IN THE MATTER OF the *Public Utilities Act*, R.S.N., 1990, Chapter P-47 (the "Act"), and

AND IN THE MATTER OF a General Rate Application (the "Application") by Newfoundland and Labrador Hydro for approvals of, under Section 70 of the Act, changes in the rates to be charged for the supply of power and energy to Newfoundland Power, Rural Customers and Industrial Customers; under Section 71 of the Act, changes in the Rules and Regulations applicable to the supply of electricity to Rural Customers.

Requests for Information

From Newfoundland & Labrador Hydro

(Filed pursuant to ss. 14 and 17 of the Board of Commissioners of Public Utilities Regulations, 1996)

Newfoundland & Labrador Hydro, Applicant

September 11, 2003

Newfoundland & Labrador Hydro ("Hydro") 2003 General Rate Application

Requests for Information from Hydro To <u>Industrial Customers</u>

C.F. Osler and P. Bowman

NLH-1 IC (Re: Page 37, lines 5-7)

Please provide the assumed output from the Deer Lake 60 Hz generation when the Power On Order for Corner Brook Pulp and Paper was established and any reserve 60 Hz generation capacity available when the Corner Brook Pulp and Paper is at its maximum load and taking the Power On Order quantity.

NLH-2 IC (Re: Page 37, lines 5-7)

Please provide the level of reserve normally available from the Deer Lake 60 Hz generation to assist in step 7 if Corner Brook Pulp and Paper is operating at full production (i.e. with no load curtailed).

NLH-3 IC (Re: Page 37, lines 5-11)

Was ACCC Stephenville credited \$1.3 million per year from 1993 to 2002 for having 46 MW available for step 5 (c)? Why is this not shown in Table 6.4 on page 30?

NLH-4 IC (Re: Page 37, lines 16-23)

Given the premise that NP thermal generation is used and useful to the system in the same manner as Hydro's standby gas turbines, how should NP be compensated for having their generation available to customers other than NP?

NLH-5 IC (Re: Page 48, lines 19-22)

Should the condition of the economic dispatch also include as a second priority to maximize NP hydraulic generation for meeting peak loads? Please explain your response.

NLH-6 IC (Re: Page 52, lines 24-29)

This testimony recommends changes to billing demands to Industrial Customers. Assuming the Board approves such a recommendation, please indicate what Industrial Customer demands would be used for cost allocation in Hydro's Cost of Service study.

NLH-7 IC (Re: Page 52, lines 24-29)

This testimony recommends changes to billing demands to Industrial Customers. Assuming the Board approves such a recommendation, please indicate what Industrial Customer demands would be used for billing demands in Hydro's Cost of Service study.

NLH-8 IC (Re: Page 52, lines 24-29)

This testimony recommends changes to billing demands to Industrial Customers. Assuming the Board approves such a recommendation, please indicate how Hydro's total Industrial Customer revenue requirement would be collected. If the total revenue requirement would not be collected, please indicate the risk to Hydro.

NLH-9 IC

Would Industrial Customers agree that with the existing Power on Order contract requirements, Industrial Customers have the ability to increase their requirements by availing of Interruptible service from Hydro, and also have the ability to reforecast Power on Order annually to decrease their requirements? If not, why?

NLH-10 IC

Assuming the Board accepted the proposal to have all riders for the RSP applied equally to IC, NP, and Rural, would Island Interconnected Rural Rates no longer be the same as those charged by Newfoundland Power, as is currently the case?

NLH-11 IC (Re: Page 39, lines 3-4)

The evidence states "...there does not appear to be any credible basis to provide NP with any generation credit to reflect the thermal generation plant they have in service".

If the ICs are proposing to eliminate NP credit for thermal generation in its entirety, please provide rationale as to why it should receive no credit whatsoever for this generation in light of the fact that it can still be called on by Hydro to supply power at the time of a system constraint, and provide any other examples of customer-owned generation on Hydro's system for which the customer does not receive a credit from Hydro in one form or another.

NLH-12 IC (Re: Page 39, lines 3-4)

The evidence states "...there does not appear to be any credible basis to provide NP with any generation credit to reflect the thermal generation plant they have in service".

To what extent do the ICs believe that, once installed, generating facilities should be reevaluated as to their usefulness on an ongoing basis?

NLH-13 IC (Re: Page 41, lines 24-30)

The evidence states: "To the extent that these loads are expected to cover in excess of the incremental costs they impose on the system (to reflect some contribution towards the fixed costs of the system), this is already covered in the 10% premium charged on the energy rate, similar to the other three utilities reviewed."

Would the ICs accept that if it was demonstrated that the 10% premium covered items other than contribution to fixed costs, such as losses, oil and lubricants and administrative costs, that it could indeed be appropriate to include a separate demand charge to cover contribution to fixed costs?

NLH-14 IC

Please outline the experience of Messrs. C. F. Osler and P. Bowman with respect to electric utility operations or utility generation, transmission or distribution planning.

NLH-15 IC (Re: Page 5, line 21-23)

Please list all risky or Government–initiated ventures or supply options from which customers require protection, which are not consistent with Provincial power policy objectives of efficiency and equitable power supply at the lowest possible cost. Identify the owner of the supply option and whether any IC customers are involved in ownership.

NLH-16 IC (Re: Page 10, lines 8-17)

With reference to direct comparability for the systems operated by the Yukon Energy Corporation and the Northwest Territories Power Corporation please provide a table outlining for each:

- the number of generation plants, their capacity in MW, type of generation and ownership (utility or customer);
- the total transmission length (km) by voltage class (230 KV,138 KV,66 KV etc.);

- the total length of distribution (km);
- the peak load (MW) and annual energy (GWh) supplied by type of generation in 2002;
- the number of customers and sales for 2002 broken down by wholesale, industrial and retail;
- the total revenue requirement for 2002;
- the balances of any rate stabilization accounts at the end of the last fiscal year; and
- the current debt to capital ratios and return on equity approved by the regulator.

NLH-17 IC (Re: Page 34, line 16-18 and Page 38, line 12-14)

Did the study provided with CA-36 NLH with respect to generation expansion incorporate Hydro's GNP generation facilities and Newfoundland Power's generation including it's thermal facilities, as listed in Table 2-1 of that study, for the purpose of determining the projected timing of future deficits and the requirement for additional capacity?

NLH-18 IC

What is there beyond any intervening transmission event, which would prevent the GNP diesel generation and Newfoundland Power's thermal generation from producing energy for the system under peak or for emergency situations at any time during the year?

NLH-19 IC

Doesn't existing capacity on the system always assist in deferring the requirement for additional capacity at some future date as evidenced by the comparison of LOLH indices with and without the existing capacity?

NLH-20 IC (Re: Table 6.4, page 30)

What is the cost of GNP generation to Newfoundland Power after the revenue credit and deficit allocation in dollars and \$/KW?

NLH-21 IC (Re: Table 6.4, page 30)

What is the cost in dollars and \$/kW to IC customers of just the Burin generation with TL 219 assigned common, as has always been the case in previous hearings?

NLH-22 IC

Please indicate the relative impact on the generation level at other generation locations which are already running, assuming no change in customer load, if either or both GNP generation and Newfoundland Power generation were brought on line and run to full capacity.

NLH-23 IC

What benefit would other customers receive from the interruptible "B " contract if the Stephenville mill was not operating and there was a requirement for generation capacity?

NLH-24 IC

Does remote generation near load centers reduce system losses?

NLH-25 IC

Is there a situation where any new additional load on the Island Interconnected System does not adversely affect the system with respect to the application of the generation planning criteria? If so please describe.

NLH-26 IC

Assuming the cost of any new generation addition required to address forecast load requirements is higher than existing average costs and that a perfect match cannot be achieved between the incremental load increase and generation addition, under what conditions would existing customers not be adversely affected?

NLH-27 IC (Re: Page 34, line 4)

Please explain how the Interruptible "B" contract with the Stephenville mill provides essentially the same function as GNP generation.

NLH-28 IC (Re: Page 35, lines 23-24)

Please provide evidence relied on to state that "NP's thermal generation plays no role in meeting the system energy requirements " and reconcile with the response to IC-188 NLH.

NLH-29 IC

How do IC customers reconcile the position that despite generation facilities having been available to defer generation additions and as part of a required

generation reserve in the event of generation outages etc. that all customers should not share in the costs?

NLH-30 IC

Please provide copies of Mr. C. F Osler's expert testimony before the Yukon Public Utilities Board on planning capital projects (1992), on electricity costing and rates related to rate applications by Yukon Energy Corporation in 1997 and 1998 and before the Manitoba Public Utilities Board in the Manitoba Hydro electricity rate hearing of 1998.

NLH-31 IC

Under terms of the expired Interruptible "B" contract, could ACCC Stephenville if it wished, not respond to a request to interrupt?

NLH-32 IC

Under terms of the expired Interruptible "B" contract, how many occasions per year could Hydro call upon an interruption?

NLH-33 IC

Under terms of the expired Interruptible "B" contract, how many times in one day could Hydro interrupt firm power?

NLH-34 IC

Under terms of the expired Interruptible "B" contract, during what period of the day and for how long could firm power be interrupted?

NLH-35 IC

Under terms of the expired Interruptible "B" contract, could Hydro request an interruption before running any of its gas turbines?

NLH-36 IC

Under terms of the expired Interruptible "B" contract, what limitations were placed on total energy interrupted over a 3 day and 5 day period?

NLH-37 IC

Please advise on the practice of other Canadian utilities with respect to the allocation of utility owned generation assets. Specifically, do any other Canadian

utilities specifically assign utility owned generation assets to individual customers or customer groups? If so, please describe.

NLH-38 IC (Re: Page 27, line 16 through page 28, line 22)

Are C.F. Osler and P. Bowman aware of any method in which Hydro could meet load with capacity (plus reserve) on a kW-by-kW basis, as is implied in their Pre-Filed Testimony? Conversely, are C.F. Osler and P. Bowman suggesting that Hydro include in rates only those sources that are required to just meet the LOLH target of 2.8 hours/year and add/remove resources from rates on a continuing basis?

NLH-39 IC (Re: Page 69, lines 14-15)

C. F. Osler and P. Bowman state that, "there can be substantial required investment in capital, development of operating procedures, and staff training" by the industrial customer to avail of Interruptible 'B' power. What costs did ACCC Stephenville incur to provide the service and were they compensated for those costs under the expired Interruptible 'B' contract?

NLH-40 IC (Re: Page17, Table 5.2)

Please provide the rationale for using the variable O&M rate of 0.45 cents/kWh to calculate 2004 OM&A savings, given the explanation of that number as stated in the response to IC-374 NLH.

NLH-41 IC (Re: Page 17, Table 5.2)

Please restate Table 5.2, using Hydro's estimated avoided costs identified in the response to IC-325 for the OM&A savings, rather than the System Planning estimate.

NLH-42 IC (Re: Page 4, line 9)

What was the basis of the conclusion that RSP balances owing are funded only by Hydro's short term borrowing program?

NLH-43 IC (Re: Page 17, Table 5.2)

Isn't the increase in the return on debt due to the fact that dividends were disallowed and thus debt and interest artificially reduced in the 2002 test year?

NLH-44 IC (Re: Page 54, line 19)

Could a cap of \$50 or \$100 million lead to significant lags in collection or repayment of historical fluctuations in hydrology, and could such lags lead to inter-generational inequity?

NLH-45 IC (Re: Page 54, line 29)

On what basis is it assumed that an accumulating RSP balance which exceeds a one year horizon (likely multiple year horizon for the hydraulic component as suggested), is financed with short term funding that normally reflects an average maturity time frame of approximately 3 months?

NLH-46 IC

Please provide the credentials for Mr. C. F. Osler as to his expertise on cost of capital matters.

NLH-47 IC (Re: Interest costs to be charged on fuel and hydraulic variation, page 4, lines 9-10)

If these balances are assumed to be financed solely by short-term debt would you agree that to be consistent one would recalculate the cost of capital to be recovered in rates excluding that proportion of short-term borrowing, thereby increasing the cost of debt for purposes of determining an appropriate WACC and Return on Ratebase.

Guillot and Dean

NLH-48 IC

Please provide a table indicating for each year since 1998 to the present and the forecast for 2003 and 2004, ACCC Stephenville's and Grand Falls' annual energy purchases (GWH), annual electrical energy costs (\$) and average annual energy costs (\$/kWh).

NLH-49 IC (Re: Page 4, line 10-11)

Please provide evidence relied on to state that: "The projected increase for power in 2004 would make Stephenville the highest cost ACCC Canadian mill".

NLH-50 IC (Re: Page 7, line 3-4)

Please provide the evidence relied on to state that: "The Stephenville mill is one of the most efficient mills in North America. The items that are mill controllable are in line or better than average".

NLH-51 IC

Please provide the current ACCC newsprint price in \$(US)/tonne and a listing of all changes in price/tonne that occurred in ACCC's North American and other markets over the past 5 years.

NLH-52 IC

Provide an estimate of mill demand at ACCC Stephenville and Grand Falls that would be altered by application of a seasonal TOU rate structure assuming that the ratio in rates between the periods November 1st to March 31st, and April 1st to October 31st was approximately 1.5 to 1.

Newfoundland & Labrador Hydro ("Hydro") 2003 General Rate Application

Requests for Information from Hydro To <u>Newfoundland Power</u>

Perry and Henderson

NLH-53 NP (Re: Pages 9-11)

If NP increased storage to produce more energy in winter and then spilled more than if it hadn't increased storage how much would NP's energy purchase cost increase per kilowatt-hour, in a winter month, a summer month and after the effect of the RSP?

NLH-54 NP (Re: Pages 9-11)

How much additional energy can NP store in its reservoirs to shift into the winter period?

NLH-55 NP (Re: Pages 9-11)

Is this additional energy stored at the start of winter the maximum additional energy that can be spilled as a result of the change of operation to maximize winter energy production? If not please explain how much more would be spilled and why?

NLH-56 NP (Re: Pages 9-11)

What is the potential additional NP power purchase cost as a result of spillage of this additional storage? Please provide the answer before and after RSP effects expressed in absolute dollar terms and in \$/kWh.

NLH-57 NP (Re: Pages 9-11)

What is the potential savings in NP power purchase costs as a result of using this storage? Please provide the answer before and after RSP effects expressed in absolute dollar terms and in \$/kWh and explain how this is justified versus the potential costs.

```
NLH-58 NP (Re: Pages 9-11)
```

Please indicate if and how much NP can shift energy production to the winter without spillage? If this requires modeling that is not available please provide an order of magnitude estimate.

NLH-59 NP

Do you agree that the existing RSP load variation provision would negate any incentive for Newfoundland Power to alter its management of seasonal water storage patterns and the likelihood of spill by stabilizing energy sales to test your loads and revenue? If not, why not.

NLH-60 NP

Please provide a copy of CA-287 from Newfoundland Power's 2003 GRA.

NLH-61 NP

Please provide a copy of CA-572 from Newfoundland Power's 2003 GRA.

NLH-62 NP (Re: Page 6, Table 4)

Restate Table 4 showing energy sales from energy only rates and energy sales from rate classes, which also have a demand charge.

NLH-63 NP

If a demand energy rate structure and the November to March demand price signal is approved, can this be reflected in the form of seasonal rates to domestic customers? If so, what effect could this potentially have on electric heat customers?

NLH-64 NP

Please explain the impact of the existing RSP load variation provision on Newfoundland Power's purchased power expense.

NLH-65 NP (Re: Chart 3, page 18)

Please confirm that Chart 3 does not include demand for Newfoundland Power domestic customers, and indicate domestic customers approximate share of demand.

NLH-66 NP (Re: Chart 3, page 18)

Restate Chart 3 including estimated demand for domestic customers. Please explain assumptions used to derive the estimated demand.

NLH-67 NP (Re: Page 20, lines 17-18)

It is stated that, "The lack of an historical relationship between Newfoundland Power's energy requirements and its system peak also highlights another element of risk associated with the Sample Rate." Given the lack of relationship between energy and peak, please comment on the appropriateness of a separate charge for each of these products.

NLH-68 NP

With respect to DSM and marginal costing, provide annual carrying cost per kW of a single cycle gas turbine peaking unit.

NLH-69 NP (Re: Table 5, page 15)

Please restate Table 5 to show contribution to margin after the effects of the existing RSP load variation. Please recalculate substituting 3.760 in the column "Energy-Only Wholesale Rate". This rate approximates the effective rate after the consideration of the RSP Load Variation and is reflective of the percentage of fuel costs paid by Newfoundland Power, calculated as follows:

NLH-70 NP (Re: Table 6, page 17)

Please restate Table 6 to show contribution to margin after the effects of the existing RSP load variation. Please recalculate substituting 3.760 in the column "Sample Rate Average Energy Charge". This rate approximates the effective rate after the consideration of the RSP Load Variation and is reflective of the percentage of fuel costs paid by Newfoundland Power, calculated as follows:

NLH-71 NP (Re: Page 17, lines 12-14)

Given the results of the restated Tables 5 and 6, please recalculate the before and after tax potential variations in forecast contribution.

NLH-72 NP (Re: Page 22, lines 4-5)

Given the results of the restated Tables 5 and 6, please recalculate the rate of return on rate base variation.

NLH-73 NP (Re: Page 1, line 18)

With reference to line 18, which reads, "The sample Rate significantly increases the potential financial impact of forecast variances", and Table Nos. 5 and 6 on pages 15 and 17, respectively. Does NP agree that if the energy charges are taken out of the second columns of each table and also taken out of the first column (titled "Tail Block Energy Rate") of each table at the same value, that there will be even greater volatility than NP has demonstrated, such that it is not Hydro's energy rate per se that causes the volatility, but rather, NP own rate design as it pertains to collection of its other system costs? If not, why?

NLH-74 NP (Re: Page 13, lines 7-12)

It is stated that, "The energy-only wholesale rate from Hydro combined with the high percentage of Newfoundland Power's revenue recovered through energy charges results in a strong relationship between revenue and purchased power expense. This relationship is shown in Chart 1 below."

Does NP agree that the chart presented in the evidence does not have a true relationship to the manner in which Hydro's costs are incurred, i.e., having demand and energy components, but simply demonstrates that NP gets billed for energy each month on a kWh basis and receives revenues from its customers on a predominately kWh basis? If not, why?

NLH-75 NP

Please provide the NP hydraulic generation at the time of NP's native peak for each year from 1993 to 2002. Include the average of these values.

NLH-76 NP

Please provide the NP hydraulic generation assumed at the time of NP's native peak in NP's forecast provided to Hydro for the 2004 COS forecast.

NLH-77 NP

Please provide the maximum NP hydraulic generation available to assist in meeting NP's native peak in each of the winter months assuming normal hydraulic conditions and no increase in spill probability. Please provide the average of these monthly values.

Larry B. Brockman

NLH-78 NP (Re: Page 6, lines 1-8)

Other than discerning differences in usage characteristics between two customers in a class, please discuss any other reasons there may have to be a demand and energy rate?

NLH-79 NP (Re: Page 7, lines 2-4)

Would NP accept a demand and energy rate if there was another wholesale customer in the class that had a materially different load profile? If not, why?

NLH-80 NP (Re: Page 6, lines 15-18)

Although NP has a fairly well known load profile, to what extent does NP believe there is merit to using a demand and energy rate in order to influence the behavior of the components of load that comprise NP's aggregate load profile?

NLH-81 NP (Re: Pages 7-19 - marginal cost)

In light of the response to NP-124 NLH, which indicates that although energy may initially drive the need to add new generation, the need for additional capacity to meet increased system demand will occur shortly thereafter, does NP agree that demand as well as energy is a relevant consideration for Hydro in developing marginal cost based rates? If no, why, and when are demand-related marginal cost signals appropriate for Hydro?

NLH-82 NP (Re: Pages 7-19 - marginal cost)

With respect to reflecting demand and energy cost relationships in marginal cost based price signals, please discuss relevant differences between Hydro and other systems.

NLH-83 NP (Re: Pages 7-19 - marginal cost)

In recognition of the fact that Hydro's Island Interconnected cost of service study classifies hydraulic and Holyrood between energy and demand based on system load factor and plant capacity factor respectively, is this, in NP's view, a reasonable reflection of the fact that generation plant additions can be driven by demand as well as energy? If it is only energy that is relevant, is it NP's contention that the basis for cost causation of Hydro's Island generating resources are energy-related and should be classified as such in its cost study? If not, please explain.

Newfoundland & Labrador Hydro ("Hydro") 2003 General Rate Application

Requests for Information from Hydro To <u>Consumer Advocate</u>

Dr. Basil Kalymon

NLH-84 CA (Re: Page 13, lines 11-13)

Dr. Kalymon states: "Under such an assumption, the overall risk of Hydro would be comparable to that of the average utility and somewhat below that of Newfoundland Power in particular". How was it concluded that at 60% debt, Hydro's overall risk would be somewhat below that of Newfoundland Power, particularly in view of comments made on page 10, lines 21-23 respecting similar business risk of the two utilities?

NLH-85 CA (Re: Page 13, lines 9-11)

Dr. Kalymon states: "Given that the guarantee provides implicit equity support beyond the levels recorded on the balance sheet of Hydro, my analysis of the appropriate returns on the rate base shall assume a deemed capital structure of 40% Equity and 60% Debt". What is the rationale for concluding that the support to debt holders afforded by a guarantee on debt comprising 86% of the capital structure, is equal to exactly 26.13% of additional "implicit" equity.

NLH-86 CA (Re: Page 7, lines 19-20)

Dr. Kalymon characterizes the TSX Index price/earnings ratio of 24.78 as of May 2003 to be "at a moderate level." Please define what range of price/earnings ratios for the TSX Index would be considered moderate.

NLH-87 CA (Re: Page 7, lines 19-20)

Dr. Kalymon characterizes the TSX Index price/earnings ratio of 24.78 as of May 2003 to be "at a moderate level." Please comment on whether "moderate" would, in this context, be considered "normal."

NLH-88 CA (Re: Page 7, line 24)

Dr. Kalymon refers to investor returns over the past twenty years as "moderate." Please define moderate as used in this context. Specifically, is the average return of 9.52% cited at Page 8 considered to be higher, lower or equal to future expected returns. Please explain the rationale for the response.

NLH-89 CA (Re: Page 8)

Dr. Kalymon states that investors in equity are showing lower dividend return expectations. Is it Dr. Kalymon's view that lower dividend return expectations equate to lower total return expectations, that is, inclusive of capital gains? Please explain.

NLH-90 CA (Re: Page 11)

Dr. Kalymon compares the business risks of electric utilities in Ontario and Alberta to Newfoundland Hydro. Does Dr. Kalymon believe the business risks of the Alberta transmission facility owners are higher than those of NLH? If yes, please explain why. (If competition is a factor, please explain how it impacts the distribution utilities.)

NLH-91 CA (Re: Page 11)

Dr. Kalymon compares the business risks of electric utilities in Ontario and Alberta to Newfoundland Hydro. Does Dr. Kalymon believe the business risks of the Alberta distribution utilities are higher than those of NLH? If yes, please explain why. (If competition is a factor, please explain how it impacts the transmission facility owners.)

NLH-92 CA (Re: Page 11)

Dr. Kalymon notes New Brunswick Power's 100%+ debt ratio. What is Dr. Kalymon's understanding of the regulated deemed capital structure for NB Power's transmission operations?

NLH-93 CA (Re: Page 14, lines 1-4)

Dr. Kalymon states, "assuming a deemed capital structure of 60% Debt and 40% Equity, Hydro would be able to achieve an investment grade for its bond without the Provincial guarantee. Thus, for this 60% of the rate base, the Provincial guarantee can be seen simply as enhancing the credit from a corporate BBB rating to a provincial BBB rating." Please confirm that the referenced passage concludes that with a 60/40 debt/equity capital structure, the regulated operations of Hydro would be able to achieve a debt rating of BBB on a stand-alone basis. If Dr. Kalymon cannot so confirm, please explain why.

NLH-94 CA (Re: Table, page 15)

Please explain why the employee benefits component of the capital structure is treated as part of the equity.

NLH-95 CA (Re: Table, page 15)

Please confirm that the approach taken is premised on a deemed capital structure of 60% debt, 1.72% employee benefits and 38.28% common equity.

NLH-96 CA (Re: Table, page 15)

Please confirm that the indicated return on rate base, in the absence of an employee benefits component in the capital structure would be 8.025%.

NLH-97 CA (Re: Table, page 15)

Please confirm that Dr. Kalymon's recommended ROE for Hydro at a deemed capital structure of 60% debt/40% equity is identical to his recommended ROE for Newfoundland Power in his December 2002 testimony.

NLH-98 CA (Re: Table, page 15)

Please confirm that the PUB allowed a return on equity of 9.75% for Newfoundland Power.

NLH-99 CA (Re: Table, page 15)

Pease confirm that the table does not reflect a 60%/40% debt/equity capital structure, but 60% debt, 1.72% employee benefits and 38.28% common equity. If Dr. Kalymon cannot so confirm, please explain why.

NLH-100 CA (Re: Table, page 15)

Does Dr. Kalymon believe that it would be unreasonable to restate his deemed 60/40 debt/equity capital structure inclusive of employee benefits by deducting half of the employee benefits component from the deemed equity and half from the deemed debt ratio, producing the following deemed capital structure?

Debt	59.14
Employee Benefits	1.72
Equity	39.14

If Dr. Kalymon believes this is an unreasonable alternative, please provide all support for his conclusion.

NLH-101 CA (Re: Table, page 15)

Please explain how the cost of debt of 7.04% in the table was determined.

NLH-102 CA (Re: Table, page 15)

Please reconcile the 7.04% cost of debt in the table to the cost of debt contained in Schedule VII of Mr. Roberts' revised testimony.

NLH-103 CA (Re: Table, page 15)

Please revise the table on page 15 using (1) the return on equity the Board allowed for Newfoundland Power of 9.75%; (2) Hydro's correct cost of debt (less the guarantee fee); and (3) the capital structure ratios shown in the alternative deemed capital structure shown in question NLH-98 CA above.

NLH-104 CA (Re: Table, page 15)

Please compare the results to Hydro's proposed return on rate base as revised.

NLH-105 CA (Re: Page 14, lines 4-5)

Dr. Kalymon states, "Thus, the value of the guarantee on this 60% Debt component can be seen as approximately 50 basis points based on the yield spread between similar rated corporate and provincial bonds." Please explain and document how Dr. Kalymon derived the 50 basis points.

NLH-106 CA (Re: Page 16, lines 12-13)

Dr. Kalymon states that a portion of the guarantee fee is providing compensation for the implicit equity investment. Would Dr. Kalymon please discuss whether he believes the existence of the guarantee eliminates the financial risk to the equity holder and explain why or why not.

NLH-107 CA (Re: Page 16, lines 12-13)

Dr. Kalymon states that a portion of the guarantee fee is providing compensation for the implicit equity investment. Would Dr. Kalymon please discuss whether the existence of the guarantee changes the level of business risk to which the equity holder is exposed and explain why or why not.

NLH-108 CA (Re: Page 16, lines 12-13)

Dr. Kalymon states that a portion of the guarantee fee is providing compensation for the implicit equity investment. How, if at all, would Dr. Kalymon's analysis of the appropriate compensation to the equity holder change if the debt were guaranteed by and the fee were paid, to a third party? NLH-109 CA (Re: Page 15, line 9 (Table))

Dr. Kalymon shows a fee of 1.71%. Please explain how this figure is to be interpreted relative to the 1% guarantee fee paid by Hydro, that is, are the two values comparable and, if so, how?

NLH-110 CA (Re: Appendix B)

Please provide in electronic format, the 10-year average return on equity (1991-2001) and ten-year variance in return on equity of each of the industrial firms that met the trading and data availability criteria.

NLH-111 CA (Re: Page 24)

Dr. Kalymon states that the lowest risk sectors outperformed the higher risk sectors. Has this been consistently Dr. Kalymon's finding since he has been performing this type of analysis?

NLH-112 CA (Re: Schedule 4 A - Analysis of Achieved Risk Premiums Over 1982-2002 Period)

Please explain why Dr. Kalymon believes a twenty-year period is a sufficiently long measurement period for historic risk premiums for the purpose of estimating the expected risk premiums.

NLH-113 CA (Re: Schedule 4A - Analysis of Achieved Risk Premiums Over 1982-2002 Period)

Please explain in detail how the historical data led to Dr. Kalymon's specific conclusion that the market risk premium is 2.0 - 2.5%.

NLH-114 CA (Re: Schedule 4A - Analysis of Achieved Risk Premiums Over 1982-2002 Period)

Please confirm that the long-term risk premiums for Canada reported in Schedule 33 are 4.5% to 6.0%.

NLH-115 CA (Re: Schedule 33)

Please confirm that the cited source of the data on this schedule recommends using the arithmetic means for purposes of estimating the cost of capital.

NLH-116 CA (Re: Appendix B)

Please explain how Dr. Kalymon decides how many of the potentially acceptable companies should be in his final sample of low risk industrials.

NLH-117 CA (Re: Table, page 28)

Dr. Kalymon adjusts the five and ten year returns on equity by a current ("spot") market-to-book ratio. Please explain why Dr. Kalymon believes a current market-to-book ratio rather than an average market-to-book ratio measured over the 5- and 10-year periods should be used.

NLH-118 CA (Re: Table, page 28)

Please confirm that the basis for the adjustment is Dr. Kalymon's belief that the return on equity is equal to the cost of equity if the market-to-book ratio is 1.0. If it cannot be confirmed, please explain why.

NLH-119 CA (Re: Table, page 28)

Please provide all independent documentation and support for the idea that the market-to-book ratios of competitive industrials should be 1.0.

NLH-120 CA (Re: Page 29)

Dr. Kalymon adjusts the return of the industrials by 75 basis points for the lower risk of utilities. In the response to NLH – 68 as part of the Newfoundland Hydro 2001 GRA, he noted as the basis for his adjustment, the lower Beta levels of the industrial sample and the significantly higher payout ratio of the utility sample. Please show the calculations using these two factors that produce the 75 basis point result.

NLH-121 CA (Re: Schedule 6)

Please explain why there is no 2002 Market-to-Book Ratio for TransCanada.

NLH-122 CA (Re: Page 31)

Dr. Kalymon calculates the required return of Fortis. Please confirm that the calculated value of 9.07% is 74 basis points higher than when Dr. Kalymon prepared his Newfoundland Power testimony.

NLH-123 CA (Re: Page 31)

Dr. Kalymon makes a downward adjustment of 25 basis points for the higher risk of the utility sample relative to the regulated activities of Hydro. Please explain

why the adjustment has been reduced from 50 basis points in Dr. Kalymon's August 2001 testimony for NLH and the December 2002 testimony for Newfoundland Power.

NLH-124 CA (Re: Page 33)

Dr. Kalymon mentions the lower significance of utility dividend yields. Please explain what the "lower significance" means and on what basis Dr. Kalymon draws that conclusion.

NLH-125 CA (Re: DCF test applied to utilities)

Please explain what led Dr. Kalymon to reduce the level of expected growth from 4.0-5.5% in the Newfoundland Power proceeding to 4.0-5.0% in the NLH proceeding.

NLH-126 CA (Re: DCF test applied to industrials)

Please explain what led Dr. Kalymon to reduce the level of expected growth from 8.0-9.0% in the Newfoundland Power proceeding to 7.5-8.5% in the NLH proceeding.

NLH-127 CA (Re: Page 8, lines 4-5)

Dr. Kalymon states, "Clearly, with the low level of interest rates, investors in equity are showing lower dividend return expectations". Please provide any studies Dr. Kalymon has performed on the relationship between dividend return expectations and interest rates.

NLH-128 CA (Re: Page 10, lines 1-2)

Dr. Kalymon states, "demand for Hydro has been very stable and growing over the past decade and has not imposed any significant volatility on Hydro operations". In light of the experienced and expected population decline in Newfoundland and Labrador, please comment on demand for Hydro in the future.

NLH-129 CA (Re: Page 11, lines 1-3)

Dr. Kalymon states, "The business risks of electrical utilities in Ontario and Alberta are currently substantially higher due to the level of competition which is being mandated in these markets". Is competition the only factor driving the "substantially higher" business risks in Ontario and Alberta? Please explain. NLH-130 CA (Re: Page 22, line 16)

Dr. Kalymon states, "....expect a risk premium in the range of 2.00% to 2.50%". Considering Dr Kalymon proposed a 2.5% to 3.0% risk premium over 10-year Canadas in NLH's last case, does he believe the spread between 10- and 30year Canadas is normally 50 basis points?

NLH-131 CA (Re: Schedule 10)

Does Dr. Kalymon believe using a spot dividend yield in the DCF test is fully representative of the market or might using a spot yield be influenced by a random daily event?

NLH-132 CA (Re: Pages 34-36 in the growth tables)

Please provide the calculations for the sustainable growth figures.

NLH-133 CA (Re: Pages 34-36 in the growth tables)

Does Dr. Kalymon believe by looking at historical growth figures only one can fully estimate future expected growth?

NLH-134 CA (Re: Schedules 10 and 22)

Please explain why different dates for the dividend yields for the utilities and industrials were used.

NLH-135 CA (Re: Page 10)

Dr. Kalymon discusses regulatory risk. Is it Dr. Kalymon's assessment of Hydro's regulatory risk predicated on the assumption that "The current mandate for the regulation of Hydro requires that it be treated similarly to a privately owned utility," as stated by Dr. Kalymon on page 12.

NLH-136 CA

Please indicate the rate of return recommended by Dr. Kalymon in each of the last 5 appearances before regulatory boards and the actual return granted by the Board in each case.

C. Douglas Bowman

NLH-137 CA (Re: Page 5, lines 17-18)

Please quantify the value of determining how much customers are willing to spend for service improvements when, in fact, Rural customers' rates are set based on the rates of Newfoundland Power's customers, not on Hydro's expenditures and are heavily subsidized.

NLH-138 CA (Re: Page 5, lines 17-18)

Further to NLH-137 CA and given that Newfoundland Power's customers' costs are reflected in their rates, to what extent, in Mr. Bowman's opinion, can the expectations of Newfoundland Power customers regarding electricity service, be attributable to Rural customers.

NLH-139 CA (Re: Page 5, lines 17-18)

Further to NLH-137 CA and NLH-138 CA, would Mr. Bowman recommend a survey of Newfoundland Power customers, who pay the Rural subsidy, to determine the level of spending for service improvements in Rural areas?

NLH-140 CA (Re: Page 9, lines 20-22)

Mr. Bowman recommends "..that the Board direct Hydro to undertake a marginal cost study, and evaluate and make recommendations on how its rates can be redesigned to better incorporate marginal cost principles and promote market efficiency".

Is Mr. Bowman recommending a long-run marginal cost study applicable only to generation, or to Hydro's entire cost of service, including transmission, distribution and customer?

NLH-141 CA (Re: NLH-140 CA)

If the response to NLH-140 CA above is with respect to generation only, please discuss why it is not appropriate to view the marginal cost of generation in relation to the marginal cost of Hydro's other functions?

NLH-142 CA

Is Mr. Bowman proposing that marginal cost studies be undertaken for each of Hydro's systems?

Newfoundland & Labrador Hydro ("Hydro") 2003 General Rate Application

Requests for Information from Hydro To <u>Public Utilities Board</u>

Grant Thornton

NLH-143 PUB (Re: Financial Consulting Report on 2003 GRA, page 36, line 15-16)

Grant Thornton states that Hydro uses a calculation called the targeted weighted average term to maturity to determine when a bond issue is necessary. Would Grant Thornton agree that this method is a principle determinant in the decision as to the term for an intended debt issue, and that the decision to issue long-term debt is driven by considerations as to our outstanding promissory note position?

NLH-144 PUB (Re: 2001 report, page 11, employee future benefits)

Please confirm that Hydro's obligation for future benefits are unfunded, i.e. there are no plan assets, and that the higher interest expense in 2001 relates solely to the higher balance of the obligation.

NLH-145 PUB (Re: 2002 Report, page 4)

Please correct the error in calculating the return on ratebase for 2000, i.e. please recalculate including the actual value of opening plant assets rather than \$0.

NLH-146 PUB (Re: 2002 Report, page 7 and 2003 GRA report, page 15)

Please confirm that Churchill Falls (Labrador) Corporation adopted new recommendation for foreign exchange, not Hydro.

NLH-147 PUB (Re: 2002 Report, page 9)

Net Income amounts do not agree to those on Schedule 3 as indicated. Please provide correct reference.

NLH-148 PUB (Re: Discussion Paper on the Rate Stabilization Plan, page 17)

Please provide a listing of other jurisdictions and utilities that use a fuel price index to adjust rates and the indices used.

NLH-149 PUB (Re: Discussion paper on the Rate Stabilization plan, page 17)

With reference to the discussion paper on the Rate Stabilization Plan and given the discussion on oil price hedging in Exhibit JRH-1, does Grant Thornton believe

Hydro can establish a fuel price hedging program that can do better than a market index so that Hydro will lower fuel costs? Please explain and give examples of success under similar circumstances using a fuel price index.

NLH-150 PUB (Re: Discussion paper on the Rate Stabilization Plan, page 17)

Is Grant Thornton recommending a change in the current regulatory method of establishing a Holyrood conversion factor when establishing rates? Please explain why.

NLH-151 PUB (Re: Financial Consulting Report on 2003 GRA page 22, lines 1-2)

Please explain how 633 kWh/bbl for the period January 1996 to December 2003 was derived from NP-208. Shouldn't the answer be 625 kWh/bbl given that the actual and projected production for Holyrood in 2003 is 2,127 GWh using 3,363 thousand barrels?