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February 13, 2008

BY COURIER (2 COPIES) AND EMAIL

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
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Toronto, Ontario M4P 1E4
Fax: (416) 440-7656
Email: boardsec@oeb.gov.on.ca

Dear Ms. Walli:

Re: Pollution Probe – Written Interrogatories
EB-2007-0791 – Ontario Power Authority – Fiscal 2008

Pursuant to Procedural Order No. 1, please find enclosed Pollution Probe's written interrogatories to the Ontario Power Authority for this matter.

Yours truly,

Basil Alexander

BA/ba

Encl.

cc: Applicant and Intervenors per Procedural Order No. 1

EB-2007-0791

Pollution Probe's Interrogatories for the Ontario Power Authority

February 13, 2008

Issue 1.2b

A. Northern York Region – Reference: Ex. B, Tab 1, Sch. 1, pp. 3 - 4

1. Please provide a map showing the location of Northern York Region local supply area (the "NYR" or the "Region").

2. Please provide the following for the Northern York Region by year from 2000 to 2007 inclusive:
   (a) its total peak day area demand (MW);
   (b) a break-out of its total peak day area demand by LDC (i.e. Newmarket Hydro, PowerStream, and Hydro One Distribution);
   (c) a break-out of its peak day local area generation and demand response resources; and
   (d) its net area load (MW).

3. Please provide the following for the Northern York Region by year from 2000 to 2007 inclusive:
   (a) its total annual demand (MWh);
   (b) a break-out of its total annual demand (MWh) by LDC (i.e. Newmarket Hydro, PowerStream, and Hydro One Distribution);
   (c) a break-out of its local area generation supplies (MWh); and
   (d) its net area load (MWh).

4. Please provide the following for the Northern York Region (by year from 2008 to 2015 inclusive:
   (a) the OPA's forecast of the Region's total peak day area demand (MW);
   (b) a break-out of the OPA's forecast of the Region's total peak day area demand by LDC (i.e. Newmarket Hydro, PowerStream, and Hydro One Distribution);
   (c) a break-out of the OPA's forecast of the Region's peak day local area generation and demand response resources; and
   (d) the OPA's forecast of the Region's net area load (MW).

5. Please provide the following for the Northern York Region by year from 2008 to 2015 inclusive:
   (a) the OPA's forecast of the Region's total annual demand (MWh);
   (b) a break-out of the OPA's forecast of the Region's total annual demand (MWh) by LDC (i.e. Newmarket Hydro, PowerStream, and Hydro One Distribution);
   (c) a break-out of the OPA's forecast of the Region's local area generation supplies (MWh);
   (d) the OPA's forecast of the Region's net area load (MWh).

6. Please provide the annual load duration curves for the Northern York Region for 2006 and 2007. For each year, please also state the incremental loads (MW) during the top 88 and the top 219 demand hours.

7. Please provide your best estimate of the Northern York Region's electricity demands by end-use (e.g. residential cooling, commercial cooling, lighting, industrial process machine drive, etc.) at the time of the Region's peak day demand.

8. Please state the existing electricity supply limit for the Northern York Region.

9. Please state how many MW of demand were curtailed in the Northern York Region at the time of its 2007 peak demand pursuant to:
   (a) the demand response contract with Rodan Energy;
   (b) the PeakSaver contract with PowerSteam;
   (c) the PeakSaver contract with Newmarket Hydro; and
   (d) the PeakSaver contract with Hydro One.

10. Please state the OPA's demand response resources (MW) in the Northern York Region, as of December 31, 2007, pursuant to:
   (a) the demand response contract with Rodan Energy;
   (b) the PeakSaver contract with PowerStream;
   (c) the PeakSaver contract with Newmarket Hydro; and
   (d) the PeakSaver contract with Hydro One.

11. Please state the OPA's forecasted demand response resources (MW) in Northern York Region, as of June 1, 2008, pursuant to:
    (a) the demand response contract with Rodan Energy;
    (b) the PeakSaver contract with PowerStream;
    (c) the PeakSaver contract with Newmarket Hydro;
    (d) the PeakSaver contract with Hydro One; and
    (e) any other demand response contract(s).

12. Please state the OPA's forecasted demand response resources (MW) in Northern York Region, as of December 31, 2008, pursuant to:
    (a) the demand response contract with Rodan Energy;
    (b) the PeakSaver contract with PowerStream;
    (c) the PeakSaver contract with Newmarket Hydro;
    (d) the PeakSaver contract with Hydro One; and
    (e) any other demand response contract(s).

13. Please state the number of homes in the Northern York Region that:
    (a) have central air-conditioning;
    (b) have enrolled their central air conditioners in the PeakSaver programme as of December 31, 2007; and
    (c) are forecast to have enrolled their central air conditioners in the PeakSaver programme by:
        (i) June 1, 2008; and
        (ii) December 31, 2008.

14. Please state the number of small businesses in the Northern York Region that:
    (a) have central air-conditoners that are eligible to enroll in the PeakSaver programme;
    (b) have enrolled their central air-conditioners in the PeakSaver programme as of December 31, 2007;
    (c) are forecast to have enrolled their central air conditioners in the PeakSaver programme by:
        (i) June 1, 2008; and
        (ii) December 31, 2008.

15. Please state how many commercial, institutional and industrial electricity consumers are located in the Northern York Region. Please also state how many of these customers:
    (a) have enrolled in an OPA demand response programme, other than PeakSaver, as of December 31, 2007; and
    (b) are forecast to be enrolled in an OPA demand response programme, other than PeakSaver, as of:
        (i) June 1, 2008; and
        (ii) December 31, 2008.

16. Please provide your best estimate of how many MW of diesel back-up electricity generation capacity exist in the Northern York Region.

17. Please provide your best estimate of the total combined heat and power potential in the Northern York Region. Please also break-out your estimates according to projects that are:
    (a) greater than 10 MW in size; and
    (b) less than 10 MW in size.

18. Please state how much money the OPA has spent, as of December 31, 2007, to obtain reductions in the Northern York Region's electricity demands (regarding both MW and MWh). Please also state the quantity of savings (in both MW and MWh) that the OPA has obtained as of December 31, 2007.

19. Please state the OPA's forecasted incremental electricity savings (in both MW and MWh) and budget for the Northern York Region for 2008.

B. Kitchener-Waterloo-Cambridge-Guelph Local Supply Area – Reference Ex. B, Tab 1, Sch. 1, pp. 3 - 4

20. Please provide a map showing the location of the Kitchener-Waterloo-Cambridge-Guelph local supply area (the "KWCGLSA" or the "Area").

21. Please provide the following for the KWCGLSA by year from 2000 to 2007 inclusive:
    (a) its total peak day area demand (MW);
    (b) a break-out of its total peak day area demand by LDC;
    (c) a break-out of its peak day local area generation and demand response resources; and
    (d) its net area load (MW).

22. Please provide the following for the KWCGLSA by year from 2000 to 2007 inclusive:
    (a) its total annual demand (MWh);
    (b) a break-out of its total annual demand (MWh) by LDC;
    (c) a break-out of its local area generation supplies (MWh);
    (d) its net area load (MWh).

23. Please provide the following for the KWCGLSA by year from 2008 to 2015 inclusive:

    (a) The OPA's forecast of the Area's total peak day area demand (MW);
    (b) a break-out of the OPA's forecast of the Area's total peak day area demand by LDC,
    (c) a break-out of the OPA's forecast of the Area's peak day local area generation and demand response resources; and
    (d) the OPA's forecast of the Area's net area load (MW).

24. Please provide the following for the KWCGLSA by year from 2008 to 2015 inclusive:
    (a) The OPA's forecast of the Area's total annual demand (MWh);
    (b) a break-out of the OPA's forecast of the Area's total annual demand (MWh) by LDC;
    (c) a break-out of the OPA's forecast of the Area's local area generation supplies (MWh);
    (d) the OPA's forecast of the Area's net area load (MWh).

25. Please provide the annual load duration curves for the KWCGLSA for 2006 and 2007. For each year, please also state the incremental loads (MW) during the top 88 and the top 219 demand hours.

26. Please provide your best estimate of the KWCGLSA's electricity demands by end-use (e.g. residential cooling, commercial cooling, lighting, industrial process machine drive, etc.) at the time of the Area's peak day demand.

27. Please state the existing electricity supply limit for the KWCGLSA.

28. Please state how many MW of demand were curtailed in the KWCGLSA at the time of its 2007 peak demand pursuant to:
    (a) the OPA's PeakSaver contracts with local LDCs (broken out by LDC); and
    (b) all other OPA demand response contracts.

29. Please state the OPA's demand response resources (MW) in the KWCGLSA, as of December 31, 2007, pursuant to:
    (a) the OPA's PeakSaver contracts with local LDCs (broken out by LDC); and
    (b) all other OPA demand response contracts.

30. Please state the OPA's forecasted demand response resources (MW) in the KWCGLSA, as of June 1, 2008, pursuant to:
    (a) the PeakSaver contracts with local LDCs (broken out by LDC); and
    (b) any other demand response contract(s).

31. Please state the OPA's forecasted demand response resources (MW) in the KWCGLSA, as of December 31, 2008, pursuant to:
    (a) the PeakSaver contracts with local LDCs (broken out by LDC); and
    (b) any other demand response contract(s).

32. Please state the number of homes in the KWCGLSA that:
    (a) have central air-conditioning;
    (b) have enrolled their central air conditioners in the PeakSaver programme as of December 31, 2007; and
    (c) are forecast to have enrolled their central air conditioners in the PeakSaver programme by:
        (i) June 1, 2008; and
        (ii) December 31, 2008.

33. Please state the number of small businesses in the KWCGLSA that:
    (a) have central air-conditoners that are eligible to enroll in the PeakSaver programme;
    (b) have enrolled their central air-conditioners in the PeakSaver programme as of December 31, 2007; and
    (c) are forecast to have enrolled their central air conditioners in the PeakSaver programme by:
        (i) June 1, 2008; and
        (ii) December 31, 2008.

34. Please state how many commercial, institutional and industrial electricity consumers are located in the KWCGLSA. Please also state how many of these customers:
    (a) have enrolled in an OPA demand response programme, other than PeakSaver, as of December 31, 2007; and
    (b) are forecast to be enrolled in an OPA demand response programme, other than PeakSaver, as of:
        (i) June 1, 2008; and
        (ii) December 31, 2008.

35. Please provide your best estimate of how many MW of diesel back-up electricity generation capacity exist in the KWCGLSA.

36. Please provide your best estimate of the total combined heat and power potential in the KWCGLSA. Please also break-out your estimates according to projects that are:
    (a) greater than 10 MW in size; and
    (b) less than 10 MW in size.

37. Please state how much money the OPA has spent, as of December 31, 2007, to obtain reductions in the KWCGLSA's electricity demands (regarding both MW and MWh). Please also state the quantity of savings (in both MW and MWh) that the OPA has obtained as of December 31, 2007.

38. Please state the OPA's forecasted incremental electricity savings (in both MW and MWh) and budget for the KWCGLSA for 2008.

Issue 2.2

Reference: Ex. B, Tab 2, Sch. 1 and (with respect to combined heat and power questions) Ex. B, Tab 3, Sch. 1

39. For 2007, please state the OPA's intended and actual MW and MWh results for each of the following:
    (a) energy conservation;
    (b) demand response;
    (c) fuel switching; and
    (d) combined heat and power resources.

40. For 2007, please state the OPA's budgeted and actual expenditures to acquire each of the following:
    (a) energy conservation;
    (b) demand response;
    (c) fuel switching; and
    (d) combined heat and power resources.

41. For 2008, please state the OPA's intended MW and MWh results for each of the following:
    (a) energy conservation;
    (b) demand response;
    (c) fuel switching; and
    (d) combined heat and power resources for 2008.

42. For 2008, please state the OPA's budgeted expenditures to acquire each of the following:
    (a) energy conservation;
    (b) demand response;
    (c) fuel switching; and
    (d) combined heat and power resources.

43. Please provide a break-out of the OPA's total cumulative demand response resources (MW) as of December 31, 2007 according to each of its demand response programmes (e.g. PeakSaver, Northern York Region, DR1, DR2, DR3, City of Toronto, etc.)

44. Please provide a break-out of the OPA's total PeakSaver demand response resources (MW) as of December 31, 2007 by LDC (e.g. Hydro One, Toronto Hydro, etc.).

45. Please provide a break-out of the OPA's total number of PeakSaver customers as of December 31, 2007 by LDC (e.g. Hydro One, Toronto Hydro, etc.).

46. Please provide a break-out of the OPA's forecasted total cumulative demand response resources (MW) as of June 1, 2008 and December 31, 2008 according to each of the demand response programmes (e.g. PeakSaver, Northern York Region, DR1, DR2, DR3, City of Toronto, etc.)

47. Please provide a forecast of the OPA's 2008 incremental PeakSaver demand response resources (MW) by LDC as of June 1, 2008 and December 31, 2008.

48. Please provide a forecast of the OPA's 2008 incremental number of PeakSaver customers by LDC as of June 1, 2008 and December 31, 2008.

49. Please provide the OPA's best estimate of the number of residential and small business central air-conditioners that are eligible for enrollment in the PeakSaver programme.

50. Please provide your best estimate of the quantity (MW) of diesel back-up electricity generation capacity in Ontario.

51. Please provide your best estimate of the total combined heat and power potential (MW) in Ontario. Please also break-out your estimates according to projects that are:
    (a) greater than 10 MW in size; and
    (b) 10 MW or less in size.

52. Please describe your methodologies to estimate the economic benefits to Ontario for each of your demand response programmes.

53. Please provide your estimates of the economic benefits (i.e. dollars of savings per MW of reduced demand) for each of your demand response programmes. Please also state your assumptions and show all of your calculations.

54. For each of your demand response programmes, please provide an analysis of the variance (dollars per MW or MWh) between:
    (a) the economic benefits of the demand response programme to Ontario; and
    (b) the price paid by the OPA to demand response sources for supplying demand reductions .

55. Please describe your methodology for estimating the economic benefits (e.g. avoided nuclear and/or avoided combined-cycle gas generation, avoided transmission and distribution capital costs, avoided electricity losses, etc.) of your proposed standard offer programme for small-scale (i.e. 10 MW or less) combined heat and power projects.

56. Please provide your estimate of the economic benefits (i.e. avoided cost savings per MW and per MWh) of your proposed standard offer programme for small-scale combined heat and power projects. Please also state your assumptions and show all of your calculations.

57. Please state when you expect that your combined heat and power standard offer programme will be operational. Please also state the number of combined heat and power standard offer contracts that you expect to sign in 2008.

58. With respect to each of the LDC CDM programmes that the OPA funded in 2007, please state:
    (a) the intended and actual MW acquired;
    (b) the intended and actual MWh acquired; and
    (c) the forecasted and actual budget.

59. With respect to each of the LDC CDM programmes that the OPA plans to fund in 2008, please state each programme's intended 2008 MW and MWh savings and each programme's forecasted cost to the OPA.

Issue 6.2

Reference: EB-2006-0233, Ex. S-1-2, p. 4, Issue 1, Item 1.6

60. Please provide your best estimate of the current typical electricity losses for Ontario's electricity distribution system, as a percent of electricity generation, during Ontario's top 88 annual electricity demand hours.