

**POWERLINE CONNECTIONS – WRITTEN  
QUESTIONS FOR TECHNICAL CONFERENCE**

**Project Need and Justification**

1. Produce OPA's files, including their analysis of this project compared to other alternatives. 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?
2. What land use policy does OPA refer to in their letter dated March 23, 2007? Please produce this land use policy.
3. 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?
4. 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?
5. What better capability does the Bruce to Milton line offer as described in the second bullet-point of the March 23, 2007 letter?
6. 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?
7. Has HONI considered upgrading the existing 230 kV transmission line?

8. Why has HONI decided not to upgrade the existing 230 kV transmission line?
9. What would be required to upgrade the existing 230 kV transmission line?
10. Could any additional power produced at the Bruce Power plant be carried along the existing 230 kV transmission line?
11. How much more power can the existing 230 kV transmission line carry?
12. 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?
13. 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?
14. What is HONI's risk management policy concerning EMF claims?
15. Can HONI, or does HONI purchase insurance for risks associated with its projects? What risks are insured?
16. How are EMFs factored into HONI's analysis of project risk factors?
17. How does HONI budget for EMF claims?
18. 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.
19. What is the extent of the EMF associated with the existing lines? Identify the envelop of the existing field on a map.
20. What is the extent of the EMF associated with the proposed line(s)? How will the proposed project affect landowners at various spots of the proposed line? How

will the level of EMFs differ at various spots in the proposed line? Identify the new envelope on a map.

21. 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.
22. 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.
23. How many 60 Hz Electric and Magnetic Field Measurement Data Sheets are completed each year by HONI? How many have been completed in regards to the existing Bruce to Milton transmission line? What are the results of these inspections? Please provide copies of all of these documents.
24. How accurate is the EMDEX Snap 60 Hz Magnetic Field Meter used to conduct the inspection? Has HONI experienced any discrepancies in relations to device's accuracy? Currently, is this the only device used by HONI to read EMF levels?
25. 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 regards to those readings?
26. For what purpose is any EMF testing completed by HONI? Who reviews the results of any EMF testing that is completed by HONI?
27. What analysis or summary is made of the EMF testing once the tests have been finalized?

### Project Alternatives

28. How much additional transmission capacity does the new line add that could not be realized by upgrading, modifying or intensifying the use of existing lines?
29. 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?
30. Has HONI looked at any alternative beyond the construction of a new line as proposed in this leave application? What alternatives were considered? Please produce that analysis.
31. Has HONI or its consultants started work on the EA process, and specifically have any alternatives been generated in that process? If not, why not?
32. When will HONI produce the alternatives considered in the EA process and compare them to the proposed new line? If the EA process is incomplete, but alternatives are identified, will HONI consider those alternatives in its analysis?
33. Has any input been received from the public or municipalities in the development of the alternative? If so, how have those comments affected HONI's consideration of alternatives?
34. Other than to follow the existing corridor, what is the technical justification for bringing the new line through Hanover?
35. 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.
36. 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.



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37. Has HONI factored in the costs of damages or expenses that may arise as a result of the expansion of the EMF 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?
38. Has HONI considered the use of narrow-based towers? If not, why not?
39. What is the cost differential between narrow-based towers and conventional towers?
40. On other projects, have narrow-based towers lowered the overall project cost? If so, how and how much?
41. Is there a technical reason why narrow-based towers could not be used along this proposed line?
42. If no analysis has been carried out of the costs and benefits of narrow-based towers, can that be done before the technical conference and in any event before the hearing?
43. 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 so, why not?
44. How does HONI budget for claims relating to transmission line noise?
45. 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.



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46. 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.
47. 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.
48. 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?
49. Who reviews the results of any noise level testing that is completed?
50. For what purpose is any noise level testing completed?
51. What analysis or summary is made of the noise level testing once the tests have been finalized?
52. Has HONI been forced into any legal proceeding relating to the existing Bruce to Milton transmission line(s)?
53. 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.
54. HONI purchased lands or paid compensation to owners with 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.

55. 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?

#### **Near Term and Interim Measures**

56. Has HONI given consideration to the extended use of the proposed near term 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?

#### **Reliability and Quality of Electricity Service**

57. 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?
58. Are there examples of HONI constructing transmission lines that exceed guidelines and standards for reliability and quality of electrical service?
59. 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?

#### **Aboriginal Peoples Consultations**

60. 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.
61. 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?

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