

DATA REQUIREMENTS FOR UTILITY-SPECIFIC LOAD PROFILE ANALYSIS

Section A: General Comments

1. This data requirement pertains to data required for preparing utility-specific load profiles for Run 1, Run 2 and Run 3 as specified in the OEB's *Staff Proposal Regarding Rate Classifications and Associated Load Data Requirements*, dated May, 2006.
2. Distributors must define rate classes to be modelled by Hydro One under Run 1, Run 2 and Run 3 before the commencement of the load shape analysis.
3. Data format and template are provided as part of this data request (see **Attachment A: Load Data Template**). Distributors must follow the data format guideline and template carefully. **If data provided by Distributors are not consistent with the suggested format or do not add up to the total wholesale purchases by calendar month, Hydro One will not accept the data, consequently delaying the timing of the deliverables as well as other consequences set out in the Agreement between Hydro One and Distributor.**
4. The data template provided in Attachment A pertains to rate classes commonly used by Distributors. For rate classes not covered in the data template (e.g. Seasonal residential class), Distributors must modify the data template to accommodate these rate classes as appropriate.
5. This data requirement may be updated as required. Distributor may be required to provide additional data as appropriate (e.g. special situations due to mergers and acquisitions affecting total wholesale purchases and number of customers between 2002 and 2006).
6. Test year in this document pertains to either historical test year (2004 for Distributors that use historical test year in their 2006 EDR applications) or future test year (2006 for Distributors that use future test year in their 2006 EDR applications).
7. This data requirement assumes the use of generic load shapes from Ontario Load Data Research Group, the use of Hydro One weather normalization methodology and Hydro One to prepare utility-specific load shapes. If Distributors requiring load shape analysis support from Hydro One have not yet made any arrangement with respect to using the generic load shapes, they should make arrangement as soon as possible. Please send all questions directly to LoadResearch@HydroOne.com.
8. For Distributors that use historical test year in their 2006 EDR applications, the sum of items 4 to 8 in Section B for 2004 (consumed kWh by rate class with losses) must be equal to the sum of items 2 and 3 in Section B (total wholesale purchases with losses). Distributor will provide items 4 to 8 in Section B so that they must add up to the total wholesale purchases by calendar month. Distributor must consider adjustments which are typically made for unbilled kWh. There may be other potential adjustments required to address items such as: i) errors introduced by billing cycle, ii) differences between OEB approved loss factors and actual loss factors, iii) loss of billing data, iv) theft of power. Similarly, for Distributors that use future test year in their 2006 EDR applications, all numbers must add up to the total wholesale purchases by calendar month. If Back-up/Standby Power Rates are required, Distributors must provide separate hourly load data and generation data (metered or estimated) for the test year for each customer.
9. Hydro One requires all Distributors to provide their data files using either of the following 2 options: i) send a CD or DVD [to Stanley But, Hydro One Networks Inc., 483 Bay Street, 8th floor, South Tower, Toronto, Ontario, M5G 2P5]; ii) set up a FTP site to allow Hydro One to retrieve the Distributor's data files directly.
10. Deliverables of the utility-specific load shape analysis from Hydro One include: i) hourly kW for each rate class for the test year; ii) 1, 4 and 12 NCPs (non-co-incident peaks) and CPs (co-incident peaks) for each rate class for use in the cost allocation model; iii) weather correction analysis for total Distributor's load and by rate class; iv) documentation of assumptions used for load shape analysis and weather correction analysis.

Section B: Information Required from Distributor

1. Hydro One has over 30 years of historical actual hourly weather data for the following weather stations in Ontario:
 - London, North Bay, Windsor, Ottawa, Thunder Bay, and Toronto PearsonFrom the above list, the Distributor shall select the appropriate weather station(s).
2. Four years (i.e. 48 months, May 1, 2002 to April 30, 2006) of hourly kWh purchases (4 x 8760) for the Distributor (i.e. total purchases at the wholesale level with losses included). This information may be obtained from the IESO (if Distributor is a wholesale market participant) or from the host Distributor (if Distributor is not a wholesale market participant). Distributor is responsible to make adjustments for long-term and short-term load transfers to the hourly data as appropriate.
3. Four years (i.e. 48 months, May 1, 2002 to April 30, 2006) of hourly kWh purchases (4 x 8760) from embedded generation including losses if applicable.
4. Four years (i.e. 48 months, May 1, 2002 to April 30, 2006) of hourly kWh at the wholesale level for customers with interval meters (i.e. losses included) by rate class and by industry classificationⁱ (i.e. sum of all customers in the same industry classification; see **Attachment B** for a list of industry classifications required by Hydro One).
5. (a) For Street Lighting, provide one year (test year) of hourly kWh at the wholesale level (i.e. losses included). (If no actual hourly data is available, OEB deemed profiles should be used to estimate hourly data)

(b) For Sentinel Lighting, provide one year (test year) of hourly kWh at the wholesale level (i.e. losses included). (If no actual hourly data is available, OEB deemed profiles should be used to estimate hourly data)

(c) For Unmetered Scattered Load (USL), provide monthly total class kWh for the test year at the wholesale level (i.e. losses included). USL should be divided into photo-sensitive type and non-photo-sensitive type. If Distributor's test year is 2006, further break down the non-photo sensitive USL kWh into weather sensitive (e.g. cable box heaters) and non-weather sensitive loads (this item is NOT required if Distributor's test year is 2004). The Distributor is responsible to make accrual and unbilled analysisⁱⁱ as required in order to bring the total monthly billing information consistent with wholesale purchases for these types of loads for the calendar month.
6. (a) For residential customers, if Distributor has undertaken appliance survey, provide detailed appliance survey resultsⁱⁱⁱ together with total number of residential customers^{iv} for the test year and total class monthly kWh at the wholesale level (i.e. losses included). (See **Attachment C** for Sample Residential Appliance Survey, **Attachment D** for Sample Seasonal Residential Appliance Survey and **Attachment E** for Sample Coding Instructions for Appliance Surveys). The Distributor is responsible to make accrual and unbilled analysisⁱⁱ as required in order to bring the total monthly billing information consistent with wholesale purchases for these customers for the calendar month. In addition, Distributor must provide the number of residential customers by six pre-defined annual kWh groups^v. If the Distributor's (main) residential class includes a significant number (over 10 to 15% in number of customers) of seasonal customers (defined as customers residing at their premises for less than 8 months), provide 2 most recent years (2004 and 2005) of monthly kWh for each residential customer so that special analysis could be performed to determine the mix between regular and seasonal customers (accrual adjustment is optional for this batch of data).

(b) If Distributor does not have appliance survey results, provide total number of residential customers^{iv} for the test year and total class monthly kWh at the wholesale level (i.e. losses included). The Distributor is responsible to prepare accrual and unbilled analysisⁱⁱ as required in order to bring

the total monthly billing information consistent with wholesale purchases for these customers for the calendar month. The Distributor is required to provide 2 most recent years (2004 and 2005) of monthly kWh for each residential customer so that special analysis could be performed (accrual adjustment is optional for this batch of data). In addition, the Distributor must provide the number of residential customers by six pre-defined annual kWh groups^v.

7. For general service >50 kW customers without interval meters, provide monthly total class kWh excluding interval metered customers for the test year at the wholesale level (i.e. losses included) by industry classificationⁱ (i.e. sum of all customers in the same industry classification). The Distributor is responsible to make accrual and unbilled analysisⁱⁱ as required in order to bring the total monthly kWh billing information consistent with wholesale purchases for these customers for the calendar month. In addition, provide 2 most recent years (2004 and 2005) of monthly kW and total monthly kWh for each of the >50 kW general service customers together with their industry classifications so that further load factor analysis could be performed (accrual adjustment is optional for this batch of data).
8. (a) For general service <50 kW customers without interval meter, provide monthly total class kWh excluding interval metered customers and excluding USL loads for the test year at the wholesale level (i.e. losses included). The Distributor is responsible to make accrual and unbilled analysis^{iv} as required in order to bring the total monthly kWh billing information consistent with wholesale purchases for these customers for the calendar month.

(b) For general service <50 kW customers without interval meter, the Distributor may wish to provide industry classification informationⁱ. This is optional as it is used for checking purposes only since OEB has approved LDC to use this classification as the residual.
9. If Standby Power or Back-up Power Rates are required, Distributor must provide one year of hourly load data and embedded generation data (metered or estimated) for each customer with standby/back-up power (i.e. 8760 or 8784 hours of consumption and embedded generation data) with losses for the test year.
10. For rate classes which are not covered in the OEB's *Staff Proposal Regarding Rate Classifications and Associated Load Data Requirements*, dated May, 2006, the Distributor must provide all necessary information as appropriate.

ⁱ Industry Classification: All industry classifications will be done using NAICS-2002 (North American Industry Classification System). If Distributor is using other classification systems such as SIC 1980 or 1987 (Standard Industrial Classification), convert that to NAICS-2002. Conversion tables can be found from Statistics Canada: <http://www.statcan.ca/english/Subjects/Standard/concordances/naics02-to-sice80.htm>.

If Distributor does not currently have or want to use detailed classifications (such as 6-digit) with NAICS-2002 for its general service customers, it must provide industry classifications according to a short list of industry groupings (about 50 groups) as specified by Hydro One. See Attachment B for the required industry classifications.

ⁱⁱ Accrual and billing analysis is applicable to total class monthly kWh only (not by industry classification or by individual customer).

ⁱⁱⁱ Appliance survey results:

- See Attachment C for Sample Residential Appliance Survey
- See Attachment D for Sample Seasonal Residential Appliance Survey
- See Attachment E for Sample Coding Instructions for Appliance Survey

^{iv} Number of customers: Number of customers should be consistent with the number used in the 2006 EDR applications.

^v Six annual kWh groupings are 0-6000 kWh, 6000-10500 kWh, 10500-16500 kWh, 16500-24000 kWh, 24000-40000 kWh and >40000 kWh. (These groupings are based on customers with a complete year of kWh information only. The summation of these groupings will not add up to the total residential kWh).