IN THE MATTER OF the Public Utilities Act (the "Act")

AND

IN THE MATTER OF an Application by Newfoundland and Labrador Hydro for the approval pursuant to Section 71 of the Act of the cost of Low Sulphur Fuel as a fuel cost component to be recovered through the Rate Stabilization Plan charged to Newfoundland Power Inc. and the Island Industrial Customers

FINAL SUBMISSIONS OF THE INTERVENORS, CORNER BROOK PULP AND PAPER LIMITED, NORTH ATLANTIC REFINING LIMITED, ABITIBI CONSOLIDATED COMPANY OF CANADA, STEPHENVILLE AND GRAND FALLS DIVISIONS AND AUR RESOURCES LIMITED (the "Industrial Customers")

1. These are the Submissions of the Industrial Customers of Hydro with respect to the above-noted application. The Industrial Customers submit:

   (a) that the additional cost to Hydro associated with the use of Lower Sulfur Fuel is not a reasonable and prudent expense under the Act which should be recoverable by Hydro in rates;

   (b) should any additional cost to Hydro associated with the use of Lower Sulphur Fuel at the Holyrood Thermal Generating Station ("HTGS") be found by the Board to be a properly recoverable expense, such expense should not be recovered through the Rate Stabilization Plan.

Reasonable and Prudent Expense:

2. Under Section 80(1) of the Act, a public utility is entitled to earn annually a just and reasonable rate of return as determined by the Board. Section 80(2) provides that the return shall be in addition to those expenses that the Board may allow as a reasonable and prudent and properly chargeable to operating account. In order to justify the additional expense associated with 1% Sulphur Fuel, Hydro must meet the onus of proving on a balance of probabilities that the expense is reasonable and prudent.

3. In addition to the provisions of the *Public Utilities Act*, Hydro is bound by and the Board is required to apply the provisions of the *Electrical Power Control Act*, 1994. Under Section 3(b)(iii) of the *Electrical Power Control Act*, it is required that all sources and facilities for the production of power in the province, including the HTGS, shall be managed and operated in a manner that would result in power being delivered to consumers in the province at the lowest possible cost consistent with reliable service. Given that provision, the onus on Hydro is clear: to establish that this additional cost, which is a new cost which had not been incurred by Hydro prior to this Application, is a necessary cost of the provision of electricity to consumers. It should be assumed for the purposes of this hearing that, in using 2% Sulphur Fuel, HTGS generates electric power to consumers at the lowest possible cost consistent with reliable service. The current application does not propose any change to or improvement in the reliability of electrical service being provided to customers. Accordingly, Hydro must, in our submission, show that its only available course of action is to incur the additional cost of Lower Sulphur Fuel to continue to provide the same level of service as has been previously been the case.

4. Hydro's case is that the additional expenditures associated with Lower Sulphur Fuel are required in order to comply with environmental legislation which is applicable to the HTGS. Hydro has not attempted to make a case that it is necessary to implement a standard which is higher than what is required for compliance with the law **[see Transcript, May 5, 2006, p. 43, line 23 to p. 44, line 10]**.

5. It is clear that Hydro is responsible to comply with the general law in addition to complying the requirements of the *Public Utilities Act* and the *Electrical Power Control Act*, 1994. The issue before the Board is whether or not the proposed expenditure is mandated under current laws. However, the present application is is not being made in the context of Government mandating the use of a Lower Sulphur Fuel, as was the case in 2004 when Government banned the use heavy fuel oils having more than a 2% sulphur content. In 2004, the reduction in sulphur content from 2.2% to 2% was mandated by the Regulation. The regulated 2% sulphur content has not been changed by Government.

6. The current case is much different in that the issue that Hydro seeks to address arises from the air dispersion modelling described in SENES Consultants Limited Report dated October, 2005 and produced in response to IC-1(b) NLH (the "SENES Report"). It is useful to examine the legislative context for air dispersion modelling.

Environmental Protection Act:

7. Under the *Environmental Protection Act*, S.N.L. 2002, c. E-14.2, the Lieutenant-Governor in Council may make regulations for various purposes including the control of air pollution. Under that power, the Air Pollution Control Regulations 2004, NLR 39/04, were passed effective May, 2004.

8. Section 3 of the Regulations prescribes as follows:

   (i) the ambient air quality standards prescribed in Schedule A shall be used to maintain air quality in the province.

   (ii) the concentration of air contaminants due to all sources shall not exceed the standards prescribed in Schedule A.

9. Among the standards included in Schedule A is a standard for sulphur dioxide which prescribes that the average concentration of that substance in micrograms per cubic meter of air in any one hour period shall not exceed 900, in any three hour period shall not exceed 600, in any twenty-four hour period shall not exceed 300 and over one year shall not exceed 60. Nowhere is any offence created by the legislation or regulation for causing any of these standards to be exceeded. Accordingly, there is no risk of prosecution under the legislated regime for simply causing an amount of sulphur dioxide emissions in excess of the standard.

10. As already adverted to, under Section 14 of the Regulations, one is permitted to burn No. 6 fuel with a sulphur content of up to but not in excess of 2%.

11. Under the *Environmental Protection Act*, it is an offence to commence or continue an "activity" that requires an approval under that Act unless the person so commencing or continuing holds the appropriate approval. An "activity" that requires an approval is required to be listed in a regulation. The operation of a thermal generating station is apparently not prescribed as an "activity" for the purposes of the Act. Certain aspects of Hydro's operation, such as treatment of waste materials, would require approval under provisions related to waste disposal and waste management, but the actual operation of the facility in and of itself does not appear to be an "activity" within the meaning of the Act.

12. Notwithstanding the lack of a clear requirement to do so under the legislation, Hydro has requested from the Department of Environment and Conservation (the "Department") and been granted, as of February 2, 2006, a Certificate of Approval. The Certificate purports to approve, among other things, the operation of the thermal generating station at Holyrood. While there may be reason to question to what extent the conditions set out in the Certificate are legally binding on Hydro, for the purposes of these submissions only it will be assumed that the conditions do have legal force. Among the conditions included in the Certificate of Approval is a requirement, in paragraph 4, that all necessary measures be taken to ensure compliance with all applicable acts, regulations, policies and guidelines, including the *Compliance Determination Guidance Document* and the *Plume Dispersion Modelling Guidance Document* **[see CA 18(a)]**.

Guidance Documents:

13. Under the *Compliance Determination Guidance Document*, more particularly entitled "Determination of Compliance with the Ambient Air Quality Standards", an existing facility is required to register a stack emission test and dispersion model once every four years if it has been shown that the facility is compliant with the Ambient Air Quality Standards for all pollutants, and once every two years if the facility has been shown not to be compliant. Under the Guidance Document more particularly entitled "Departmental Requirements for Plume Dispersion Modelling", the CALPUFF Modelling System is approved for facilities such as HTGS.

14. Under paragraph 8 of the Guidance Document entitled "Determination of Compliance with the Ambient Air Quality Standards", the facility is deemed compliant where the maximum predicted ground level concentration pursuant to the modelling under all operating scenarios is below the associated ambient air quality standard for the given time frame. While not explicitly stated, the implication is that any other result is deemed to be non-compliance.

15. The SENES Report sets out the predicted results derived from the CALPUFF Air Dispersion Modelling of emissions from Holyrood in 2004. The modelling requires actual emissions data for the boilers and, for the purpose of the SENES Report, testing to obtain this emissions data was performed over a limited number of days in April, 2005 [**see SENES Report, p. ii]**. The specific results produced for particular metals and particulate concentrations as well as gaseous emissions for each unit at a measured level of output were pro-rated for each hour in the test period of the year 2004 using the emissions data obtained in the April, 2005 testing. The model also uses atmospheric information to predict dispersion of gases and particulates from the stacks at the generating station. The results of the modelling do not represent any measured quantity of deposit of any substance, but rather represent a series of "predictions" of what would happen under a modelled set of conditions in each hour of the year 2004.

16. Apparently based upon the results of this dispersion modelling, the Department of Environment and Conservation by correspondence dated February 2, 2006 **[Information Document No. 1]** and February 9, 2006 **[CA 5]** has deemed Hydro to be non-compliant with the ambient air quality standards under the *Air Pollution Control Regulations*, 2004.

17. The Guidance Document entitled "Determination of Compliance with the Ambient Air Quality Standards" sets out options in the event that non-compliance is determined. It should be recalled in this regard that non-compliance as determined by the dispersion modelling does not constitute an offence under the *Environmental Protection Act*, nor has any compliance order been made against Hydro, nor has there been any suggestion of any revocation or amendment to the Certificate of Approval which would cause any increased operating expense or operating restriction for Hydro in respect of the HTGS facility. It should also be

remembered that, despite predicted non-compliance based upon dispersion modelling for years prior to 2004, there is no evidence of any written communication having been directed to Hydro expressing concern on the part of the Department other than February 2, 2006 **[Information Document No. 1]** and February 9, 2006 **[CA 5]** correspondence. In that February 2006 correspondence, it has not been purported by Government that Hydro is acting contrary to law so as to raise the spectre of prosecution.

18. Under paragraph 9, Hydro may choose to enter into a compliance agreement with the Department for the purposes of:

    (a) attaining compliance within a reasonable time frame; or

    (b) establishing a compliance ambient monitoring network at locations of maximum predicted non-compliance.

19. Given that these are the specific options outlined in the *Compliance Determination Guidance Document*, with which Hydro is bound to comply under the Certificate of Approval, the reasonable and prudent, and indeed anticipated, course would be to negotiate a compliance agreement for implementation of one of these options, in accordance with the Department's own Guidance Document, to resolve the issue of non-compliance presented in the February 2006 letters.

20. Paragraph 11 of the *Compliance Determination Guidance Document* makes clear that the Department is prepared to take a practical approach to the proximity of the monitoring network to locations of predicted maximum non-compliance, and to the prorating of the monitored levels to the locations of maximum predicted non-compliance. Given this express recognition by the Department that modelling results are not sacrosanct, and that determination of compliance can be subject to monitored observations, surely the presumption of Hydro and of the Board, absent any evidence to the contrary, should be that the Department would negotiate reasonably with Hydro on the terms of a compliance agreement, should one be actively sought by Hydro.

Compliance Agreement:

21. According to Mr. Haynes' evidence **[See Transcript May 8, 2006 p. 59, line 7 through p. 61, line 24]** Hydro refused to consider a compliance agreement as a condition of that agreement would be a written admission of non-compliance. There was no evidence on why such a written admission was objectionable to Hydro, other than vague reference to legal concerns. However, any such legal concerns about admission of non-compliance appear non-sensical in light of the position and evidence of Hydro on this application, which is entirely predicated on the assertion that Hydro is non-compliant.

22. It is the submission of the Industrial Customers that this stance on the part of Hydro is wholly imprudent and unreasonable, particularly in light of the fact that the only implication of the admission requested by Hydro would be that the Department could, perhaps, use such admission as evidence of non-compliance for other purposes of the *Environmental Protection Act*. This stance becomes, in fact, irrational in light of Mr. Haynes' having, as a senior officer of Hydro, given sworn testimony in a public forum before this Board that Hydro was, in fact, non-compliant. The written admission required in order to allow the Department to consider a compliance agreement would have no greater evidentiary impact than this sworn evidence from a senior official of Hydro. The rationale offered by Hydro for failure to pursue the compliance agreement is totally baseless.

23. In fact, on the evidence before the Board, Hydro has a very strong case to negotiate for the establishment of a compliance ambient monitoring network under paragraph 9(b) of the Guidance Documents. The following points should be noted:

    (a) All modelling studies prior to the most recent one reported by SENES were flawed by the use of meteorological information which did not reflect the meteorological conditions at Holyrood, particularly as regards wind data which had previously been used from sites far remote from Holyrood. The Department's deeming of non-compliance is based on the predictions of a single modelling study, albeit one with apparently more meteorological information for Holyrood and using a model never before utilized for Holyrood. However, it should give pause in relying even on this latest modelling that the responsible parties had previously fallen into a pattern of relying on inappropriate meteorological data for 10 years prior to 2005 **[See Transcript May 5, 2006 p. 131, line 4 through p. 132, line 13]**. Surely, reasonable prudence indicates that the predictions under the new modelling should not be too heavily relied upon until there has been a few more years' predictions from the new, and it is hoped improved, modelling.

    (b) The evidence is clear within the SENES Report itself that predicted maximum SO_2 concentrations were gross over-predictions when compared with actual monitoring information from monitoring stations (Indian Pond, Indian Pond Drive, Lawrence Pond) located at or very near the areas of predicted maximum concentrations, and that to the extent the model produced under predictions, these were in areas where monitors nonetheless showed low levels of SO_2 (and where the under predictions were likely due to background SO_2) **[see SENES Report, pages 4-7 and 4-8]**.

    (c) The new monitoring station at Indian Pond Drive (installed at a cost to ratepayers of approximately $250,000.00) has had just over one year of active operation and this is a monitoring site located very near to the predicted area of highest exceedance identified in the SENES Report.

(d) The SENES Report shows that 99% of the time, the level of sulphur dioxide in the ambient air is less than one half of the mandated standard and less than the recommended standard; **[see SENES Report, pp. 4-5 and 4-6; and Transcript, May 5, 2006, p. 64, line 15 through to page 65, line 11]**.

(e) As regards predicted exceedances, only 0.06% of the hourly readings predicted exceedances and only 0.8% of the three hour periodic averages showed exceedances.

(f) No exceedance was predicted with respect to the daily average or the annual average amounts of SO_2 in the ambient air.

(g) The forecast for production at Holyrood is significantly less due to the closure of the Stephenville mill in 2006 and for the foreseeable future than in the year 2004 when the dispersion modelling was done. The evidence was clear that there was a near one-to-one relationship between the amount of fuel burned and sulphur dioxide emissions, and that the gross amount of fuel burned and the numbers of heavy loading periods in the course of the year would be reduced by Stephenville being off-line.

24. Any prudent business operator, including any prudent public utility, would, in those circumstances, commit itself to serious negotiations with the regulator, and thereby determine whether there is the need to incur any additional operational costs as a result of the deemed non-compliance. There is a strong case to make that, notwithstanding the dispersion modelling, there is no actual, material exceedance based on monitored results. Assuming even a marginally reasonable position on the part of the Department of Environment, this matter should have been resolved between Hydro and the Department by an agreement which would allow use of the existing and recently enhanced ambient monitoring network, utilizing if necessary the pro-ration provisions of paragraph 11 of the Guidance Document, and deferring the additional costs associated with compliance measures, such as lowering the percentage of sulphur in the fuel, until such time as this was demonstrably necessary, if indeed that time ever came. Notwithstanding the potential logistical difficulties if additional monitoring stations are required, many millions of dollars could be saved by deferring the change to low sulphur fuel even if several new monitoring stations had to be established over the next two to three years. Instead of pursuing this course, Hydro proposes to spend well over $20 million in the next three years as a premium for lower sulphur fuel rather than risk having to invest a few hundred thousand dollars in additional monitoring stations.

25. It appears that the decision to move to low sulphur fuel was a senior management decision, but it is striking how little information senior management apparently had in making that decision **[see Transcript, May 8, 2006 p. 20, line 6 through p. 23, line 21]**. It is legitimate for the Board to consider in determining whether an expense is prudent whether the decision process leading up to it was a reasonable and prudent process. It appeared in evidence that Mr. Haynes was unfamiliar with the gross over-predictions of the modelling report. As Mr. Haynes is part of Hydro's senior management and participated in the November 2005 presentation to senior management of the proposal to move to 1% sulphur fuel, one can only assume therefore that all of senior management was unaware of the flaws in the modelling results and the real potential for resolving the matter using a compliance agreement, rather than proceeding to extract millions of dollars yearly from ratepayers to use a higher grade fuel which (a) is not mandated by law and (b) may not address the deemed non-compliance predicted by modelling which has been shown to be subject to gross over prediction.

26. Even if a compliance agreement could not be reached on establishing a compliance ambient monitoring network, less costly alternatives such as the use of 1% sulphur fuel in the highest load periods or staging the reduction in sulphur content to obtain a gradual reduction in emission would be more prudent and less costly alternatives than the route chosen by Hydro. It appears that, even prior to formal notification of deemed non-compliance, Hydro precipitously and ill-advisedly indicated to the Department of Environment that it was moving to 1% sulphur fuel. This, in our submission, was not a reasonable and prudent decision and, to the extent that this gives rise to an increase in operating expenses, these expenses should be disallowed by the Board. Should Hydro chose to incur these expenses, they should be charged to Hydro's equity and not form any part of regulated expenses. It should, in any event, be noted that Hydro has taken it upon itself to incur the cost of Low Sulphur Fuel already, prior to a Board order approving that expense, and, given the fundamental prohibition against retroactive rate making, any cost incurred up to the date of the order must not be allowed even if future costs were to be approved.

Regulatory Management of Operating Expenses:

27. As indicated above, Section 80(2) of the Act contemplates ordinary operating expenses being allowed to be recovered by the utility as part of its ordinary rates. Particularly when the increase in expense is controllable, i.e., is an increase which results from a conscious decision on the part of management, such expenses will be considered at a general rate hearing and form a part of the calculation of the rates which the utility is permitted to charge. In the ordinary course of events, a utility will plan against anticipated changes in such expenses by planning its rate hearings accordingly, but such expenses will be for the account of the utility until such time as a general rate hearing is held and an order granted allowing the expense.

28. It should be noted that expenses associated with environmental management issues are typical examples of this sort of expense and further noted that, if the response to an environment issue involves capital spending, this would ordinarily be approved at a capital budget hearing and the depreciation and interest associated with such assets would only attract a return after a general rate hearing had been held and an appropriate order issued.

29. Apparently, for no reason other than the fact that the expense is fuel related, Hydro proposes to obtain immediate flow through of this operating expense (i.e., immediate recovery from ratepayers of the expense) by use of the unique mechanism which is in place as part of Hydro's rates known as the Rate Stabilization Plan.

30. As pointed out in cross-examination of Mr. Haynes, the intent of the Rate Stabilization Plan has always been to smooth changes in Hydro's expenses which arise from factors beyond its control, typically factors such as the overall level of world oil prices. The Rate Stabilization Plan has been designed and modified in recent hearings with the sole view to attaining that purpose. Historically, anomalous results have been observed from attempting to extend the application of the Rate Stabilization Plan beyond its stated purpose. The Plan is necessarily intricate and the results it produces not always intuitive since it has been decided to track changes in many variables through this Plan. To attach this new discretionary expense to the Rate Stabilization Plan is inappropriate and may lead to unforeseen results. No effort has been made to allow the experts who have most recently crafted the Rate Stabilization Plan to have input on the decision to flow this type of expense through the Plan and little time has been permitted since the most recent modifications to the Rate Stabilization Plan to allow a history of effects to be observed and analyzed for the purpose of considering any future changes to the Plan.

31. The use of the Rate Stabilization Plan in this instance would appear to be simply, from Hydro's point of view, a convenient way of accelerating their access to ratepayers funds to off-set this particular expense. This is not consistent with good regulatory practice and discretionary expenses of this nature should be subjected to the full scrutiny of a general rate hearing before being allowed under Section 80(2) of the Act.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

DATED at St. John's, this 12th day of May, 2006.

POOLE ALTHOUSE & STEWART MCKELVEY

Solicitors for the Industrial Customers

Per: _____

Joseph S. Hutchings, Q.C.

Per: _____

Paul L. Coxworthy

TO: The Board of Commissioners of Public Utilities
120 Torbay Road
P.O. Box 21040
St. John's NL A1A 5B2

TO: Newfoundland & Labrador Hydro
P.O. Box 12400
500 Columbus Drive
St. John's NL A1B 4K7
Attention: Mr. Wayne D. Chamberlain
Mr. Geoffrey P. Young

TO: Newfoundland Power
P.O. Box 8910
55 Kenmount Road
St. John's NL A1B 3P6
Attention: Mr. Peter Alteen
Mr. Gerard M. Hayes

TO: Consumer Advocate
c/o O'Dea, Earle
323 Duckworth Street
P. O. Box 5955, Stn. C
St. John's NL A1C 5X4
Attention: Mr. Thomas J. Johnson