

INDEX

Messrs. MacPherson, Marshall, Little,

- Bishop, Dalton - page 248
- Cross by Mr. Coon - page 258
  - page 269
- Cross by Mr. Thompson - page 262
- Cross by Mr. Hyslop - page 303
- Cross by Mr. MacNutt - page 330

New Brunswick Board of Commissioners of Public Utilities

Hearing June 5th 2001  
Delta Hotel, Saint John, N.B.

IN THE MATTER OF a generic hearing to establish the need for  
and the evidence to be provided in connection with any  
specific hearing held to review the maintenance or upgrading  
of a generating facility of New Brunswick Power Corporation

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CHAIRMAN: Good morning, ladies and gentlemen. I'm  
just going to go through a housekeeping item again. I  
would ask the parties, when they want to refer the Board  
and parties in the room as to which exhibit they are going  
to be referring to, would you give us time to get the  
binder down?

So for instance, if you have something that you are  
going to be quoting from an interrogatory, that is the  
principal interrogatory, why you will say this will be in  
exhibit 3. And we can get the binder down.

And then you will say it is interrogatory by whichever the intervenor might be. Because there is only interrogatories from the intervenor to the applicant. And then give the number of the interrogatory. And we will be able to find it.

Likewise if it is from the applicant's prefiled evidence, then that is exhibit 1. That would probably save us some time. But once we have got the binder down, then you can rattle off what page number and what not.

Are there any preliminary matters? Mr. Coon?

MR. COON: Mr. Chairman, we would like to introduce an exhibit and because it was referred to yesterday by myself in cross examination and by Mr. Marshall in responses.

It is the volume on electrical demand savings for energy-efficiency potential study for New Brunswick that was done for the Department of Natural Resources and Energy. The copies are just being made upstairs now for the Board and intervenors.

CHAIRMAN: All right. My suggestion, Mr. Coon, is that let's wait until the copies are done. And you can circulate it.

And then we will find out if anybody has any objection to its being introduced. And if not, the Board will receive it.

MR. COON: Thank you, Mr. Chairman.

CHAIRMAN: Okay. Any other matters?

MR. THOMPSON: Dave Thompson, Conservation Council. Well, I guess it applies to this hearing too. But when I think about I guess what we are hearing now about the increased role of the Public Utilities Board, there may be a need with -- I guess there will be overwhelming volumes of paper in the next -- at this hearing and in the next few hearings.

And it might seem prudent that, you know, if we are looking at conserving energy that we, you know, look at some ways of ensuring that a lot of that gets recycled and that there is at least some kind of an obligation on intervenors and participants that, you know -- and also an opportunity for them to do so in some kind of way.

Thank you.

CHAIRMAN: I don't think the Board is going to make a ruling on that. I recycle everything that I can myself personally. And my wife gives me a hard time about it. But I do. And I think we can all privately look after that.

Any other matters? All right. Mr. Hashey?

MR. HASHEY: Thank you, Mr. Chairman, members of the Board.

We have requested that panel 2 and 3 take the stand at the commencement of this morning. There I believe are two outstanding requests for information. And maybe they

could be dealt with by Mr. MacPherson and Mr. Little before the actual presentations take place.

As you can see, there are a number of people on this panel that were the same as were here yesterday. The only person who has stood down is Mr. Bhutani. All the others are present, the same panel members who were before you yesterday.

We have circulated at the commencement of the hearing, summaries of the intended scope and evidence of the Coleson/Lepreau hearings. This panel is of course being called to deal with that. It is a combination of panels 2 and 3 from the book. And they will be referencing the items that were in NBP-6 which was presented in evidence yesterday.

In advance of the questioning of this panel, Mr. Marshall and Mr. Little will outline the intended scope and the evidence and deal in a summary fashion with matters like we did yesterday.

And we have here, and we will circulate right away, copies of what you will be seeing on the screen, if that suits your convenience, Mr. Chairman.

CHAIRMAN: Yes, Mr. Hashey. And why don't you have those circulated right now. And we will have the Board Secretary swear in the additional panel members.

And Mr. Little, Marshall and MacPherson are still

under oath from yesterday, so --

MR. HASHEY: If I could just make one additional comment?

CHAIRMAN: All right. I'm sorry, Mr. Hashey.

MR. HASHEY: No, no. No problem. We have noted yesterday there were requests for additional information or suggestions as to what might be included on these lists.

I mean, in the discussion yesterday some of the questioning really went into the issues that we are dealing with today.

And it would be the intention of NB Power to provide you with a revised list, probably this afternoon, which would include and encompass some of these additional suggestions.

And I'm sure there will be others that will come out this morning, that members of the Board may say yes, fine, we will deal with that at the next hearing.

So there won't be an extensive revision. But we will provide that. And hopefully that will assist the Board with any decision and direction that it will be giving on these two items. That would be my preliminary comment.

Thank you, Mr. Chairman.

CHAIRMAN: I see you have had that distributed now. Would the Board Secretary swear in the two witnesses on the right of the panel?

DARRELL BISHOP AND JOHN DALTON SWORN

MR. HASHEY: Mr. Chairman, I probably should for the record state, since this is being a recorded matter, that this panel will consist of Mr. MacPherson as the chair again, Mr. Marshall and Mr. Little, who we have heard from yesterday.

And the additions to this are Darrell Bishop and Mr. John Dalton who -- all these people of course have presented evidence, which is part of -- included in exhibit 1.

MR. HASHEY: Thank you very much.

CHAIRMAN: Mr. Hashey, thank you. The handout that has just gone around, which is an 8-page document, as Mr. Hashey has indicated, gives a print rendition of the slides that are to be put up, will be given exhibit number NBP-8.

MR. HASHEY: Mr. Chairman, first of all, maybe the outstanding matters. Mr. MacPherson, there was one matter concerning numbers of people, energy advice questions yesterday. Could you elaborate on that point?

MR. MACPHERSON: Yes. As a result of a question from the Conservation Council of New Brunswick, we have looked at the numbers of energy advisers that we have working with our respective customers.

We have in the province 25 energy advisers approximately that work with our customers on a regular basis. And as well, we also have our call centre people



trained in being able to provide responses to our customers as they call in with respect to particular energy issues.

And our approximate budget for the energy adviser area is about 2 1/2 to \$3 million a year.

MR. HASHEY: Thank you, Mr. MacPherson. I believe that the questions were left outstanding too with respect to some scheduling on NEB and Mr. Little, could you address that?

MR. LITTLE: The question was with respect to the National Energy Board hearing process for the second tie which is the overland transmission route to the U.S.

The environmental scoping document was filed in April. The formal application was actually filed May 31st. So that process is fully initiated.

We don't have an exact hearing date yet. I would expect we are looking September, October time frame.

MR. HASHEY: Thank you, Mr. Little. Then we would move on to this panel. And I would ask Mr. Marshall possibly to give the initial presentation which has been summarized on the blue sheet but will be elaborated on here, which is the relevant issues for any subsequent hearings on Coleson Cove/Point Lepreau.

Mr. Marshall?

MR. MARSHALL: Thank you. The question that I will discuss is question 2, what are the relevant issues to be

considered in a subsequent refurbishment hearing?

And first of all, we would -- I think one of the key issues would be definition of the project. And by definition of the project, I mean the sizing, capacity size, the facilities, the fuel delivery systems and all of that nature of equipment that would go in to define the project.

The key issues for evaluation of the project, the number of criteria, first of all, reliability of supply, and some of the specifics under reliability of supply, it is not just meeting the 20 percent reserve criteria which we were discussing yesterday in panel 1. But where you would have some differential reliability, attempt to quantify what contribution that would make.

Cost of power. We would do life cycle power costs at the busbar of the project. We would also do first year accounting costs so we get an indication of what contribution to power rates would be made by the project.

And the analysis of these power costs would be limited to utility-related costs as opposed to including societal, social costs for other factors. What are the direct related costs to the utility?

In addition, the third key criteria area would be environmental requirements. And as we discussed yesterday, these would be environmental requirements of

existing standards and projected standards into the future.

We would meet the standards for SO<sub>2</sub>, NO<sub>x</sub>, mercury, particulate. We would also do quantification of CO<sub>2</sub> emissions and potential cost implications on CO<sub>2</sub>.

In that analysis it is our position that we would not do a consideration of the scientific and social policy issues behind those standards. We view it that that is a government regulatory responsibility in considering what those costs are in terms of developing what the standards are. Our obligation is then to meet the standards. And inherent in that we would also -- it would not be our intention to repeat all of the EIA-related issues. They would be handled through the EIA process.

The fourth criteria in the financial area in terms of financial impacts, we would look at the borrowing requirements for the project and what would be the net income impact of after construction and in-service of the project. What would that flow through to net income and to rate impact?

The fifth area, we would look at risk factors and how we might mitigate risk factors. One of the issues going forward in this deregulation world of the electricity business that we are in is regulatory uncertainty.

We have the White paper energy policy. And we would

certainly review that and look at terms of how we would go forward and our responsibilities under that.

We could look at some risk issues related to regulatory possible changes, also changing environmental standards, particularly the risk issue there as we discussed yesterday related to CO2 emissions.

And again in number 6 we would look at export market impacts. And issues there are access to the market, competitive access and what type of pricing is available in the market, what type of benefits you could -- would be extractable out of the market as a contribution back towards the project, and also future transmission impacts.

And as we discussed yesterday, the current two projects of the second intertie into Maine and the underwater cable into New York, if they were constructed, how would they affect the export market potential.

The process to review the alternatives we had outlined in evidence. And we provide a summary here with some more specifics.

First of all, we would need to identify what all alternatives to the project are. And we had listed in the load resource balance a number of those.

And there was some discussion yesterday about whether we would include wind in alternative energy. And they would be included in that along with all conventional

power type projects.

We would look at purchase options from external utilities and from in-province independent generators. We would look at self-generation by customers.

And we would -- but our view is, as we stated yesterday, that additional demand side options over and above what is already included in the load forecast and in the fuel switching that we have in the forecast, would not be considered in valuation of alternatives.

And going forward, all of those alternatives would be evaluated using the three primary criteria, their contribution to reliability, power costs and meeting environmental obligations.

We would then, from the review of all of those criteria, we would select the most viable alternatives. And if there was one alternative that clearly was better than the others, we would select that one relative to the project. Or we may select two depending upon the results.

And we would then do a comprehensive comparison of the proposed project with those viable alternatives. And that comprehensive comparison would utilize all six criteria, not just the three basic ones of reliability, cost and environment.

And inherent in that we would also look at end effects for differing project lives to account for the effect of

that on the cost comparison of the projects.

And from that we would be able to go forward. And then we would determine the overall project robustness through a sensitivity analysis. And the sensitivity analysis for comparison of the viable alternatives to the project, we would look at variations in a number of factors. Load forecast, and I believe in discussion yesterday it was raised about the load forecast could be plus or minus 13 percent in response to a question from DNRE. We would look at variation in fuel prices. We would look at variations in export market prices. We would look at variations in discount rates.

And again I think the variation in discount rate could consider inherent in that the issue of the level playing field issue that was raised yesterday, which really is what is the cost of capital of a Crown versus a private company.

So in the sensitivity on discount rates we could provide for some range of the level playing field issue. And we would look at variations in capital cost. And then finally we would look at environmental extranality mitigation costs to quantify the differential emissions of the projects.

And again our view of environmental extranality mitigations would not be on a health-related cost basis of

impact. They would be on what are the mitigation costs of emissions from a mitigation viewpoint, from a cost control issue?

We believe that would be more reflective of the market value of trading of permits should such markets develop based on cost of emissions control.

And that concludes the issues that we see for question 3. And I will turn over to Mr. Little to talk about question 3.

MR. LITTLE: Thank you, Mr. Marshall. We would anticipate commencing the evidence with a policy overview which would involve a project description and depending on the project, it would look at the key drivers for why the project refurbishment is being proposed. In the case of Coleson those would be largely the environmental emission standards and in the case of Lepreau it would be largely life limiting factors for pressure tubes.

We would then look at some relevant trends in the electric and nuclear industry and then provide a summary of the overall results of the evaluation.

Looking at the refurbishment option itself, the evidence would deal with the -- first of all, the generating station condition assessment, and that would be a review of the major components and their state of physical condition and their probable lives and any work

that needs to be done on those.

Then the refurbishment plan itself which would deal with the scope of the project, the construction cost estimates and then the schedule.

We would look at issues related to replacement energy during construction. We would look at issues related to the expected useful life of the project. And of course we would look at issues related to the fixed and variable power costs that result from the refurbishment project.

In the case of a Coleson specific refurbishment project, we would expect to look at the planned environmental mitigation strategies, the resultant costs and the emission levels. We would look at the orimulsion fuel characteristics and its availability in world-wide usage. We would look at the fuel delivery plan and we would look at the orimulsion supply risk factors related to sole source supply and that issue particularly.

In the case of a Point Lepreau project, the evidence - - there are some unique features here. As Mr. Dalzell had pointed out in questioning, here it's a question of environmental emissions avoided and we would look at all of those issues. We would look at the decommissioning plan and the cost of that plan. We would look at the spent fuel management plan and the cost of that plan. We would look at nuclear option risk factors, including



construction cost and schedule, reliable operation and staffing issues. We would discuss nuclear licensing with the Canadian Nuclear Safety Commission. We would address nuclear accounting issues, one of which was raised yesterday with respect to replacement energy costs. We would also expect to address the issue of funding, decommissioning and spent fuel management, which has been of interest to the Board in the past.

For the non-refurbishment alternatives we would look at the definition of alternative supply options, we would look at their power costs, the fixed and variable. We would look at their expected useful lives. We would look at their expected environmental mitigation strategies, resultant costs and emission levels. We would look at the fuelling considerations for those alternatives and for each we would look at the risk factors relevant to that alternative.

Then we would compare the alternatives, as Mr. Marshall said. We would look at the power costs, we would look both at the levelized life cycle costs and we would look at the early year accounting costs. We would look at the differential impacts of the alternatives on export market benefits, those benefits of course being used to keep in-province power rates as competitive as possible. We would look at the emission levels relative to the

various alternatives in the refurbishment proposal and we would produce a detailed financial projection, an eight year financial forecast with and without the refurbishment option so that we can see clearly the impact on the finances of the corporation, the net income and of course that would relate to the rate issues.

We would look at the sensitivity analyses on the economic variables and the in-province and export sales and discount rates, as Mr. Marshall had outlined in more detail.

We would look at the risk assessment, including possible added costs of future greenhouse gas regulations as best we can estimate what might happen there.

And although it's not prime to the decision, in our view, we anticipate interest in the socio-economic impacts and we certainly would produce evidence there on the impact on economic activity and job levels and that sort of thing.

That concludes the presentation on question 3.

MR. HASHEY: I believe that's the time for people to raise questions, Mr. Chairman.

CHAIRMAN: Thank you, Mr. Hashey. The Conservation Council?

MR. COON: Good morning, Mr. Chairman, Commissioners, gentlemen on the panel.

Before we start, the copies have arrived. Should

those be distributed now, later?

CHAIRMAN: Well I would suggest that perhaps the -- why don't you distribute them now and we will see how long your cross goes and -- it may go over the break and if it does then immediately after the break we will deal with them. Otherwise we will deal with them at the end of your cross.

MR. COON: Okay. Thank you. David Thompson will distribute them then at this time.

CROSS EXAMINATION BY MR. COON:

Q.1 - I would like to start this morning with NB Power 6, exhibit 6, which deals with relevant issues. I have a number of questions regarding that document. The first one deals with the project evaluation criteria and, number 1, you say, look of the reliability of supply and quantify -- quantify the reliability contribution which speaks to the first part of NB Power's legal mandate to provide a continuous supply of electricity. I am wondering whether or not you would see it being relevant that you should also look at how the project meets NB Power's mandate in terms of promoting efficiency of generation and quantify that? Would you expect to evaluate it in those terms, so looking at the efficiency of the project generation?

MR. MARSHALL: We see the mandate as promoting economy and efficiency, and we would certainly in review of any

projects we would look at the -- in order to determine power costs and efficient use of energy, you would have to look at the heat rate, fuelling costs and the combination of the efficiency and the costs come together into a power cost, and that in essence gives you a measure of the combination of economy and efficiency.

Q.2 - So would you expect to provide that information concerning both economies and efficiencies in evidence?

MR. MARSHALL: Yes. I think in order -- in order to develop power costs, heat rates would be included. So that would be the efficiency of process of input fuel to output electricity is what the heat rate provides as a measure of the efficiency of conversion of fuel would be information that would be provided.

Q.3 - Thank you. I would like to move on to number 2, costs of power. How would the environmental costs be evaluated, that is, the externalities?

MR. MARSHALL: You are referring to the environmental sensitivities in terms of externality, how we would evaluate differential emissions?

Q.4 - Referring to the costs -- environmental costs borne by New Brunswick society from operating the particular project.

MR. MARSHALL: Well as they referred in item 3, we -- and I stated that the issues of societal costs for emissions is

an issue for regulators and governments to consider in defining the standards. And so our view is they are already accounted for in defining the standards. Our obligation then is to perform to meet the standard.

So we would not consider the cost of that in the base evaluation. However, we said that in the sensitivity area when we look at the sensitivities of the differential emissions from one project to another after they have met the standards, we would look at those differential emissions from an environmental externality viewpoint.

So in that sense we would look at for example SO<sub>2</sub>. We would look at differential SO<sub>2</sub> and look at what is the quantifiable value of that SO<sub>2</sub> from a market viewpoint.

So we would look at the U.S. trading market in SO<sub>2</sub> and say, that's what SO<sub>2</sub> is -- the mitigation cost of it is on a trading value in the U.S. market. That's a number you could use to quantify the differential value of the SO<sub>2</sub> in New Brunswick as well.

Q.5 - That leads to my question I guess as to why as a public utility would NB Power limit its assessment of costs to the utility and not to look at the externalities that -- the costs imposed societally in New Brunswick? As a public utility why wouldn't you look at that?

MR. MARSHALL: I believe it's in our mandate to provide for economy and efficiency in the -- as you provided yesterday

-- in the generation, transmission, distribution and use of power. It doesn't say anything in that mandate about consider social costs to society in New Brunswick.

Q.6 - So are you saying that there are no environmental or health costs once you meet all the standards imposed by your generation activities on New Brunswick society?

MR. MARSHALL: No. I am saying that the regulators, the Department of Environment, the government -- the federal government, the provincial government, in setting standards and setting an emission level for power plants - - in setting that standard have considered what the cost effects are and what the value and the situation is in terms of damage or effective emissions on society, and set those standards in order to mitigate those effects.

Our function is not to question government in terms of setting those standards. Our job is to obey the standards and meet the requirements.

Q.7 - Well then, Mr. Marshall, would it be fair to say that you agree after all standards are met, there remains some environmental and health costs imposed by generation activities?

MR. MARSHALL: Given that any emissions may be damaging to the environment, and there are still some residual emissions, I guess the answer to that question would be yes.

And I said that we would look at the effect of differential emissions between projects based on the cost of mitigation of those emissions.

So we would do a sensitivity to the differential effects of emissions between projects.

Q.8 - Thank you. Now with respect to number 3, point 3 of the evaluation criteria, environmental requirements, do you expect to address standards related to emissions from -- this deals with thermal fossil fuel plants. Do you expect to address standards relating to the Candu plant as well, tritium releases, liquid effluent, radioactivity?

MR. MARSHALL: I would think that again what the standards that are set for rates of emissions of those particular effluents from a nuclear plant that are set by the -- by the federal government, the Canadian Nuclear Safety Commission, we would meet those obligations.

Q.9 - Thank you. With respect to carbon dioxide, you refer to potential costs implications. Could you just explain what you are referring to here? Are you referring to the cost of purchasing permits?

MR. MARSHALL: Possibly, yes.

CROSS EXAMINATION BY MR. THOMPSON:

Q.10 - Regarding the environmental requirements, will you be submitting information on emissions of all heavy metals both into the atmosphere and into the marine environment.

And I will qualify that, from both projects.

MR. MARSHALL: I think that's an issue certainly with whether that's a relative quantification issue between the projects or through the EIA process, but I believe the level of emissions of those would be considered.

Q.11 - Will you be providing them though in this process?

MR. MARSHALL: Yes.

Q.12 - What about non radioactive emissions from the Lepreau Nuclear Generating Station? We are aware that they are non radioactive emissions just from operations there during the construction and the operation of the plant, what about those emissions? I'm referring particularly to liquid effluent into the marine environment and into I guess the land environment there as well.

MR. LITTLE: We did provide some evidence from the IAEA on the life cycle emission, I think it was on the greenhouse gas issue. But liquid effluent is -- you are concerned about liquid effluent from the nuclear plant?

Q.13 - Well I'm concerned about liquid effluent from both plants but particularly from the nuclear plant. And we realize that when these plants are -- I guess what we are looking at here is the rebuilding of the construction of these plants and I might point out that -- again I hope I'm not getting too far off track -- but when I was down during construction of Lepreau in the 1970s, I found



operations there of industrial plants on site that were using chemicals and chemical operations during construction, that some of the regulatory bodies at that time and people did not know about.

So what I'm asking is that other emissions, I guess particularly discharges into the marine environment or into the I guess the terrestrial water system as well that -- are you going to provide information on that? I guess on all possible contaminants that might result from those kind of operations and then when the plant itself is operating, such things as treatment chemicals, whether they be biocides that are put into a system to control some kind of algae growth or whether it be pipe treatment chemicals or water treatment chemicals, those kind of things.

Is that information going to provide I guess a full inventory of all the possible effluents from the operations, and there are many, both during construction and operation of both facilities?

MR. MARSHALL: Our position is that those issues that you raise, Mr. Thompson, would be dealt with in the EIA process, in the approval to get a construction licence and in the procedures to be followed in the construction and the operating licence for the plants.

To the effect that they would influence costs and

would affect costs, all information provided related to how they -- we would mitigate them and affect costs, it would come through to influence power costs we would provide to this Board, but the specifics of their impact and how they would be handled and mitigated in the environment would be an EIA review process issue.

Q.14 - Well certainly there is a cost to -- well I guess I shouldn't say that, but in respect to the matter, when I see a -- or if there is an industrial operation on the site, is there not a cost to dealing with the effluent?

MR. MARSHALL: Yes. And I expect that cost would be taken into account in the nature of the contract from that industrial entity and would be responsible for dealing with that at cost, so that cost would then flow through in the project costs that we would layout before this Board in order to get approval to go forward.

Q.15 - In respect to the -- you mentioned the environmental impact assessments and were you talking about the provincial environmental impact assessment or an assessment by the Canadian Environmental Assessment Agency?

MR. MARSHALL: Whatever environmental assessment process is required in order to get construction and operating licence permits for the plant.

Q.16 - Do you know which ones are required?

MR. MARSHALL: I believe it's --

Q.17 - Is it both?

MR. LITTLE: The CNSC is prime and -- but the project has been registered I believe with the provincial department as well and the review processes would be integrated under the federal authority, I believe.

Q.18 - Have you been informed by the CEA office whether they are going to look at as screening comprehensive study or panel review? I guess I'm asking that question in respect to both projects or was there a requirement to register both projects federally or is it just the Lepreau project that would be registered federally?

MR. LITTLE: Mr. Thompson, I -- the specific status of the environmental approvals, what's required and where they stand would be the kind of evidence that would be produced at a project specific hearing. I don't have all those details today.

Q.19 - Well in respect to that, do I understand that you have already registered the projects?

MR. LITTLE: I don't think Coleson -- Coleson Cove has not been registered. My -- I believe that Lepreau has been.

Q.20 - And when you say Coleson Cove hasn't been registered, does that mean both federally and provincially?

MR. LITTLE: At all.

Q.21 - It hasn't been registered at all?

MR. LITTLE: Not to my knowledge, no.

Q.22 - Okay. In respect Lepreau has been registered, I guess the concern that I have are the timing of the two processes, you know, whether that kind of decision would occur, you know, or not occur, you know, during or before or after this process. Now how will the timing of them fit together?

MR. LITTLE: They will be occurring at the same time. I'm not sure of the exact timing of the determination of the two processes. We obviously have to satisfy both.

Q.23 - My concern is that, you know, is that we don't lose something because of that, that we, you know, get the information that -- I guess that we want here.

MR. COON: Just with respect to EIA -- and perhaps this is our last question on that -- but in your opinion, Mr. Marshall, do you expect that EIA's will be required? I don't mean the requirement to register the projects, but do you expect full environmental assessments will be required? Is that the basis you are operating on at this point?

MR. MARSHALL: You are asking me personally?

MR. COON: Yes.

MR. MARSHALL: I'm not qualified to answer that question.

I'm the system planner and I do costs and evaluations. I don't do environmental impact assessments.

MR. COON: No, but is there anyone on the panel who can answer this questions in terms of whether or not NB Power is expecting that these projects will have to go through environmental assessment?

MR. LITTLE: Both projects will definitely be registered and in the case of Lepreau it's a joint registration. In the case of Coleson it's certainly provincial. I'm not totally familiar with what federal aspects may be there.

None of us are the environment group at NB Power. We try and -- from my role on the regulatory affairs try and understand some of the scheduling issues of when the EIA processes such as the scoping document for the National Energy Board, for example. I would certainly be aware of when some of those processes are initiated. But we don't know in detail on this panel what all of the steps are and whether they are screening or scoping or necessarily all the details of exactly what the process will be.

MR. COON: But you would agree that going through a full environmental impact assessment does represent a cost to NB Power to have to go through that long and complicated process?

MR. MARSHALL: Yes, and I would expect we would discuss that kind of issue at the project specific hearing to tell you exactly what the status of the environmental approval processes are.

MR. COON: Thank you.

Q.24 - In respect to the Coleson Cove, you mentioned that you were unsure of whether it would go through a -- be required to go through a federal EIA review, and in respect of that project I guess that we had seen that one option of unloading the fuel for the plant would be a monobuoy which would -- a new monobuoy at Coleson Cove which would require marine construction and disturbance of the seabed and -- is that still part of the project? I guess what I am asking is, is that still part of the project, or an option?

MR. MACPHERSON: That's still one of the options we are looking at, that's correct.

Q.25 - Do you believe that that would require a federal EIA?

MR. MACPHERSON: We believe it comes under federal review, yes.

MR. THOMPSON: Thank you.

CROSS EXAMINATION BY MR. COON:

Q.26 - I would like to move on to number 5, Risk Factors and Mitigation. Can you just help me out here and explain a little bit about what you mean by regulatory uncertainty, some examples perhaps to illustrate it.

MR. MARSHALL: I think one of the issues under regulatory uncertainty were we are aware -- well aware of the energy policy White paper and the intent of the government to

bring in a transmission market access in March of 2003 or April 1st of 2003. Also inherent in that policy is the intent to review full retail access at the distribution level every two years on a go-forward basis. The effect of what retail access at the distribution level would be and when it could occur all right is part of the regulatory uncertainty that might be looked at.

Q.27 - Are there other risk factors that should be evaluated here that you haven't mentioned that perhaps you are anticipating and just haven't listed?

MR. MARSHALL: I'm not aware of any specific one. There may be some. There is a balance between these itemized risk issues and the sensitivity variables that we lay out.

So that we would actually review the project and the viable alternatives through the sensitivity analysis would account for a lot of the risk and variation of fuel prices and other variables.

So the extent that that is a risk issue along with some of these, the regulatory and the environmental CO2 issues, we would look at in that way.

If there are other risk issues that you could identify we could add to this list, we would be prepared to look at them.

Q.28 - Well, one I'm wondering whether you would consider for example, is the financial risk associated with capital

intensive projects in terms of the extent of financial exposure to the utility?

MR. MARSHALL: Yes. We see that in item 4, financial impacts on borrowing requirements and net income. And then you would look at the effect of that if the project were there or it would operate or not operate.

Q.29 - So you wouldn't consider it as a criterion under risk factors? Rather you look at it as -- you wouldn't consider it as a risk, simply a financial impact?

MR. MARSHALL: Well, I think financial risk is an issue. And we will evaluate financial impacts in detail from different aspects.

MR. THOMPSON: What about going over budget, over construction budget? Is that a financial risk?

MR. MARSHALL: Yes.

MR. THOMPSON: I know it has happened before.

MR. MARSHALL: Yes, it is. And it is covered off in the sensitivity area, sensitivity on capital cost, okay, that if costs increase 25 percent, what would the impact be?

MR. THOMPSON: Would you be presenting, you know, like a full contingency plan for that or -- you mentioned a certain figure.

I can only think back in respect to the original construction of Lepreau. I think when there was a figure of 425' and \$600 million, eventually ending up at \$1.2



billion completed.

Are you going to present contingency plans for those kind of situations arising?

MR. MARSHALL: We would look at the impact of a capital cost variation in the project. From that capital cost variation would determine what the impact on power costs are, what the impact then on net income would be.

So you would come up with, through that analysis, basically the effect of that change in cost.

Q.30 - With respect to risk factors and mitigation, you have listed changing environmental standards. And you note especially carbon dioxide.

What else are you considering here might fall under it that you have to use in your evaluation?

MR. MARSHALL: We have already identified our projections of changing standards for sulphur dioxide, NOx, mercury. Particulate is another one that we would look at.

So we have already identified standards which are significantly lower than the current standards that we would target to achieve.

The one outstanding one that we see, that we discussed yesterday, is CO2 and the nature of the CO2 regulations and standards and where that would go covers a wide range.

That is why we see it as more of a significant risk issue, how we would look at it.

Q.31 - There is two others I guess that come to mind. And I'm wondering whether you would see them as significant risk factors. Because they are not currently existing as standards but perhaps may within this time frame.

And one is the issue of standards for heavy metal such as vanadium, nickel as Canada is signatory to an international treaty on reducing heavy metals.

And the other is changes in -- the National Safety Commission's potential changes in radioactive -- or standards for radioactivity or tritium releases.

MR. MARSHALL: Again I think they -- we would look at those if they become issues. Or they would be certainly I think considered in the process.

Q.32 - I'm just wondering whether at this point you see them as risk factors like you do -- especially CO2? Or are they not really on the radar screen?

MR. MARSHALL: I don't see them to the level of CO2 as a risk factor. To the extent that they would influence costs and require significant increases in costs in order to mitigate their effects, then they are issues we certainly would look at and consider.

Q.33 - Thank you. If I could move on to number 6, export market impacts. Could you just explain for us a little bit what you mean by competitive access? We just weren't clear.

MR. MARSHALL: I think part of that is current nature of the market. What is the price in the market? What is the price of your -- the cost of your resources relative to market price? Can you competitively access that market?

Are there constraints in the transmission access to the market? How will the market change relative to pricing? How will it handle transmission congestion?

And then the third item there about future transmission impacts. Are there new transmission projects that can bypass that and change the market access? Those are the nature of the issues we would look at.

Q.34 - That makes it much clearer. Thank you.

Now there is a question about a number 7. It is not there, I guess. And that is in the evaluation would you look at impacts of the project on the competitiveness of the local electricity market post 2003?

MR. MARSHALL: Would you just rephrase that please?

Q.35 - The question is in the evaluation would you look at -- evaluate the impacts of the particular project on the competitiveness of the local electricity market as it is expected to develop after 2003?

Maybe I should give you an example. Would a capital intensive plan, for example, make it much harder to compete against on the spot market for non-utility generators?

MR. MARSHALL: Okay. You have asked two questions there, I think. The issue of whether or not we look at the local market, we have already laid out evidence that our current cost structure is lower than market today. And we have a forecast of 150 megawatts of self-generation of firm load exit from the system.

The effect of our pricing structure relative to alternatives -- and including in the alternatives we have itemized that we would include self-generation of industry as one of the alternatives in the evaluation process.

So in doing the economic comparison of our project to alternatives, we will be inherent in that considering the competitive situation of our generation to the marketplace and alternatives in the marketplace in New Brunswick.

Q.36 - I guess the issue though is the impact of your particular project on the actual competitiveness of the market that is supposed to develop as a result of the energy policy.

While the policy hasn't been introduced into evidence -- I won't quote it or anything -- it did go at some length to describe the challenges in creating competition within our market because of its size.

And presumably there are issues around if NB Power comes in ahead of time with very capital intensive projects, will that make it harder once the market is up

and running for others in the private sector to effectively compete in that market?

MR. MARSHALL: Well, I think the issue of the energy policy is, in terms of competitiveness of the marketplace, a couple of the issues that are laid down in the energy policy relate to transmission access into this market and out of this market in order to provide opportunities for independent generation to develop.

The other point in the energy policy is that NB Power still has the obligation to serve all customers that choose not to take a competitive supplier.

Now there is nothing in the energy policy that says NB Power should increase its costs to improve the opportunity for somebody else to participate in the market. I think our obligation is to be as cost-effective as we can be.

If competitors can't meet those costs, then most likely customers will continue to be supplied by NB Power.

So what we are working on is to develop a transmission access so that the market can develop to the level that the market can develop. And we are trying to keep our costs as low as possible so we will be competitive in that market.

Q.37 - So then would you agree your response is you would not look at the impact on the competitiveness of our local market that will develop here for electricity as part of

your criterion for evaluating a project?

MR. MARSHALL: No. I didn't say that. I said that the competitiveness of the marketplace will be considered in the evaluation of the project relative to our system costs and relative to alternative costs, so that the marketplace, the fact that customers have the freedom to select a competitive supplier or to build their own generation, the economics of the alternatives will be considered in the evaluation of the project.

Q.38 - But you will not evaluate your project in terms of its impact on the competitiveness of the new market?

MR. MARSHALL: We do not see our obligation -- the issue of the energy policy is to provide an opportunity for a market.

In a market the intention of competition is to develop the lowest possible costs in the marketplace. We intend to develop the lowest possible costs that we can. And competitors in the marketplace will have to respond to that.

MR. COON: Thank you.

MR. THOMPSON: What about free trade? What about possible challenges by others that you are subsidized due to your taxation?

CHAIRMAN: Mr. Thompson, I'm going to interrupt there. I'm just looking at the time. And I think we may be getting

into what is not really relevant to this hearing. We may not.

So when we come back after the break you can reconsider your line of questioning and --

MR. THOMPSON: Thank you.

CHAIRMAN: -- start again if you would like to.

A couple of quick points here. Mr. Coon, perhaps when we do come back you can introduce this energy-efficiency potential study at that time, subject to intervenors having or the applicant having any difficulty with that.

Secondly, you might investigate with Mr. Hashey. You had a line of questioning about the status of the various projects in reference to an environmental assessment review.

Perhaps the company -- the applicant can undertake to provide you with some useful information, let's say over the next 24 hours, in regard to that. I would just pursue it with Mr. Hashey in the break.

And the third thing, Mr. Thompson mentioned the monobuoy. And that would unquestionably in my opinion be a federal jurisdiction.

If however it is pipeline then this Board -- that is how they get their fuel to Coleson Cove -- that would be under this Board's jurisdiction pursuant to the Pipeline Act.

And pursuant to that Act we act basically as a public forum to which everybody can look to see what has been done and what review has been made.

And certainly in the past the Board has always scheduled things so that the Provincial Department of the Environment will be able to come before the Board and assure us that they have satisfied the requirements of their legislation.

We want to know that that will be done prior to the hearing itself on the pipeline. But that is just the pipeline. I thought I would bring that up.

So we will take a 15 minute recess now.

(Recess - 10:35 a.m. - 10:50 a.m.)

CHAIRMAN: Shall we deal first with the energy efficiency potential study for New Brunswick, Mr. Coon?

MR. COON: Thank you, Mr. Chair. The Conservation Council would like to enter this as an exhibit, the energy efficiency potential study for New Brunswick. This is what was referred to yesterday in the exchange between ourselves and Mr. Marshall as the Marbec study. It also is the subject of interrogatory CCNB 22 which NB Power provided a response to in some detail in a quantitative way. So we felt it would be important to have this entered as an exhibit for reference purposes.

CHAIRMAN: Mr. Hashey.



MR. HASHEY: Yes, Mr. Chairman. My only comment on that, and I am not objecting to it, is that it is my understanding this study was a very extensive study and if you really wanted to see it all you would be seeing a huge book and this may be just part of it. We really haven't had a chance to determine if there are other relevant parts that might relate to this.

But for this purpose and my understanding is that Mr. Coon's comment is that he had referred to it yesterday and thought the document that he was referencing should be before you. On that basis I have no problem with it going in at this time.

CHAIRMAN: All right. Thank you. Any other intervenors any comments? All right. This will be CCNB-1.

All right, Mr. Coon. Any results of speaking with Mr. Hashey in reference to undertakings?

MR. COON: Yes. Mr. Hashey said he would undertake to obtain what was available at this point in time.

MR. HASHEY: We have done that. I would ask that Mr. Little address that. I think we can be as complete as possible at this point in time and he could bring that evidence so it's on the record.

MR. COON: That would be fine. Thank you.

CHAIRMAN: Thank you.

MR. LITTLE: This information comes from Mr. Hickman of our

environmental department. He is the prime individual responsible for EIA processes at NB Power.

With respect to Point Lepreau it does require an EIA.

The project has been registered with the Province as of March or April, the exact date is not known, of this year.

It has been registered with the CNSE in April of 2001, that's the federal authority.

The Province has indicated it will work with the CNSE.

There will be one set of documents used by the two levels of government. However, there will be separate decisions.

And in respect to Coleson Cove the project has not yet been registered. The plan is to register it at the end of June in 2001. This would be the Province. It will be up to the province to decide the level of assessment. NB Power expects that that the federal government will participate in the provincial process. However, until the final design option, specifically fuel delivery, are complete the need for federal assessment is not known.

Given the status of the two projects and the fact we haven't applied for either one I guess the proposal I would like to make is that at the time we file a project specific application up front in the application we fully describe the status of any EIA process and the nature of what we see as the approval requirements and so on.

I think that way you will have it early enough in the

process, Mr. Coon, that we can all have a full discussion of the potential impact on the PUB proceeding.

CHAIRMAN: Fine. Is that agreeable, Mr. Coon?

MR. COON: Yes. Thank you for the very rapid response, Mr. Little.

CHAIRMAN: Okay. I interrupted Mr. Thompson in the line of questioning. Are you ready to go ahead, sir?

MR. THOMPSON: Mr. Coon will proceed with that matter of trade in a few moments. Thank you.

Q.39 - Yes, it will come up a little later. So now we will move on to -- we are still on NBP-6 -- move on to the process to review project alternatives.

Under the identification of alternatives there is a point here that says, additional demand options will not be considered. And I guess our question is straightforward and that is why?

MR. MARSHALL: I think Mr. MacPherson answered that yesterday, and it's our view that we already have significant amount of demand issues in here, that the gas electricity substitution and the self-generation is significant and that the demonstrated need for the existing capacity is pretty clear.

And so the issue then is evaluation of where that capacity comes from and that there aren't sufficient demand reductions we said yesterday that would mitigate

that.

Q.40 - Then you will be bringing evidence to the specific hearings to demonstrate that there aren't sufficient options on the demand side available to mitigate that?

MR. MARSHALL: No. As we said in response to question 1 yesterday, it is our view that we have enough in the forecast in the load resource review.

We are asking, in response to question 1, that the Board rule that the capacity is required and that evaluation on a go-forward basis not include any demand side options.

We will look at all different types of supply side options and the only demand side option we would consider will be evaluation of potential additional self-generation by industry as we see that as really a supply option rather than a demand option.

Q.41 - Just to remind me on this question, there currently are no programs besides your energy advisors to promote energy efficiency to your customers, is that -- is my understanding correct?

MR. MARSHALL: None that I am aware of.

Q.42 - Thank you. Let me go on to the evaluation of alternatives. Here you have said that you would use reliability, power costs and environmental criteria in this initial evaluation of the alternatives.

Our question is, why would you not evaluate the initial list of alternatives by the same criteria, the same six criteria, that you would evaluate the projects with?

MR. MARSHALL: It's simply a matter of efficiency of work load. We will look at all the projects on those three basic criteria and then if they are close at all or within reason I guess, we will then continue on and use the additional criteria of export and all the others to look at them.

So we are not saying that we are -- we are eliminating projects only on those three. Anything that has a reasonable chance of competing under all the criteria will be considered. It's a way of screening projects down to a more manageable number in order to do the detailed evaluation.

Q.43 - So the criteria that you will use to determine reasonableness would include what sorts of things?

MR. MARSHALL: Reliability, power cost and environmental.

Q.44 - Okay. So this would give you a determination of what would be viable. In your evidence would you supply the analysis that generated your list of viable alternatives?

MR. MARSHALL: Yes.

Q.45 - In number 4 -- yes, number 4 -- this is just a question of clarification. Can you give some explanation for us

what you mean by end effects, a little more detail?

MR. MARSHALL: Power projects have different lives. For instance a combined cycle project, because the key component is a combustion turbine, combustion turbines have a life of 20 to 25 years. A thermal base load power plant may have a life of 35 to 40 years.

To account for the differing lives you have to look at the replacement of the combustion turbine at the end of its life to get it to an equivalent number of lives so that the net present value calculation of the power cost is on an equivalent basis.

Q.46 - Could you perhaps give us a more specific example, say maybe using Coleson Cove and Point Lepreau, what are the end effects that you would look at there?

MR. MARSHALL: For Point Lepreau if you were going to do a refurbishment and you expect a 25 year life of the refurbishment at Point Lepreau, then in order to get the full life cycle costs you would have to look at the replacement of Point Lepreau at the end of that 25 years with a like type of an option to go forward over the long term so that you are then comparing the net present value of the cash flow over a long term so that the differential lives are not influencing your economic decision.

Q.47 - So does the decommissioning in this case of Point Lepreau factor into end effects the way you are describing

them, or how would it? Two questions. Does it and how would it?

MR. MARSHALL: Decommissioning costs would be factored into the cost of a Point Lepreau option, yes.

Q.48 - In considering end effects specifically?

MR. MARSHALL: Decommissioning would be factored into the basic project and the need to decommission that plant. The issue then of end effects is, you know, how long is the 25 year life, what goes on after the 25 years? You have to account for the decommissioning costs in the 25 years and you would also have to account for replacement power costs beyond the 25 years.

MR. COON: Thank you. That's much clearer for us.

MR. THOMPSON: In looking at the project life, and we realize in particularly in the case of -- I suppose in nuclear plants more than others, there has to be organ replacement along the way, and are you going to provide information about I guess interim refurbishment, you know, for the life of Lepreau, what might be needed along the way?

MR. MARSHALL: Yes. That's a key component of any life cycle power cost is the capital upgrades to equipment through the life of the project. That would be considered in any of our evaluations.

Q.49 - I would like to move on to the question of sensitivity

analysis with respect to the alternatives. A general question I guess first and that is, would it be relevant to carry out the sensitivity analysis beyond 2011?

MR. MARSHALL: The sensitivity analysis would be conducted over the life cycle power cost effect of the projects.

Q.50 - So yes?

MR. MARSHALL: So the answer is yes.

Q.51 - Okay. Would it be fair to characterize the current planning environment for you as turbulent?

MR. HASHEY: I don't really think that's a fair question.

MR. MARSHALL: It's interesting. I guess in the Chinese proverb, interesting times can be considered turbulent.

Q.52 - With that in mind, let me ask you if you can provide us with the relevant range of values you would be using in the load forecast in terms of the variations? What range of values would you use there?

MR. MARSHALL: I believe we responded to that yesterday and it was defined as plus or minus 13 percent, in response to DNRE's request.

Q.53 - And with respect to fuel prices for oil and gas, what range of values would you anticipate using?

MR. MACPHERSON: We would be open to suggestions in any of these areas.

MR. MARSHALL: Certainly fuel price is a key issue. We know -- you can look only at the history of gas prices in the



last two years to see that you may look at a gas price differential of plus or minus \$2 on the current price. And that wouldn't be out of line from where it was two years ago to where it was last winter.

So again it's the size of the price change reflective of what is possible in the market place and then what impact that could have.

So for oil and gas prices I would think you would look at quite a significant variation. For coal prices there is little variation in price. So it depends on the specific fuel. And again, as Mr. MacPherson says, we are open to suggestion.

Q.54 - So at this point you haven't determined what the range of values to use for oil and gas?

MR. MARSHALL: We have not specifically laid down what our ranges are for those, no. But at the time of a project specific hearing we would come in with evidence and clearly define, here is the sensitivity range we are actually using showing the impact.

Q.55 - Thank you. With respect to export market prices, would the sensitivity analysis include the possibility of export quotas imposed by the U.S. Department of Commerce?

MR. MARSHALL: Not that I am aware of what impact they would have on us. Electricity as we understand it and the deregulation of the market place under FERC rules in the

United States and intent through RTL's and development, electricity is a free trade commodity in the North American marketplace and there wouldn't be any restrictions in my view.

Q.56 - We had softwood lumber, but we know what happened there. Sorry about that, Mr. Chair.

Discount rates, what sort of range of rates would you use here in the sensitivity analysis?

MR. LITTLE: I think as Mr. Marshall said this morning it would seem reasonable that we would look at a investor owned utilities cost structure as an alternative. I would expect that we would also, if it's feasible to calculate an internal rate of return, which it normally is for an investment, that we would offer that as evidence as well.

Q.57 - So you would go beyond simply your cost of borrowing?

MR. LITTLE: Yes.

Q.58 - Any idea on what sort of range though? What sort of range does that -- would that work out to be?

MR. LITTLE: The -- I would think if we look at the investor owned example you are probably looking at something -- including tax effect something closer to perhaps 9 percent rather than say ours which would be closer to 7. I would expect in that range.

In terms of calculating internal rates of return, however, there wouldn't be a limit on that. It would be

whatever the actual return from the project is.

Q.59 - Has NB Power's cost of borrowing ever exceeded your 7 percent or 9 percent range?

MR. LITTLE: Yes.

Q.60 - Sorry?

MR. LITTLE: Yes, it has.

Q.61 - By how much?

MR. LITTLE: The imbedded cost of debt right now is 8.9 percent. The highest interest rate that I am aware of was probably back about 1980, it would have been I think 17 percent.

Q.62 - Thank you. Now back to the capital cost question which you mentioned earlier, with respect to the sensitivity analysis, what sort of range would you use in terms of capital cost?

MR. MARSHALL: Well I had said earlier 25 percent.

Certainly we would look at a 25 percent increase.

Q.63 - Would you supply evidence at the specific hearings with respect to the kinds of actual variations from past capital -- in terms of capital costs from past projects?

MR. MARSHALL: Sure.

Q.64 - Environmental externality mitigation costs, could you just explain exactly what you mean by this?

MR. MARSHALL: I will give an example of SO<sub>2</sub>. The differential value -- or the differential cost of SO<sub>2</sub>, one

project emits 10,000 tons, an alternative project emits 8,000 tons. You have a differential of 2,000 tons between the two projects. You put a cost effect onto the differential to account for that.

Now the costs that we would propose using at -- we have not finally decided, but certainly my recommended view at this time is that we would look at the cost of SO2 trading permits in the U.S. market for SO2 emissions as that is indicative of the mitigation cost of SO2 in the U.S. marketplace and you would value those differential emissions at that dollar value and include that into the cost and see if that actually altered the economic result of the project, the comparison.

Q.65 - Thank you. Now if we can move on to question 3, the nature and scope of the evidence. And start I guess specifically to deal with the proposed refurbishment option, the generic evidence that you are saying you would provide.

And I guess you have -- just confirm this for me in my own mind, you agreed previously that yes you would introduce evidence around the efficiency of the projects in terms of converting fuel to electricity?

MR. MARSHALL: Yes, we would, to the degree that we are able. If we entered into a contract or had a contract option to purchase from a private producer that heat rate

information may be confidential, we may not be able to divulge it from the nature of that contract. Certainly to the extent that we are able, any projects that we can provide that information we would do it.

Q.66 - And would that be provided as well for the alternatives that are examined in the specific application?

MR. MARSHALL: Yes.

Q.67 - Thank you. But as you -- we said before -- you said before the break, you would not be providing evidence concerning the potential impact of the projects on competitiveness in the local market?

MR. MARSHALL: Well we had a discussion on that over the break and I guess I could clarify that. It's not our intention to do that. We would not provide evidence as to how it affects the competitive through the marketplace. We will attempt to provide the lowest possible cost power and let the marketplace do what it's going to do.

MR. THOMPSON: Will either one of these conversion projects include any kind of use of the waste heat or cogeneration?

MR. MARSHALL: Potentially, yes. We certainly have had discussions with some of our customers and certainly some of the self-generation options that I think are being considered by industry today. And we put it evidence that there are beneficial values if there is a steam host or cogeneration host that can improve the efficiency of those

projects and improve the economics of those projects, we will consider that.

MR. THOMPSON: But are there?

MR. MARSHALL: Are there what?

MR. THOMPSON: Are there -- are there any proposals -- currently any proposals to use either one of those projects for cogeneration?

MR. MARSHALL: Are you speaking specifically of Coleson or Lepreau, the projects --

MR. THOMPSON: I'm speaking about both projects, the ones on the table.

MR. MARSHALL: Well currently we have no consideration of cogeneration waste heat use from those two projects at this point in time. If an industry wants to locate adjacent to it and there is an opportunity to do that we would look at that, but right now there are none that we are aware of.

MR. THOMPSON: Will you be identifying -- or can you identify the potential energy loss, you know, from cogeneration for both of those plants?

MR. MARSHALL: In providing the heat rate information the amount of waste heat would be provided in basically in terms of the heat rate. How much of that heat is in some form that might be useable depends on whether it's a thermal project or a nuclear project, whether the heat

goes up the stack or out in cooling water or whatever.

Q.68 - Thank you. With respect to -- one other question on the generic evidence. Would you expect to provide evidence concerning the expenditures to that point on the projects before the Board?

MR. LITTLE: Yes.

Q.69 - Thank you. Now if we can move on to the Coleson Cove project specific evidence. A couple of things here. Would you be providing evidence around your assessment of your legal liability and clean-up costs from a spill from either a marine spill or a pipeline spill from orimulsion?

MR. MARSHALL: I think the issue of that would be handled in an EIA issue, I guess where there is a potential cost consideration that would affect the power cost of the project. We would consider that for application to this Board.

Q.70 - Would you be providing evidence with respect to the Coleson Cove project on how it might impact on the Province's climate change action plan and efforts to reduce greenhouse gasses?

MR. MARSHALL: I would say yes. Although I'm not aware the Province has a plan yet, and we are prepared to work with them in developing that plan, which I think an energy policy is scheduled to be developed through this year. So

as that -- as information on that plan comes forward, we will show how our plans can fit into that -- into their plan.

Q.71 - And if the plan is not available, because we don't know the exact time frame, at the point you are before the Board on Coleson Cove, would you provide any evidence on the impacts on the potential for reducing greenhouse gas emissions in the province of the project?

MR. MARSHALL: We will quantify all emissions from the project and we will look at the alternatives. And in the evaluation of alternatives we will give all the emissions from different types, so the effect of the emissions will be provided in evidence from -- for the projects and all alternatives.

MR. THOMPSON: Will you be providing information -- if the monobuoy at Coleson Cove if that fuel delivery system is the system you go with, will you be providing information on the effects on the commercial fishing industry in the Bay of Fundy from vessel traffic and from loss of fishing ground, use of the monobuoy, that sort of thing?

MR. MARSHALL: Again that's an EIA issue. To the extent that there are cost implications coming out of that related to capital costs of the project, they would be considered here in terms of the economic review of the project.



MR. THOMPSON: If that option for unloading the oil, for delivering the oil is taken would NB Power enter into some kind of agreement for compensation of the local fishing industry?

MR. MACPHERSON: We will -- these kind of issues will be addressed through the EIA process, associated with fuel delivery. And that's really where the public participation in this aspect of the project would occur in our view.

MR. THOMPSON: In respect to delivery from the Irving monobuoy as is being done now, would you be preparing, if that delivery option is taken, to replace the existing pipeline?

MR. MACPHERSON: Just a clarification. We are not presently using the Irving monobuoy. We do have a pipeline that runs across Saint John that transfers fuel, heavy fuel oil to the Coleson Cove project. And that is also part of the review process in terms of fuel delivery, in terms of the status of that line and its fitness for service in order to do that. So that process will be reviewed with the appropriate agencies of the -- during the review process.

MR. THOMPSON: You say you are not currently using the Irving monobuoy, do I interpret that to mean that it's not you as the operator who is using it or that the fuel for Coleson Cove is being unloaded at the facility in

Courtenay Bay rather than the monobuoy?

MR. MACPHERSON: That's correct.

MR. THOMPSON: Will we -- I guess I would ask is what we could expect then would be for you to present evidence on the condition of the existing pipeline? And in your evidence is that what you will be doing?

MR. MACPHERSON: That will be one issue that will be raised through the permitting process and obviously any results of that would be available -- if those results are available at the time of the hearing, they would be available to the hearing.

MR. THOMPSON: If changes are made in that pipeline -- or I guess in respect to the project, if changes aren't proposed to be made is there anything to trigger review of that pipeline?

MR. MACPHERSON: Are you talking subsequent to the -- if we convert -- if we refurbish the plant to orimulsion are you talking about review subsequent to that, or are you talking that review prior to the approval on the -- the EIA approval on the project?

MR. THOMPSON: I'm talking about prior to any approval of the project. Will there be a review, an opportunity to review the condition of that pipeline?

MR. MACPHERSON: We fully anticipate that the status of that line will be reviewed.

MR. THOMPSON: Through which process? Through this process?

MR. MACPHERSON: Through the -- we have to talk -- we don't anticipate it being reviewed through the project specific process. It will be reviewed in our view through the environmental permitting process on fuel delivery, which this Board still has authority in regard to some aspects of it.

MR. THOMPSON: Will you be presenting in that information a history of any maintenance on the pipe or a history of the problems, you know, the leaks that there have been in that pipe with your information, if that option for delivery continues from Irving to the plant?

CHAIRMAN: Mr. Thompson, I'm going to interrupt just to -- perhaps I shouldn't but I shall just to speed us along here a bit.

It is my understanding of the legislation now that if the existing pipeline were to be used then technically approval of the same would come from the Minister. However, in the legislation as well the Minister can refer that question to the Board for investigation.

There have been difficulties with that line in the past and the Board is very well aware of them, so that I would say as I sit here today, the odds are 95 to 5 that it will come in a process under the Pipeline Act before this Board in an open public hearing. The timing of which

I can't tell you at this time. But that's my best advice on it. And I will just leave it at that. Go ahead.

MR. THOMPSON: I guess the third option for unloading -- the option of unloading on the West Side, we have learned I guess at a public information meeting by NB Power and also a briefing session by NB Power that if that option for unloading goes ahead that there will be storage tanks in west Saint John, is that correct?

MR. MACPHERSON: That's one of the options that is being looked at, yes.

MR. THOMPSON: Could that unloading option proceed without those storage tanks at the West Side docks?

MR. MACPHERSON: Yes, it could.

MR. THOMPSON: Will you be presenting the full information on that option at the time?

MR. MACPHERSON: At which time are you referring to, Mr. Thompson?

MR. THOMPSON: At the time of the specific hearing.

MR. MACPHERSON: We see that process being reviewed through the EIA process. I agree with the chairman that it's our expectation that the pipeline options would be reviewed by this Board, and it's at that point in time that the option with respect to unloading at pier 10 would be reviewed.

MR. THOMPSON: In respect to the review, will you be submitting all three unloading options for the review at

the time, or will you have identified the one preferred option that you want reviewed?

MR. MACPHERSON: It's our anticipation that when we file the project it will have one option contained.

MR. THOMPSON: And you mentioned that you would -- am I correct in recalling that the project would be filed by the end of June?

MR. MACPHERSON: That's correct.

MR. THOMPSON: Thank you.

Q.72 - I would like to move on to the evidence specific to Point Lepreau now. A couple of questions here.

Do you intend to file in evidence a detailed analysis of the performance of the Pickering A reactors after they were refurbished, since that's the only experience in Canada that I am aware of where Candu reactors have been refurbished and then operated following refurbishment?

So would you be providing in evidence an analysis of the performance and post-refurbishment challenges faced at the Pickering A station?

MR. LITTLE: We did undertake I think in response to your interrogatory on that and I believe it was your interrogatory on that subject that we would make effort to find what information we could. I expect we will have an answer of some kind to that question.

The -- characterizing the Pickering work as a

refurbishment in the same context as perhaps Lepreau may not be completely fair, but whatever information there is in respect to Pickering and the load factors of the plant, we would address that to some level as we are able.

Q.73 - But would you introduce evidence concerning the Pickering refurbishment, how it compares to Point Lepreau, what happened there, the relevance?

MR. LITTLE: What we know we can talk about.

Q.74 - Which would include presumably any publicly available published documentation?

MR. LITTLE: I would assume so, yes.

Q.75 - And in evidence would you be introducing information concerning performance at Point Lepreau in terms of its historical performance before refurbishment comparing the assumptions about performance with its record of performance?

In other words, are you going to make some assumptions about the performance of refurbished Point Lepreau, so would you introduce in evidence the record of performance of the station before refurbishment and contrast it with the assumptions that were made at the outset of that project?

MR. LITTLE: Yes. I am not sure of the nature of the assumptions at the outset but we would certainly talk about what it has been.

I believe our general expectation has been for an 80 percent performance factor over the life of the station. I am not sure if you need anything more specific than that.

MR. THOMPSON: Will you be presenting information regarding the long-term management of radioactive materials at the station other than spent fuel?

MR. LITTLE: I think again that probably falls in the category of an EIA type issue, that the consequences of whatever the results of the process are that lead to cost impacts would be reflected in this process.

MR. THOMPSON: Thank you.

MR. COON: Thank you, gentlemen. Mr. Chairman, Commissioners, that ends the examination of panel 2 and 3 by the Conservation Council.

CHAIRMAN: Thank you, Mr. Coon. The Department of Natural Resources and Energy.

MR. HYSLOP: Good morning, Mr. Chairman, Commissioners. Thank you.

I will begin with a few questions arising perhaps out of the interrogatories. And the first is with regard to exhibit number 3 NBP, DNR 21, page 138.

CHAIRMAN: The Board requests that you wait till we get --

MR. HYSLOP: Yes.

CHAIRMAN: -- 3 down, and then you give us the rest.

MR. HYSLOP: Okay.

CHAIRMAN: Thank you, Mr. Hyslop. We now have 3. What is the rest?

MR. HYSLOP: Okay. DNR 21. It is page 138.

CROSS EXAMINATION BY MR. HYSLOP:

Q.76 - This particular question proposed that -- and on part A we asked do you assume refurbishment of Point Lepreau and conversion of Coleson Cove in forecasting 3 terawatt hours per year over an eight-year period?

And the answer is in forecasting the levels averaging 3 terawatt hours, a period over the next eight years, only Point Lepreau was assumed to be refurbished.

Now the question relates to matters yesterday in the use of Coleson Cove being used on a full-time basis if it is refurbished with the new transmission lines.

And our question is what effect if any would there be with regards to the questions asked in terms of the total sales of power to New England if Coleson Cove is also refurbished?

MR. MACPHERSON: We will be addressing that in the project specific hearing. Just to give you a flavor of it, we would anticipate -- one of the main restrictions in the data we filed deals with the fact that we have to meet lower SO2 emissions out of the Coleson Cove plant as it is presently fueled.



And with a conversion, that restriction would be lifted by virtue of the fact we would have a scrubber installed which would be used to remove the SO<sub>2</sub>.

And we would anticipate that the Coleson Cove plant refurbished on orimulsion would dispatch to a greater extent into that market. That is generally it.

But when we are dealing with the project specific hearing, that will definitely be one of the sensitivities that we will be presenting with respect to the sales into those export markets.

Q.77 - As a follow-up to that, to what extent is the Coleson Cove refurbishment being considered for the needs of New Brunswick and also perhaps for the ability to market New England? Is there trade-off and considerations in both those areas?

MR. MACPHERSON: There is obviously value associated with being able to market into the export markets. However the driver as we see it with respect to the conversion is, as we state in question 1, it is our belief that we require that capacity. And we are initially looking at the lowest cost option to be able to either -- to provide that capacity that we presently get from Coleson Cove.

As a result of that there are additional benefits that we will be able to demonstrate which will meet one of our other objectives, which is to try and have as low cost and

stable rates as we can.

But initially it will be reviewed on the basis of trying to replace that generating capacity that we presently get from Coleson Cove.

Q.78 - In your project specific hearing will you be forwarding or providing evidence relating to the anticipated breakdown of the power which is produced at Coleson Cove between New Brunswick markets and the New England market?

MR. MACPHERSON: Yes, we will.

Q.79 - Dealing with exhibit 3 again and in this regard DNR number 25, page 143. And these questions are directed more particularly to Mr. Dalton.

At page 142 you indicated that you have not performed an analysis as to how much of a price reduction would result because of the ISO New England congestion-managed system. But you did conclude the price would be reduced.

In the absence of such analysis how did you reach the conclusion the price to NB Power for electricity sales to New England would be reduced?

MR. DALTON: I came to that conclusion based on the assumption that the generation that NB Power would likely be dealing with would be gas-fired generation from Maine which would have, given that there is going to be -- there would potentially be transmission congestion on this

interface, it would have a lower underlying cost than the

rest of the New England market.

What one does need though to actually do an analysis, to really come to any definitive conclusion -- this was just reasoned judgments.

Q.80 - Reasoned judgments based on what input factors?

MR. DALTON: Just based on my knowledge of market dynamics.

Q.81 - And your knowledge of market dynamics must accrue in some manner as a result of publications, conversations? What type of information?

MR. DALTON: Based on my close to 20 years in the industry.

Q.82 - Can you provide an opinion, based on your 20 years in the industry or through any analysis, how much the price of electricity to New England might be reduced? Can it be quantified?

MR. DALTON: It is very hard to do without actually running a model and doing the analysis. It is really based on, as I suggested, underlying market dynamics, questions associated with relative gas prices at different points in New England.

So an important element of this analysis will also be issues associated with gas supply and the delivered cost of gas to these different submarkets.

Q.83 - Can you perform that analysis? And what type of costs would be incurred in performing it?

MR. DALTON: Yes, we can perform that analysis. We have

done that for a number of different clients.

Q.84 - Has NB Power asked for such an analysis as part of these proceedings or others?

MR. DALTON: No, they have not.

Q.85 - Perhaps I might ask if NB Power officials would be prepared to ask for this type of analysis?

MR. MACPHERSON: We would initially do some of our own analysis. Usually when you ask consultants to do this kind of work it costs you money. So we would probably prefer to do some of the analysis ourselves initially.

I think one of the issues too that we should keep in focus is that one of the sensitivities associated with our specific project proposal will deal with market prices and market constraints. And so today we would propose to analyze the particular projects in that regard.

Q.86 - You have indicated that you have done some analysis internally. Will that analysis be part of the site-specific processes?

MR. MACPHERSON: We can certainly provide information with respect to historically the constraint issues that we have had to deal with in terms of getting to that market both in terms of capacity that we can get to that market and any price impacts that that has or market price impacts that it has had. Yes, we can do that.

Q.87 - Referring back again to Mr. Dalton -- and I do

appreciate that the total assessment and analysis has not been completed -- but is there a risk in this decrease of price that the price per kilowatt hour of electricity to the New England market would be reduced below NB Power's marginal cost of production?

And this is to the panel. I have asked Mr. Dalton. But if something -- I see you looking. If it can be better answered, I --

MR. DALTON: I would think that one of the other panel members would better be able to address the question in terms of NB Power's marginal cost of production than I.

MR. MARSHALL: We sell into the New England market today mostly in the on-peak hours and back off at nighttime. In the issue of congestion there are some constraints in southern Maine, across the Maine-New Hampshire interface.

And it depends on the loading levels in Maine and the loading levels south of the Maine-New Hampshire border. It depends on the generation that is on and dispatched in Maine and the level of power flow out of New Brunswick.

So it is a combination of all of these factors. And currently New England has one market price but will be implementing a nodal locational price. So there will be separate prices to reflect constraint at individual nodes.

I think that is what Mr. Dalton is referring to, that there then could be some reduction in price. If all the

generators in Maine want to get access to the southern market and all of the load across New Brunswick wants to get there, it may then lower the price in Maine slightly from the New England market price. That is the effect.

Our review of that is that that likely will occur. But it will occur a smaller number of hours. It won't occur in every hour. It will occur at sometimes.

The other effect is that the New England price varies significantly night to day. And there are times that the New England market price itself is lower than our cost. And there will be times that we would not sell into that market.

So part of it is our generation cost relative to the market price. There are times it may not match. And there are times that -- in times of constraint, I do not believe that the constraints will cause us to be dispatched out in terms of the competition. We are still going to be competing against gas-fired generation in Maine.

So the issue is will the energy resources out of New Brunswick compete against the gas-fired resources in Maine?

Q.88 - And just to follow up on that again, you are anticipating that in the long run and overall you will be able to sell your electricity into these markets at a

price that still means profit for New Brunswick and New Brunswick consumers?

MR. MACPHERSON: That is correct.

Q.89 - But a risk has been identified by Mr. Dalton that the price could drop. But there is no evidence that it is being produced as to the quantification of that potential price drop in the future.

And you are relying on his expert opinion that there will still be some margins there for NB Power, am I correct?

MR. MACPHERSON: That is correct.

Q.90 - Again going back, will an analysis either performed by NB Power or through Mr. Dalton be part of the evidence at a specific hearing relating to Coleson Cove?

MR. MACPHERSON: As we had envisaged that the evidence would be presented, we would see the sensitivity analysis with respect to access to those markets and market prices would be how we would deal with those issues, as it refers to selection of the appropriate options for supplying capacity under our obligation to serve.

However we would be open to performing additional analysis particularly as it relates to what our historic experience has been, and so look forward at what the potential may be.

Q.91 - I will move on to exhibit 3 at DNRE 27 which is at page



145. And again these questions are directed toward Mr. Dalton.

In this interrogatory you provide an opinion that NB Power's oil price forecasts appear to be low in comparison to natural gas prices, but you were not requested by NB Power to provide a forecast.

Have you since been requested to provide a forecast by NB Power?

MR. DALTON: No, we have not.

Q.92 - What type of information would you need or require in order to provide a forecast?

MR. DALTON: I am sorry, I'm not sure if I follow your question. I mean to provide the forecast I think we would just require a request from the appropriate party.

Q.93 - Perhaps I should rephrase that. What type of input factors and information -- what would be the process in producing a forecast?

MR. DALTON: To clarify once again, would you be talking about a forecast for natural gas prices or oil prices?

Q.94 - A comparison between the two.

MR. DALTON: Just so I am clear, I think that we would be able to provide a forecast of natural gas prices. Typically we do not have a model that allows us to forecast oil prices. What we would do in terms of comparing the two would be to compare the underlying

assumptions or forecast put forward by NB Power for oil prices and assess how they compare to natural gas prices considering the underlying market competitive dynamics, the ability of different customers to switch between these two fuels.

Q.95 - Just to go back, your opinion was that NB Power's oil price forecast appear to be low in comparison to natural gas prices. That was the opinion you provided. You would not do an analysis of the oil price forecast but rather just how NB Power's oil price forecast compared to natural gas prices.

MR. DALTON: That was the opinion that we put forward here, yes.

Q.96 - Okay. What would be the type of cost to provide such a forecast?

MR. DALTON: I would need to defer to one of my associates.

I would not be the one who would actually be offering opinion here or providing the forecast. So someone else would have to price that work.

Q.97 - I'm sorry, you personally or other persons in your firm?

MR. DALTON: Other persons in my firm would be the ones who would be responsible for pricing such a consulting assignment. It's not an assignment that I would actually be pricing.

Q.98 - I understand. I wasn't clear on that. In relation to your analysis of NB Power's position, what would be the significance of any inaccuracies in NB Power's position relating to the pricing of electricity into the New England market?

MR. DALTON: I think the significance would be that it would potentially reduce the benefits from these projects and that I think one of the benefits that they offer New Brunswick consumers is the ability to sell power into a lucrative export market when that power is not needed for the benefit of New Brunswick consumers.

Q.99 - And is there a risk at some point in time that in fact it could become a detriment to consumers having excess capacity that can't be sold on the New England market, given long-term pricing in natural gas and in oil?

MR. DALTON: I have to answer yes, there is risks in power markets, and I think that the analysis that is being put forward by NB Power is designed to really evaluate those risks.

MR. BISHOP: I might add, however, that this is a two-edged sword, that if those -- if those projects or any exports from New Brunswick are disadvantaged by price that also provides a source of energy from outside New Brunswick that in turn will benefit New Brunswick customers.

Q.100 - I would understand what you are saying is if the price

was better in New England you could purchase from New England rather than produce your own?

MR. BISHOP: Yes.

Q.101 - However, that would result in that capacity not being used in New Brunswick, is that correct?

MR. BISHOP: From time to time it may, yes. I think our experience has already shown that the purchase and sales work both ways.

Q.102 - Perhaps directed to NB Power officials, I would ask what, if any, concerns Mr. Dalton's opinions have created with regard to your analysis in relation to the sale of electricity in the US markets?

MR. MACPHERSON: The analysis we have performed on the projects that we are discussing here would benefit from -- that analysis would benefit from Mr. Dalton's analysis. In other words, we have been more conservative in that in terms of our assumptions.

Q.103 - And am I correct in saying, however, though that if Mr. Dalton's analysis in relation to the two is correct it's a negative input factor in terms of NB Power's position?

MR. MACPHERSON: No. It's positive in terms of our position. We have -- Mr. Dalton has indicated that our fuel prices are off by -- I gather it's around a dollar a barrel, in that context. All of this -- when we are

looking at these projects we are looking at them, as I stated initially, primarily to deal with our obligation to serve within the province. That benefits these projects we are talking about by virtue of the fact that the economics of these projects are better because they would -- they would have greater fuel reduction potential from the estimates that Mr. Dalton has with respect to fuel. So in his estimates our projects would actually evaluate as having greater return to the citizens of the province than when we -- using the assumptions that we are using.

But just to clarify that, as Mr. Marshall has just indicated, they are within the -- the sensitivity analysis we will be doing will be certainly -- Mr. Dalton's forecast and ours will be within the range of any sensitivity analysis we will be doing in this regard.

Q.104 - Thank you very much. I would like to move on to the relationship of the different applications and matters that must be dealt with by regulatory bodies before any of these projects go ahead. And first of all there has been some -- I understand your position with regard to the EA, that those matters would be proceeded with before the hearings before these Boards with regard to the specific projects, is that correct?

MR. LITTLE: The processes will be occurring largely in

parallel. The EIA processes will have begun first and our position earlier was that we would certainly apprise the Board and any intervenors of the status of the approvals at the time of an application.

Q.105 - And as I understand the situation with regard to in-province environmental impact assessments, once these reach the Minister's desk they become either dealt with by the Minister or may go to public hearings, am I correct in that regard? I think the phrases are screened in or screened out.

MR. LITTLE: I'm not totally familiar with the statute but I think you are generally correct.

Q.106 - And does any other members of NB Power have knowledge of the screening in/screening out process that they can be more specific on?

MR. MARSHALL: I think Mr. Little is correct. My understanding again is that the application -- preliminary application would go in, we would file that the end of June, and then the Minister of Environment local government, their staff would review all of that, and on the basis of the information provided would make a decision as to whether or not the project was screened out and could go forward under whatever requirement was needed, or whether there would be a full public hearing EIA review process.

Q.107 - And would it be correct given the scope and magnitude of these projects that NB Power anticipates full public hearings with regard to the environment impact assessment?

MR. MARSHALL: We are preparing our case now under the assumption that it will be a full hearing. So we are preparing all our information for that. The decision will be made by the Minister of Environment.

Q.108 - That's a fair answer. Thank you. What type of time period do you anticipate for the environmental impact assessment hearings, assuming they are in fact public hearings?

MR. LITTLE: I think the estimates are in perhaps the range of a year, that kind of time frame.

Q.109 - So you would assume or you are going forward with both the environmental impact assessments and the hearings before this and other boards simultaneously.

MR. LITTLE: That's correct.

Q.110 - I would ask if consideration at any point in time has been given to merging or streamlining the different types of hearings so that all evidential matters could be done together, and I do appreciate there may be a legal and other considerations in that regard, but is this something that NB Power is prepared to investigate?

MR. LITTLE: I don't know quite how to answer that. We have had meetings with the various provincial parties that may

be involved in the Coleson project and have asked for some views from them as to how the process might proceed in an expeditious fashion.

We would, however, anticipate that proceeding with the project specific application in roughly a time frame that would see us making an application around Labour Day, and trying to proceed expeditiously with that process. We do have a variety of ensuing subsequent processes to deal with with this Board, and we feel that's an appropriate time to try and do this.

Q.111 - Would NB Power have any preference regarding dealing with environmental impact assessments and Public Utility Board matters simultaneously?

MR. MARSHALL: We see them as two separate processes and the fact that they may run parallel to each other -- the mandate of the Board is to review our capacity requirements, our obligation to serve and the cost effects to ratepayers in New Brunswick. The EIA review process is to look at mitigation of environmental impacts for licensing and construction permits to proceed and operate.

Q.112 - So therefore you do see two separate processes?

MR. MARSHALL: Yes.

Q.113 - Thank you. Under the document which has been marked -  
- I believe it is NB Power 6 -- and I'm looking at question 2, and in particular the environmental



requirements, "No repeat of EIA review issues."

My understanding of NB Power's position with regard to environmental matters is that they regard it as a business constraint to comply with the appropriate emission restrictions that exist, is that correct?

MR. MARSHALL: It is our obligation to comply, if that is what you mean by business constraint.

Q.114 - Yes.

MR. MARSHALL: Yes.

Q.115 - Yes. You can't build a power plant unless you are meeting the regulations with regard to emissions?

MR. MARSHALL: That's correct.

Q.116 - As part of any of the processes to be put forward at a site-specific hearing, will the cost alternatives of doing better than just meeting these standards be part of evidence put before this Board?

MR. MARSHALL: I think the answer is yes. Certainly in looking at the scrubber or SCR there are operational costs associated with that. So they could be operated just to meet the standard.

They also could be operated with additional limestone input for instance, an operation to do better than the standards. And we will provide information reflecting those costs.

Q.117 - So in other words there will be some sensitivity

approach in terms of cost versus doing better than the environmental standards?

A. Yes.

MR. HYSLOP: Thank you very much.

CHAIRMAN: Mr. Hyslop, I don't know how much longer you wanted or need for your cross. I'm just looking at the time now.

If you wanted to take -- have us take our lunch break and come back at 1:30 maybe that will give you time to see what it is you have left remaining. Or do you want to continue to 12:30?

MR. HYSLOP: I would think we might be another half-hour, Mr. Chairman.

CHAIRMAN: Oh, well.

MR. HYSLOP: And a lot of these notes have been -- Mr.

Barnett has produced. So it will give me a little chance to organize them.

CHAIRMAN: All right.

MR. HYSLOP: And it would flow a little better.

CHAIRMAN: Then we will adjourn and reconvene at 1:30.

MR. HASHEY: Could I speak just briefly to the timing of the procedures, maybe for my own assistance?

It appears that we are moving ahead well with this aspect of the case. I don't know. Maybe we can find out if there are others that are intending to ask questions

this afternoon without restricting.

What I'm coming to is the final presentations to you on these points and the timing of those presentations. We are prepared to move ahead as quickly as you wish.

I'm just wondering if there is any guidance that you could provide us. That is in relation to our own timetables, checkouts and this sort of thing.

CHAIRMAN: The remaining intervenors who want to have questions of this panel, can they indicate that by just raising a hand? Where is your hand, Mr. MacNutt?

All right. So it would just be Board staff after that. And any estimate, Mr. MacNutt, on how long you think your cross will take?

MR. MACNUTT: At least a half an hour if not 45 minutes.

CHAIRMAN: I -- normally the Board would reconvene sometime tomorrow. I don't know how long you are going to take this afternoon, Mr. Hashey. But let's say we finished at 3:00. We would reconvene tomorrow, perhaps at 2:00 o'clock or 1:30, which would give counsel an opportunity to speak with their clients about where they think they are and the suggestions they will have to the Board. I find that that gap after evidence closes until summation proves to be a worthwhile thing. Is that sufficient guidance? Do you want to check out now?

MR. HASHEY: No, no. That is very helpful. We probably

will.

CHAIRMAN: Okay.

MR. HASHEY: Thank you.

CHAIRMAN: All right. We will adjourn till 1:30.

(Recess - 12:25 p.m. - 1:30 p.m.)

CHAIRMAN: Any preliminary matters? If not go ahead,  
Mr. Hyslop.

MR. HYSLOP: Thank you, Mr. Chairman. Just a couple of  
follow-up matters. And I have two fairly short lines of  
questioning. This particular question directed towards  
Mr. Little.

Q.118 - My understanding, Mr. Little, is that sometime  
earlier, not in direct connection with these proceedings,  
a meeting was initiated by yourself on behalf of NB Power  
with the Department of Environment to discuss -- and I  
believe the proposal from NB Power was in fact to try to  
harmonize the environmental impact assessments and the  
Public Utilities Board hearings.

I guess first can you confirm that that type of  
meeting did in fact take place and that was the position  
of NB Power?

MR. LITTLE: We had a meeting to try and coordinate the  
environmental impact assessment processes that seemed to  
span several jurisdictions within the province. Not this  
PUB project process. That was not on our minds.

Q.119 - So that having the environmental impact assessments as part of the specific hearings that will become before this Board wasn't the issue from NB Power's point of view?

MR. LITTLE: That was not our intent, no.

Q.120 - Thank you very much. Also this morning we discussed a couple of occasions the various applications that had been filed.

And I would like, if you or any member of the panel is aware -- my understanding is that the applications with regard to Point Lepreau relate solely to the construction of the waste disposal storage facilities.

But there has been no applications yet with regard to refurbishment of Lepreau. Am I correct in that statement?

MR. LITTLE: I believe that the EIA discussions with CNSE have been focused on the waste management facility. That is correct.

Q.121 - And to your knowledge there is yet to be an EIA application relating specifically to the refurbishment of Point Lepreau?

MR. LITTLE: I think what I know I read into the record earlier from Mr. Hickman's advice that he had given us.

Q.122 - Perhaps you might undertake to let us confirm exactly whether that distinction exists in the application?

MR. LITTLE: The project has been registered. The scope of the proposed EIA and so on I think relates primarily to

the, as you say, the waste management facility. That is really all I know about it at this point.

Q.123 - Is it anticipated there will be another further application dealing with the refurbishment itself for EIA purposes?

MR. LITTLE: The project has been filed with the Department of Environment. And CNSE, I think, working with the Department of Environment, will make those decisions.

Q.124 - Thank you. A question directed toward Mr. Dalton.

Yesterday in evidence, and I don't have -- or today, Mr. Marshall in evidence referred to the gas prices varying as much as \$2, 100 percent changes in the pricing over the last two years.

I would ask Mr. Dalton his view as to whether or not such wide variances in the price of natural gas are likely to continue over the 10-year scope of the projects now being under consideration?

MR. DALTON: Many analysts believe, and I count myself one of them, that gas market dynamics have changed fundamentally, and that for the foreseeable future we are going to be at considerably higher price level than we have seen for the last few years.

So I think one needs to look back at history and what has transpired in the markets as some indication in terms of the risks and uncertainties associated with prices.

But if you were to ask me for my best estimate in terms of market prices going forward, I wouldn't suggest that a \$2 gas price was a reasonable forecast.

Q.125 - My question was more directed to anticipate a wide volatility in the price of gas, natural gas over the short and long-term future?

MR. DALTON: There will continue to be significant gas price volatility, I would expect.

MR. HYSLOP: Thank you, Mr. Dalton.

Q.126 - I have some questions with regard to accounting issues in the presentation of evidence in your application for the specific hearing.

I understand that the premise of evaluating projects is on life cycle costs. And my question is to the effect that will all alternatives be presented in a similar format reflecting the respective life cycle costs?

MR. MARSHALL: Yes.

Q.127 - Thank you. There is a phrase that is used in the -- I think it is NBP exhibit number 6. And the phrase is "levelized life cycle costs."

Could someone describe to me what that constitutes?

MR. MARSHALL: You would take any project. You would calculate the capital costs, the fuel costs, the O & M costs over the life of the project with an escalating stream.

You would discount them all down to get one levelized cost of power that would be one fixed cost flat over the 20 or 30 or 40 years.

Q.128 - You used the word "escalate". Could you perhaps go a little farther and explain that concept?

MR. MARSHALL: Well, when you build a project, the capital costs are expensed over the two or three years of the construction period.

They would have some interest expense and carrying cost in them and escalation through that. So you get the in-service cost of the project as a capital cost.

The fuel costs will vary over the life. So there would be some escalation in fuel costs and in nominal dollars. The O & M costs, because of inflation and CPI and salaries and wages, you would expect O & M costs to increase over the life of the project.

And you would take those cash flow streams. And then you discount them at the discount rate to get one total average cost over the entire project.

Q.129 - With respect to the evidence that you will be submitting, what manner do you anticipate presenting depreciation costs of the projects? On a straight line or some other basis?

MR. LITTLE: The economic assessment in the life cycle of costs would be based on cash flows as opposed to



accounting allocations like depreciation.

Our expectation however on depreciation would be straight line.

Q.130 - Would that be true for both Coleson Cove and Point Lepreau, Mr. Little?

MR. LITTLE: That would be our belief at this time, yes.

Q.131 - Thank you very much. Reference to exhibit 4, and it would be DNR supplemental 30 (b) which is at page 49. I will wait for the Chairman.

Very well. Dealing with item (ii), the question in the supplemental, "Is the noncapitalization of replacement energy a common practice at NB Power?"

The answer is "Replacement energy has been capitalized in the past. But it is not expected to be in the future."

Our first question is what factors have gone into changing the accounting treatment of this item?

MR. LITTLE: I think in general NB Power has become more in line with generally accepted accounting principles as opposed to regulatory accounting principles.

So some of the things that may have been capitalized in the past and amortized over long periods of time are no longer being capitalized.

Q.132 - And will you be filing -- or as part of the evidence that you will be presenting at the specific hearings, will you be outlining the costs of fuel during the period of

shutdown with Point Lepreau in particular?

MR. LITTLE: Yes, we will.

Q.133 - Replacement power?

MR. LITTLE: Yes.

Q.134 - Yes. Thank you. And I would expect that such outage

-- the replacement power costs would become part of the budgetary process in the years affected, 2006 to 2008?

MR. LITTLE: Yes. You would clearly see that in the eight-year financial projections that we have offered to provide.

Q.135 - Questions with respect to the different options

available with regard to delivery of fuel to Coleson Cove.

I'm not clear. I don't think any of the evidence has spelled it out. But could someone briefly outline the different delivery options to Coleson Cove?

MR. MACPHERSON: We are presently exploring three separate options for fuel delivery to Coleson Cove. One is delivery at Pier 10 and taking that via pipeline to Coleson Cove. There are two options with respect to the pipeline there.

One is to build a pipeline right from Pier 10 to Coleson Cove. The other option, with respect to the Pier 10 option, is to build tankage storage at Pier 10 and then take pipeline to the existing pipeline that transports heavy fuel oil to Coleson Cove.

And so we have two options in terms of fuel delivery from Pier 10, one that involves tankage at Pier 10 and the other that involves a pipeline of sufficient size to be able to take the fuel directly into Coleson Cove. Another option is looking at a monobuoy off of Coleson Cove and then direct line into the Coleson Cove plant.

And the third option is utilizing the existing monobuoy at Canaport, offloading the fuel and using the existing pipeline from -- that we use to deliver fuel oil to Coleson Cove.

Q.136 - Will you in your specific proposals be outlining the costs of each of these different proposals for transporting fuel?

MR. MACPHERSON: We anticipate making a decision on that and filing one option. And at the present time we would anticipate that the project would have the preferred fuel delivery option.

However we could certainly make available the information that we used in arriving at that decision.

MR. HYSLOP: That would be fine. Thank you very much, Mr. MacPherson. That concludes the questioning -- I'm sorry.

Have you anything else? Concludes the questioning from the Department. Thank you very much.

CHAIRMAN: Thank you, Mr. Hyslop. I presume Enbridge Gas New Brunswick is not represented today and therefore has

no questions. Emera?

MR. BLAMIRE: We have got no questions.

CHAIRMAN: Mr. Gillis?

MR. GILLIS JR.: No questions at this time.

CHAIRMAN: Irving Oil?

MR. CLINTON: No questions.

CHAIRMAN: J.D. Irving Limited?

MR. DEVER: We have no questions.

CHAIRMAN: Nova Scotia Power?

MR. WALLACE: No questions.

CHAIRMAN: The Saint John Citizens Coalition for Clean Air?

Saint John Energy?

MS. COUGHLAN: No questions.

CHAIRMAN: And West Coast Power Inc. was not represented,

but are they today and do they have any questions? If

not, Mr. MacNutt?

MR. MACNUTT: Thank you, Mr. Chairman.

CROSS EXAMINATION BY MR. MACNUTT:

Q.137 - I would ask you to turn up NB Power 1 and we are going

to go to Mr. Marshall's evidence, page 107, question 8.

And just for the record there are additional references in

NB Power 3, CCNB 41 at page 102, DNRE 5 at page 117 and

Gillis 9 at page 161. But I think for the purpose of a

question the first reference I gave you to Marshall direct

evidence at 107, question 8 will do it.

Preamble, reference is made to the environmental issues which are anticipated in the near future, i.e., reduction and emissions of NOx and CO2 at a project specific hearing with respect to refurbishing Coleson Cove. What information will NB Power provide with respect to plant design which will allow for implementation of more stringent environmental standards over a period of years following the refurbishment?

MR. MARSHALL: We would anticipate for Coleson Cove environmental control equipment, including flue gas desulphurization equipment. We would design that to the level of the technology capable today and it would enable us to exceed the standards. It would have some flexibility in operating at various levels of sulphur removal.

We would design our NOx SCR equipment to reduce NOx at -- we would target the design at levels actually slightly below what we believe the standards to be, so that we would have a little bit of operating room in that.

So that's -- and we would also include a wet precipitator I believe in the project so that particulate would be significantly below current standards for particulate as well.

Q.138 - The question was really directed towards -- premised on an assumption that you would build the plant, design

and build the plant to meet the standards required as of the date the plant would come into operation.

The question is really directed towards, will you in addition design and build into the plant sufficient capacity for environmental emission reduction to accommodate what might reasonably be expected to be required by way of standards beyond the date of commissioning of the plant?

MR. MARSHALL: We have some margin for error. Our speculation -- or our projections are what emission standards will be in place out to 2010 and put in place by 2010 and we will fully intend to meet all those.

We would have, as I said, some additional flexibility for reductions below what those projected standards are, so we would have some provision for standards that may come in in 2012 or '15.

But not knowing exactly what they are, we couldn't guarantee we will meet every standard for 30 years from the point of construction of the project.

Q.139 - But we could expect to see a statement in the information supplied, evidence supplied on a project specific hearing as to the standards to be met and the design standard to which the plant will be constructed?

MR. MARSHALL: That is correct.

Q.140 - I'm now going to look at exhibit NB Power 3, and

perhaps it might be an idea just to have a quick look at two other -- three other -- four other -- four references all together, excuse me.

In NB Power 3 there would be CCNB 46 at page 107. CCNB 50 at page 111. This all has to do with emissions trading and a carbon tax. DNRE 10 at page 122. And Sollows 4 at page 190.

In those references reference is made to emissions trading and a carbon tax. And the questions are -- there is a series arising out of this opening comment -- with respect to a project specific hearing for both Coleson Cove and for Point Lepreau, what information will NB Power provide with respect to -- there follows a series of questions -- (a) NB Power's position on emissions trading as a viable and good business practice, or if it does not consider it a good business practice, what information will be provided?

MR. MARSHALL: As we stated in our evidence our position is that we would support trading on a wide range market including United States and Canada and other areas, if possible, but at least as wide as United States and Canada, because we operate in a North American electricity market in a North American free trade zone and should be subjected to the same rules. So we would support that type of a trading scheme for carbon.

Q.141 - And what information will NB Power provide with respect to its position on emissions trading as a responsible corporate policy when considering its environmental obligations?

MR. MARSHALL: Could you elaborate? I don't quite understand the question.

Q.142 - I would like you to tie the -- your stated desire to do emissions trading and contrast that with the statements you will make with respect to meeting your environmental obligations?

Do the two marry with one another or are they a slight discontinuity between the two?

MR. MARSHALL: Okay. First of all we -- our position for example on emissions trading on sulphur dioxide, we currently have a provincial cap of 123,000 tons which is projected to be lowered to 61,000 over the next 10 year period.

We would design our systems and be capable to operate lower than the 61,000 tons. We would advocate that we are able to trade in the North American market the surplus SO2 reduction that we have into that market to gain some credits to help pay for the equipment we put in place and benefit our customers in New Brunswick.

We would advocate exactly the same thing on carbon emissions. Whatever standard is set through negotiations



with the provincial government, the federal government and Canada's obligation or commitments to climate change, whatever mechanisms are put in place and whatever standards are allocated as initial requirements, we would advocate trading of credits in order to promote the greatest -- the most efficient means of achieving those targets.

So I don't see any conflict between our business practice of meeting our standard obligation and trading.

Q.143 - So your statements will in effect reflect the fact that you consider that the plants will exceed the requirements and therefore you will be a generator of credits as opposed to the purchaser of credits?

MR. MARSHALL: Initially we believe we will be a -- we will exceed the standards and be a generator of credits in the initial years.

Over the long terms if standards are lowered and lowered, we may be a purchaser of credits in order to operate the plants.

Q.144 - Now what information will you be providing with respect to the time of implementation of emission trading, and over what period of time you would consider emission trading to be acceptable?

MR. MARSHALL: Our position is we support the Canadian Electrical Association proposal to the federal government

which is an emission standard proposal that all existing power plants can operate at their existing levels until the end of their 40 year life. At that time they would have to meet a standard of equivalent combined cycle gas emissions. This is a way of allocating the credits to initiate the trading structure to go forward. We support that position.

Q.145 - And what information will you be supplying with respect to the date of initiating the commencement of this trading?

MR. MARSHALL: Well the CEA proposal initiates that proposal in 2008.

Q.146 - And what information will NB Power be providing with respect to the impact of emissions trading and the carbon tax on NB Power's cost of compliance with emission standards?

MR. MARSHALL: We have outlined in our presentation today we would be looking at levels of CO2 and what risks there may be, at what level the tax may be, and that we would look at the valuation of different projects on CO2 emissions and the differential valuation against a projected trading value of CO2.

Q.147 - And what information will NB Power be providing with respect to the impact emissions trading and carbon tax will have on environmental costs externalities to New

Brunswickers?

MR. MARSHALL: As I said this morning, we would do environmental externalities. We would view differential emissions at projected market trading numbers for carbon emissions, sulphur emissions, NOx emissions.

We would not consider externalities to the level of human health effects or other considerations. We consider that that's an issue of the regulators of putting the standards in place.

Q.148 - Now you are saying you would consider those. Will you be supplying information with respect to the analysis you go through in arriving at those conclusions?

MR. MARSHALL: Yes.

Q.149 - What information will you be providing with respect to measures that will be taken by NB Power to reduce the financial effect of a carbon tax on NB Power?

MR. MARSHALL: Look for the lowest cost sources of power and the least emissions.

Q.150 - And the information that went into the selection of the result or decision would be provided, would it?

MR. MARSHALL: Yes.

Q.151 - And what information will be provided with respect to the manner in which emission trading had been factored into the overall plan to meet the projected 40,000 tons of SO2 at Coleson Cove?

That 40,000 tons is referred to in NB Power 3, Gillis 9, at page 161, if you need the reference.

MR. MARSHALL: We project the standard of 40,000 tons to apply to Coleson Cove specifically and we expect to be able to meet that directly at Coleson Cove with the project through flue gas desulphurization.

What we would like to do is to be able to trade any excess credits that we have below the 40,000 tons in other markets in order to help pay for the project and to provide benefits to New Brunswickers.

Q.152 - I am now going to ask you to turn to NB Power 1, base load options, appendix B, page 36. There is two references. NB Power 1, page 36, and NB Power 3, page 162, which is Gillis IR 10. Just to run through that again. NB Power 1 at page 36, NB Power 3 at page 162.

NB Power in its evidence states that as an alternative to the reconstruction of facilities it could purchase resources from an alternative external source. Hydro Quebec as mentioned elsewhere in the evidence is unwilling to enter into long-term supply contracts.

On both project specific hearings, one, will NB Power be providing the results of their investigation of the potential of entering into long term agreements with electricity suppliers in Ontario, Newfoundland and other areas?

MR. MACPHERSON: We will. We anticipate firming up the information that we already have or confirming it or otherwise prior to the hearing, that's correct.

Q.153 - Will NB Power provide its evaluation of the possibility of cost sharing new transmission lines from other electricity suppliers into New Brunswick?

MR. MACPHERSON: I'm not quite sure I know what you mean. Are you talking about existing present projects we have under consideration or are you talking new projects?

Q.154 - Well, will you be supplying information as to any cost sharing on the transmission line for which you made application to the National Energy Board and, secondly, with respect to Neptune, and thirdly, with respect to any new ones above and beyond those two?

MR. MACPHERSON: Some of that information may be under confidentiality agreements. To the extent that we can share it and that we can -- or get release from the particular parties we will, yes.

Q.155 - And the third question, will New Brunswick Power as a part of its due diligence in examining other sources of long-term electricity supply be providing independent market assessments such as the results of an RFP for supply options?

MR. MACPHERSON: We do not contemplate a full request for proposal prior to the initiation of a project before the

Board.

We have information with respect to different supply alternatives and supply options that we would be prepared to make available, but we do not anticipate issuing an RFP for supply options in relation to these particular projects.

Q.156 - Would there be any -- aside from an RFP would NB Power be providing any independent information or advice with respect to those options and costs, the RFP being only one approach to coming up with the independent information?

MR. MACPHERSON: We could have an independent review of the supply options that we are -- and our view of them, if that was -- if that was the wish of the Board.

Q.157 - I am asking you are you prepared to provide the Board at the specific hearings in those areas?

MR. MACPHERSON: Our proposal is that we would provide our view of the supply options available to us and that includes all conventional forms of generation, purchase options and any of the new technologies or renewable energy options available to us.

We did not anticipate having an external review of that analysis or going to the market specifically looking for options or alternatives to the plan that we are proposing.

Q.158 - Thank you. I believe we have page 36 of NB Power 1

open. That's my next reference. But first, presently Ontario, is it your understanding that Bruce A and B nuclear generating plants are under contract to an independent operator who intends to produce and sell nuclear power?

MR. MACPHERSON: Yes, that's our understanding.

Q.159 - Now NB Power's base load options on page 36 of NB Power 1 do not indicate that nuclear expansion at Point Lepreau is considered an option at this time.

My questions are, one, in a project specific hearing on Point Lepreau refurbishment will NB Power provide the economic, environmental and other reasons that NB Power did not identify nuclear energy expansion as a base load option in the present generic hearing?

MR. MACPHERSON: We do include it as an option in doing our assessment.

Q.160 - Could you --

MR. MARSHALL: It was an oversight on page 36. It wasn't included. In the reference you also made to GIL 10, we stated that we use all options that we have considered in the past. And in GIL 10 in 95 IRP document we included a second nuclear unit at that time. We included it earlier on. We will include it again.

Q.161 - So it is omitted from 36 and you say that you did identify it in your response to Gillis 10?

MR. MARSHALL: We didn't itemize it specifically in response to Gillis 10, but in reference to the 1995 IRP, all the options included there, it was analyzed and included in that study. So we would provide data on a second nuclear unit as an option.

Q.162 - Oh, so you are saying the only -- the reference before this generic hearing to the nuclear energy option at Point Lepreau being Point Lepreau II is in the document that was supplied in response to Gillis IR10.

That document in fact was your capacity planning in 1991 and in the 1995 integrated resource plan, is that correct?

MR. MARSHALL: That is correct.

Q.163 - All right. So it's not -- nowhere in the initial filed evidence in NB Power 1 as an option?

MR. MARSHALL: That is correct. That's -- I said that's an oversight. It should be included.

Q.164 - So what you are telling me though as a part of our questions and answers here is that you will be supplying information with respect to the consideration given by NB Power to that option when we come to a Point Lepreau refurbishment specific hearing?

MR. MARSHALL: That is correct.

Q.165 - This next question, NB Power 1, the direct evidence of Mr. Marshall at page 105 at line 12, and the second



reference is NB Power 3. It's NB Power 1 at page 105, Mr. Marshall's evidence at line 12 on that page in response to question 4, which is at the top of the page. And the second reference, NB Power 3, page 148 which is DNRE 30. There might be a little overlap in this question with the question I previously asked this afternoon.

MR. MARSHALL: Yes, I have it.

Q.166 - Mr. Marshall has in answer to question 4 at line 12 that the cost of replacement energy during the construction refurbishment period would be some of the information necessary to estimate cash flow streams for a generation project.

In responding to DNRE 30 it is stated that the estimated cost of replacement energy during the construction refurbishment period would be based on the construction schedule and the cost impact associated with unforeseen delays in construction.

In a project specific hearing what specific information will NB Power be providing with respect to Coleson Cove with respect to (a) energy replacement requirement and costs for Coleson Cove and the location where it will be generated?

MR. MARSHALL: The schedule for Coleson Cove has it that it would be out of service during the summer months. We would attempt to optimize that schedule so that one unit

is out, the other two are still available to generate energy, and there may not be any requirement for replacement.

But if there is a time when more than a unit is out and the project has to be phased in, we would project that the replacement energy would be purchased out of the marketplace at market price.

Q.167 - And you would purchase out of the marketplace. Would you be anticipating where those purchases would be made and providing that information? Or do you just buy on the spot market?

MR. MARSHALL: We would look to purchase the energy from the lowest cost available source, to begin with. That could be Hydro Quebec, if they are prepared to sell.

If we are looking for a block of energy -- they currently don't like to sell blocks, they are looking at hourly prices -- it could be blocks of energy from potentially Nova Scotia, if they had some at that time.

It could be out of Ontario through Quebec or New York.

It could be out of New England. We would look to get it at the lowest price.

Q.168 - So this information, to the extent that it is available at the time, will be provided as a part of the overall -- your overall cost estimate, because it would be taken into account in the total project costing, would it

not?

MR. MARSHALL: Yes. And in the detailed analysis of the eight-year financial plan we would have budgeted cost estimates of that replacement and total power costs then would flow through and show up on the bottom line of the total corporation through those analyses.

Q.169 - Still on the same topic and in the same references, what specific information will NB Power be providing with respect to a project-specific application involving Coleson Cove as to the manner in which the construction schedule dictates replacement energy costs?

MR. MARSHALL: Well, as I said, our intent is we would not have Coleson Cove capacity out of service during the wintertime. We schedule the construction through the summer to minimize the effect of costs of replacement requirements.

Q.170 - The next reference is NB Power 1 at page -- question 6 at page 106 and 107. It is NB Power 1 at pages 106 and 107. And I'm looking particularly at Mr. Marshall's response on line 1 at the top of page 107.

Mr. Marshall says that one of the risk factors that would be considered in a generation refurbishment application would be a "risk mitigation strategy".

With respect to the term "risk mitigation strategy", will information be provided to define the risk mitigation

MR. MARSHALL: I'm going to hand off to Mr. Little here.

MR. LITTLE: The answer to that question would be yes.

Q.171 - Will information be provided with respect to the management of risk as a part of the risk management strategy?

MR. LITTLE: I'm not sure I understood that one. We are talking risk mitigation here.

Q.172 - Well, perhaps I better restate that. Because I'm informed I may have misspoke myself.

Will information be provided with respect to the management of risk as a part of the risk mitigation strategy?

MR. LITTLE: I think so.

Q.173 - So your answer is yes, that information will be provided?

MR. LITTLE: Yes. I may not understand all of what you mean by the terms. But I believe that is what we are talking about as the managed risk.

Q.174 - Will information be provided to show that risk management will be a part of the overall management plan of the project?

MR. LITTLE: In your specific use of the phrase are you talking about financial hedging? Or do you mean something else?

Q.175 - Oh, you may be anticipating. I think we are talking more in terms of overall risk management, of which financial hedging may be part, environmental, scheduling delays, regulatory delays?

MR. LITTLE: I think we would have a comprehensive treatment of risk issues related to any project or its alternatives, yes.

Q.176 - So you will be providing information with respect to an overall risk management plan?

MR. LITTLE: I believe so.

MR. MARSHALL: I think so. I think in this evidence what we are talking about here is to try to -- we would look at evaluating the risks and the level of risk involved. And a key part of that is our sensitivity analysis in terms of variations.

As we say here, associated with construction schedules and costs, whether the unit will be finished on time or available, what would you do, regulatory risks, performance, fuel costs. So a lot of that would be covered off in the sensitivity analysis.

Q.177 - Thank you. Reference, new question, NB Power 1, pages 29 and 33 which is appendix B, "load and resources review", NB Power 1, pages 29 and then at page 33. At those two pages NB Power identifies various types of fuel used in its generating facilities. That's the particular

reference at page 29. Included in NB Power's generating capacity there are 300 megawatts dependent on orimulsion, as identified on page 29.

The Coleson Cove project is contemplating conversion of its capacity to orimulsion which would result in an additional 1,004.1 megawatts of NB Power capacity which would be dependent on orimulsion fuel.

What information will NB Power provide on a project-specific hearing on Coleson Cove in respect of (1) security of supply of fuels?

MR. LITTLE: We would expect to address that issue both in terms of the unit's physical characteristics to burn alternative fuels and perhaps other arrangements related to the security of the orimulsion supply itself.

Q.178 - And what information would be supplied in respect of the associated costs of fuels to be included in the life cycle cost analysis for the facility if Coleson Cove is designed as a dual fuel facility, and if not so designed, why not?

MR. MARSHALL: Well it is our intent to design it as a dual fuel facility, would be capable of burning orimulsion and having fuel oil, so that if for some reason because of single source fuel of orimulsion if it was not available for any reason, we would continue to be able to operate the power plant on heavy fuel oil.

Q.179 - And you will be providing information as to the cost of designing to and building to the dual fuel capacity? Can we expect that information?

MR. MARSHALL: Yes.

Q.180 - Thank you. And what efforts -- what information will you be supplying with respect to efforts made to avoid being captive to a single source fuel supplier?

MR. MARSHALL: Contract well. We would -- in our contract with the supplier we would attempt to provide terms and options for fuel replacement under different conditions if they could not supply.

Q.181 - And what information would you be providing with respect to the factors used in examining and assessing fuel suppliers?

MR. MARSHALL: Well if it's an orimulsion conversion project at Coleson Cove there is only one fuel supplier for us to deal with, that would be BITOR America.

Q.182 - And would you be providing information that would indicate the standards that NB Power considered necessary for it to meet to be an acceptable single source supplier?

MR. MARSHALL: I don't quite know what you mean.

Q.183 - Well you are suggesting that simply because they are the only ones who supply it that they are acceptable. Will you have done any analysis to determine, even though they are the only people who can supply it, it's

appropriate that you use them for this fuel?

Perhaps they may not be acceptable and you should seek out another type of fuel?

MR. MACPHERSON: As Mr. Marshall indicated, our strategy here is to have this facility as a dual fuel facility so that it can burn both oil and orimulsion. There is only one supplier of orimulsion that we can procure that fuel from.

We will have -- it then becomes one of a financial risk to us and we would be prepared to share -- I think we have already indicated, be prepared to share with the Board in confidence the contract to the level that you could understand that we have some protection there for that.

MR. MARSHALL: I might add to that that in terms of acceptable standards, we have been doing business with BITOR America for over 10 years now and have been operating the Dalhousie plant successfully to the benefit of New Brunswickers. I think they have a pretty reasonable track record.

Q.184 - What information will NB Power be providing with respect to its analysis of the risk of having approximately 30 percent of NB Power's generation capacity dependent on orimulsion fuel assuming the Coleson Cove conversion is approved and in service?



MR. MARSHALL: The 30 percent is not totally dependent on orimulsion. With the capability to burn oil in addition to orimulsion we have the flexibility to move to other fuels.

Q.185 - And will you be providing an analysis or an assessment as a part of the project-specific hearing addressing that issue?

MR. MARSHALL: We would look at -- I guess in the price of fuel oil we can quantify what the differential costs would be, the -- or some relative indication of costs.

But as Mr. MacPherson said our contract terms with BITOR would be confidential. We could provide that to the Board so they could have some degree of comfort of understanding what that cost would be.

Q.186 - You would be providing an analysis or assessment of the risk of having to go -- convert to oil versus using orimulsion arising out of the possibility of interruption of fuel supply or changing in pricing?

MR. MARSHALL: We could provide a quantification of a -- of any cost difference against oil prices. We do not intend to provide a quantification of the risk of the failure of the Orinoco field or failure of the plant facilities in order to deliver. They have delivered well in the past. We expect them to deliver in the future.

Q.187 - And you --

MR. MARSHALL: But if they do not we would provide what the cost differential may be.

Q.188 - Okay. So you accept the fact that there -- there is a chance that they could fail, as miscule as it might be, therefore you will provide an analysis of the risk assessment on that possibility?

MR. MARSHALL: An analysis of the quantification of the potential cost. Currently we --

Q.189 - In effect you are saying to me, Mr. Marshall, there is -- your assessment of it is there is no risk of failure?

MR. MARSHALL: What I'm saying is that there may be a risk of failure. We do not plan to undertake studies of the Orinoco fields, the orimulsion processing plant, the orimulsion delivery systems and the transportation systems to determine and quantify what the probability of delivery to our power plant is.

I might add that we have -- there is no plan to quantify the risk of delivery of gas from Sable Island, a single source offshore either.

MR. MACPHERSON: I think the issue though with respect to risk is what we are trying to say is that we will analyze the impact on our specific project if the risk of -- with -- for the risk of that interruption of supply. And we would analyze that impact, yes.

Q.190 - Thank you very much. That's what we are looking for.

I'm now going to ask you to turn to the NB Power exhibits that were marked yesterday and today possibly.

NB Power 6 and it would be the second page, or what I refer to as the blue page where it's headed "Question 2 - relevant issues". That's NB Power 6 page 2, which is colored blue. And it's headed "Question 2-relevant issues?". In view of the fact that there is two sets of numbers 1 to 6, I will refer to top half or bottom half of that page. Initially I would like you to go to the top half of the page which is entitled "project evaluation criteria."

I direct your attention to paragraph 3, "environmental requirements".

And I'm going to drop down. I want to look at, if you like, bullets 3 and 4. Bullet number 3 is "no consideration of scientific and social policy issues." 4 is "no repeat of EIA review issues."

Now with respect to bullet 3, "no consideration of scientific and social policy issues", does this mean that scientific and social policy issues are not considered to be evaluation criteria?

MR. MARSHALL: We mean that they are not considered to be evaluation criteria specifically for a project review. Our position is that they are the criteria that the environmental review boards and governments utilize to put

in place the standards that are applied to the operation of power plants.

Our function is to meet the standards, not to question the governments in terms of what social policy or health effects and scientific rationale for what the standards are.

Q.191 - Then how are you able to state in paragraph 6 in the bottom half of the page that environmental externality mitigation costs are a part of the sensitivity analysis?

MR. MARSHALL: I think there is a little confusion. In the area of environmental externalities there are two ways of viewing externality costs.

One is to view externality costs from the health effects and the impact in society. The other way is to view externality costs from the cost of mitigation of those particular emissions.

We would view it from the cost of mitigation of the emissions, not from the health effect on society.

Q.192 - And you would supply information accordingly on a project specific area?

MR. MARSHALL: Yes.

Q.193 - With respect to bullet number 4 which was "no repeat of EIA review issues", does NB Power agree that this means that the results of any EIA review, including the decision and recommendations, must be available to the Public

Utilities Board by the time of the specific hearing?

MR. MARSHALL: No. We see them as two parallel processes.

They can carry on in parallel. In covering off the sensitivities and the range of impacts on our project, we think that this Board can rule on the acceptability of the business aspects of the project going forward subject to approval of environmental EIA output results only if the EIA output results will significantly affect the costs so that they go outside the range of what was presented should there be any consideration.

Q.194 - Still with the same exhibit and blue page, I want you to look at project evaluation criteria, paragraph 6, "export market impacts."

Will different options, each with the same capacity, provide different export market impacts? And if yes --

MR. MARSHALL: The answer to that question is yes.

Q.195 - -- where will reliability of such potential impacts be addressed?

MR. MARSHALL: First of all, two projects having different capacities could have different market impacts. The market impact is influenced by the marginal cost of energy from that plant in terms of what it can interact into the market with as opposed to the total cost of energy.

And if they are the same capacity and the same availability they would have the same reliability impact.

Q.196 - Is the load forecast based on the requirement for electricity in New Brunswick?

MR. MARSHALL: Mr. Bhutani is not here. But I think, yes, it is, based on the requirement for electricity in New Brunswick.

Q.197 - In other words, does the need for Point Lepreau and Coleson Cove or replacement facilities derive solely from the need to serve in-province requirements?

MR. MARSHALL: I believe Mr. MacPherson answered that yesterday, that our view of the capacity requirement is to provide a reliable supply to New Brunswickers for in-province requirements, and that that is the need for the capacity, review export markets as an opportunity to optimize the use of those resources in order to gain additional value which will help keep power costs in New Brunswick lower.

Q.198 - Will the options to be considered by NB Power each provide approximately the same capacity? And if not why not?

MR. MARSHALL: The options would be considered to meet the capacity requirement that we have laid down, the requirement for Coleson Cove and Point Lepreau.

The options will not be exactly at the same capacity.

Because the nature of the projects, their inherent nature makes them of different size.

So for instance, to replace Coleson Cove, if we don't refurbish Coleson Cove -- we need 1,000 megawatts -- we likely wouldn't be able to do that with one gas plant. You would need to do it with two or three or four gas plants or a combination of other resources.

We would attempt to get the sizing, this total sizing of the project alternatives to a similar capacity level so they could be evaluated on an equivalent type basis.

Q.199 - So if you have gotten them to roughly the same size, please explain how developments that might occur in the export market are relevant to determining the most appropriate way to supply the in-province requirements?

MR. MARSHALL: I'm not quite sure. I think what you mean -- the issue of the export markets is whatever happens in the export market and whatever market prices are against the marginal cost of energy from any of the projects that we would go forward to look at and evaluate, the contribution from the export market of export benefits that can come back and help pay the fixed cost of the project then influences the economics in order to be able to supply in-province load in the lowest cost fashion.

Q.200 - So this would favor capital intensive projects then?

MR. MARSHALL: It is a double-edged sword. A capital intensive project will have lower marginal costs but will have a higher burden of fixed costs to carry.

So there would be a higher financial risk and a higher market risk. So there is a tradeoff between getting the lowest possible marginal cost and the highest capital cost.

MR. MACPHERSON: If I may add as well in this concept of higher capital cost projects, the two projects we are considering are refurbishment projects.

And they are with respect to dollars per kilowatt of development, they are lower cost options than other capital development options, by virtue of the fact that they are refurbishment options. They are not greenfield options in terms of providing these plants.

So it is really the situation that from a capital intensive point of view they in many cases are less intensive than the alternative and as well have some operational benefits.

And this is really by virtue of the fact that they are refurbishment projects for this capacity as opposed to building these projects from scratch.

Q.201 - And a general question, without specific reference to exhibits or documents. And it may not have been raised before.

In a project-specific hearing for the refurbishment of Point Lepreau, what information will be provided by NB Power with respect to the amount of money allocated for



the establishment of the physical base infrastructure for Lepreau II?

MR. LITTLE: I don't envisage any new evidence. We have discussed that I believe 10 years ago. So the numbers are on the record.

I can't recall what they were, but -- are you anticipating new investments for a second nuclear unit? Or are you talking about --

Q.202 - I'm asking if NB Power will be supplying, as a part of the analysis of the cost for the establishment -- refurbishment of Point Lepreau II, if that analysis will include allocation of money for creating the physical base for the infrastructure of Lepreau II or improving the existing one that was built into Lepreau I?

MR. LITTLE: I wouldn't anticipate any new investment related to a future nuclear unit. As I said, the historic numbers in terms of what infrastructure was originally built in the 1970's in anticipation of a possible unit was on the record.

It is not -- I wouldn't think it would be relevant to the decision of where we go from here. But if you want us to dig out the historic information, I guess we could do that.

Q.203 - No. I don't think we are looking for the historic record. It is just an indication on the specific

application, if you will be doing anything in addition to what was previously put in place for Lepreau II?

MR. LITTLE: I don't anticipate any of it. If there is we would identify it.

Q.204 - Coming back again to the New Brunswick Power 6, the blue page. And I'm going to ask you to go to the bottom half of the page, paragraph 2, which is a process to review project alternatives.

Paragraph 2 is "evaluation of alternatives." And it is stated there "Using reliability, power cost and environmental criteria" -- those are three alternatives given.

Will you be explaining if there were any other alternatives and why they were eliminated as criteria?

MR. MARSHALL: I think I answered that question this morning for the Conservation Council. The intent of this, we will review all project alternatives using those three criteria. Because they are the key criteria.

And we would then -- on that basis we will select what we consider to be the more viable alternatives which we will then carry forward and do more detailed evaluation using the other criteria as well.

It is really a screening process to try to take all of the projects, screen them down to eliminate some, then do more work on the remainder until you come down to the

final decision.

Q.205 - Which ones were eliminated and why?

MR. MARSHALL: We have not done that yet. We will provide evidence on that at a project-specific hearing.

Q.206 - You will be providing that information?

MR. MARSHALL: Yes.

Q.207 - Thank you. I'm going to ask you to look at paragraph 5 at the top half of the page which states "Risk factors and mitigation."

And what information will be provided with respect to -- will the risk of unexpected maintenance costs, in other words Point Lepreau problems, be considered for each option?

MR. LITTLE: I would anticipate that in the Lepreau refurbishment option the discussion of future performance levels and risks related to that would be there.

I hadn't -- I don't think we had envisaged Lepreau maintenance risk in assessment of Coleson alternatives necessarily.

CHAIRMAN: Mr. MacNutt, I am going to interrupt and you are under point 5, risk factors, mitigation. And I am going to overcome some regulatory uncertainty and take our 15 minute break now.

(Recess)

MR. MACNUTT: Just a few more questions, Mr. Chair.

Q.208 - Turning again to NB Power -- NB-6, the blue page, and on the top half of the page, reference to paragraph 5. You note that "regulatory uncertainty" is a risk factor in mitigation that would form a part of your project evaluation criteria.

Would you please explain how you would introduce regulatory uncertainty into your evaluation criteria and modelling process? And would you provide that information at the project-specific hearing?

MR. MARSHALL: I have been trying to get somebody else to answer a question for a while here.

As I said this morning, one of the issues with regulatory uncertainty that we see in the energy policy is the question of full retail access or not or changes in the regulatory structure of the electric industry going forward. That is one area that I think there is an issue.

Some of the others, I think because we have not yet implemented the full energy policy, the act has not changed in order to empower the Board to look at transmission tariffs and other issues, but that's the intent of the act.

We don't have a ruling yet specifically on what that tariff is and what the ancillary services are. They actually have some influence back into the valuation of our generation assets. So there are some things like

that.

Now we would try to provide some quantification as to what range that might be in that sense. I think that's really what I am referring to.

Q.209 - Would "levelling the playing field" as contemplated by the energy policy represent a regulatory risk and if not why not?

MR. MARSHALL: I would say that's another one, yes, that would fit into that area as a government regulatory position as to what they would impose on NB Power and its operations.

But as we said, we think that our sensitivity analysis on discount rates really can provide some variation on what that would do for rate of return on projects to cover that off.

Q.210 - And would including such a risk impact impact your project evaluation to supply alternatives and if not why not?

MR. MARSHALL: Well yes, including anything that would change the cost, levelling the playing field would -- is -- we talked about yesterday in Mr. Little's analysis -- could increase costs five percent from his response to one of the interrogatories. That would change the relative position of an NB Power cost option relative to a private purchase option.

Whether it would be significant enough to change the relative competitive positions, at this point in time we don't think so, but we certainly would provide information at that level of sensitivity.

Q.211 - Would it be an improvement, in light of your statement that you would be providing information -- would it be an improvement in your evaluation process if some risks associated with the energy policy were known as a part of the criteria?

MR. MARSHALL: I guess if -- the more definite information one has the easier it is to solve any type of a planning problem. But I think the level of uncertainty and the amount of change that's there can be covered off in the range of sensitivities that we would include in any analysis.

So the issue is, is the value of waiting until that happens worth the cost of not doing a project now? Our view is waiting would be more costly than proceeding.

Q.212 - Why is that?

MR. MARSHALL: First of all we are driven by environmental obligations which we project for 2005 with the -- any renewal of the operating license of Coleson Cove. We would then -- if we have to wait we would have to go to higher sulphur -- or lower sulphur fuel, higher costs.

We would be incurring increasing costs in order to

operate within the standards that we see and we would miss the opportunity to have a lower cost orimulsion project on line and operation prior to any retubing of Point Lepreau.

Q.213 - And what impact would Lepreau coming on -- refurbished and coming on stream later than 2006?

MR. MARSHALL: Well I think Mr. MacPherson addressed that yesterday, that we are on an evaluation process of the limiting pieces of equipment at Point Lepreau and the timing of when that project best fits.

Right now our estimate is around 2006 but that review process is still ongoing and is to be completed through the end of this year, early next year, and that timing would be specifically laid down at a project specific hearing for Lepreau.

The concern is not so much Lepreau. The concern of waiting really relates to the Coleson Cove project. If we have to wait another year or two years before the energy policy is finalized and in place we miss the window of opportunity to do a Coleson Cove refurbishment project. It really delays it significantly past the time that we -- it fits into the optimum use of the system.

Q.214 - Coming back to New Brunswick Power 6, the blue page, at the top half of the page there are six evaluation criteria set out.

What information will you be providing with respect to

the weighting of each of those criteria in your analysis?

MR. MARSHALL: Most of the criteria are basically all translated into cost.

The reliability of supply we are demonstrating in this hearing that we require this capacity to reliably supply load. So you basically have a minimum capacity requirement, the capacity is needed.

Then the issue is how do you meet the environmental obligations and meet all of the requirements as laid down in the standards, and then you are down to what is the cost of power after you have provided the capacity you need and you meet the environmental standards in place.

So the other issues of market impacts again translate into a cost benefit that can contribute back to the project. The risk issue is one of what is the cost variation of certain risks of things that can happen. So the yardstick essentially in the end is cost.

Q.215 - And the last question. You provided us considerable information on environmental trading and carbon tax in your answers.

Would you please confirm that the information you have outlined in your comments with respect to same, you will be including that information in the project-specific hearing material you supply to the Board, is that correct?

MR. MARSHALL: We can provide information to the extent that



there are trading systems in place and what effect they could have for SO2 that exist.

The issue of CO2, without any known clear standards or trading systems in place, all we can provide is speculative information of relative trading costs. And we said we would do that in a sensitivity on evaluation of CO2.

Q.216 - And you will do it with respect to trading as well to the extent that you have information? I would just like confirmation.

MR. MARSHALL: To the extent that we have information on trading systems, we can provide that information.

Q.217 - You say you can have that information. I am asking if you will in fact provide the information you have available on both of those issues -- information available to you at that time at the project-specific information -- hearing?

MR. MARSHALL: We will provide the information that is available to us.

MR. MACNUTT: That's it, Mr. Chairman, from the Board.

CHAIRMAN: Thank you, Mr. MacNutt. I understand Mr. MacNutt indicated to me in the break that the Conservation Council may have an additional question they wish to put to this panel, is that correct, Mr. Coon?

MR. COON: Yes. Mr. Thompson will address that.

CHAIRMAN: The Board has no problem with that. We just want to get a complete record. Mr. Hashey, does the applicant --

MR. HASHEY: No problem.

CHAIRMAN: Okay. Go ahead, Mr. Thompson.

MR. THOMPSON: Thank you, Mr. Chairman. It's in respect to the refurbishment of Lepreau, and it's I guess specific information.

The refurbishment as we understand it will involve removing of very large metal components of the -- in and around the reactor core which were quite highly radioactive, and will have to be isolated from people and the environment.

And we would like to know whether the proponent will provide full information on that, on the cost of that and the scope of that and what materials and parts will have to be removed, in the evidence. Thank you.

MR. MACPHERSON: Yes, we will.

MR. THOMPSON: Thank you.

MR. DUMONT: During the project specific hearing for Coleson Cove would you provide evidence that the technology proposed to reduce emissions is the best available?

MR. MARSHALL: The emission reduction equipment proposed, the flue gas desulphurization scrubbers I believe is the state of the art, or the availability of scrubbers for

flue gas scrubbers.

We would look at SCR's as being -- which are the current quality of SCR's that are currently being installed on generating units today which I guess would be the -- what is considered the best available technology in that area.

MR. DUMONT: You will provide that --

MR. MARSHALL: Those are the two that we are aware of. I don't know what other technologies you may be referring to.

MR. DUMONT: I'm not referring to any technologies. I want to make sure that we have the evidence that it is the best technology available.

MR. MARSHALL: Well we will be providing evidence on the scrubbers and the specifications of the scrubbers and of the specifications of the SCR, so that they can be rated against the quality of equipment at that time.

MR. DUMONT: Will you provide evidence what the emissions will be in the event that you can't burn orimulsion? What would be the emissions burning only heavy fuel oil?

MR. MARSHALL: If orimulsion is not available and we are burning oil, we would expect the emissions would be similar, on SO<sub>2</sub> the scrubber would still operate, we would still be removing emissions and be down at a very low level of sulphur emissions, low level of NO<sub>x</sub> emissions.

So the scrubber equipment, the SCR NOx control equipment would also be operational, and the level of emissions on oil should be similar to orimulsion.

MR. DUMONT: So you would still exceed your emission standards?

MR. MARSHALL: Yes. And by exceed we mean we would do better. We would operate at a lower level of emissions than the standard.

MR. DUMONT: During the specific hearing will you provide evidence that you intend to keep operating exceeding emission standards, not only to meet the standards but provide evidence that you will always try to operate exceeding the standards and what would be the cost associated with this?

MR. MARSHALL: We -- our intention is we would provide evidence and we will design to have room to do better than the standards, and then we will operate within the operating permits and requirements put upon us by the Department of Environment in licensing of the plant.

Where there is an opportunity to operate better than that and to gain value and sell credits in some way, we would try to optimize our operation for the benefit of our customers.

MR. DUMONT: Thank you.

CHAIRMAN: Well I just have three questions, one slightly

relevant and the other two not relevant at all.

The first --

MR. HASHEY: When do I render my objection.

CHAIRMAN: Hear the question, Mr. Hashey. The first has to do with the line of questioning Mr. MacNutt has just been through in reference to your exhibit number 6 and again it's the blue page and down at the bottom under 6 sensitivity analysis we talk about environmental externality mitigation costs.

And I certainly understood your response, Mr. Marshall, as to meeting with all of the federal and provincial environmental standards, and also using credit trading as an economic measure of the value of those environmental consequences where there are credits.

The question is simply -- my understanding is you are not going to provide any economic measure in reference to those emissions which don't have credit trading, is that correct?

MR. MARSHALL: No, that's not quite correct. When you do evaluation of environmental externalities we would -- I said where there is a trading system and you could use that as the dollar value to assign to the emissions to be able to do the evaluation.

Where there is not an open trading market you would do an estimate based on the cost of reducing emissions in

terms of evaluating the emission variations from a base situation.

CHAIRMAN: Thank you. Get ready, Mr. Hashey.

MR. HASHEY: Who will be ruling on these objections.

CHAIRMAN: Well the first one, Mr. MacPherson, I probably misheard what you said in response to a question by Mr. MacNutt.

He was asking you, as I recollect, about cost sharing on transmission projects, the tie line that you are proposing to build into the U.S. and the Neptune project and any other ones in the future.

And did I hear you say that the fact that you might have somebody cost sharing on a line would be confidential information?

MR. MACPHERSON: No, that wasn't -- I may have -- it may have sounded that way but that wasn't my intention, no.

CHAIRMAN: So the fact that you did have a partner or partners on a transmission line, that fact alone would not be confidential?

MR. MACPHERSON: No, that's correct. No.

CHAIRMAN: And the fact that you had an agreement in place as to the -- that cost sharing arrangement, the fact that that was there would not be confidential either?

MR. MACPHERSON: No, that's correct.

CHAIRMAN: Okay. Thank you. The third one, Mr. Little, you

were -- again I think it was Mr. MacNutt was asking you questions about capitalization of replacement fuels when Lepreau was down.

You used an expression that I said, I must ask a question about that, and that had to do with "regulatory accounting", we are moving from regulatory accounting to what I would interpret as GAAP. Is that fair in what you said?

MR. LITTLE: That's what I said.

CHAIRMAN: All right. Now I just want you to confirm.

There are certain accounting that was used in reference to Lepreau over the last six or seven years that I would suggest you are not claiming that they were regulatory accounting?

MR. LITTLE: I perhaps could have said it more clearly. We consider what we have done over the years with accounting policies to have been accepted with generally accepted accounting principles for a regulated entity.

I think where we are dividing the line a little tighter now is that we are tending to not presume long term future recovery necessarily in some of the capitalization policies. So things that aren't directly relevant to the value of an asset in an economic sense we are looking tighter at those and capitalizing fewer things.

CHAIRMAN: Okay. And my layman's impression of regulatory accounting is that if your regulator approves of it then you are allowed even under GAAP to use that accounting procedure, so that anything from '93 on your regulator was the Cabinet and not this Board?

MR. LITTLE: That's fair.

CHAIRMAN: Good. Okay. Those are the -- Mr. Hashey didn't have to object at all. Good. Thank you.

Mr. Hashey, do you want to break before you do your redirect, or --

MR. HASHEY: I don't believe there is any redirect necessary this afternoon, Mr. Chairman. I think that will be fine. We will come tomorrow with our brief presentation and then be prepared to discuss this matter further with you at that time.

CHAIRMAN: All right. Board counsel and Mr. Hashey and I had an opportunity to chat briefly, and I reiterated my desire to -- I think it's beneficial particularly where there are parties or -- excuse me -- Intervenors who are not represented by legal counsel to have tomorrow morning to review what it is that they wish to present to the Board, because the Board will look to the Intervenors to give us suggestions as to the things that we should cover in our decision.

And so we look for that, and I believe by having an



extra morning may give you an opportunity to collect your thoughts and present them to us in a better fashion.

So when we do adjourn and I have got one other housekeeping matter and the parties may as well, is that all the parties who are here today may not in fact be here tomorrow, and I am purely speculating, but I just wanted to share with you Board staff and staff of the power corporation and counsel have been tossing around some target dates in reference to Coleson Cove refurbishment hearing, and we will have available for everybody who is here tomorrow a copy of our tentative schedule.

But I will just outline a couple of dates for you as what we are looking at by way of targets, and if you are not going to be here tomorrow and you want to get these dates down, then come on up after we adjourn and you can get them.

But we are looking for the application to be filed on a target basis of Tuesday, July 3rd, the notice in the press August 7th, the evidence available on Tuesday, September 4, pre-hearing conference September 7 -- that's just before our camp-out national convention, I don't know about that -- anyway, carry on -- then we carry on through an interrogatory process in the fall and the hearing to actually commence on the 3rd of December.

And it would be held as we tentatively are targeting

it in a ballroom in this hotel, but we will only have a two week window of opportunity at that time because it's close to the Christmas season. Anyway, that's what we are targeting at the present time.

So do any parties have any further things they want to bring before the Board or shall we rise and adjourn until -- okay, Mr. Barnett?

MR. HYSLOP: Yes, Mr. Chairman. Mr. Hashey in his closing remarks made a statement that there would be a brief presentation. Just for clarification, is this an additional presentation tomorrow or just in the nature of argument and summation?

MR. HASHEY: No. I apologize, Mr. Hyslop. The intention was to say that we would briefly refer to what has happened and what we are wishing here, which I expect would not be very long, just so the others will know.

Then I understand that there would be two -- probably two intervenors that would address issues, and then we would ask for the right to come back and reply in case there are issues raised that we have a problem with.

MR. HYSLOP: That would sound appropriate to me, Mr. Chairman. Thank you.

MR. HASHEY: What time specifically, Mr. Chairman, is that?

CHAIRMAN: I was going to adjourn until 1:30. Mr. MacNutt reached for his microphone. Did you want to say anything?

MR. MACNUTT: Just that that was what was missing, was the  
time at which this was to take place.

CHAIRMAN: Okay. Fine. Thanks.

(Adjourned)

Certified to be a true transcript of the proceedings of  
this hearing as recorded by me, to the  
best of my ability.

Reporter