it was. Of course, it was partly not as bad because the huge increase in oil prices that took place in >79 and early 1980 that drove the spot price up to $40 US a barrel, which is perhaps $100 US a barrel in today=s money, was forcing the world into recession. So rising prices were working against themselves and supplies fairly quickly, were coming back in balance. I had a Canadian friend, Fred Sexsmith, who now lives over here on Maine Island, a good Alberta I think, formerly with Shell Canada working for A. D. Little. He used to phone up from time to time and I remember him telling me in about November 1980 that their concern was that large product surpluses were developing and they were going to drive down the available price of crude oil. I told Ed that and he couldn=t believe it, he simply would not believe it, Ed Clark that is. So those are some of the vignettes from that period at EMR. So I had a lot

to learn about the National Energy Board. Jeff had not been a really tight manager of the Board and when I joined, it had about 450 or 470 staff. In 1991 it absorbed a large chunk of the Canada Oil and Gas Lands Administration, which was being folded as a government economy measure. So it you looked at the COGLA staff who would have been working at the National Energy Board, had they then been merged, you got a total of say, 550 people. When I left the Board it had about 280 people. I like to think that I about halved the size of the Board and I hope, made it more efficient and structurally more efficient. It had tended to get rather fat in the period when the Board was doing a huge amount of government administration of oil and gas pricing. On top of its regulatory work. . . David, the regulatory work of the Board had tended to recede enormously in you know, the straight pipeline, gas exports, there were very, very few new gas exports allowed, between about >73 and 1980. I remember in 1980 there was a big brou-ha-ha about allowing new gas exports which were needed to support the Foothills pre-build of the Alaska Highway Pipeline. And there had been very little new pipeline development, apart from the oil pipeline to Montreal during the 70's because the gas industry was stagnating. So the Board was very busy with studies and very busy with administering prices, export flows and so on and had accumulated a lot of staff to do that. A lot of that became redundant when the oil and gas industry was put on a sort of market sensitive basis and many of these programs sort of dismantled from 1985, >86 onward. So a lot of people had to go. Actually the move to Calgary took place in September >91. That was a painless opportunity to downsize the Board, which we used.

#306 DF: Because many people didn=t want to move?

RP: Yes, about 40% of the people actually moved. So David, moving on from my appointment, which became effective January >86, there was the Market Based Gas Export Procedures, there was working hard to adjust gas pipeline contracting to allow these new flows of gas and then there was the opening up of the, you know, the start of a definitive open access pipeline policy. That was worked out by Board members other than myself in successive trans Canada hearings. I didn=t do a huge amount of panel work, that is sitting on hearing panels. I did 1 or 2 gas export panels to try and develop an expedited public hearing process to gas export licensing. Towards the end of my time at the Board we=d got gas export licensing down to a written proceeding but in the early part of my mandate it was still a public hearing proceeding.

DF: So why was it you weren=t . . .

RP: I didn=t take all that much part in hearings, in the way say, Neil McCrank at the EUB doesn=t do so now. Because I thought that the chairman ought to be doing a chairman job and chief executive. He=s responsible for the work of the Board and it was more important that I do that rather than spend the very long days sitting on public hearings. When there were very important hearings I took part in them. Like the California Gas Export Hearings, when we ran head on into the California Public Utilities Commission and did a kind of rear guard action on marketization of Canadian gas to California in the early 90's. A very big event in the middle of my mandate was moving to Calgary. The idea of the Board being located in Calgary had been around since 1959. I believe that

when the Board was set up one of the issues was, should it be located in Calgary or in Ottawa. That was the time when things were very much centralized in Ottawa. It came up again and again and was resisted. I have to say, it was a number of people, I think at the Calgary Chamber of Commerce as much as anywhere else, who in the energy group there, thought it would be a good thing to bring the Board to Calgary. What actually happened I am told was that Mr. Mulroney=s kind of war cabinet, was meeting at 24 Sussex on a Sunday morning just before the, probably February, 1991 budget. The conversation turned to the budget and some Alberta ministers may have asked Michael Wilson what was in the budget for Alberta. Someone suggested that there wasn=t much in the budget and could anyone think of something and somebody picked up on something they=d heard. A chap called Walter Litvinchuk, he=s probably retired now, who was with Pan Alberta Gas as a vice-chairman and he may have been chairman of the energy committee of the Chamber of Commerce. He had been touting this idea around in Calgary in 1990 and early >91, so one of the ministers said, why don=t we move the National Energy Board to Calgary. Everyone agreed. The budget speech and all the budget documents had by that Sunday been printed, I think the budget was going to be given on Tuesday afternoon. So it was decided that Mr. Wilson should be authorized to write that in to the budget which he did, or speak it into the budget. So that=s how we got moved. I was in Calgary doing a hearing at the time.

End of tape.

Tape 3 Side 2

DF: So start that sentence again, you were in Calgary.

RP: I was in Calgary for some kind of, not public hearing, but sort of pulse taking. It was on something to do with the reversal of the Montreal crude oil pipeline. The idea that economics were now dictating that that pipeline should not be used in eastward service, should perhaps be mothballed and perhaps be reversed, to allow imported oil to flow at least part way into Ontario, say to the Toronto area refineries. So I=d had a call, I was actually in Halifax on the Sunday evening, remember the kind of cabinet meeting had taken place on the Sunday morning. I was at the home of one of my son=s in Halifax, and my daughter-in-law picked up the phone and she said, it=s the Prime Minister=s office calling. She thought it must be a joke, everybody laughed. So I picked up the phone and it was one of the Privy Council office officials telling me this. But I couldn=t tell anyone because it was a budget secret. So when we were in Calgary having this hearing at the Palliser on the Tuesday afternoon I asked one of the staff people to go and watch the budget on TV and tell me if he saw anything. So that=s how it all started. I think we did a reasonable job David, from a standing start in February, 1991, to opening our doors for business in September 1991 in Calgary, in the Cadillac-Fairview building. We had all the people there by about mid October and had to build up staff. We got quite a lot of new staff, mainly local people and that was a very valuable infusion of new blood into the Board. The Board, I think, has been very happy in Calgary. I think there are still differences of view as to whether that was the right thing to do. I feel strongly that it was

the right thing to do. I think moving the Board to Calgary has not impaired, in any way, its relationship to industry. There=s been nothing improper, nothing closer to the industry in any way than they were in Ottawa. But I think there=s a better understanding of the industry. Got new people, living in a very vibrant city environment and I think it=s been good for the Board and it=s nice to be a bigger fish in a smaller pond, talking government wise of course, than you were, a small fish in a very, very big government pond in Ottawa. So I tend to give the Mulroney government good marks for that move.

#029 DF: Right. One of the things that the people of Alberta have always said is that Ottawa doesn=t hear it very well. If the NEB was more in contact with the oil industry once it moved to Calgary, does that mean that then, the politicians in Ottawa were getting a better contact with the industry because the NEB was in Calgary?

RP: Yes, I think, to a small degree David, that would be the case. Because successive ministers do visit with the National Energy Board, perhaps more than the Board goes to Ottawa. I presume the chairman, like I did, is in Ottawa occasionally, I wasn=t there a great deal. I do think it would give the minister and David, the department, because there is a good relationship between the Board and the policy people in the department, a proper relationship, not to deal with individual cases but in general policy terms. It gives the department and the minister a window on the Alberta and Calgary scene that they didn=t have when the Energy Board was just down the street in Ottawa.

DF: But when the NEB was in Ottawa, were people from the department coming over more often?

RP: I wouldn=t say so, no. David, I should point out that since probably the late 70's, the Board had a sort of branch operation in Calgary. We had a small office in Bowness, mainly geologists and engineers tracking resources, reserves, oil supply and keeping us informed. That was somewhat wasteful and those people of course, were absorbed into the single head office. You know, David, some strange ideas flew around in 1990 about moving the Board. Responsive to the ideas generated by Walter Litvinchuk and other people in Calgary, I=m not saying Walter did that himself. There were curious ideas around. I remember one person in the machinery of government in the PCO, Privy Council office, was touting the idea of kind of splitting up the National Energy Board, letting Board members live in any city that they happened to come from. Having say, an oil and gas staff in Calgary and electrical staff in Montreal, an environmental staff in Vancouver and you know, a pretty unworkable way of distributing a small organization nationally. That was one idea. Another idea was to move a head office to Calgary and keep a sub-office in Ottawa. I don=t think that was readily workable again, for a small organization. So I=m glad that the whole thing came together. The Board got great support from Mr. Jake Epp, the minister at the time, to effect that move. The move was fairly expensive.

DF: As they are with a big organization

RP: Yes. Trans Canada Pipelines you know, had moved to Calgary. That by the way, I think Mr. Maier, the then president and CEO of Trans Canada takes all of the credit for that but I believe that that move was precipitated by the National Energy Board in a public

hearing that I chaired, questioning Trans Canada=s head office expenses and asking why they needed to be in some of the most expensive office accommodation in the country, in First Canadian Place in downtown Toronto. And the explanation that was given by the policy witness was that they needed to be in touch with the financial community. Now that wasn=t really true. They were running a pipeline not a financial operation. I think that led Mr. Maier to consider whether it was really essential to be in downtown Toronto. He probably looked at being on the outskirts of Toronto and found that it was not much more expensive in moving terms, to move it a couple of thousand miles rather than 20 miles.

#073 DF: Any other things you=d like to recollect from the 90's?

RP: The 90's was a time of accelerating change in terms of the Board=s role. From about 1995, remember, these very difficult toll proceedings, that=s setting rates for oil and gas pipelines, which in some cases had been taking place almost every year, resetting tolls every year for the following year. We got completely out of that with the use of negotiated settlements. I think Inter Provincial Oil Pipeline had its negotiated settlement in 1994, Trans Canada the next year and they=ve endured pretty well. I realize that Trans Canada=s has basically come to pieces at the moment but they endured right through the end of my mandate.

DF: What was the principle of the negotiated settlement?

RP: The idea basically, that rather than bashing things out in a public proceeding, with people taking adversarial positions and causing a lot of bruising. And the Energy Board picking, basically, one set of ideas and embodying them in tolls, you had a system whereby the Board said that if a company wants to negotiate a rate or a set of rates, and do it on a long term basis, if it advises all of the interested parties that it=s going to do this, if those parties who take part in the negotiation are willing to support the outcome, then the Board, assuming that there=s nothing illegal, relative to the National Energy Board Act, in that outcome, will find the negotiated rates to be in the public interest without serious further inquiry. It will have a hearing to see if anybody has public comments to make on the settlement. But it meant that you got much more sophisticated outcomes than you=d get in the knock-down, drag-out of a hearing. Now the negotiations take a long, long time, at least a dozen meetings spread out over a year. Perhaps 2 dozen over 2 years. A lot of executive time. But they=re still, I think preferable, to the traditional adversarial public hearings. So that was a big change, and that was an outcome of something called, I forget the key words that we had. It was a sort of move towards efficient regulation and incentive based tolling. That=s not the same as negotiated settlements but the negotiated settlements involved incentive tolling, as against tolling, on the basis of the very sort of pro-forma cost of service regulation. I paid tribute a few minutes ago to some of our staff people. Gaetan Caron, the present COO of the Board, who came up the engineering route at the National Energy Board, a very able executive, was the person who pushed various efforts directed towards incentive regulation. And also pushed the idea of a generic rate of return for all pipelines which stemmed from a public hearing which we held in the mid 90's. So again, that=s a good example of staff initiative. It was initiative by the way, that was not well received by the pipeline industry. The pipeline industry, we had a public

seminar, it was articulated in part by a couple of professors from the business school in Calgary and I think it was very successful. It didn=t draw enthusiastic response from the pipeline industry, it did from the producing industry. And it laid the groundwork for negotiated settlements embodying incentives features so that pipelines could have the opportunity to earn over and above their regulated return by basically, finding efficiencies and sharing the savings of those efficiencies between their shareholders and the shippers. So that both parties split savings approach would benefit from, and would therefore want, efficiencies.

#127 DF: Offloading a lot of the administration then, from your organization to the companies themselves?

RP: Yes. It meant that the Board was to a much lesser extent, I don=t think the Board ever micro-managed the pipelines but the settlements were left to be worked out in continuing detail between the shippers, all of the interested parties, and the pipelines rather than being sort of supervised by the National Energy Board and its staff.

DF: Would you care to comment on, in the early days of the oil patch regulation in Canada, there was always concern over supplies and protecting a certain amount, sometimes 40 years, I think, was the Board regulation. So quite a large amount for Canadian use and then now, under your direction, gone to market base. Talk about that change in thinking over the years?

RP: That thinking is very deeply rooted. In the early 1900's, some small gas fields were developed in the Niagra Peninsula and in, I think, is it Essex County in southern Ontario. Those fields were connected to markets in Buffalo and Detroit respectively. That was a period of very low tech gas field technology, engineering. They were very quickly drained by demand from Buffalo and Detroit and that upset the Canadians and there was enacted something called, something like, the Exportation of Power and Fluids Act. Power meant electricity. For many, many years, basically no exports were allowed. Then Alberta was found to have significant gas and she was very concerned about adequacy of supplies for her long term needs. In maybe 1949, this is all covered in the Breen book, about the Energy Resources Conservation Board, published about 10 or 12 years ago, in 1949, the government, I presume with advice from the Board, recommended that Alberta should set aside 50 years supply of gas before allowing any exports. So somehow you would calculate what were the needs of the next 50 years of gas by Alberta, and only to the extent that reserves exceeded that 50 years number would exports be allowed. The Mines minster of the day, who I think probably was the person who was a very prominent Latter Day Saint after he left Alberta.

#162 DF: Tanner?

RP: Nathan Tanner, very good, thank you. Went to Chicago and told an American business audience of this decision. That immediately produced a very strong reaction by Canadian gas reserves ???. The number was boiled down and boiled down and I think it eventually became 30 years. So what I like to do David, is to remind Albertans that the idea of a domestic demand, set aside for gas that was so controversial in Alberta=s eyes for so

many years was an Alberta decision. Being copied, and they should have been flattered that it was being copied, by the federal government. Its implementation was in the hands of staff and Board members, most of whom came from Alberta. Basically, the federal management of, we=ll talk about gas, of gas export licensing, the Act said, allow the export only of volumes of gas which are surplus to reasonably foreseeable requirements for use in Canada. That was probably Alberta language put into the National Energy Board Act. So Mr. McKinnon created, the first NEB chairman, a very similar design to Alberta. I think it started out with 30 years, I think it started out with 30 times next years gas requirements were to be held as reserves. And any reserves above that could be exported, any volume above that could be exported. Then they later went to something called 25 A 4, so you looked at the 4th forward years. So now you would look at 2007's gas requirements, multiply that by 25, get a big number, compare that to your reserves and any reserves above that number could be exported. So that was the scheme through the mid 1970's, when the Board added a produceability criteria. Not only did you have to have the reserves but projected productive capacity had to exceed domestic requirements right through the licensing term. That was a very, very difficult thing to forecast. What the Board found was that there was a sort of apprehended shortage of natural gas in the 1970's, despite all the export control. Because having gas reserves wasn=t enough, you had to have the productive capacity to get it to consumers. So productive capacity was then seen as really, more important than reserves. Nevertheless, the reserves test was maintained until it was changed in May >86, to this RP ratio test. And then in the fall of >86, to that Market Based Gas Export Procedure that basically says, as long as you=ve got freely moving gas prices, as long as gas prices are unconstrained by governments, then we are making the assumption that gas supply and demand will always balance. So that Canadians will always be able to get the gas they are willing to pay for. So reasonably foreseeable requirements should be met at any current gas price. And that=s proven to be the case for the last 17 years. We=ll have to see now, whether that=s going to endure in a situation where it now looks as if western Canadian, and possibly national gas production has started a decline. So far David, and I=m retired and this is outside of my bailiwick, it looks as if the fall in gas production is falling on exports rather than on domestic use. That exports are being throttled back somewhat and domestic markets kept fully supplies. But that=s only a year or two into this inflection. So I am reasonably satisfied that that program has worked well. I mean, a government policy, a regulatory policy that works well say, for 10 years, is worth having. One that works for 17 years I think is very good. And it=s pretty well the same on the oil side. Now there wasn=t the same concern about oil because you can import oil if you can=t, it=s much more difficult to import gas but not impossible. We might be looking at an era where supplementary gas supplies to North America come from imports, that would be LNG imports, just as they in the USA case, have come from Canada for some years. Think about oil. The National Energy Board created a very comprehensive and very complex scheme in the 1970's, now completely forgotten, whereby they were throttling back oil exports faster than productive capacity was declining. So they were creating a surplus of productive oil productive capacity, that could have been brought to market. Pipelines were under utilized, wells

were under utilized and they were sort of banking that. But the engineering fact is, that you create very little real savings attributable to future consumption by that methodology. You=re not really banking something in a tank. It would seem that you=re doing so but you=re only say, extending by a very short period, 18 months, 24 months, the time when there=s a cross over between supply and demand, as demand rises and production falls. So the Energy Board got out of that fairly quickly, it didn=t make sense. It was a Jack Stabback idea and he=s a fine petroleum engineer, reservoir engineer, and it wasn=t workable. So we haven=t had any licensing. We=ve still got licensing of gas exports but we haven=t had licensing of oil exports for a long, long time. Our oil requirements are very adequately met. David, I would tend to take the view that what you need to have a well supplied oil and gas economy is a vigorous industry that will get it from someplace or other. Will import it, bring it from the USA or whatever, and then keep a supply that way. I think the more companies that you have, the more ideas that you=ve got in play, the better you will be supplied. Now we=ll have to see whether history will prove that to be true.

#256 DF: Prove that out. [tape turned off then back on]

RP: That was a very formative experience and it enable us to do significant downsizing of the Board, only about 40% of the people in Ottawa eventually moved. It tended to be the older people and the professional people and the kind of dedicated people, people who were willing to make their career at the Board who moved. So that was a good thing. But we had a good infusion of western Canadians, not just from Alberta and we got a very kind reception from the Calgary community, the Chamber of Commerce. I think Bill Kauffman was the managing director of general manager of the Chamber at that time. Mayor Duerr took the trouble of coming to Ottawa in the spring of 1991 to talk to the whole of the NEB staff, to tell them that they were going to be welcome in Calgary. You may remember David, that the early 1990's were a time of considerable recession in the oil and gas business. I think the community was glad to have us hear. It was a good time for the Board to move, real estate prices were relatively low. We got a very attractive rental for what became Energy Plaza, initially the Cadillac-Fairview building. So that was an all round good experience in my view. Clearly it was not a good experience for those people who were not prepared to move out west. But the Energy Board people who did not move were basically dispersed, one way or another, into the federal government system. Many of them have done very well with CRTC, some went into the private sector and so on. So I don=t think there were too many serious bruises left, say, by a year after we had made the move. It meant that we did very little regulatory work in 1991 and there was a large accumulation for Board members to get busy with in 1992. I don=t remember what the issues were at that time. One of the issues of course, was a bit of a head on that we were having with California, which was restructuring her gas market. And really, insisting that the recently renewed, long term contracts by Alberta & Southern, a subsidiary of Pacific Gas & Electric, for the long term supply of Alberta gas to the northern California market would have to be redone. This led to a little bit of a regulatory

head-on which froze the situation for awhile. We would not allow the export of gas which displaced long term licensed gas supplies. Then there was a private negotiation between Alberta gas producers and California state and the buyers and Pacific Gas & Electric, Pacific Gas Transmission, which enable some kind of reasonably acceptable outcome for both parties. It was hard for us to argue very strongly against what California was doing because she was doing what Canada had done inter-provincially as I described, from 1986 onwards. So we had, I mentioned that the Board, in the case of several companies, Trans Canada, West Coast, was having almost annual rate hearings to reset the rates for long distance gas transmission. When I joined the Board that was kind of an exciting thing to do but it got more and more tedious as time went on. that led, as I mentioned to the Board=s efforts in the area of incentive regulation, combined with its initiative, and it was a Board initiative, to have a generic cost of capital worked out for the whole of the Canadian industry. Some of the companies were able to negotiate with their stake holders settlements that derogated from the generic rate of return. If those settlements met the Board=s conditions as indeed they did, they were accepted. It took companies like Inter Provincial Oil Pipeline, now Enbridge, out of the generic merry-go-round but Trans Canada, and to a degree, West Coast, stayed with it. So that meant that when we derived the generic rate of return in about 1995, that=s the rate of return which still, in 2003 applies to Trans Canada Pipelines. Now it=s being vigorously contested by Trans Canada Pipelines at the moment I notice.

End of tape.

Tape 4 Side 1

DF: In spite of it being contested now, explain to us how that came to be accepted then?

RP: Again, I think that the industry and the industry isn=t just the pipeline industry but everybody who took part in those extended, adversarial hearings on pipeline rates was getting tired of them. They were very expensive, involved a lot of lawyers, bringing forward expert witnesses, and the expert witnesses tended to go again, and again, over the same type of evidence. It was simply updated to the current year. There were 2 or 3 ways of looking at what was a fair rate of return. I won=t bore you with what they were. The one which the Board had sort of chosen for several years as its essential test was called the Equity Risk Premium. It was to say that the equity invested in a relatively safe business, like long distance pipeline transportation secured by contracts by the shippers would be aiming for a return on equity equal to the lowest kind of return in the economy. That would be the return on long term government of Canada bonds, plus a premium to reflect the risk of being in the pipeline business. Supply risk, market risk, technical risk and so on, regulatory risk as well. So basically, the Board gave the industry an initial generic rate of return on equity after tax of around, I think it was, 11%. That must have been say, 300 points, 3 whole percentage points above the then prevailing expected long term rate of return on government bonds. The generic rate of return would be changed each year, depending on what was the forecasted rate of return on government of Canada bonds for the coming year.

DF: Was that always fairly reliable?

RP: It didn=t too much matter David, that=s a good question, whether it was reliable or not. It was the so-called, consensus forecast in November of the previous year, as to what forward looking, the rate was expected to be. So to the extent that investors take their decisions on what is expected, rather than what is or what has been, that was seen as a reasonable way of going at it.

DF: And it was a common number that everyone could agree on too.

RP: Yes it was. It=s a published number, it comes from consensus forecasts in London, England of all places. So if the consensus was that the rate of return on Canadian government long term bonds would be say, 6% next year, compared to 7% this year, so it=s gone down by 1 whole percentage point, the generic rate of return was adjusted by .75 of that amount. It wasn=t adjusted by the whole amount. That was to give a little bit of cushioning as the government bond rate expected return fell, the equity investor in pipelines would get affected by just 3/4 of that fall. But it would have worked on the upside, they would have only got 3/4 of the upside. So it was intended to introduce an element of stability around a kind of a mean.

#038 DF: And you say that worked fairly well.

RP: It was welcomed, absolutely enthusiastically by the pipelines in the mid 1990's, and it was greatly applauded by the sort of independent consultant experts in this business. However, as time has gone on, I think that the pipelines feel, and Trans Canada certainly does feel, that it is now yielding a return on equity which is significantly less than Trans Canada should be getting. So long after my time, there was probably in March or April 2002, an Energy Board decision, following what was called a Fairness Hearing, that was Trans Canada=s name for it. But the Board at that time, nevertheless, elected to stay with the 1995 design. Now, there=s yet another kind of appeal type hearing coming up on that. They did however, give Trans Canada, an increase in the thickness of its equity. Allowed the equity proportion of its deemed capital structure to be increased from 30% to 35% which it now is. Basically, David, I=ve taken the view that over the last 40+ years, the National Energy Board has given the pipelines a fairly stable regulatory environment. It hasn=t been an excitingly sort of generous environment for pipelines. It=s kept those Canadian pipelines adequately financed. I think if you drew a trace of say, if you could determine what had been the behaviour in terms of say, return on equity of Canadian pipelines over the last 40 years and compared that wavy line to the return actually experienced by USA pipelines, you=d find that the Canadian one was much more stable. American pipes have had much higher returns in the past, sometimes much lower returns. They=ve been much more fluctuating I believe. American pipelines have tended to come and go. Some icons of the American industry have been swept under, partly because of their own errors but partly also, because they were given a less stable regulatory treatment. A couple of the watchwords of regulation are that it should give results that are predictable and stable and I think the Board has done that, and continues to do it.

DF: But when there was just basically one or two main pipeline companies in Canada you could have quite a bit of stability there. But as you=ve gone towards market based pricing

in other things, the pipeline industry has been opened up for competition.

RP: That=s correct. And so the biggest element of competition was the creation of the Alliance Pipeline, which took Trans Canada on head to head.

DF: Explain the historical circumstances around that pipeline being allowed to be creative, and the change in thinking about pipelines?

RP: I think the change in thinking was this, that we used to refer to, in my very early days at the National Energy Board, in the 1960's, and Trans Canada had then been existing for less than 10 years as an operating pipeline. In concept it went back further than that. Trans Canada was talked of in sort of hushed tones as the Achosen vessel≅. It was the Achosen vessel≅ to bring Alberta gas eastwards to domestic and export markets. It=s often overlooked that Trans Canada is, to a very important degree, a creature of government. I don=t think they see themselves as that now, because it was a government choice to support Trans Canada Pipelines rather than, I think it was, Western Pipelines, a competing proposal focussed on Chicago. Trans Canada focussed on Ontario and to a lesser extent Quebec. It could not have been built without government support. The government. . .

#083 DF: And a fiercely nationalistic pipeline too, it had to stay on Canadian soil.

RP: That=s correct. And keeping on Canadian soil provided the same problem that the CPR had faced, sort of 70 years previously. That was of getting across the Shield. So the government, through I think, guaranteed the borrowing costs for the construction across northern Ontario. I think David, probably owned the pipeline. It was called the Northern Ontario Pipeline Corporation or something like that. It was provided that, as Trans Canada gained in financial strength it would retire those bonds and obtain ownership of the northern Ontario portion of the pipeline. That all happened I think, in advance of the scheduled time. But the short point is that Trans Canada could not have existed without the government=s choice and support.

DF: And blessing, yes.

RP: Yes. So for a long time the National Energy Board sensed that policy was, or else it made policy be, that there should not be a competitor against Trans Canada in terms of owning pipe west to east, or of purchasing gas in competition with Trans Canada. So when an American company. . .

DF: And just for the uninformed, why would the government make that kind of. . .?

RP: Because, remember that natural gas distribution businesses, Canadian Western in Calgary, Consumer Gas in Toronto, B.C. Gas in the Lower Mainland, are franchised monopolies. That was, that the provincial or municipal governments or a combination of them, gave these utilities the sole right to service certain communities. That idea of a franchised monopoly is not fundamentally present in the case of inter-provincial and international pipelines. However, the perception was that because of the way that Trans Canada grew up that corporation basically, was desired by government to have a monopoly, to be a strong company.

DF: Because of the risks in all these other things?

RP: Yes. So David, when in probably the late 60's, another pipeline came along, Consolidated

Pipelines, which I think may have been owned by the Northern Natural Co. from Omaha, and wanted to buy gas in Alberta and build a pipeline, probably to the Twin Cities or Chicago, and compete against Trans Canada in that west to east transportation to export markets. By that time the Great Lakes Transmission System, 50% owned by Trans Canada, existed. That led to a major regulatory proceeding in the early 70's and the Board turned Consolidated Pipelines down. Ostensibly, on the basis that there was not enough surplus gas available, under the surplus test of that time, what I have described as 25 times the 4th forward year=s requirements of Canadian gas, had to be protected first. There wasn=t enough surplus gas and the Board denied it. Interestingly David, that was a little bit of a cause celebre for the new Mr. Peter Lougheed government in Alberta. Because, quite correctly, the Conservatives felt that by denying Consolidated the right to export and to build a pipeline to carry those exports, the National Energy Board was reducing competition in Alberta gas purchasing, and therefore adversely affecting the purchase price from the standpoint of the owner of the predominance of the resource, and that was the Alberta Crown. So that was a bit of a run-in for which the National Energy Board was responsible. That actually started an extended period of no new gas exports. Some gas exports were allowed at that time and that time must have been, I would have guessed, about 1970 or >72. There were no further exports until the first pre-billed exports, probably about December 1979 and some more in 1980.

#137 DF: So in retrospect, was there not enough to make that other pipeline viable?

RP: There would have been enough if prices had been higher. There was still remaining,, and I=m not suggesting this is the case now, it=s not the case now, there was remaining a bank of gas prospects in Alberta which, given an adequate, higher price for gas, could have been developed to support that pipeline. But David, you=ve been asking about competing pipelines, so it was a long, long time later, nearly 20 years later, in the late 1990's that western Canada gas producers got together with this concept for Alliance Pipeline.

DF: So why had it taken so long, I mean, certainly you would have had western Canadian producers that wanted to export?

RP: That=s right. So people were sort of terrified of the idea of additional exports during the 70's, and basically, government was saying, there isn=t enough gas and even if the National Energy Board approved exports we probably wouldn=t endorse the licenses. Then you had the NEP period and that was say, 4 or 5 years, from 1980 to 1984, >85.

DF: There was a gas bubble at the end of the 70's.

RP: And the gas bubble got worse and worse and caused a lot of hardship among producers through the first half of the 1980's. It wasn=t really released until we had the Market Based Gas Export Procedure, starting in late 1986. Gas exports then took off, but David, they were basically, in the first place, occupying, filling, existing pipeline capacity. Because there was a surplus of pipeline capacity. And then Trans Canada did expand in a measured sort of way, responsive to industry pressures but not always keeping ahead of demand in terms of the demand reflected in additional supply of gas. So as you know, from time to time situations developed when there was more available productive capacity in Alberta than pipelines to take it out of western Canada. We were now in a

situation where anybody could supply gas to anybody else. You got a situation of very fierce competition between suppliers, locked in at the margin, into Alberta. And the price in Alberta was driven well below the sort of networked North American price. If you took a price from Chicago or New York or whatever, and netted it back by deducting pipelines tolls, to Alberta, you would find that the Alberta price was actually below that net back caused by gas being bottled up in the province. So by the mid 1990's producers were feeling very frustrated about this, felt that Trans Canada wasn=t expanding fast enough, wasn=t responsive enough to producers. And I think producers by that time thought, wouldn=t it be a neat idea to have a competing line of pipe. Then I think a man called John Ladigan came along, he had founded Direct Energy. Remember, with the opening up, the commoditization of gas following the Halloween Agreement in 1985 there had been a whole blossoming of entrepreneurship in gas marketing. John Ladigan was an engineer, who spent at least the first half of his career developing gas distribution systems, probably for a company called Northern and Central Gas in northern Ontario, probably at the lake head. Had some interesting engineering ideas and also interesting ideas of a competing pipeline to Trans Canada. That gave birth to Alliance. An extra high pressure pipeline operating, say at 1,600 lb. per square inch compared with the sort of 1950's conventional pressures of 1,000 lb. that Trans Canada was using.

#192 DF: So what had changed politically and at the Board to accept this idea?

RP: Yes. The Board was prepared, I should have talked about this earlier, starting I think, in the early 1990's, the Board felt that any residual idea that gas transmission lines should be de facto franchise monopolies, they were never de jure franchise monopolies in the way that street distribution systems are, any idea of de facto monopolies was passe.

DF: Because?

RP: Because of the need to foster competition in the gas market. And that competition could come about by competing pipelines as well as gas suppliers competing within an existing pipeline.

DF: What I=m trying to get you to say, and I think you mean to say it, is that the monopoly was no longer necessary, to assure long term stability.

RP: That=s correct. Yes, that=s right, it was.

DF: That was a thing of the 50's and 60's, by the 90's. . .

RP: Yes. And also David, the Board was prepared to see, for instance, some competitive pressure put on existing pipelines as being in the public interest.

DF: Right. That wasn=t going to be to their detriment?

RP: That=s right. And it would also work to the common good of the more competitive gas market. It was also prepared, you look at the case with the bypass pipelines in Alberta, there=s been some duplication by federally regulated pipelines of provincially regulated pipelines. And the Board was prepared to accept say, the relatively minor environmental degradation of building a pipeline, say in the Suffield area in exchange for the additional competition that would occur in the gas business as a result.

DF: Now the monopoly pipelines didn=t always necessarily agree with the Board=s position?

RP: No. Trans Canada fought Alliance tooth and nail, partly on technical grounds, arguing

that a 1,600 lb. pipeline would be engineering unsafe and unsafe therefore for the workers and the public that happened to be near the pipeline. I don=t think Alliance would have been build unless they had conducted very expensive burst testing with their technology before putting any pipe in the ground. So in a hard fought hearing the Board found in favour of Alliance and that=s been a tremendous achievement, to have the first brand new pipeline in Canada since Foothills. But Foothills had basically been a creation of Nova and Trans Canada Pipeline. So this is the first brand new pipeline in nearly 50 years.

#230 DF: It=s my job to ask stupid questions, why was the high pressure important to Alliance? Is that something new ???

RP: Yes, it was. It was new in long distance international pipelines, completely new. I understand that it was in part, John Ladigan=s idea that you would not strip all of the liquids out of the pipeline, that you could have a dense gas pipeline that was not just methane but some ethane and some propane as well. So very high BTU gas. To make that work required a higher pressure, and there were also other efficiencies from high pressure.

DF: High pressure being 1,600 lb. versus. . .?

RP: 1,000 lb. for conventional kind of, 1950's design of pipe. Remember David, once you started a pipeline system and you=ve got several lines of pipe, operating say, at 1,000 lb., you can=t bring in a 1,500 lb. ???, it simply doesn=t work. So Alliance had to be a new pipeline and it cut a swath across western Canada from northeast B.C., to exiting the 49th parallel in Saskatchewan.

DF: Was the higher pressure necessary to carry those liquids?

RP: I believe it was.

DF: Alberta had always wanted to keep those liquids for political reasons?

RP: Yes, and she was very unhappy with the removal of the liquids. But Alberta did not oppose Alliance, I believe, in the NEB proceeding, which was still when I was chairman, I didn=t sit on the panel. And the liquids are stripped at a plant in Fort Chicago, near Chicago.

DF: That was always a big deal for Lougheed wasn=t it?

RP: Yes, it was. It wasn=t just liquids. I remember, it was probably in the late 50's, there was a project called the Sarnia, Olefinse and Aromatics Project, SOAP. The idea there was to take light Alberta crude oil and manufacture a product stream, the main component of which would be used to crack into ethylene and possibly propylene and butylene, at a new plant in Sarnia, which would also contribute Olefinse, you know, the basic building blocks for petrochemicals, to existing plants like Polysar, which had been a government creation from the Second World War. When Mr. Lougheed=s government came in in 1971 they took aim at SOAP, which later became known as Petrosar, Petrochemicals Sarnia and it was owned by several companies including Polysar, which was a federal government owned company. It was by then, a creature of CDC, Canada Development Corp. Mr. Lougheed didn=t even want crude oil to go out of Alberta to make petrochemicals. Much less did he want LPG=s to go out. Although David, LPG=s were going out in the Inter Provincial Oil Pipeline from probably, the early 70's, in what was

basically a very clever Dome scheme, to ship liquified petroleum gases in slugs in between the crude oil. But you=re right, it=s been a principle of Alberta from the very start. It=s rather interesting that Alberta espoused that principle. She now wants to be the ??? for Alaskan gas LPG=s and would like to strip LPG=s from a future stream of Alaska gas and process those in Alberta.

#288 DF: Is that because Alberta has done what it can with its own petrochemical industry, there=s not much more room for expansion?

RP: Yes. There probably isn=t much more ethane to be recovered so it would be difficult to support further expansion. I must say David, I think that the Dowe and Nova initiatives that led to Alberta gas ethylene and what is now, Nova Chemicals, even though it=s now headquartered, to my disappointment, in Pittsburgh rather than in Calgary, I think that was an interesting piece of statism, if you like, derijism??? to create what has been a commercially thriving industry. David, as I said to you, I pull my Alberta=s friends legs, or used to, about NEB gas export control, saying that was just the federal government doing what Albert had started well before the National Energy Board Act. How could you therefore, complain about that. Alberta presents herself, probably quite rightly, as a great exponent of private enterprise and so on. But quite a number of her successes, the creation of the Nova system as basically, a state sponsored, privately owned, gas giant, gas gathering and transmission system within the province, that was the doing of a free enterprise government. In a sense as well, Nova Chemicals was. The Joffre plants are a product of provincial enterprise as much as of private enterprise. Alberta Energy Co. in a sense, got dowries in terms of the Suffield block and maybe the right to build the second pipeline from the oil sands to carry the Syncrude product. So those were building blocks for a very successful private enterprise, now of course, Encana. But Alberta has done a reasonable share of interventions in the operation of markets.

DF: So we sort of got off topic there. Back to the competitive pipeline system.

RP: Oh yes. So the National Energy Board was by the mid 1990's, fairly relaxed about certificating competing pipelines. Was willing and I think said so, in its reasons for decision on Alliance, that there should be potential environmental degradation, a potential adverse economic impact on an existing system or systems, Foothills and Trans Canada, but that competition was an overriding consideration and it was in the public interest to certificate therefore, this giant new pipeline. Even in a company as big, gas wise, as Canada is, it=s not often you get a chance, that circumstances conspire to having a brand new pipeline. That=s a very bold venture. So I=m certainly impressed with the folks who originally sponsored Alliance and the was virtually, entirely, a group of producers. Now the pipeline is owned, as you know, by the Fort Chicago Trust, by Duke Gas Transmission and by Enbridge. So they=re all people from outside of the Trans Canada circuit who own it. But it was a producer initiative.

End of tape.

Tape 4 Side 2

DF: Okay, so we=ve got some competitive pipelines, what else was happening towards the end of your time at the Board? Any other major initiatives?

RP: I would not say so. The Board, in the late 1990's, I think it was responsive to the general interest at that time in establishing favourable long term policies for oil sands development. Outlined the circumstances in which it would be prepared to give long term licenses for Syncrude product, for synthetic oil from the oil sands, but that was really something that was done with a view to an economic situation which has not arisen, where people would want to export long term to offshore markets from the oil sands. I don=t see that arising. I think there=s going to be more than enough North American demand for oil sands product to enable those transactions to take place within the NAFTA framework. So those are the main elements of what was happening latterly. The Board was also responsible for electricity, that is for international power lines and for international power exports. But at one time we thought that there would be a flowering of those international exports based on long term contracts, say, for further large scale development of the lower Nelson Hydro in Manitoba and for the second stage of the Bay James project in Quebec, the Notaway-Broadback Project which would have added several thousand megawatts to Hydro Quebec=s James Bay overall scheme. But that faltered and then failed, partly on the strength of American environmental opposition. One of the Kennedy=s getting a bunch of Indians to paddle up and down the Hudson to express their opposition to that development. And I thought, very unfairly, because I thought the Quebec government was dealing in a very advanced way and very fairly with the Indians in the area, the Cree. But it also floundered on the changed commercial circumstances, you know, commercial circumstances of energy trade have changed so much in the last 40 years when it was essentially based on long term contracts and long term licenses for gas and for electricity. As the energy economy has moved more into a short term mode and the market has given people enough confidence that gas or electricity would always be there in volume terms, if you were prepared to pay the going price for it, the people haven=t been willing to contract gas or electricity in the long term. Unless of course, the contract simply provided that the price would be equivalent to the price at any one time on the short term market. If that was the pricing condition of a long term license there wasn=t much point of having a long term license. Why not just go into short term contracts all the time. So lower Churchill in Labrador, Notaway-Broadback in Quebec, lower Nelson in Manitoba never took place because most importantly, of the changed commercial situation. It=s been striking as well David, how, in 1986, 99% of our gas exports were going out under long term license. It must now be much less than half of our gas exports and there=s very little interest in long term licenses, because of the change in the commercial market. That should be something that should help to assuage Canadian consumers concerns that gas is being committed to export under some kind of long term obligations that Canada cannot get out of. That phenomenon is fast fading and gas is available to anybody who wants to buy it at any one time.

#045 DF: A couple of other things that came up during your time at the Board when you were chair, one was an increased significance of environmental issues.

RP: Yes.

DF: Two individual cases, Peter Lewington, his case with the pipeline construction and then Wiebo Ludwig is very much in the news but there have been many other people. So there=s this growing collision between corporate direction and environmental issues at the personal level. How did you see that develop?

RP: Now David, the Board didn=t have to deal with the trickiest kinds of environmental issues, which tend to be in the upstream exploration and development and production phases. That was what was upsetting the Ludwig=s. It hasn=t had to deal with EUB type issues, where say, a valuable dairy herd allegedly was being damaged by sulphur emissions from a heavy oil development. So the things that the Board had to deal with were kind of cumulative effects of forestry and mining development in northeast B.C. competing for environmental space with pipelines and gas processing plants being built by West Coast, now Duke Energy Gas Transmission. And by say, pipeline construction completely in areas where there was no familiarity at all with pipelines. For example, the Maritimes and Northeast Project in Nova Scotia and New Brunswick. That brought to light new problems, like say, the drainage of melt water from snow and rainwater from acid bearing rocks that were exposed, crushed, opened up or whatever, as a result of pipeline construction. Now the Board=s interest in environment has been a very, very long standing one. They had an environmental advisor as long ago as the late 1960's. The Lewington case that you refer to. Peter Lewington, he=s now deceased, was a British born Army captain who was a great farmer, had some fine property, very valuable farmland in southern Ontario, was a leading light in a well known Canadian cattle association, I forget the name of the breed. He got very, very rough treatment, he and his neighbours, by Inter Provincial Pipeline when they were building a new line of pipe in southern Ontario, probably in the mid 1960's. He argued and was subsequently proven to be right, that the pipeline had damaged the water table, had cut across aquifers where they came to the surface and had tended to drain aquifers and the restoration had been very poor. I think the National Energy Board of the mid 60's and Inter Provincial Pipeline is greatly to be faulted for that. By the way David, what that experience tells me is that if developers and regulators are not sensitive to local concerns, and Lewington=s concerns were very well articulated and he had a very considerably following in the farm community, in the university community, University of Western Ontario in London, Ontario. The Board wasn=t sensitive, and Inter Provincial Oil Pipeline certainly wasn=t, to his concerns, that leaves a kind of bad odour that works against both those institutions, the pipeline and the regulator for years and years afterward. There are people down there who, 30+ years later, still rankle about this. So I don=t think you can be too careful as a regulator or a developer in dealing with those kinds of situations. I did a hearing in the mid 1990's in London and it related to some small changes to the Inter Provincial Pipeline and it was made more difficult by the backwash, 30 years later, of the Lewington saga. Peter Lewington was dead at that time. So the Board did make some early mistakes. I think it worked as quickly as it could to correct them.

#097 DF: But by nature, an organization like the Board is going to work slowly and may be

behind the game already. So was the Board, were you able to affect any changes at the Board to be more proactive?

RP: I hope so. Just to finish up on Lewington. . . well, the unhappy thing was that the whole saga across the Lewington land and his neighbour=s land, that had started in the mid 60's with a first looping of the Inter Provincial line, was repeated again in the mid 70's, when line 9 was built from Sarnia to Montreal. So he got his land ripped up again and it happened that that construction was done through his land in one of the wettest ever fall season. It was seen as something of a sort of national emergency to get the pipeline built and again, the Board at that time, was not as responsive as it should have been. Again, because of the urgency of building it, Inter Provincial was using, perhaps 4 or 5 contractors. It was quite a lot for say, 500 miles of pipeline. Some of whom weren=t experienced at working on southern Ontario agriculture land which I believe is somewhat different than working on say, much drier land in the prairie. So anyhow, I think progressively, by bringing on good staff, good professional advising staff, by subjecting the Board members to sort of, environmental sensitivity, by having from time to time capable, temporary Board members come on. Richard Revell for instance, a professor of I guess, environmental studies, a great plant biologist, physiologist from University of Calgary, he was very helpful to us in a couple of hearings, including the one on Inter Provincial in southern Ontario. And a very pragmatic person as well as a good scientist, the Board has progressively worked itself into a situation where I think it does a bang-up environmental job. And as well David, with Board pressure and just the desire to do a very good job, the pipelines themselves have got much more experienced at minimizing the environmental impact when they build. So what used to be a problem that had to be dealt with afresh each time new pipe was laid is now sort of, manualized in book form. This is what you do, this is how you separate out the top soil, how you keep the lower layers of the soil from mixing with and damaging, degrading, the top soil. There are machines to do this, machines to protect strip and protect sod and so on. It=s much more routinized now so there are lesser concerns that there is a need to recreate, you know, redesign the wheel each time. So I think that the Board will always have to be very, very sensitive to environmental issues. I think it now is sensitive. Of course, David, from the early 1990's onwards came . . . you know, the Board ceased to be a single window approach to getting things done. We were talking about that the other day in relation to the north, where there will be at least 4 parties who will be hearing the evidence and taking separate decisions, respecting a Delta to northern Alberta gas pipeline over the next few years. But starting in the early 1990's you had the Canadian Environmental Assessment Act. The minister of the Environment was empowered, either the issue of the application of the CEAA could be left with an institution like the National Energy Board to act responsive to that act as well as its own act. Or you could have a joint panel where 1 or 2 panel members would be designated by the minister of Environment, under the CEA Act, or you could have a separate panel. Now so far, we haven=t had that separate panel, we=re likely to have it for the Delta pipeline. But it=s meant that quite often the NEB panel would be expanded from the normal 3 to 5 members, with 2 environmental people taking part. We did that say, for the Express Pipeline in the mid 1990's. They did it

when they were, and I wasn=t involved, dealing with the Maritimes and Northeast, Sable offshore energy Projects in the late 90's.

#154 DF: Talk about the one window approach and its benefits and why that=s not happening in the north?

RP: I think it was a splendid idea of the Diefenbaker governments in the late 50's, to conceive the National Energy Board as a single window that a pipeline or an electricity transmission line could come to the National Energy Board and get, under federal authority, a single approval. It had to deal with all local laws and so on, that was presumed, but it didn=t have to be subject to any kind of a public regulatory process apart from the NEB one. The idea was that the NEB process would take into account all of the issues that might be looked at say, by a province. The province of course, because it was a federal project, wouldn=t have any right to give an approval. But the Board would look after provincial concerns which could be expressed in the NEB proceeding. So we went along splendidly like that for over 30 years and then I guess that environment and the social effects of environmental impacts were considered to be so sort of ominous, that special steps had to be taken, separate panels or joint panels, to deal with this. I think myself, that that was a mistake, that the Board, with an enormous amount of experience, both in theory and in terms of mobilizing expert help to guide it in practice would have been capable of doing a very good job itself. It=s experience had gradually built up. It was easily the best regulatory body for pipelines, it was difficult to create something new and better. But that=s what the government decided to do. The Ablame≅, has to be on successive governments. Of course, that was the Mulroney government which enacted or put to Parliament, the Canadian Environmental Assessment Act. Then in the north you=ve got a very fragmented situation where at least 3 other bodies, the Canadian Environmental Assessment Act panel, the Mackenzie Valley Land and Water Board, and the Northwest Territories Water Board will each seemingly, hold separate proceedings to deal with a northern pipeline.

DF: Is that because more politics is involved?

RP: Probably.

DF: Because the issues of building a pipeline are similar, aren=t they?

RP: Of course they are. And the Board was the only party to certificate the first northern pipeline, that is, the Enbridge IPL Norman Wells Pipeline. I think the Board could look very adequately after a Delta pipeline but it is not going to be allowed to. There=s been a layering, especially in the north, of other agencies and it should have been left to the Board. I also feel somewhat the same David, in regard to the Alaska Highway project. I don=t think it was necessary to set up a northern pipeline agency. I think that had the Alaska Highway Pipeline been built in the late 70's and early 80's it could have been built under the regulatory supervision of the National Energy Board which issued the certificate in any event. So there=s been some diluting of that concept that Diefenbaker and his colleagues felt right from the early late 1950's. You know, the Borden Royal Commission on Energy, which recommended, among other things, creation of a National Energy Board thought that, the responsibility say, for certificating a pipeline should be

separate from the responsibility for setting its rates. That would have been a mistake, and it was a mistake which Diefenbaker avoided. It gave both those responsibilities to one Board. I think the idea of the Borden Commission was that the National Energy Board would set the rates but that say, the Board of Transport Commissioners for Canada would approve the pipeline. That or the other way around but the 2 responsibilities would have been divided. I think there=s a great deal to be said for keeping them together, as Diefenbaker did.

#211 DF: But why did Borden think they should be separate?

RP: I think he felt the BTC was already experienced in certificating pipelines and that responsibility shouldn=t be taken away from it. There hadn=t been any proper regulation of pipeline rates up to that time so it thought it could give that to a new body.

DF: So why, in the political milieu of the time, starting with as you said, during the Mulroney time with that Canadian Environmental Assessment Act, why was there now a proliferation of new programs and new jurisdictional bodies?

RP: I think mistakenly, that it was felt that there shouldn=t be any exceptions to the CEAA, there couldn=t be anything carved out of the CEAA mandate. The mandate can be conferred on the National Energy Board to be discharged and in smaller projects that=s almost always the case. But I think the proper thing, the right thing, would have been to exclude the National Energy Board from the operation of the CEAA. Because the Board is so expert in pipeline regulations and gas plant regulation in British Columbia. Because some of the largest gas plants in the country are regulated at Fort St. John, Fort Nelson and so on, by the Board. But the same story was true with the Transportation and Safety Board, where there was an unsuccessful move to exclude pipeline accidents from the TSB=s mandate, because the National Energy Board has an excellent record of sensibly looking into pipeline accidents and changing its regulations to make sure that the circumstances that caused a particular accident do not, if at all possible, arise again. But again, the Parliament of Canada decided otherwise. So those are 2 example, TSB and CEA Act, of the Board=s powers being somewhat diluted, shared with others.

DF: What=s happening in the current political climate then, that allows these 4 agencies to be looking at the Northern Pipeline?

RP: They are carry-overs from a previous government. David, I can=t remember which previous government set this up. I do think it was done at the end of the Mulroney years, in the early 1990's. Again, it was partly connected with settlement of Aboriginal land claims in the Northwest Territories. But we=ve got a situation in the north David, where those . . . take Alliance. . . Alliance of course, had to get provincial approvals, went across some provincial lands and so on. But no province tried to regulate Alliance, it got a sole certificate from the National Energy Board . Even proud Alberta, with great authority from its own legislature to approve pipelines, didn=t stand in the way of Alliance. It cut right across the province, from northeast B.C. to Saskatchewan. But when you=re building a pipeline in the north you=re going to run across these other boards, which we don=t have on the prairies. So there are institutions in the north which are much more powerful as affecting federal pipelines, than any institutions in the south.

#265 DF: In the provinces.
RP: Yes.
DF: It does speak to a different political climate in the north. And the Territories have always been different.
RP: Yes it does. And it=s a complex climate and I wouldn=t pretend to fully understand it.
DF: And it=s still in the early evolutionary stage.
RP: Yes it is. And it will be an interesting test for those systems to see if they can work cooperatively, in relation to a Delta to northern Alberta gas pipeline.
DF: Anything else from your time at the Board?
RP: I don=t think so David. I think we=ve covered that pretty well.
DF: What caused you to decided to move on?
RP: I=d been at the Board, my first 7 year term, and David, looking back 7 years is quite a long time for terms of Board members, that=s still the case. My first 7 years term expired shortly after we=d got to Alberta. I=ll just tell you this very frankly, I=m not sure if I=ve ever said this semi-publicly before, there was a very capable French Canadian vice-chairman and it was certainly my expectation, my intention had been to step down after 1 term. I didn=t think that a chairman should serve for more than 1 term. So I was ready to go in early 1993. However, my colleague, the vice-chairman at the time, who=s French Canadian, said that he didn=t particularly want to stay in Alberta even if he could get the chairmanship. So I told the minister who at that time was, I believe, Mr. Epp, that I would be interested in an extension to that first term and they gave me another 5 years, which kept me going until the end of 1997. So I was at the Board for 12 years. In retrospect I think that was a bit too long. I think if the Board hadn=t moved I would certainly have left after 7 years.
DF: Were you at mandatory retirement age at that point?
RP: No, I haven=t looked at the act but I think that Board members could continue to 70. Remember David, the concept of the Board is somewhat that of a court of law. It is a court of record and the whole idea of an agency like the NEB or the EUB or the Ontario Energy Board is that it=s a specialized court. So even though I have no law training the Board members are somewhat judges. So I think 70 years is the mandatory retirement for National Energy Board members and I hadn=t of course, reached that. I was 64 when I retired.

#310 DF: Now, during all this very busy career you also picked up a Masters degree, tell us about that?
RP: That was in the early 1970's. What had happened was that when I got to the Board in >65 I was in the economics department or branch, doing special projects and that was helping Dr. Howland with the National Oil Policy. Then he created, within a few months, this oil policy unit which became the Oil branch and I felt that I needed to have a qualification in economics. So I started part time at University of Ottawa. I was being supervised for much of the time by Dr. Jack Firestone. Firestone, unlike many academic economists, was also a very successful businessman. He=d got a doctorate in Austria before the

Second World War, had come to Canada, probably about 1938. Very interesting person. Art collector, friend of A. Y. Jackson, probably knew other members of the Group of Seven, collected their art, his home was an art gallery. He was a very practical economist. He had been the economic advisor to the department of Trade and Commerce in C. D. Howe=s time. He was an ideal person to supervise somebody making a kind of career in government economics if you like. When I say practical, there wasn=t much emphasis on calculus and econometrics in his teaching. That suited me very well. I chose as my thesis topic an examination of the early development of the Alberta oil and gas industry in a staples framework. You know, the idea, in Canadian economic history, that economic growth of Canada has been a succession of resource development eras. The salt fish trade that developed, principally Newfoundland, a long, long time ago. The square timber trade from the Maritimes provinces, Quebec and to some extent, Upper Canada that opened up those areas economically. The grain trade from Ontario in the middle of the 19th century. Then of course, the western grain economy opened up by the railways. Then the wheat economy. Then one wondered whether you could classify the oil and gas development in Alberta post 1947 in that same framework. I decided that you could not. That even though Alberta was a relatively poorly developed province in 1947, nevertheless, in parallel with the development of oil and gas in say, the 25 years that I was looking at, from 1947, the economy was growing fast enough in other areas and agriculture was important enough for oil not to have the dominance that say, wheat had had in Saskatchewan in the 1890's and 1900's, 1910's. But it was an interesting look at the oil and gas industry.

End of tape.

Tape 5 Side 1

DF: So the staples theory didn=t apply?

RP: I felt it did not, no. And my supervisor evidently agreed with me.

DF: What other conclusions did you make in that study?

RP: That western Canadian oil and gas, compared to upstream global sources, Middle East, Venezuela, is relatively high cost. So there wasn=t a huge amount of rent to be collected out of the Alberta oil and gas development. And of course, what rent there was has fluctuated. It grew enormously with the upswing in international oil prices in the 70's, it fell off in the mid 1980's. It=s rising again with higher oil prices and gas prices right now, except with the industry=s cost structures, of course, much higher than it was 20 years ago. In the Canadian context there=s going to be a lot of, this is changing the subject a bit David, a lot of discussion over dividing that loot. The discussion led to these terrible energy wars of the 1970's and early 80's. Fiscal systems, who could tax what and take what out of the industry. I=m glad that that=s over. It was very unhealthy of Canada but it was a product of the uneven distribution of oil and gases. Geologically they=re always unevenly distributed so we had a sort of, as you may have remarked a sort of OPEC, the producing provinces over in the west and a sort of IEA, the consuming provinces, principally Ontario and Quebec in the east and tensions between them. I=m glad those tensions have been resolved. I think it was a great triumph of Canadian common sense

and also, of the Mulroney national reconciliation line of thinking. And of the Western Accord and the various other accords, the Atlantic Accord and so on, that gave substance to the dissolution of the energy wars.

DF: Yes, those energy wars aren=t likely to come back in that fashion again.

RP: I don=t think so because energy is more diluted now, prices in real terms are not nearly as high as they were in the late 70's and early 80's. And I think that there=s a preparedness to see Alberta take her fair whack out of what is recognized as an exhaustible resource.

DF: But although the Alberta oil, synthetic and conventional, is relatively expensive, it=s also there in great abundance.

RP: That=s correct.

DF: So it=s future is good.

RP: Yes. So if Alberta and Canada so wish, the oil age can last, on the strength of the oil sands, for an enormously long time. Now, whether there will be the water and the energy, in the form of natural gas for both fuel and for hydrogen to keep that going on an expanding scale is anyone=s guess.

DF: But the Alberta resource is in a much more stable place politically, in the world.

RP: Yes, it is. And because it=s so stable it will attract capital despite relatively low returns to that capital.

DF: And the Sun Oil money, it came a long time ago didn=t it?

RP: Yes, in the 60's.

DF: And that=s a part of it.

RP: Yes, that was in 1967.

DF: Yes, because Howard Pugh saw Alberta tar sands as being a very long term investment, not something short.

RP: That=s correct. And I think Imperial saw it similarly. They were the main spring if you like behind Syncrude. They=ve retreated a bit from Syncrude now.

#039 DF: So when you retired from the Board, you didn=t rest on your laurels?

RP: No, what I found David, was that I retired to Victoria in April 1998. I=ve been here now for, coming up to 5 years and what I have found is that Canadian experience and practice of energy regulation, the little area of activity that I was involved in for many years, is known and respected throughout the world and frankly, that there has been an adequate market for simple ideas about how to organize energy structures governmentally, separating the policy making from the regulator side of government. Having transparent, on the record, regulatory decision taking by independent bodies. Simple ideas about restructuring industries, unbundling the transportation from the commodity aspect of gas transmission. Simple ideas on privatization have sold well with international organizations like the World Bank and with some countries in South America, south Asia, central Asia and so on. So that has kept me as busy as I wanted to be. Now the Canadian environment is a very sophisticated one so there hasn=t been much need for my sort of skills within Canada but they have been fairly saleable overseas and that=s where I=ve spent most of my post retirement efforts.

DF: You mention all these things, like the unbundling and the privatization and the market

driven pricing and so on. That evolved over a period of about 50 years ??? the Canadian industry. Have you been able to see ways that you can speed that process up in new jurisdictions?

RP: That=s a question that arises all the time. I spent last week working on a paper for the Chinese government, which we=re doing jointly with a think tank in Beijing. The question is, how quickly can you build those sorts of structures into what is in the case of China today, let=s take that as the example, a very small gas industry. It=s smaller than Italy=s in a giant country. Contributes only about 3% to their energy balance. It=s badly needed. There are reasonably good prospects for gas, there=s the potential, which they=re going to realize, for importing LNG. So the question is, can you get a functioning wholesale market for gas from the start or do you have to have some kind of government administered market. So we are suggesting that they should take a chance on negotiation, even between relatively few suppliers and few buyers, resulting in more favourable economic arrangements, prices, terms and conditions of supply of gas, than could be created by the state development planning commissions price bureau dictating what should be the price. So that=s the thesis that we=re putting now, to the new leadership in China that=s going to come on stream in March 2003. Now I=m not altogether confident about this. They=re working with economists in Britain and also with Dr. Peter Miles, a vice-president at CERI in Calgary. We=ve been arguing that even relatively weak competition will yield more favourable results than good regulation. But that has yet to be seen. In Canada we have hundreds of competing gas producers in western Canada so no one producer has such a large share of the market that he can possibly affect the price of the commodity. In China, you=ve got say, 4 or 5 suppliers. Can you get a functioning market there. I think the answer is that you can=t at first, but even then, suppliers and buyers negotiating and agreeing, but having as a last resort, the possibility of going to a regulator, to sort of arbitrate price. That=s still better than having governments set prices. But if you look in other prices, Bolivia seems to have a fairly functioning gas market with perhaps 10 suppliers. I realize that Argentina has suffered a terrible economic decline in the last year or so but she, from the early 1990's, created a functioning gas market. It=s conceivable to do it in Columbia.

#093 DF: So what are the main pitfalls that can be overcome through knowledge of the Canadian experience?

RP: You=ve got, in these countries, which are not used to the ideas of independent regulatory tribunals, you=ve got to sell them on the idea that investor confidence can be enhanced and you can get optimal decisions if you leave it to an organization which is separate from the policy side of government, which takes account of the policy environment that government creates but in each case, takes its decision, say to approve a pipeline, to approve access terms for a pipeline, contract carriage, to approve rates, the prices for the pipeline services, independently of government in individual cases. That that is a preferable way of regulating, governing, administering, these natural monopoly phenomena. So the competitive market, arguably, can look after gas consumers but you have to have an independent regulator looking after the transportation activity that takes

the commodity to the consumers to see that that natural monopoly power is not abused. And also, this is important say, in a country like China where some state owned natural monopolies have been overly regulated, the prices of their services depressed, so that they=re poorly financed, they don=t have good technology, they=re not safe, they=re not able to expand to meet growing energy requirement. So in some circumstances proper regulation will result in higher prices rather than lower prices.

DF: But more incentives.

RP: That=s right. And incentives to bring in new domestic capital and possibly, new foreign capital. So regulation doesn=t operate simply to protect the gas consumers short term interest. It can act to protect the interest of the investor, including the foreign investor. Which should be in the long term interest of the gas consumer.

DF: Yes. However, one important assumption that you=re making with an independent regulator is that that independent regulator would be perceived to be independent by the people in that country. I would challenge you. I don=t know China much but I would certainly challenge you in South America on the fact that government=s there change, sometimes not democratically and the stability of a government that may last only a few months or a year or two at the most, might call into question the independence of what you call an independent regulator.

RP: I agree. So you can have a period of trial, during which the regulator and the government, sort of with a general responsibility for the regulator, has to build up public confidence, that it is truly independent. And you=ve got to be able to give the appointees to the decision taking level of the regulator, the Board members, Commission members security of tenure by longer term appointments, 3, 5 or 7 years let=s say. You=ve got to give them independence in terms of reasonable salaries, not exorbitant salaries but reasonable ones. You=ve got to give them independence by giving them the staff resources and the cash to support those resources with information systems and computers and so on that they need to carry out their jobs properly. So that=s a challenge to government to properly feed and water an independent regulator.

#138 DF: But here in Canada the National Energy Board got many of those directions for the Alberta regulatory board and people, and personnel, the early leadership. Where does the indigenous leadership come from?

RP: That=s going to be more difficult. But you know, there are training programs. In the USA the National Association of Regulated Utility Commissioners, NARUC, in Canada, possibly CAMPUT, Canadian Association of Member of Public Utility Tribunals are organization which can help train those foreign staffs. There are a tremendous number of visits by policy members from abroad who are interested in establishing independent regulatory tribunals to Canada. Canada is seen as a global example for good energy regulation. So they=ll have to learn abroad because they=re not going to be able to learn at home from existing organizations or existing traditions. Although David, I noticed that in China they=ve established a regulatory commission for financial institutions. And that seems to be an independent board. So the beginnings are there.

DF: You=ve also, on your resume, listed some companies on whose board you=ve served.

RP: Yes. I was on the Crestar board, that was a creation I guess, of Amoco Canada, responsive to commitments that Amoco made to, perhaps the Foreign Investment Review Agency after it acquired Dome. Crestar survived and prospered for a few years but then was acquired by Gulf. I=m also on the Talisman board. Talisman of course, is the second largest Canadian oil and gas producer, second to Encana.

DF: Just spend a few minutes if you would, telling us what a person at your stage in their career does on a Talisman board?

RP: Yes. Supervise and approve senior management=s decisions in terms of the proposed strategy to be followed by the company, to see that its operations were in conformity with that strategy, approve major investments, approve entering new countries. So it=s fairly high level, kind of 30,000' level, supervision of the management in the interests of the shareholders.

DF: And how does an appointment like that come?

RP: I guess that regulation and dealings with government are fairly important considerations for the managements of largish oil and gas companies. Someone must have felt that it would add value to have somebody with a regulatory and governmental background on the board.

DF: Any other things you are doing these days?

RP: I=ve been proud for the last 4 years to have been chairman of the Canadian Gas Potential Committee. A group of old timers mostly, geologists, engineers, mathematicians, who look at Canada=s natural gas endowment from a standpoint of fairly solid science. Look at endowment David, not at supply of gas, how much gas is there in the Canadian land mass.

#180 DF: What does endowment mean then?

RP: Another way of putting it is, what is the original gas in place in Canada. How much has been used and what is the remaining therefore, of probable gas in place. Some of which will exist as proven reserves, a lot of which will have to be turned from being a resource that is thought to exist, into a reserve that can be produced, that is known to exist. It=s been a pleasure to do that. I joined just after they had brought out their first report in 1997. I was there through bringing out their second report in September >01. It was actually published and we had our press conference on September 11th, >01. Now I=m ready to step down and look for a successor as the committee builds up its activity towards an >05 review. Because this is a continuing exercise and it depends on the availability of factual data about gas drilling and the success of that drilling and changing views on the size of the reserves. It sort of parallels, we think more scientifically, an activity which, under the Potential Gas Committee, we are the Canadian Gas Potential Committee, in the USA it=s the Potential Gas Committee, that=s been going probably for 40 years, doing the same thing in the USA.

DF: And that=s an independent body is it?

RP: Yes it is. In the USA it=s sort of focalized on the Colorado School of Mines where there=s a Potential Gas Agency, which is its administrative headquarters. We in Canada have had financing from the Association of Petroleum Producers, the Energy Pipeline

Association and the Gas Association of all the Canadian associations. We=ve been promised some money and expect to start getting it in April >03, from the federal government. But in operational terms we are independent of industry. Our work gets peer reviewed by industry but no one has sort of particular ties to groups, commercial interests, which may have a particular ax to grind in terms of assessing the gas endowment.

DF: Given that I=m not familiar with this organization, another dumb question but, to what extent are economic factors and pipelines and things like that. . .?

RP: We don=t look at economics.

DF: You=re doing the science?

RP: That=s right. So Syria??? for example, has taken our >01 data and I think, is still, here we are in February >03, trying to develop a gas supply model out of that data and trying to develop cost parameters. Saying that so much of this endowment can be turned into reserves and produced at this price or at that other price, either higher or lower price. But that=s not our business.

#226 DF: Anything else?

RP: I don=t think so David. I=ve enjoyed talking to you.

DF: Oh, we=re not done yet. We=re not just getting started but I have some summary questions. Which of your contributions in your career do you consider most significant and why?

RP: That=s very easy David. I think it was the work, first as ADM for petroleum in helping, with many other people, to negotiate the Halloween Agreement on gas markets and prices. And then subsequently, at the National Energy Board, although it was started before I joined the Board, working to restructure the whole Canadian gas industry and gas markets. Because I think that that brought great benefits to the whole Canadian energy economy and to the western Canadian industry, for a period now, of 16 years, 17 years. We were the first people in the world to do it so it=s very easy to see and to say, that that was really the highlight of my career. It brought about a fundamental change, it=s been an enduring change. I think that if I were a sort of quantitative economist and studied it, I would find that it was a fine piece of optimization. It gave Canada a much larger gas industry than she would otherwise have had. I realize it resulted in the drawing down of our gas reserves more quickly than otherwise would have taken place. But I feel strongly that monetizing as they say, resources in the ground, you=ve got to bear in mind the present value effect. What people have done with that money is outside of my ambit. Sometimes it was well invested, sometimes it was poorly invested by governments or corporations. But the return cash flow from monetizing was very appreciable. It also, I developed the word, decontroversialized gas in Canada for the first time ever. It meant that people weren=t arguing interminably about gas exports, gas for domestic use, about gas pricing, who should be pricing the gas, how it should be priced and so on. The market provided a neutral reference and progressively, people came to understand the functioning of the market. Many businessmen were slow to understand that functioning. So that=s an easy question.

#265 DF: What have you enjoyed most about your career?

RP: I think I enjoyed working with the people at the National Energy Board, the Board members. They=re independent minded and I didn=t have any influence over their individual decision taking but they=re a good bunch of people. The Board was able to attract a staff loyalty and continuity which may be a little bit rare in a government department. Because it was a fairly specialized agency, which tended to give its people, perhaps a little bit more pride than the typical amorphous federal government department. So I enjoyed very much working with people. I enjoyed with an enormous amount of help by Robin Glass, the executive director, by Scott Richardson, one of the engineers who managed most of the move, the physical aspects, the planning of the move to Calgary. I enjoyed picking up an organization of 400+ people and moving it a couple of thousand miles and doing it with relatively little notice and within the constraints of a government system. It was a fairly big undertaking and I found that very formative.

DF: Ideas seem to really excite you too.

RP: They do, yes.

DF: Which of the ideas that you were. . . well, I guess the one that you mentioned, when I asked you which of your contributions. Any other ideas?

RP: The big Idea, with capital letters, of Energy. I think back to the 1970's and early 80's when the energy problem seemed absolutely intractable. It seemed that you could never get a really adequate supply of energy. Club of Rome thinking was very prevalent. It seemed that energy demand would follow entirely its own course, that neither supply nor demand could be subject to normal economic influences. The big idea that evolved, and it actually evolved from President Regan, when he dismantled oil price controls fairly soon after he came to office in 1981, and there was no price shock, partly because prices were falling at the time, no shortages, the big idea that grabbed the energy world was that prices can balance supply and demand, certainly for oil, as a novelty since the late 80's for natural gas. And as a novelty and the conditions for achieving it have yet to have been specified for electricity, from say, the early or mid 1990's. The idea that price can perform its equilibriating function in the energy field is the big idea that attracts me. I know that that thinking has taken a beating in the aftermath of the Enron, Dynergy etc. corporate disasters and the California and to a lesser extent, Alberta supply spiking in 2000, 2001. But I still think it=s a valid sound idea and I=d like to see it experimented with and applied globally on an even greater scale. It=s caught on entirely in North America, in Britain. It seems to be spreading to Europe, it seems to have done a reasonable job in Australia and parts of the southern cone of South America. It=s been experimented with in Singapore and I=d like to see more of the same.

#335 DF: It=s an extremely good idea if there are other things that don=t get in its way, the really big one being politics isn=t it?

RP: That=s true.

DF: Because that=s what blew it all out of the water in the early 70's.

RP: That=s right. And it=s politicians not being willing to leave things, and we=ve seen that in the California situation and the Alberta situation and Ontario electricity today, not

being willing to leave things alone. Not having confidence in the market. Now, to have confidence in the market you=ve got to have competition and confidence that competition is going to take place. So the unsolved problem, I=ve said to my Chinese friends, Bangladeshi friends and so on is, how many competitors does it take to achieve a functioning market. I don=t know the answer to that. In air travel, between say, Victoria and Calgary, I think you have a reasonably functioning market with only 2 competitors. One aggressive new competitor is snapping at the heels of the old established dominant carrier and I think has strongly modified his pricing. So 2 competitors seem to have achieved a fairly functioning market here for air fares. I think you certainly need more than 2 in the case of oil and gas and electricity. I don=t know how to define the acceptable share of the largest competitor. It=s certainly less than half, could you have a functioning market with 1 supplier having 40% of the market, or does it have to be as low as 20% or 10%. I don=t know what the answer is to that.

End of tape.

Tape 5 Side 2

DF: Economic competition also includes an assumption of stable international climate. I would posit that given the reliance of the North American people . . .or their proclivity for wasting the resources, and the fact that North Americans are extraordinarily vulnerable again to crude from unstable parts of the world, we=re back to a pre 1973 situation.

RP: Yes.

DF: Where if for any reason, well, whatever is going to happen in the next weeks or months in the Middle East with the Americans and perhaps the United Nations allies going into Iraq, something that big could totally throw your economic model out the window.

RP: Yes, but David, I would still argue that governments should, I rather like the dictum, don=t just do something, stand there. I think governments should stand back and let the market sort things out in terms of keeping people supplied with energy rather than jumping in and modifying prices, say to meet social objectives. I think if a class of people, it might be all of the people in a jurisdiction, are being adversely affected by high energy prices, I think the best way is to give them some kind of a rebate. As has been done from time to time in Alberta, rather than modify the prices. If my electricity goes to 10 cents a kilowatt hour I will use that electricity more carefully if I have to meet that 10 cent price rather than the 4 cent price that I=m used to. And if the government=s going to help me, and give me say, $100 a month of some kind of a tax rebate to help me deal with the high electricity price, I will still modify my electricity consuming behaviour to respond to the 10 cent price and do something else with the $100. That=s why I feel that governments should only interfere indirectly in energy pricing. If, supposing the Iraq war curtailed international oil supplies, my prescription would be to allow price to balance supply and demand. And in a sense, deal with shortages. If suppliers are always able to obtain the going market price for oil they will tend to supply preferentially, those countries and customers who pay that international price. But that=s a really difficult one. It=s a difficult one for politicians. It was difficult for Mr. Eves recently in Ontario and it

was difficult for the Albertans in the price spike. But I still think that=s the first principled recommendation that you should make. Now in China we=re dealing with an issue of affordability. Many poor people can=t afford correct gas prices, that is gas prices that would reflect a properly financed gas distribution system. A safe gas distribution system that was generating enough internal funds to expand to meet new needs of existing customers and of new customers. But the prescription that we=re giving is that affordability should be looked after by some kind of social policy rather than by modifying the prices that people actually pay. Now we=ll see how that goes down with the new Chinese leadership. But David, more generally, you are right, it looked as if the world oil economy was going to burst a blood vessel in 1973, even without the Yom Kippur war. I remember a leading international oil company was going around saying that unless Saudi Arabia can produce 20 million barrels a day, by say, 1975, the whole world economy was going to collapse. Now Saudi has never produced anything remotely like 20 million barrels a day. But that was obtained by straight line forecasts of growing demand and of constrained supply in countries other than Saudi. It didn=t happen because prices went up, demand was modified, the world went into a global recession and supplies were developed in the 70's and early 80's, principally in the North Sea and in west Africa and so on. But the world has lived with the luxury of a relatively easy international supply situation for many years. So by >79 the world was able to do without virtually, any Iranian oil for a long period of time. Then when the Iran-Iraq war took place it was able to do without Iranian or Iraqi oil. If Iranian and Iraqi oil had been taken off the market in 1970 it would have been catastrophic. It was able to do without Iraqi oil in 1990 and 1991, during the war there and we=ve not much Iraqi oil since then. But gradually the curve of demand has continued to rise after the recession and demand in the 1970's, when demand in some years was actually falling for the first time in decades, apart from war time. So now it looks as if we=ve used up virtually all the world=s surplus oil producing capacity. So in a sense we=re getting back to a kind of early 1970's situation.

#061 DF: But the perceived crisis isn=t there?

RP: Not there at the moment no, but it might be coming. But then, as you look at perceived crises they usually go away because the things that are creating the crisis, the rate of demand growth gets strongly modified. People can=t get or can=t afford the amount of oil that would be needed to fulfill the forecast. So bad things generally, forecasted bad things don=t happen. When I first went to work for Shell it looked as if the world=s economy was going to be desperately short of all forms of energy. That was the early post war thinking. Every coal miner, every shovel full of coal, every barrel of oil, wherever it came from, would be needed. Then very quickly the world went into the post Suez recession, partly caused by the high prices around Suez and the economic uncertainties. And the world was awash with oil and people were worried about their coal industries in Cape Breton and the British Midlands and France and Germany. And we were into a surplus situation. So forecasted crises, Club of Rome type crises, tend to go away. Not because they=re fundamentally wrong but because behaviours change.

DF: If I keep asking you questions we=re going to run out of tape. Next question is, have you any regrets from your career, any things you wished you could have done?

RP: No.

DF: You=ve been very busy.

RP: I=ve been very fortunate David, in my career. I went to Cambridge, a good university. That gave a sort of aura of academic ability which is not altogether correctly placed. Working for Shell was a great opportunity to learn about energy in a fine organization, a little bit about management although I wasn=t a manger. The experience at the Energy Board came at a very formative time. The National Oil Policy and then the very beginnings of the apprehended crisis of the early 70's. Then I was thrown into the very middle of dealing with that crisis of EMR, so I=ve lived through some exciting times and they couldn=t have been much better in terms of a career path.

DF: Well, on behalf of the Petroleum Industry Oral History Project and especially myself, thank you so much for inviting me into your home and allowing me to spend these few hours with you getting a taste of your life and we=ll end the formal part of the interview at this time. Thank you very much.

RP: Thank you David.