Board Staff Interrogatories
2009 Electricity Distribution Rates
Midland Power Utility Corporation ("Midland")
(EB-2008-0236)

General – Economic Assumptions

1.

a) Given the general economic situation in Ontario has Welland assessed the situation and identified any specific issues that may have a material impact on its load and revenue forecasts and bad debt expense forecast?
b) If so, please indicate if Welland will be updating its current application, in whole or in part, to address any material impacts. If yes, please provide an estimate of the timing of the update.

Cost Allocation and Rate Design

2.

[Ex8/T1/S2/Pg1]
Please file Sheets O1 and O2 from the Cost Allocation Informational Filing EB-2006-0247 as an official part of the record of this Application. Please file Run 1 or 2, whichever one is more closely representative of Midland's situation. Alternatively, file a modified run that is more closely representative than either of the runs in the Informational Filing.

3.

[Ex1/T1/S6/Pg6]
Preamble: Midland states at Ex1/T1/S6/page6 with respect to revenue-to-cost ratios that, Midland "is proposing to bring the Street Light[ing] customer revenue to cost ratio to 49%." Midland makes a similar comment in respect of Sentinel Lighting. Midland is scheduled for to file incentive rate mechanism (IRM) applications in 2010, 2011, and 2012.

Staff has prepared the following table regarding revenue-to-cost (R/C) ratios and included Midland's proposed cost allocation ratios for 2009.

a. Please complete the non-shaded cells in the table for Midland's intended cost allocation ratios for 2010 and 2011.

Table XX: Cost allocation ratios for Midland

Class	CA Report[1] Range	CA Info. Filing	2009 Rate Application, as requested	2010 IRM	2011 IRM
Residential	85-115	118.18	107		
GS < 50	80-120	97.96	98		
GS > 50 kW – regular	80-120	83.67	98		
Street Lighting	70-120	23.46	49		
Sentinel Lighting	70-120	28.21	49		
USL	80-120	117.38	100		

b. Please confirm that Midland proposes to implement the ratios in the 2010 and 2011 columns in the table in part (a) in its 2010 and 2011 IRM rate applications.

4.
The total bill impact for the GS > 50 kW rate class is an increase of 16% over the previous rate. Please provide the drivers behind this rate of increase.

Retail Transmission Service Rates (RTSR)
5.
Reference: "Electricity Distribution Retail Transmission Service Rates", Guideline G-2008-0001, October 22, 2008

Under the OEB Guideline, Welland is expected to file an update to its Cost of Service application with evidence to support a change in its RTSRs. The adjustment in RTSRs is intended to eliminate future growth in the Applicant's variance accounts that are related to the pass-through of transmission costs.

a. Please file a table showing 2 years of Welland's wholesale Network and Connection costs, and its retail billings for Network and Connection service to its retail customers.
b. Please provide an analysis of the variances between costs and the corresponding revenues, and any trends in these amounts.
c. Please file proposed RTSR rates for each customer class that are an adjustment to the currently approved RTSRs and would recover the wholesale cost of transmission service assuming that the Uniform

[1] Report of the Board, *Application of Cost Allocation for Electricity Distributors,* November 28, 2007

Transmission Rates effective January 1, 2009 had been in effect during the 2-year period in part a). Please provide the calculations used to derive the proposed RTSR rates.

Deferral and Variance Accounts

6.

[Ex5/T1/S1/Pg2[

Midland is requesting disposition of regulatory deferral and variance accounts.

a. Please provide the information as shown in the continuity schedule attached as Appendix A in excel format for regulatory assets. Please note that forecasting principal transactions beyond 2007 and the accrued interest on these forecasted balances and including them in the attached continuity schedule is optional.
b. Please provide a schedule reconciling the completed continuity schedule in part (a) with the table at Ex5/T1/S3/Att1/page1 of Midland's application.
c. Please specifically breakout the continuity schedule for the following areas and provide quarterly data for at least 2006 and 2007 for Account 1550 – Low Voltage Costs.

7.

For 2007 revenues please clarify that Midland reported the following amounts in its application:

- $ 2,671,332 for Distribution Services Revenue in APH account 4080
- $ 249,029 for Revenues from non-utility operations in APH account 4375

For account 4080 and account 4375 please:

a) Provide the amount reported to the Board in Midland's 2007 annual filing pursuant to RRR 2.1.7.
b) Identify any differences between the amounts provided in response to a) and the amount reported in exhibit E4/T2/S1/A2 and explain any differences.
c) Clarify whether the amount stated in a) or the amount in exhibit E4/T2/S1/A2 has been reflected in Midland's 2007 audited financial statements and identify the line item in the audited financial statements.
d) State the value which should be relied upon in this proceeding, and why.

8.

[Ex5/T1/S3/Att1/Pg1]

Midland provides details and calculations of the proposed deferral and variance account rate rider by classification in the table at Ex5/T1/S3/Att1/page1. Midland has proposed a recovery period of two years.

9.

Midland has not provided a clear description of the amounts recorded in Account 1508. Please provide further details of the amounts that have been recorded in this account.

Loss Factors
10.
[Ex4/T2/S9/Pg1]
Preamble: Midland is an embedded distributor of Hydro One. Midland is proposing no change in this proceeding to its Total Loss Factor (TLF) of 1.0651. Midland reports data for 2006 was flawed and has taken measures to account for this. The following table provides a summary of Distribution Loss Factor (DLF) and TLF for Midland.

	5 year average (2002-2007)	4 year average	4 year average (excluding 2006)	2007 approved*	2009 proposed
Embedded DLF	1.0318	1.0313	1.0294	1.0301	1.0301
TLF	1.0669	1.0664	**1.0644**	1.0651	**1.0651**

*assumes DLF,Hydro One = 1.0340

11.
As indicated in the table, the total loss factor indicated by the removal of 2006 is 1.0644.

Given that Midland reports that data for 2006 was flawed, why has Midland not considered using the "4-year average, excluding 2006" data. This corresponds to a TLF of 1.0644.

12.
[Ex4/T2/S11/Pg]
Midland provides a materiality analysis on distribution losses at Ex4/T2/S11/page1. Please comment on the source and/or drivers of the variability in the loss factors from the period 2003-2007.

13.
[Ex4/T2/S9/Pg]
Midland has provided a loss adjustment factor calculation at Ex4/T2/S9/page1 Please complete the following table:

Modified Schedule 10-5: Determination of Loss Factors

		Year1	Year2	Year3	3-yr Average
	Losses in Distributor's System				
A	"Wholesale" kWh delivered to distributor[1]				
B	Portion of "Wholesale" kWh delivered to distributor for Large Use Customer(s)[2]				

C	Net "Wholesale" kWh delivered to distributor (A)-(B)				
D	"Retail" kWh delivered by distributor[3]				
E	Portion of "Retail" kWh delivered by distributor for Large Use Customer(s)				
F	Net "Retail" kWh delivered by distributor (D)-(E)				
G	Loss Factor in distributor's system [(C)/(F)][4]				
	Losses Upstream of Distributor's System				
H	Supply Facility Loss Factor[5]				
	Total Losses				
I	Total Loss Factor [(G)x(H)] [4]				

[1]**Line A** If directly connected to IESO controlled grid, kWh pertain to metering installation on the secondary or low voltage side of the transformer at the interface with the transmission grid. This corresponds to the "With Losses" kWh value provided by the IESO's MV-WEB. Additionally, kWh pertaining to distributed generation should be included.
If fully embedded within a host distributor, kWh pertains to virtual meter at the interface between the embedded distributor and the host distributor.
e.g. if the host distributor is Hydro One, kWh from the Hydro One invoice corresponding to "Total kWh" rather than "Total kWh w Losses" should be reported. Additionally, kWh pertaining to distributed generation should be included.
If partially embedded, kWh pertains to sum of above.

[2]**Line B** If Large Customer is metered on the secondary or low voltage side of the transformer, the default loss is 1%, i.e. Line B = 1.01 x Line E.

[3]**Line D** kWh corresponding to D should equal total of "total billed energy sales in kWhs for each rate class" in item 1 of Section 2.1.3 in Electricity Reporting and Record Keeping Requirements dated April 4, 2008.

[4]**Lines G&I** This loss factor pertains to secondary metered customers less than 5,000 kW.

[5]**Line H** If directly connected to IESO controlled grid, SFLF = 1.0045.
If fully embedded within a host distributor,

$$SFLF = LF_{Grid} \times LF_{Host}$$

Where,
SFLF is the supply facilities loss factor
LF_{Grid} is the loss factor from losses in the transformer at the grid interface
LF_{Host} is the loss factor in host distributor's system
If the host distributor is Hydro One, SFLF = 1.0060 x 1.0278 = 1.0340.
If partially embedded, SFLF is weighted average of above.

Specific Service Charges
14.
[Ex1/T1/S5/Pg3]
Midland has included the monthly interest charge, but has omitted the yearly interest charge of 19.56%. Please indicate why this charge has been omitted from the proposed rate schedule.

Rate Base – Maintenance and Capital Programs and Projects
15.
In regards to Midland's 2009 maintenance and capital plans:
a) Please provide a list of criteria and rationale that Midland has used in the prioritization and selection of its 2009 maintenance and capital projects.
b) Given the economic situation, please identify separately both maintenance and capital programs, if any, that Midland may have considered as a candidate for a deferral, cut, or partial adjustments. Please identify these programs, if any, in a ranking order that Midland would consider, using a ranking of "1" as the first suitable candidate, ranking of "2" as the second suitable candidate, ranking "3" as the third suitable candidate, etc. Please identify the rationale for the selection of these maintenance and capital programs and projects.

OPERATIONS, MAINTENANCE & ADMINISTRATIVE EXPENSES
16.
[Ex4/T1/S1]
The figures in the table below are taken directly from the public information filing in the Reporting and Record-keeping Requirements ("RRR") initiative of the OEB. The figures are available on the OEB's public website. Please confirm Midland's agreement with the numbers for OM&A, which are summarized in the table below. Where Midland does not agree with the OM&A numbers in the table below, please provide the revised number and an explanation of why it has been revised.

	2003	2004	2005
Operation	$320,276	$272,722	$303,349
Maintenance	$370,154	$306,118	$199,512
Billing and Collection	$379,401	$439,712	$406,928
Community Relations	$9,211	$15,581	$76,748
Administrative and General Expenses	$604,099	$634,480	$669,997
Total OM&A Expenses	**$ 1,683,140**	**$ 1,668,613**	**$ 1,656,533**

17.
[Ex1/T1/S7/Pg2]
What inflation rate is used for the 2009 OM&A forecast and what is the source document for inflation assumptions?

18.
[Ex4/T2/ S2]
The utility's variance analysis spans some 76 pages. Please provide an abbreviated summary of the major expense variances for each year, broken down by cost category (Operations, Maintenance, Billing & Collections, and Administrative and General). Please provide explanations for the largest 4 variances in each cost category for each year for which variance explanations are required. The variance explanations should cover the following annual variances:

- 2009 vs 2008
- 2008 vs 2007
- 2007 vs 2006
- Overall 2009 vs 2006

19.
[Exh4/T2/S2]
Has the utility assessed its own workforce in the context of the risks associated with an aging workforce? If so, please provide a description of the utility's plan to address the aging workforce issue. In doing so, please address the expected timeframe, costs, and benefits of implementing the plan.

20.
[Ex4/T2/S8/Pg2]
The evidence mentions the Management Performance & Compensation Plan for salaried employees. Please list the specific targets and describe how compensation is linked to those targets. Please provide additional detail about how the performance plan is aligned with utility ratepayer (i.e. customer) interests. Does the utility have a special bonus (or incentive) plan over and above the base plan and if so, please provide the details, including who is eligible, and the specific nature of the plan.

21.
[Ex4/T2/S8]
Please provide a table showing the percentage increases in base salary and total compensation (salary wages and benefits) budgeted for 2009 broken down by major employee grouping (e.g., executive, management, non-union and unionized workers).

22.
[Ex4/T2/S2]
Please describe any productivity or cost efficiency programs at the utility that are either in place now or contemplated at some future time. Please describe the nature of any such program and the scope, timing and benefits expected.

23.
[Ex4/T2/S2/Pg74]
For Regulatory Expenses, please provide a breakdown by expense category/grouping of the $73,700 amount requested for 2009. Please indicate which cost elements are proposed for a thee-year amortization. Please provide an alternate scenario where the costs are amortized over a four-year recovery period rather than three.

24.
[Ex4/T2/S2]
Please identify any one-time expenses in 2009 that could be amortized over a period of more than a single year and suggest an appropriate amortization period for those expenses.

25.
[Ex4/T2/S2]
Please confirm that Midland has no one-time expenses in 2008 that were inadvertently carried over into the 2009 budget. If there are such expenses, please identify the item and provide the dollar amount of the inadvertent carry-over.

26.
[Ex4/T3/S1/Pg4]
Please confirm that charitable donations are not included in the revenues sought from utility ratepayers. If they are, please provide the dollar amount and reason why these should be recovered through distribution rates.

Customer Connections
[Ex3/T2/S9]
Preamble: At Ex 3/T2/S9/page 13, Midland states “The annual trend growth rate is used to project customer growth/decline into the 2008 Bridge and 2009 Test Year. A trend forecast for the number of customers in each rate class for the

2008 Bridge and 2009 Test Year is calculated based on the most recent 2 years of growth".

27.

a) Please explain the rationale for using "most recent 2 years of growth" to develop the customer forecast when Midland has access to 5-years of customer data as presented in Table 28 (Ex 3/T2/S4/page 1).
b) Please provide a customer forecast based on 5 years (2003-2007) of average customer growth. Please also provide the impact on the proposed test year load and revenue forecast if this alternate customer forecast were adopted.
c) Please develop a total customer forecast using a simple linear trend method based on data from 2003 to 2007, for bridge year and test year. Please also provide the impact on the proposed test year load and revenue forecast if this alternate customer forecast were adopted.

28.

Please explain if Midland's test year customer count forecast for 2009 is consistent with one or more external forecasts (such as Housing Outlook reports from CMHC or the national Banks). Please provide the reference to the reports/forecasts used and explain how these forecasts support Midland's projections for customer additions in the test year. If the external reports/forecasts do not support Midland's proposed customer forecast, then please explain the reasons for any variances.

29.

Based on the responses to the questions above, if Midland decides to restate its as-filed customer forecast, then please also update the load and revenue forecasts to reflect the change in the customer forecast.

Weather Forecast

[Ex 3/T2/S9/page 6]

Preamble: Midland is seeking Board approval for a test year weather normal of 3,631 HDD and 390 CDD, based on a 10-year simple average of weather data recorded at Toronto Pearson Airport. At Ex 3/T2/S9/page 8, Midland states "Our view is that a ten-year average based on the most recent ten calendar years available is a reasonable compromise that likely reflects the "average" weather experienced in recent years".

30.

Similar to the method used to develop the test year 2009 weather normal, please provide the following "back-cast" scenarios:

a. Assuming Midland is preparing a 2006 test year forecast, please develop a weather normal using 10-years of historical weather data from 1995-2004 and compare this forecast to actual observed weather in 2006. Please calculate the variance and percent variance from actual observed weather.

b. Assuming Midland is preparing a 2007 test year forecast, please develop a weather normal using 10-years of historical data from 1996-2005 and compare this forecast to actual observed weather in 2007. Please calculate the variance and percent variance from actual observed weather.
c. Assuming Midland is preparing a 2008 test year forecast, please develop a weather normal using 10-years of historical data from 1997-2006 and compare this forecast to actual year-to-date observed weather in 2008. Please calculate the variance and percent variance from actual observed weather.

31.
Similar to the scenarios described above, please provide the following "back-cast" scenario's using a linear trend method based on 20-years of historical weather data.
a. Assuming Midland is preparing a 2006 test year forecast, please develop a weather normal for the 2006 test year using historical weather data from 1985-2004 and compare this forecast to actual observed weather in 2006. Please calculate the variance and percent variance from actual observed weather.
b. Assuming Midland is preparing a 2007 test year forecast, please develop a weather normal for the 2007 test year using historical data from 1986-2005 and compare this forecast to actual observed weather in 2007. Please calculate the variance and percent variance from actual observed weather.
c. Assuming Midland is preparing a 2008 test year forecast, please develop a weather normal for the 2008 test year using historical data from 1987-2006 and compare the forecast to actual observed weather in 2008. Please calculate the variance and percent variance from actual observed weather.

Load Forecast
32.
[Ex 3/T2/S9/Pg5 & 6]
Midland states that the forecasts for the Residential and the GS<50 kWh rate classes are based on "OLS estimates using the 68 observations from 2002:05 to 2007:12". Please explain the rationale for using only 68 observations to develop the load forecast?

33.
[Ex 3/T2/S9/Og6]
Please provide the following information regarding the accuracy of previous load forecasts:
a. What was the forceast error (i.e. variance between total normalized actual 2004 load versus forecast 2004 load) of the 2004 load forecast?
b. What was the forecast error (i.e. variance between total normalized actual 2005 load versus forecast 2005 load) of the 2005 load forecast?
c. What was the forecast error (i.e. variance between total normalized actual 2006 load versus forecast 2006 load) of the 2006 load forecast?

d. What was the forecast error (i.e. variance between total normalized actual 2007 load versus forecast 2007 load) of the 2007 load forecast?
e. What was the year-to-date (Jan-08 to Aug-08) forecast error (i.e. variance between total normalized actual 2008 load versus forecast 2008 load) of the 2008 Bridge year load forecast?

34.
[Ex3/T2/S1/Pg2]
Preamble: Midland states "Short-term variation in electricity consumption is heavily influenced by three main factors – weather (e.g. heating and cooling), which is by far the dominant effect for most systems; economic factors (increases or decreases in economic activity leads to changes in employment, industrial and commercial activity, building and population change); and timing factors (non-holiday weekdays when businesses are typically operating)". [Emphasis added]

a. Please explain the rationale for not using 'number of customers' as an explanatory variable in the Residential and GS< 50 kWh regression equations.
b. Please prepare an alternative forecast for the residential and GS<50 kWh rate class using the following regression equations: Res kWh=f(Residential customers, HDD, CDD, Employment)+constant and GS<50 kWh=f(GS<50 customers, HDD, CDD, Peak days)+constant. If monthly customer data is not available, please make a reasonable assumption for the purposes of completing the interrogatory.
c. Please provide the statistical results of the above equations and please also update Table 3 (Ex 3/T2/S1/page 7) based on results of the above regression equations.
d. Please provide the impact on the proposed test year load and revenue forecast, if a load forecast based on the above equations were adopted?

35.
[Ex3/T2/S1/Pg9]
Preamble: With regards to the GS>50 KW forecast Midland states at Ex 3/T2/S1/page 9 that the non-weather sensitive class forecasts are "based on the trend of consumption over the past two historic years (2006 and 2007)…."
a. Please explain the rationale for using only two years of consumption data to develop the GS>50 load forecast when Midland has access to 5-years of customer data as presented in Table 7 (Ex 3/T2/S1/page 10).
b. What is the GS>50 kW rate class load forecast if 5-years of consumption data is used to develop the forecast?
c. Please also provide the impact on the proposed test year load and revenue forecast if this alternate load forecast were adopted.

36.
Please prepare a weather normal for test year 2009 using a liner trend method based on 20 years of historical weather data. Please also prepare a load and

revenue forecast using the methodology proposed in this application, for test year 2009 using this weather normal.

37.
Please provide the impact on the proposed test year distribution load and revenue forecast, of the following:
a) 1% change in number of customers.
b) 1% change in the proposed weather normal.

RATE BASE / CAPITAL EXPENDITURES

38.
[Ex2/T1/S1]
The pre-filed evidence of MPUC indicates significant increases in capital expenditures in 2008 and 2009. The Company proposes to replace one substation in each of the years from 2007 to 2010. Rondar Engineering completed an assessment of the substation infrastructure in 2006 and recommended replacement of the substation infrastructure. The application also indicates that Rondar has been completing the maintenance on MPUC substations over the past 10 years. Please answer the following questions with respect to this evidence:
a) What process did the Company follow with respect to awarding contracts to outside vendors? Please provide details and file any RFQs or RFPs that were distributed to third parties.
b) Was Rondar Engineering awarded any contracts or performed any work on the substations that they identified for replacement or upgrade? If "Yes", please provide details on the contracts awarded or work performed including cost details.
c) What impact will the replacement of the substations have on the reliability of the distribution system? How will these replacements impact the reliability statistics? Please provide forecasts where appropriate.

39.
[Ex2/T4/S3/Att1]
In the Cost of Power worksheet volumes shown for the Residential class and General Service less than 50 kW do not reconcile with the numbers used in the load forecast (Exh3/Tab2/Sc3/Table 27). Please explain the variance.

INCOME TAX

40.
[Ex4/T3/S1/Att6]
Please answer the following questions with respect to income tax calculations:
a) The table showing the detailed tax calculations for PILs does not include 2007 information. Please provide a revised table for the years 2006 through to 2009, including the 2007 information.
b) Please show the calculation of the line item "Income before PILs/Taxes" of $644,773 for the 2009 test year. Please also show the calculation of the

2009 test year regulatory income before taxes based on the following calculation: rate base multiplied by the equity thickness multiplied by the return on equity percentage. Please explain why there is a difference.

c) An amount of $61,437 and $163,561 representing Actual Debt Interest for the years 2008 and 2009 respectively has been added to determine the PILs amount. Please explain why these charges, which are not deductible for tax purposes, should true up to the ratepayers. The pre-tax income used as the starting point for regulatory tax calculation allows for the deduction of deemed interest.

SMART METERS

41.

[Ex9/T1/S3]

MPUC is requesting a rate rider of $1.00 per customer per month to fund smart metering activities. The evidence indicates that MPUC will be scheduled for full installation of Smart Meters in 2009 in a process expected to take less than two months. Please answer the following questions with respect to smart metering activities:

a) How many smart meters do you expect to install in the 2009 Test Year?
b) What is the estimated cost per installed meter? Please provide a breakdown of the costs of these installations.
c) What will be the total estimated costs of smart metering activities in 2009?
d) Has MPUC purchased or does it expect to purchase Smart Meters or advanced metering infrastructure (“AMI”) whose functionality exceeds the minimum functionality adopted in Ontario Regulation 425/06? If “Yes”, please provide details of how the functionality exceeds the minimum functionality.