



Borden Ladner Gervais LLP
Lawyers • Patent & Trade-mark Agents
Scotia Plaza, 40 King Street West
Toronto, Ontario, Canada M5H 3Y4
tel.: (416) 367-6000 fax: (416) 367-6749
www.blgcanada.com

STEPHEN F. WAQUÉ
direct tel.: (416) 367-6275
direct fax: (416) 361-2708
e-mail: swaque@blgcanada.com

March 10, 2008

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, Suite 2700
Toronto, Ontario M4P 1E4

Dear Ms. Walli:

**Re: Written Interrogatories
EB-2007-0050 – HONI One Bruce to Milton Transmission Reinforcement
Project**

Please find enclosed Powerline Connections' written interrogatories, delivered in accordance with Procedural Order #5.

Yours very truly,

Stephen F. Waqué
SFW:ram
Enclosure

cc: Applicant and all Intervenors

Vancouver
•
Toronto
•
Ottawa
•
Montréal
•
Calgary



**POWERLINE CONNECTIONS' WRITTEN INTERROGATORIES
DELIVERED IN ACCORDANCE WITH
EB-2007-0050 PROCEDURAL ORDER #5**

1.0 Project Need and Justification

The following Interrogatories concern Issue 1.1: Has the need for the proposed project been established?

Interrogatory No. 1

Request: What land use policy does OPA refer to in their letter dated March 23, 2007? Please produce this land use policy.

Interrogatory No. 2

Ref: Exh. A/T 2/S 1/pp. 1, 2 and 3 and Exh. B/T 1/S 3/pp. 1 and 2

Request: What reliability requirements referred to in Exh. A/T 2/S 1/pp. 1, 2 and 3 and Exh. B/T 1/S 3/pp. 1 and 2 are being met by the Project?

Interrogatory No. 3

Request: How much additional transmission capacity does the new line add that could not be realized by upgrading, modifying or intensifying the use of existing out of Bruce lines?

Interrogatory No. 4

Request: In responding to the interrogatories stated above, please respond by identifying all existing lines out of Bruce, specifying possible upgrades to each line, estimating cost of upgrades and corresponding yield in capacity.

Interrogatory No. 5

Request: What consideration has HONI given to upgrading the existing 230 kV transmission line from Hanover to Orangeville in particular? What upgrading options has HONI considered?

Interrogatory No. 6

Request: In particular, what additional capacity would be achieved by upgrading the existing 230 kV line to 500?

Interrogatory No. 7

Request: How much less land would be required to use the existing 230 kV right of way than is being required to build a whole new 500 kV line on the route of the existing 500 kV line?

Interrogatory No. 8

Request: If HONI has decided not to upgrade the existing 230 kV transmission line, what is the reasoned basis for that decision?

Interrogatory No. 9

Request: What would be required to upgrade the existing 230 kV transmission line by means other than conversion to a 500 kV line?

Interrogatory No. 10

Request: Could any additional power produced at the Bruce Power plant be carried along the existing 230 kV transmission line?

Interrogatory No. 11

Request: How much more power can the existing 230 kV transmission line carry?

Interrogatory No. 12

Request: Could upgrading the existing 230 kV transmission line with a higher voltage or additional line meet the projected generation capacity of Ontario's power needs? Has this option been given any technical consideration? If not, why not?

Interrogatory No. 13

Request: Is power loss over distance greater with the existing 230 kV line than it would be with an upgraded/up-to-date 230 kV line?

Interrogatory No. 14

Request: Other than to follow the existing corridor, what is the technical justification for bringing the new line through Hanover?

Interrogatory No. 15

Request: Does HONI rely on the March 2007 instruction from OPA to proceed with approvals for the Bruce to Milton Project to meet an in-service date of December 11, 2011?

Interrogatory No. 16

Request: If HONI relies on the OPA instruction and or direction, has HONI critically analyzed or reviewed the basis for that instruction or direction?

Interrogatory No. 17

Request: Has HONI reassessed the question of need for new transmission capacity to the GTA in view of the applications made and proposals in place for a new nuclear generating capacity at Darlington?

Request: Does HONI admit that the penalty which OPA is committed to pay Bruce Power in the event that a new 500 kV line is not constructed is irrelevant to the exercise of discretion by the Ontario Energy Board?

Interrogatory No. 18

Request: If HONI does not admit that that penalty is irrelevant, then what evidence will it produce from the OPA with respect to the existence of that contract, its reasonableness and its relationship to need?

Interrogatory No. 19

Request: In particular, what explanation is available for the fact that the Joint Board under the *Consolidated Hearings Act* in its decision of February 20 1989 found that the transmission line it was approving for South Western Ontario was sufficient to provide transmission capacity for the power generation at the Bruce Nuclear Power Development and this conclusion was reaffirmed in an August 2005 study by the IESO in the context of re-commissioning units at the Bruce nuclear plant?

In responding to the interrogatories stated above, if there are changes in factual circumstances, changes in analytical methods, or changes in assumptions, please specify what these changes are and their impact?

Interrogatory No. 20

Request: To advise how often Bruce is running at peak capacity or 100% capacity for both wind and nuclear power at the same time in the existing scenario.

Interrogatory No. 21

Request: To advise how often Bruce nuclear power generation is running at full capacity in the existing scenario.

The Following Interrogatories Concern Issue 1.3: Have all appropriate project risk factors pertaining to the need and justification (including but not limited to forecasting, technical and financial risks) been taken into consideration in planning this project?

Interrogatory No. 22

Request: What is HONI's risk management policy concerning electromagnetic field ("EMF") claims?

Interrogatory No. 23

Request: Can HONI, or does HONI purchase insurance for risks associated with its projects? What risks are insured? In responding to the interrogatory stated above, please produce a copy of the disclosure made on EMFs and other proximity risks and the policy wording obtained.

Interrogatory No. 24

Request: How are EMFs factored into HONI's analysis of project risk factors generally and specifically in terms of land acquisition and claims for Injurious Affection?

Interrogatory No. 25

Request: How does HONI budget for EMF claims?

Interrogatory No. 26

Request: Has HONI studied the extent of EMFs along the existing Bruce to Milton transmission line? Please produce all technical information, data and studies associated with existing EMFs along this transmission line. Please produce all site specific testing done since the establishment of the line.

Interrogatory No. 27

Request: What is the extent of the EMFs associated with the existing lines? Identify the envelope of the existing field on a map.

Interrogatory No. 28

Request: What is the extent of the EMFs associated with the proposed line? How will the proposed project affect landowners at various spots of the proposed line? How will the level of EMFs differ at various spots on the proposed line? Identify the new envelope of potential or measurable impact on a map.

Interrogatory No. 29

Request: What is the estimated maximum mG measure that can be expected upon the completion of the proposed Bruce to Milton transmission line(s)? Have there been any studies to estimate this maximum? Please produce these studies or records.

Interrogatory No. 30

Request: Has HONI ever received any complaints relating to EMFs between Bruce and Milton. If so, please produce the nature of the complaints and the outcome of the complaints.

Interrogatory No. 31

Request: How many 60 Hz Electric and Magnetic Field Measurement Data Sheets are completed each year by HONI? How many have been completed in regard to the existing Bruce to Milton transmission line? What are the results of these inspections? Please provide copies of all of these documents.

Interrogatory No. 32

Request: How accurate is the EMDEX Snap 60 Hz Magnetic Field Meter used to conduct the inspection? Has HONI experienced any discrepancies in relation to the device's accuracy? Currently, is this the only device used by HONI to read EMF levels?

Interrogatory No. 33

Request: What are the instructions to HONI's inspectors as to what classifies as a significant EMF reading? What are the inspectors instructed to tell homeowners in regard to those readings?

Interrogatory No. 34

Request: For what purpose is any EMF testing completed by HONI? Who reviews the results of any EMF testing that is completed by HONI?

Interrogatory No. 35

Request: What analysis or summary is made of the EMF testing once the tests have been finalized?

Interrogatory No. 36

Request: What is the level of EMF exposure from transmission lines in rural residential outdoor amenity areas that triggers a policy of avoidance?

Interrogatory No. 37

Request: What is the level of EMF exposure that creates a threshold for further investigation by HONI?

Interrogatory No. 38

Request: What is the level of EMF exposure that directs a prudent avoidance approach and would suggest demolition of residential dwellings if owned by HONI rather than the resale of them?

Interrogatory No. 39

Request: What level of EMF exposure in outdoor amenity areas directs HONI to offer an owner an opportunity to sell the residential property?

Interrogatory No. 40

Request: With respect to questions stated above concerning EMF exposures and outdoor amenity areas, please respond to the same questions on the basis that the inquiry concerns indoor living areas in a residential dwelling.

Interrogatory No. 41

Request: What internal memorandum, including, but not limited to electronic communication and including but not limited to policies and practices, exists that relates to, touches on, or informs HONI's view concerning responding to different levels of EMFs. In particular, report on communications that relate to EMF levels that prompt investigation, documentation or reporting to different levels of management?

Interrogatory No. 42

Request: Has HONI factored in the costs of damages or expenses that may arise as a result of the expansion of the EMFs associated with the corridor? If not, why not? Are

EMFs factored into HONI's cost-benefit analysis at all? If so, where are they considered? Please provide a breakdown of the impact of this factor on the cost-benefit analysis. If not, why not?

Interrogatory No. 43

Request: Please describe in detail the design factors and their associated costs, that exist and can be implemented that would affect the nature and extent of the EMFs surrounding the lines.

Interrogatory No. 44

Ref: Exh B / T 4 / S 2

Request: Please advise whether the third party appraiser(s) who prepared the Preliminary Assessment, were specifically asked *not* to consider the impact on the land value of the stigma associated with EMFs.

Interrogatory No. 45

Request: Please provide HONI's study or studies commissioned by HONI, as well as any modelling, regarding the extent of the current EMFs around the existing transmission lines and future EMFs around the proposed transmission lines.

Interrogatory No. 46

Request: Has HONI been required to pay damages, settlement costs or expenses to landowners or affected parties as a consequence of EMFs? As these costs relate to the overall project costs, please provide details of each payment and a total of all EMF related compensation.

Interrogatory No. 47

Request: Please advise what device is used and/or what method is used to determine the extent of the EMFs.

Interrogatory No. 48

Request: Please advise whether HONI has been required to expend money to satisfy claims for damages associated with EMFs.

Interrogatory No. 49

Request: Does part of the \$28 million forecasted for contingencies include satisfaction of claims related to EMFs.

Interrogatory No. 50

Request: Has HONI been forced into any legal proceeding relating to the existing Bruce to Milton transmission line(s)?

Interrogatory No. 51

Request: Has any consideration been given to land acquisition costs? If so, provide that analysis, including the costs of the lands required, the rate proposed to be paid, and the basis for the calculations.

Interrogatory No. 52

Request: Does HONI admit that in rural and rural recreational environments, view is an important contributor to assessing value?

Interrogatory No. 53

Request: Does HONI admit that additional powerlines interfere with and potentially change the character of the view significantly?

Interrogatory No. 54

Request: If there is no admission in relation to the questions asked concerning loss of view, why does HONI consider its estimates of risks and cost reasonable?

Interrogatory No. 55

Request: Has HONI based its analysis on impact on new land acreage or has it considered improvements on parcel impacted but not situated on the land to be acquired?

Interrogatory No. 56

Request: If some parcel improvements have not been considered, how have reasonable estimates been formulated?

Interrogatory No. 57

Request: Has HONI ever received any complaints relating to the noise emitted from transmission lines in the Bruce to Milton corridor? Please produce records of all noise level complaints related to the existing Bruce to Milton corridor.

Interrogatory No. 58

Request: How many inspections has HONI done of homes to test noise levels in regard to the existing lines? What are the results? Please provide copies of these inspections to date.

Interrogatory No. 59

Request: What are the instructions to HONI's inspectors as to what classifies as a significant noise reading? What are the inspectors instructed to tell homeowners in regard to those readings?

Interrogatory No. 60

Request: Who reviews the results of any noise level testing that is completed?

Interrogatory No. 61

Request: For what purpose is any noise level testing completed?

Interrogatory No. 62

Request: What analysis or summary is made of the noise level testing once the tests have been finalized?

Interrogatory No. 63

Request: If noise impacts have not been considered, how have reasonable estimates been formulated?

Interrogatory No. 64

Request: In estimating loss of view, EMF, noise, farm operation and other impacts, has HONI assessed the information available to it based on purchases and re-sales of impacted property?

Interrogatory No. 65

Request: Please provide a list of all properties including residential dwellings that HONI or its predecessors has purchased beside existing or proposed rights of way since 1980.

Interrogatory No. 66

Request: Please identify which of those properties has been sold by HONI or its predecessors after acquisition from private land owners. With respect to those properties please specify the date of purchase by HONI or its predecessors and the date of sale and the purchase price at the date of purchase and the date of sale. If there are factors known to HONI which would impact the purchase price, other than the negative impact or injurious affection of the adjoining powerline, please specify what these factors are and provide information respecting them.

Interrogatory No. 67

Request: Has HONI factored in the costs of Injurious Affection in its budgeted land costs? If not, why not? If so, provide a breakdown of those estimates in relation to total land costs.

2.0 Project Alternatives

The following Interrogatories concerns Issue 2.1: Have all reasonable alternatives to the project been identified and considered?

Interrogatory No. 68

Request: Please produce OPA's files, including their analysis of this project compared to other alternatives. Please advise specifically, what consideration has been given to the Bruce to Essa option, and what information and conclusions does OPA provide for rejecting that alternative beyond what is included in HONI's application?

Interrogatory No. 69

Request: What is the projected cost of the Bruce to Essa option?

Interrogatory No. 70

Request: If HONI has not estimated the projected cost of the Bruce to Essa option how could it appropriately compare that option to the option before the Ontario Energy Board?

Interrogatory No. 71

Request: Why can't the renewable energy load not be carried on the existing Bruce to Orangeville system with upgrades to that system?

Interrogatory No. 72

Request: What are the costs of the upgrades that would carry the renewable energy load?

Interrogatory No. 73

Request: What are the combined projected costs of the Bruce to Essa option plus the upgrades to the Bruce to Orangeville system?

Interrogatory No. 74

Ref: Appendix 1 attached (provided by Powerline Connections)

Request: The chart attached at Appendix 1 presents a summary of the estimated impacts of the Bruce to Essa option, the Bradley to Georgetown option and the selected Bruce to Milton proposal. Are the facts as summarized in the attached chart summarizing impacts accurate? Does HONI agree that the chart can be used as a basis for measuring the relative impact of the proposed Bruce to Milton project?

Interrogatory No. 75

Request: Given that alternative routings impact property owners in significantly different ways, and in particular, that the Bruce to Milton routing impacts a proportionately high number of residential dwellings, are the relative land costs or compensation costs in need to be a relevant factor to consider in assessing other project alternatives?

Interrogatory No. 76

Request: Has HONI looked at the upgrade, modification or intensification of existing lines as a project alternative? If so, produce that analysis. If not, why not?

Interrogatory No. 77

Request: Has HONI looked at any alternative beyond the construction of a new line as proposed in this amended leave application? What alternatives were considered? Please produce that analysis.

Interrogatory No. 78

Request: Does HONI agree that until the Terms of Reference for the Environmental Assessment are approved, it cannot state with certainty what alternatives it will be advancing before the Ontario Energy Board?

Interrogatory No. 79

Request: Has any input been received from the public or municipalities in the development of the alternatives? If so, how have those comments affected HONI's consideration of alternatives?

Interrogatory No. 80

Request: With respect to the Hanover to Orangeville uprating of the 230 kV line – has HONI analyzed uprating the 230 kV line from Bruce to Hanover; if so, please produce that analysis including the additional capacity achieved; if this has not been considered by HONI; why not?

Interrogatory No. 81

Request: To produce the IESO report and any analysis or reports which HONI has performed or has commissioned which would examine the uprating of the line between Bruce to Hanover.

Interrogatory No. 82

Request: To advise if other powerlines in Ontario have four (4) powerlines strung along the same right-of-way; if so, to provide particulars.

Interrogatory No. 83

Request: Should HONI be given leave to construct up to four (4) powerlines along the Bruce to Milton corridor, please compare the length of the Bruce to Milton section where

four (4) lines are intended with the length of the other lines in Ontario which have four (4) powerlines on the same right of way.

Interrogatory No. 84

Request: Please advise if there is a relationship between the age of a (230 kV) line and the ability to uprate it.

Interrogatory No. 85

Request: Please advise if any of the 500 kV circuits on the current Bruce to Milton line can be uprated using the stretching technique to raise the line off the ground.

Interrogatory No. 86

Request: Please advise if for the Bruce to Milton corridor, HONI has considered whether capacity could be increased by replacing the current 230 kV lines with newer 230 kV lines; if HONI has not considered this upgrading, why not?

Interrogatory No. 87

Request: Please advise how often does the 500 kV system experience an unforced outage that affects both 500 kV lines that are on one set of towers.

Interrogatory No. 88

Request: Please advise how many fewer privately held properties would need to be bought out by HONI if the Bruce to Essa option were put forward rather than the Bruce to Milton option.

Interrogatory No. 89

Request: With respect to the potential route refinement at the Hanover dip, how many alternatives are there?

The following Interrogatories concern Issue 2.2: Set out in detail the evaluation methodology applied to all the alternatives?

Request: Please produce the assessment undertaken by OPA, HONI and IESO regarding the technical impacts of the two options referred to in the March 23, 2007 letter. How were the two options measured against each other? What factors were used to assess the technical impacts?

Interrogatory No. 90

Request: In the March 23, 2007 letter, the OPA says that the Bruce to Essa option delivers the committed future generation in the Bruce area, including 700 MW of renewable energy, but rejects that option because it does not accommodate the additional 1000 MW of renewable energy. Is the shortfall in the capacity of Bruce to Essa option only 300 MW, given the indication on the previous page that a total of 1000 MW of renewable energy is forecast?

Interrogatory No. 91

Request: What better capability does the Bruce to Milton line offer as described in the second bullet-point of the March 23, 2007 letter?

Interrogatory No. 92

Request: Regardless of the final form of the Terms of Reference approved by the Minister of the Environment, on what technical basis has HONI restricted its consideration of options to the three modifications from the original proposed Bruce to Milton Project set out in the amended leave application?

Interrogatory No. 93

Request: Please provide a list of all properties including residential dwellings that HONI or its predecessors has purchased beside existing or proposed rights of way since 1980.

Interrogatory No. 94

Request: Please identify which of those properties has been sold by HONI or its predecessors after acquisition from private land owners. With respect to those properties please specify the date of purchase by HONI or its predecessors and the date of sale and the purchase price at the date of purchase and the date of sale. If there are factors known to HONI which would impact the purchase price, other than the negative impact or injurious affection of the adjoining powerline, please specify what these factors are and provide information respecting them.

Interrogatory No. 95

Request: Landowners and power generation entities have entered voluntary agreements concerning the establishment of wind turbine towers and (their serving) facilities. These agreements provide for a royalty or other yearly payment to be made to the landowner. Please provide a summary of all such arrangements that HONI or its consultants are aware of and any analysis which has been done to attribute the royalty or other payments which are made to impacts such as loss of market value and injurious affection as negotiated in these “willing buyer” “willing seller” circumstances.

Interrogatory No. 96

Request: How has HONI factored this “willing buyer” “willing seller” analysis into the cost benefit analysis for this project?

Interrogatory No. 97

Request: Has HONI considered the use of narrow-based towers? If not, why not?

Interrogatory No. 98

Request: What is the cost differential between narrow-based towers and conventional towers?

Interrogatory No. 99

Request: On other projects, have narrow-based towers lowered the overall project cost? If so, how and how much?

Interrogatory No. 100

Request: Is there a technical reason why narrow-based towers could not be used along this proposed line?

Interrogatory No. 101

Request: If no analysis has been carried out of the costs and benefits of narrow-based towers, can that be done before the hearing?

Interrogatory No. 102

Request: Has HONI factored into its cost-benefit analysis the cost impacts of claims and damages from landowners whose lands are not specifically required for the project? If not, why not?

Interrogatory No. 103

Request: How does HONI budget for claims relating to transmission line noise?

Interrogatory No. 104

Request: Has HONI studied the extent of noise emitted from the existing Bruce to Milton transmission lines? Please produce all technical information, data and studies associated with the existing noise levels along this transmission line.



Interrogatory No. 105

Request: Has HONI ever received any complaints relating to the noise emitted from transmission lines in the Bruce to Milton corridor? Please produce records of all noise level complaints related to the existing Bruce to Milton corridor.

Interrogatory No. 106

Request: How many inspections has HONI done of homes to test noise levels in regards to the existing lines? What are the results? Please provide copies of these inspections to date.

Interrogatory No. 107

Request: What are the instructions to HONI's inspectors as to what classifies as a significant noise reading? What are the inspectors instructed to tell homeowners in regards to those readings?

Interrogatory No. 108

Request: Who reviews the results of any noise level testing that is completed?

Interrogatory No. 109

Request: For what purpose is any noise level testing completed?

Interrogatory No. 110

Request: What analysis or summary is made of the noise level testing once the tests have been finalized?

Interrogatory No. 111

Request: HONI purchased lands or paid compensation to owners within 75 meters of the Southwest transmission corridor, has HONI sold any of those the properties? If so, did HONI sell them with disclaimers? Please provide how many properties were sold and the circumstances they were sold under.

Interrogatory No. 112

Request: What is HONI's estimate of how many houses there are within the proposed new corridor? Will any properties with homes have to be purchased by HONI? On what basis must they be purchased? What are the estimated land acquisition costs to purchase these homes?

Interrogatory No. 113

Request: Has the risk of having so much transmission capacity along one corridor factored into HONI's consideration of alternatives? If so, how? If not, why not?

Interrogatory No. 114

Ref: Exh B/ T 6 / S 5 / App. 13/ p. 10 / sec. 1.6

Request: Please advise if there are instances in regard to the Bruce to Milton proposed transmission reinforcement where the new proposed line crosses over privately owned property and where there is not an existing line there.

Interrogatory No. 115

Ref: Exh B/ T 6 / S 5 / App. 13/ p. 10 / sec. 1.6

Request: Please define an existing right-of-way.

Interrogatory No. 116

Ref: Exh B/ T 6 / S 5 / App. 13/ p. 10 / sec. 1.6

Request: Please confirm that there is no existing line from Orangeville TS to Kleinberg.

Interrogatory No. 117

Request: Please confirm that the Bruce to Claireville to Kleinberg route was rejected as an option as it was considered inconsistent with the 2005 Provincial Policy Statement – land use policy, on the basis that it required a Greenfield right of way.

Interrogatory No. 118

Ref: Exh B/ T 6 / S 5 / App. 13/ p. 10 / sec. 1.6

Request: Please advise if it is HONI's position that the proposed Bruce to Milton transmission line does not require any Greenfield corridor on privately owned lands. If it does, then please provide the rationale behind HONI's characterization that HONI would be expanding an existing corridor, rather than creating a new corridor.

Interrogatory No. 119

Ref: Exh B/ T 6 / S 5 / App. 13/ p. 10 / sec. 1.6

Request: Please advise of the length of the new corridor required for the Bruce to Crieff option and for the Bruce to Claireville to Kleinberg option.

Interrogatory No. 120

Ref: Exh B/ T 4 / S 2 / Table 4 / p 3

Request: With respect to the preliminary assessment for land acquisition costs required for the proposed Bruce to Milton Project, estimated by HONI to be \$125 million, please

break out the values attributed to the four components for land, being: market value, injurious affection, entitlements under the *Expropriation Act* and applicable allowances.

Interrogatory No. 121

Ref: Exh B/ T 4 / S 2 / Table 4 / p 3

Request: Please produce the terms of reference provided by HONI to the third party appraisers for their analysis and report on land acquisition costs.

Interrogatory No. 122

Ref: Exh B/ T 4 / S 2 / Table 4 / p 3

Request: Please advise of the approach to the Injurious Affection component of the land acquisition costs taken by the third party appraisers, in view of the fact that no individual property appraisals had been done.

Interrogatory No. 123

Ref: Exh B/ T 4 / S 2 / Table 4 / p 3

Request: With respect to the provision for contingencies in the amount of \$28 million, please provide a break-out of all items included in that provision and the value attributed to each item, and specifically the value attributed to land cost variability.

Interrogatory No. 124

Ref: Exh B/ T 4 / S 2 / Table 4 / p 3

Request: To provide the names and professional qualifications of the third party appraiser(s) retained by HONI to undertake the Preliminary Market Value Assessment.



Interrogatory No. 125

Ref: Exh B/ T 4 / S 2 / Table 4 / p 3

Request: What was the basis for the \$218 million forecasted for Material.

Interrogatory No. 126

Ref: Exh B/ T 4 / S 2 / Table 4

Request: With respect to the \$218 million forecasted for Material, please advise which similar projects HONI used to benchmark this cost estimate against and further to advise of the fluctuating commodity price risk, and inflation factor for each commodity HONI applied, to derive the \$218 million material cost.

Interrogatory No. 127

Ref: Exh B / T 4 / S 2 / p 4

Request: Describe HONI's process and approach to estimating project costs.

Interrogatory No. 128

Ref: Exh B / T 4 / S 2 / p 3-4

Request: Please advise if HONI has studied the potential cost consequences as they relate to injurious affection, if narrow based towers rather than standard steel towers were implemented for Bruce to Milton; if so, to produce the study and its conclusions.

Interrogatory No. 129

Issue 2.3 For all of the considered alternatives, does the evaluation methodology utilized include a cost benefit comparison as well as a comparison of all quantitative and qualitative benefits



Request: Please provide the cost analysis for: a) the Bruce to Claireville to Kleinberg; b) the Bruce to Crieff; and c) the Bruce to Milton options.

Interrogatory No. 130

Request: Please provide HONI's cost-benefit analysis associated with switching the proposed route over, south of Hanover and comparing the relative cost of land acquisition and construction for both sides. if HONI has not done such an analysis, to advise if HONI would be prepared to do so and to provide, prior to the hearing.

3.0 Near Term and Interim Measures

The following interrogatories concern Issue 3.1: Are the proposed near term and interim measures as outlined in the application appropriate?

Interrogatory No. 131

Request: Has HONI given consideration to the extended use of the proposed near term and interim measures as an alternative to the project? Can extended use of those near term measures and interim measures satisfy the transmission requirements permanently if the predicted renewable generation is not realized? Under what circumstances could the extended use of the near term measures satisfy the generation requirements, and for how long?

Interrogatory No. 132

Request: To produce the consultant's report on series compensation as an interim measure, together with any analysis HONI performed concerning series compensation.

Interrogatory No. 133

Request: To produce IESO's analysis of whether series compensation, if used as an interim measure, would result in a shortfall.

Interrogatory No. 134

Request: Besides the near-term and interim measures outlined at the Technical Conference, has HONI made any technical investigation into any other means to bridge the gap in transmission capacity; if so, please outline all measures investigated, those determined feasible, those determined not to be feasible. If HONI has not made any technical investigations of other means to bridge the gap, to advise why.

4.0 Reliability and Quality of Electricity Service

The following interrogatories concern Issue 4.3: Have all appropriate project risk factors pertaining to system reliability and quality of electricity been taken into consideration in planning this project?

Interrogatory No. 135

Request: Does the placement of additional transmission capacity along the existing corridor create increased risk that the entire expanded corridor could be affected by the same outage factors, and could that risk be reduced or eliminated by constructing the new line along a different route?

Interrogatory No. 136

Request: Are there examples of HONI constructing transmission lines that exceed guidelines and standards for reliability and quality of electrical service?

5.0 Land Matters

The Following Interrogatories Concern Issue 5.0 Land Matters

Interrogatory No. 137

Request: Has any consideration been given to land acquisition costs? If so, provide that analysis, including the costs of the lands required, the rate proposed to be paid, and the basis for the calculations.

Interrogatory No. 138

Request: Has HONI factored in the costs of Injurious Affection in its budgeted land costs? If not, why not? If so, provide a breakdown of those estimates in relation to total land costs.

Interrogatory No. 139

Request: Has HONI factored in the costs of damages or expenses that may arise as a result of the expansion of the EMFs associated with the corridor? If not, why not? Are EMFs factored into HONI's cost-benefit analysis at all? If so, where are they considered? Please provide a breakdown of the impact of this factor on the cost-benefit analysis. If not, why not?

Interrogatory No. 140

Request: Has HONI considered the use of narrow-based towers? If not, why not?

Interrogatory No. 141

Request: What is the cost differential between narrow-based towers and conventional towers?

Interrogatory No. 142

Request: Landowners and power generation entities have entered voluntary agreements concerning the establishment of wind turbine towers and (their serving) facilities. These agreements provide for a royalty or other yearly payment to be made to the landowner. Please provide a summary of all such arrangements that HONI or its consultants are aware of and any analysis which has been done to attribute the royalty or other payments which are made to impacts such as loss of market value and injurious affection as negotiated in these “willing buyer” “willing seller” circumstances.

Interrogatory No. 143

Request: Please confirm or correct HONI’s advice that between Bruce and Kincardine, there are five privately held properties which would be required and between Kincardine and Milton there are thirty privately held properties which have either a major farm or commercial building or a residence on the expanded right-of-way.

6.0 Aboriginal Peoples Consultations

Interrogatory No. 144

Request: Has HONI agreed to pay compensation to any Aboriginal Group on account of land acquisition costs, injurious affection, or damages? If so, identify the group, and provide particulars of the payment or contemplated payment.

Interrogatory No. 145

Request: Has HONI factored Aboriginal claims, compensation payable and Aboriginal land costs into its cost-benefit analysis and in its consideration of alternatives? If so, please provide a breakdown. If not, why not? Can that be done before the technical conference?

::ODMA\PCDOCS\TOR01\3764313\3