Board Staff Interrogatories
Veridian Connections Inc.
2014 Cost of Service Rates
EB-2013-0174

1-Foundation

1.1 Does the planning (regional, infrastructure investment, asset management etc.) undertaken by the applicant and outlined in the application support the appropriate management of the applicant's assets?

1.1-Staff-1

Ref: (i) E2-T3-S8 p. 8 lines 10-18 (ii) E2-T3-S6 Attachment 1 (Asset Condition Assessment)

At reference (i) the evidence states that:

> In the years where the amount of non-discretionary investment exceeded the normal capital spending level, the non-discretionary projects would be approved out of necessity and all of the discretionary projects would be deferred. It became quite evident that the repeated deferral of discretionary projects led, and would continue to lead, to a backlog which was neither sustainable nor desirable. To address this problem, starting in 2012 Veridian increased its capital spending envelope to allow its investment in resources and capital each year to be at a higher level to allow broader planning flexibility. Veridian plans to maintain this steady state investment in non-discretionary and discretionary assets through and past the bridge and test years.

At reference (ii) section II, pages 3 -12, it is indicated that many of the capital investments under the Renewal Category include Asset Categories with limited asset condition information (age only appears to be available, but not other key parameters).

a) Please explain to what extent a forecast can be reliable if it is solely based on the age of an existing asset.
b) It is unclear how Veridian assesses the urgency of a capital project where "age" is the only assessment criterion.
    i. Does Veridian view all non-discretionary projects as having the same level of urgency? If so, please elaborate.
    ii. If the response to i) is no, please comment on the applicability and inclusion of an urgency scale in the assessment criteria.
    iii. Does Veridian accept the circumstance that there may be "discretionary" capital projects that would rank ahead of low urgency non-discretionary ones?
    iv. In a capital rationing environment what weight or ranking would "urgency" have?
c) Please prepare a table showing: (I) Number of Failures; and (II) Total cost of Repair or Replacements, for each of the five Asset Categories (Pole Mounted

Transformers; Overhead Line Switches; Pad Mounted Transformers; Pad Mounted Switchgear; Underground Cables), for each of the five years 2008 to 2012.
d) Please provide the same, forecasted information for the bridge year, and test year.

1.1-Staff-2
Ref: (i) E2-T3-S7 p. 17 (ii) Report of the Board, Supplementary Report on Smart Grid, February 11, 2013 (EB-2011-0004).
Veridian in reference (i) indicates that over the next 5 years, it will continue to expand the automation capabilities of its distribution system and that it is augmenting resources for this emerging area of development that will be responsible for, among other items, the identification and pilot phase testing of smart grid devices and components.

At page 14 of the reference (ii) the Board notes that some distributors have already undertaken, with Board approval, pilot and demonstration projects related to power system flexibility, including systems that facilitate real time communications with distributed generators and software solutions that enhance network intelligence (e.g., outage responsiveness). The Board indicated that as distributors plan for the modernization of their systems they must consider cost and the expectations for service from their customers and invest accordingly and that the Board does not intend to prescribe specific investments and technological choices to be implemented.

a) Did Veridian communicate with other distributors in Ontario regarding any Pilot projects in progress that may be similar to what it plans to launch, so duplications can be averted? If so, please provide description of such projects.
b) If Veridian did not communicate with other distributors in Ontario as outlined in a) above, please indicate what steps would Veridian take to address potential duplication of Pilot projects.

1.2 Are the customer engagement activities undertaken by the applicant commensurate with the approvals requested in the application?

1.2-Staff-3
Ref: E4-T1-S2 p.8 table 1 row 7
"Storm Restoration" accounts for $201,910 [$122,910+$79,000] of the increase in OM&A between 2011 actuals and 2014 Test Year.

a) Is the $201,910 the total amount budgeted in 2014 for "Storm Restoration"? If not, please provide the total amount.

In late December 2013, many parts of southern Ontario experienced a significant ice storm.

b) Please identify any impacts that the Applicant estimates that the December 2013 ice storm has had or will have on the test year capital and OM&A budget levels (e.g., in terms of infrastructure replacement or maintenance and vegetation management).

c) Will the Applicant be updating its Application in light of this event? If so, by when does it intend to file any updated evidence?

1.2-Staff-4

Ref: E1-T2-S1 p. 5

Veridian states that its success in identifying and addressing the needs of its customers is reflected in the results of its annual customer opinion survey.

Please provide a copy of the survey and results.

1.2-Staff-5

Ref: E2-T2-S1 p.5 and E2-T2-S1 p.3 Table 2- (Table from DSP) and E2-T3-S1 p.4

Veridian states that it has increased its capital investments year over year, and is planning to maintain this steady state investment in discretionary and non-discretionary assets throughout the planning window and not just the bridge and test years.

Historically Veridian's capital expenditures have been as follows: 2010- $20.6M; 2011- $20.6M; 2012- $34.2M (includes $7.M of smart meters); 2013 (est.) $23.7M

Table 2 shows the following forecasted capital expenditures:
2014 - $30.7M
2015 - $26.7M
2016 - $25.8M
2017 - $22.3M
2018 - $41.3M

a) Please explain how forecasted continuous year-over-year reductions over the 2014 to 2017 period demonstrate "steady state" approach to investment?
b) Veridian notes that the Seaton TS capital investment would total $21M (in-service 2018). Is the aforementioned $21M included in the yearly amounts shown above? If so, please indicate in which year(s).
c) Has Veridian calculated the impact on its customers' future rates (i) if the Seaton TS is built and operated by Hydro One (ii) is built and operated by Veridian?

1.2-Staff-6

Ref: E1-T2-S1

Chapter 2 of the Filing Requirements states, "The RRFE Report contemplates enhanced engagement between distributors and their customers to provide better alignment between distributor operational plans and customer needs and expectations."

a) Please describe the differences between customer engagement conducted in preparation for the current application and previous customer engagement.
b) Please explain how customer engagement has been enhanced.

1.2-Staff-7

Ref: E1-T2-S1

Chapter 2 of the Filing Requirements states, "Distributors should specifically discuss in the application how their customers were engaged in order to determine their needs. This could include references to any communications sent to customers about the application such as bill inserts, town hall meetings held, or other forms of outreach undertaken to engage customers and explain to them how the application serves their needs and expectations and the feedback heard from customers through these engagement activities."

What forms of outreach were employed to explain how the current application serves the needs and expectations of customers? If none were employed, please explain why.

2-Performance Measures

2.1 Does the applicant's performance in the areas of: (1) delivering on Board-approved plans from its most recent cost of service decision; (2) reliability performance; (3) service quality, and (4) efficiency benchmarking, support the application?

2.1-Staff-8

Ref: E2-T2-S2 pp. 94-100

The evidence indicates that the capital expenditures for the Ajax building expansion project totals about $8.0M

a) Please confirm that this is about $2.0M or 33% greater than the amount projected in Veridian's last cost of service proceeding.
b) Please provide the amount of 2014 rate base that is related to the Ajax building expansion project.
c) Would Veridian have undertaken this specific building expansion project if it were known at the time that costs would total $8.0M? For example, would the business case have changed or alternative solutions been considered?
d) The evidence identifies a number of reasons for the overspending i.e. building design changes, municipal site plan approval, driveway & parking lot remediation/expansion, development fees, building system design changes. Does

Veridian view any of these as something over which it had no control to foresee or are some due to planning lapses or deficiencies?

2.1-Staff-9

Ref: E4-T3-S1

Veridian indicates that executive compensation is based on an Executive Compensation Review conducted by the Hay Group for Veridian in 2011 and that the base salary rage is set equal to the 50th percentile.

a) Has Veridian undertaken any other studies of its proposed increases in compensation/headcount on the basis of compensation benchmarking, or any other external comparators or has it justified its proposed increases solely on the basis of its anticipated needs without any specific reference to any external comparators.
b) Please confirm whether or not the applicant took into account any external comparators when determining these increases. If yes, please state what they were and how they impacted on what is proposed in the application. If not, please state why not.

3-Customer Focus

3.1 Are the applicant's proposed capital expenditures and operating expenses appropriately reflective of customer feedback and preferences?

3.1-Staff-10

Ref: (i) E4-T1-S1 p.6 Table 3 (ii) E4-T1-S2 p. 3 Table 1 (iii) Appendix 2L

In Tables 3 and 1 Veridian provides a normalized OM&A for the years 2010 to 2012 by adjusting for Smart Meters (add) and Capitalization Policy changes (remove).

a) Please explain why Tables 3 and 1 do not show the same normalized totals of OM&A for 2010, 2011 and 2012.

Board staff has prepared the following table to compare cost per customer amounts both on a normalized (sourced from Table 1) and non-normalized basis.

	2010 Board Approved	2010 Actual	2011 Actual	2012 Actual	2013 Bridge Year	2014 Test Year	ave. annual 2010 Brd App-2013	ave. annual 2010 Brd App-2014
TOTAL OM&A	$21,486,322	$20,506,848	$20,601,507	$24,471,462	$26,093,500	$28,283,692		
OM&A/Customer	$ 191.28	$ 182.92	$ 181.70	$ 212.97	$ 222.65	$ 238.22		
% change		-4.4%	-0.7%	17.2%	4.5%	7.0%	5.19%	5.64%
TOTAL OM&A normalized	$22,362,802	$21,383,328	$21,218,503	$23,170,067	$24,458,824	$26,730,627		
Normalized OM&A/Customer	$ 199.08	$ 190.74	$ 187.15	$ 201.64	$ 208.70	$ 225.14		
% change		-4.2%	-1.9%	7.7%	3.5%	7.9%	1.59%	3.12%
Customers	112,331	112,106	113,380	114,908	117,195	118,727		

b) Does Veridian agree that the average annual increase in OM&A per customer over the 2010 Board-approved to 2014 period is 5.64% (non-normalized) and 3.12 % (normalized) and over the 2010 Board-approved to 2013 period is 5.19% (non-normalized) and 1.59% (normalized)?

c) What improvements in services and outcomes will Veridian's customers experience in 2014 and during the subsequent IRM term as a result of increasing the provision for OM&A in 2014 at about 5 times [7.9% divided by 1.59%] the annual rate experienced over the 2010-2013 period.

d) How has Veridian communicated these benefits to its customers, and how did the customers respond? If no communications took place please explain why not.

3.1-Staff-11

Ref: E4-T1-S1 pp.6-7

Veridian states that historical spending related to OM&A has been lower on a cost per customer basis that most utilities in Ontario and that "Veridian's 'O&M' cost per customer was $73.51 in 2012.

a) Please confirm that the $73.51only convers the "Administration" component of OM&A (ie. no Billing, Community Relations, Operations, Maintenance.) If it includes other components please specify which ones(s).

b) Given Veridian's statement in the preamble above, please identify how Veridian's total OM&A per customer compares to the utilities in its cohort.

3.1-Staff-12

Ref: (i) E2-T2-S-1 p. 3 Table 2 (ii) E2-T3-S7 p.10 lines 8 - 13 (iii)E1-T2-S1/ pp.1-6

Table 2 indicates that the proposed investment under "System Renewal" increases significantly in years 2014 to 2018 compared to prior years. For the test year, the proposed investment is $14.12 M which is materially higher than the levels reported historically for period 2009-2012 as well as the level for the bridge year of $6.215 M.

The evidence at reference (ii) states that:

> Prior to the test year, and the completion of the ACA, Veridian had a proactive program of planned sustainment to replace the assets in the substation transformers, substation breakers, wood pole, pad mounted switchgear and underground primary cable categories. In the test year, the pole mounted, pad mounted, submersible and vault transformer, and overhead switch asset categories have been included to further take advantage of the benefits realized from its current proactive programs

At reference (iii) Veridian outlines the various activities, multiple communication channels, and surveys Veridian conducts to secure feedback on its performance.

a) Did Veridian include in any of its communication with customers its intention to materially increase in 2014 its planned investment in System Renewal as compared to the 2013 bridge and prior years? If so, please provide a copy of such communication.
b) Did Veridian conduct any surveys that identified the increase in System Renewal investment in 2014 and/or solicited feedback? If so please provide a copy of the survey and a summary of the feedback, if any.

4-Operational Effectiveness

4.1 Does the applicant's distribution system plan appropriately support continuous improvement in productivity, the attainment of system reliability and quality objectives, and the level of associated revenue requirement requested by the applicant?

4.1-Staff-13

<u>Ref: E4-T2-S2 pp.9-10</u>
Veridian indicates that cable locating costs increased significantly between 2012 and 2013, from $.83M to $1.3M, and the Test Year provides for $1.1M. For the 2015 to 2018 period is Veridian simply assuming that major roadway expansions (hwy7 &407) and continued customer growth will continue at 2014 levels or was a more in-depth analysis performed? If so, please provide the details of the analysis.

4.1-Staff-14

<u>Ref: (i) E2-T3-S6 pp. 5-7 (ii) E2-T3-S12 Attachment 1 (iii) E2-T3-S6 Attachment 1 (Asset Condition Assessment)</u>
In reference (i) Veridian indicated that its Asset Condition Assessment (ACA) is evolving as some asset groups had limited asset condition information available other than age. Veridian also indicated that the ACA study results and the basis for the replacement of these assets are mainly driven by age: The noted asset groups (total 7) with limited asset condition information, including the following:

1. pole mounted transformers;

2. overhead line switches,
3. pad mounted transformers, ,
4. pad mounted switchgear and
5. underground primary cable

At page 6, Veridian further indicated that it adjusted the ACA results due to the fact that the basis for replacement is mainly driven by age, and at Table 2 on page 7 listed the comparison, of selected Asset Categories. The table below is a recast covering the five asset categories noted above:

	Asset Category	Condition-Based Flagged-For-Action Plan for Year 1 based on ACA Results [Number of Units]	Condition-Based Flagged-For-Action Plan for Year 1 based on Veridian Staff Adjusted Results [Number of Units]
1	Pole Mounted Transformers	116	110
2	Overhead Line Switches	299	7
3	Pad Mounted Transformers	206	70
4	Pad Mounted Switchgear	8	8
5	Underground Cables	78	12.5

In reference (ii), material investment for "System Renewal" is listed where it includes a Replacement Program for 5 of 7 asset categories, whose ACA results are mainly driven by age. The table below recasts a portion of the contents of that Table for the Test Year, and covering proposed program investments for the same 5 asset groups.

Project Name	**Net of Contribution**	**In Service Date**
1 Polemount Transformer Replacement Program, various	$736,000	2014
2 Overhead Line Switch Replacement Program, various	$706,000	2014
3 Padmount Transformers Replacement Program, various	$800,000	2014
4 Padmounted Switchgear Replacement program, various locations	$900,000	2014
5 Primary Cable Rehabilitation Program, various locations	$1,000,000	2014

Veridian notes in reference (iii) that for each of the identified five Categories, limited asset condition information (age only), was the basis for determining the Health Index results.

a) Does Veridian agree that the "Condition-Based Flagged-For-Action Plan", for each asset category, is also based on limited asset information, as outlined in reference (iii) section II pages 3 -12?

b) Please explain why it is prudent for Veridian to design proactive programs for the identified seven segments per reference (i), including the 5 noted this interrogatory, before Veridian completers the required data enhancements for these assets.

4.1-Staff-15

<u>Ref: (i) E2-T3-S8 Attachment 4 ”Reliability in South Ajax –Overview of Projects” p.4 lines 10-21 (ii) Proceeding (EB-2012-0064) T-4/S-B1/pp. 131 – 132/ Option 2: Rejuvenate existing XLPE direct buried cables via cable injection</u>

At reference (i), the evidence dealing with approaches to improving reliability in South Ajax appears to favour cable injection rather than cable replacement under certain circumstances.

Toronto Hydro Electric System Limited (THESL) evidence in the EB-2012-0064 proceeding (as sourced from reference ii) questions the economics of cable injection.

> In 2008, THESL completed a cable rejuvenation pilot job. Direct buried XLPE cable was injected with insulation rejuvenating fluids (such as silicon-based fluids). The pilot job was not as successful as THESL had anticipated. Based upon a qualitative analysis, it was determined that the cable injection process had a number of operational issues and drawbacks, including the need to locate and remove existing splices in cable circuits, the difficulties in accurately locating these splices, and the need for extremely long planned outages required to implement the cable injection procedures. A quantitative analysis was performed, which indicated that a very low percentage of cable assets would receive a positive net benefit from injection. It was concluded that cable injection was not an economically viable alternative to replacement. The detailed study of the cable injection pilot job has been included in Appendix C.

a) Is Veridian aware of THESL’s experience with the cable injection option? If yes please explain why the THESL experience is not relevant in the case of South Ajax.
b) If the answer is no to Question a), please indicate what course of action Veridian would pursue if the injection option is not the most cost effective option going forward.

4.2 Are the applicant’s proposed OM&A expenses clearly driven by appropriate objectives and do they show continuous improvement in cost performance?

4.2-Staff-16

Ref: E1-T1-S2 p.19

Veridian states that it continues to invest in technology platforms that enhance operational efficiencies e.g engineering design platform and Geographical Information System integration, Mobile Computing Platform.

a) What level of savings derived from these investments are reflected in the 2014 OM&A and 2014 Capital?
b) Are the full efficiencies of these investments reflected in the 2014 OM&A? If not, please provide an estimate of the savings that will be realized in 2015, 2016, 2017 and 2018 as a result of such initiatives.

4.2-Staff-17

Ref: E4-T3-S1 p.5

Veridian states that the current collective agreement with the IBEW was negotiated in 2011and at that time Veridian's bargaining strategy was informed by an assessment of contract settlements previously negotiated by Ontario LDCs. Veridian notes that one of its compensation strategy goals was to ensure that "… compensation and benefit levels would continue to be competitive within the local market in which Veridian competes for human capital. For this reason, particular attention was placed on wage rates and benefits at LDCs in the Greater Toronto area, where most of Veridian's employees are located."

a) What facts did Veridian have in 2011 that supported the assumption that a wage increase of less than the GTA average would actually result in a material level of resignations?
b) Going forward, does Veridian believe that the approach taken in 2011 is a sound and sustainable compensation policy?

4.2-Staff-18

Ref: E4-T1-S2 p.8 Table 1 row 2

Please confirm that expenditures related to "Distribution Asset Management Activities" accounts for $1,456,925 [$495,676+$48,714+$912,535] of the increase in OM&A between 2012 actuals and 2014 Test Year.

Veridian notes that Distribution Asset Management Activities have increased in the following areas: Critical Asset Management- Focus on Substations, System Planning, Pole and Cable Testing and Reactive Repair, Distribution Automation and Vegetation management.

Please indicate what approximate portion ($ amount) of the $1,456,925 is attributable to each of the aforementioned areas.

4.2-Staff-19

Ref: E4-T1-S2 pp. 9-10 & Table 1

Veridian states that the amount of $545,671 in 2011 [labour costs related to 2010 FTE employees and shown on line 1 in table 1] also reflects full year impacts of delayed hiring in 2010.

Please reconcile this statement with line 12 in table 1 which also shows an increase of $372,380 in 2011 due to a "delay or deferral of hiring".

4.2-Staff-20

Ref: E4-T3-S1 p.8 Table 4

Veridian has proposed a material 7.0% increase in headcount and 12.2% increase in employee compensation for the Test year relative to the 2012 actual levels.

a) What objectives has Veridian established for its operations?
b) Please provide specific information on why the proposed cost increases are necessary for Veridian to achieve the objectives that the applicant has targeted in the capital and operating expenditure sections of its application, and the alternative methods for achieving these objectives that were considered and rejected in favour of the proposed headcount and compensation increases.

5-Public Policy Responsiveness

5.1 Do the applicant's proposals meet the obligations mandated by government in areas such as renewable energy and smart meters and any other government mandated obligations?

5.1-Staff-21

Ref: E2-T3-S9 p.1

Veridian indicates that it is important to note that there are system constraints, located at Hydro One owned transformer stations, to the connection of REG projects within Veridian's service territory.

a) Please identify which Hydro One owned Transformer Stations have constraints that would limit connections of REG projects onto the Veridian owned distribution Feeders.
b) For each of the Hydro One owned Stations listed under a), please provide the nature of that constraint e.g., short circuit withstand capability, maximum capacity capability (this may require Veridian to obtain the information from Hydro One Inc.).

5.1-Staff-22

Ref: (i) E2-T2-S5 pp. 2-3 (ii) Report of the Board- Framework for Determining the Direct Benefits Accruing to Consumers of a Distributor under Ontario Regulation 330/09 – June 10, 2010 (EB-2009-0349)/Section 1.1/p. 3/1st bullet

Veridian, per reference (i), is proposing to hire a consultant with communication system expertise during 2014 to perform a study of Veridian's service territories and recommend a communication platform that will meet smart grid requirements and enable renewable generation connections. Veridian indicates that:

- the project would span a 4-year period during 2015 to 2018;
- the overall radio frequency based system is estimated to cost approximately $911,000
- the on-going O&M costs associated with the fibre-based backhaul is estimated to cost $135,000 per year.
- Veridian is proposing to split the cost on a 50/50 basis for the purpose of applying for provincial rate protection on this renewable generator connection enabling project.

The Board noted, in reference (ii) that O. Reg. 330/09 and section 79.1 (5) of the Act focuses solely on initial investment, and that ongoing OM&A costs that are incurred by the distributor after the investment has been made will not be eligible for provincial recovery.

a) Please reference the Ontario Act, Regulation, Board Report, or Board Code that Veridian is relying on to support its claim that the proposed project qualifies for the provincial benefit.
b) Please explain how Veridian estimated the "overall cost of the RF based system' to be $911,000 with O&M costs of $135,000 per year, prior to hiring a consultant whose recommendations may lead to specifications requiring a different communication platform and therefore cost.
c) Under the assumption that approval of the project is secured, please provide an estimate of the expected annual savings to Veridian covering all items such as labour, rolling stocks.
d) What is the estimated cost of hiring the consultant?
e) Please provide the rationale for the 50%-50% weighting to establish the amount to which the provincial benefit and direct benefit ratios will be applied.
f) Did Veridian consider the following method to establish the amount to which the provincial benefit and direct benefit ratios would be applied? If not, why not? Please describe any other methods considered.
    i. Tally the total number of FIT and Microfit projects and the total corresponding capacities in MW for each of the two categories that are in-service at the present time, as well as the expected in service numbers and capacities in MW for the two noted categories by 2018. Take into account the most recent directives to the OPA from the Government

regarding maximum allowable amounts for large Fit projects above 500 kW, and the Request for Proposal approach now being used.

ii. Calculate a split based on the total forecast capacity of FIT and MicroFit generators in 2018, as calculated in i) above, divided by the forecast of the total normal capacity of Veridian distribution feeders forecasted for 2018.

5.1-Staff-23

Ref: E2-T2-S5 pp. 3-4

Veridian is proposing to conduct a micro-grid project at its head-office location involving interconnection of a renewable generator with traditional distribution grid, an energy storage device, and a load consisting of electric vehicle charging infrastructure. Basic criteria for a micro-grid pilot project is that it can: (1) operate connected to the Grid; (2) operate isolated off grid and (3) can selectively switch between (1) and (2) without power quality issues. In addition, it needs to have multiple fuel sources including renewable generation when isolated.

a) Please provide a description of the proposed project, outlining the basic design of the proposed project including:
    - the size and types of the loads within the building;
    - the size of the other generation sources within the building;
    - the size and type of the storage system; and
    - the size and type of the electric vehicle charging infrastructure.
b) Please describe how the proposed design would meet the noted criteria.
c) Please indicate whether or not Veridian had, is, or is planning to assess the vulnerabilities of its present system in areas including, but not limited to voltage regulation, system stability on feeders and substations as a result of penetration of renewable generation and charging battery loads for electric vehicles, and further how any learning from the proposed project would address those identified issues.
d) Did Veridian conduct or commission an assessment of the present penetration of battery charging systems presently connected to its system as well as a forecast of same over the next 5 years?

5.1-Staff-24

Ref: (i) E-2/T-2/S-5/pp. 3-4 (ii) Report of the Board- Framework for Determining the Direct Benefits Accruing to Consumers of a Distributor under Ontario Regulation 330/09 June 10, 2010 (EB-2009-0349)/Section 1.1/p. 3/2nd bullet (iii) The Board's Distribution System Code ("DSC"), June 13, 2013/Section 3.3.2, pp. 52-53 (iv) Report of the Board "Supplemental Report on Smart Grid", February 11, 2013"/p. 15 (v) Article on PowerStream Micro-Grid

Veridian per reference (i) is proposing to conduct a micro-grid project at its head-office location involving interconnection of a renewable generator with traditional distribution grid, an energy storage device, and a load consisting of electric vehicle charging infrastructure. Veridian forecasts capital expenditures of $300,000 in 2015 and

$165,000 in 2016 and the ongoing O&M costs of $50,000 commencing in 2016. Veridian views the $465,000 in capital expenditures is an eligible investment for Provincial Rate Protection.

Per reference (ii), the Board Report dealing with Regulation 330/09, under Section 1.1, Page 3, second bullet, states:

> The Green Energy Act focused on investments related to both the smart grid and the connection of renewable energy generation. However, O. Reg. 330/09 applies to only investments related to the connection of renewable energy generation in relation to being "eligible investments". As a result, unless a certain smart grid related investment has been identified in the DSC as a Renewable Enabling Improvement, such investments are not "eligible investments" for the purpose of the Act and the regulation.

Per reference (iii), the DSC in section 3.3.2 classifies certain initiatives by a distributor as "Renewable Enabling Improvements", and states that:

> *3.3.2 Renewable enabling improvements to the main distribution system to accommodate the connection of renewable energy generation facilities are limited to the following:*
>
> *(a) modifications to, or the addition of, electrical protection equipment;*
> *(b) modifications to, or the addition of, voltage regulating transformer controls or station controls;*
> *(c) the provision of protection against islanding (transfer trip or equivalent);*
> *(d) bidirectional reclosers;*
> *(e) tap-changer controls or relays;*
> *(f) replacing breaker protection relays;*
> *(g) Supervisory Control and Data Acquisition system design, construction and connection;*
> *(h) any other modifications or additions to allow for and accommodate 2-way electrical flows or reverse flows; and*
> *(i) communication systems to facilitate the connection of renewable energy generation facilities.*

Per reference (iv) the Board's Report on the Smart Grid at page 15 states:

> Following Board approval, some distributors have already undertaken pilot and demonstration projects related to adaptive infrastructure, including electric vehicle charging, home energy management applications, and electricity storage options. The Board expects that distributors will report on the outcomes and learning from these pilots for the benefit all regulated entities. This expectation is consistent with the Board's policies (e.g., Filing Requirements: Distribution System Plans), which emphasize the need to avoid duplication of efforts in testing out and learning about new technologies.

Reference (v) is an article highlighting the Power Stream Micro-Grid project, and is attached to this interrogatory for convenience.

a) Given the direction in reference (ii) regarding what is allowable as qualifying investment for provincial benefits, and reference (iii) where the DSC lists the investments that are classed as “Renewable Enabling Improvements”, please provide the basis that Veridian is relying on for its view that the proposed micro-grid project can qualify for the provincial benefit.
b) Given the direction of the Board in reference (iv), please indicate how Veridian undertook “to avoid duplication of efforts” with other distributors when considering its proposed pilot project investment. If Veridian took steps to avoid duplication of efforts, please provide a summary of its findings, and if not please indicate what is Veridian’s proposed plan to cover this aspect. Please also explain the unique contribution the proposed investment will make to advancing industry knowledge in this technology area.
c) In connecting the Renewable Generator, please provide a cost estimate, if any, that would be qualified as Renewable Enabling using the list of allowable items listed in the DSC in section 3.3.2, noted in the third reference.
d) Please refer to the attached article titled “PowerStream shows future off-grid solution for energy consumers”, by IGEN Technologies, dated December 4, 2013. Given that there is a Micro-Grid project in place at PowerStream, please provide a detailed assessment of the similarities and differences between Veridian’s Micro-grid proposal and that of PowerStream’s Micro-Grid as well as the additional learning that Veridian believes its Micro-grid project would provide.

5.1-Staff-25

<u>Ref: (i) E9-T2-S1 p.1 Table 1& p.3 Table 2 (ii) E9-T1-S1 pp. 10-12 (iii) E2-T3-S8 Attachment 4 ”Reliability in South Ajax –Overview of Projects” (iv) Filing Requirements: Distribution System Plans – Filing Under Deemed Conditions of Licence, March 25, 2010, Revised May 17, 2012 (EB-2009-0397)</u>

At reference (i) Veridian proposes the disposition of the following amounts in Account 1535 – Smart Grid OM&A Deferral:

- Veridian Main $245,388
- Veridian Gravenhurst $13,460

At reference (ii) under the section titled “1535 Smart Grid OM&A Deferral Account”, there are two subsections:

- Smart Grid Studies and Planning Exercises - describing six items listed below:
    - Veridian Distribution System Review;
    - S&C Intelliteam Review;
    - Utilidata AdaptiVolt;
    - Better Place / Durham Strategic Energy Alliance Electric Vehicle Charging;
    - Tollgrade LightHouse Sensor Management System;
    - Siemens Durham Region Smart Grid Project.
- Smart Grid Education and Training – lists a number of smart grid education and training sessions were attended during the period from 2010 to 2012:

- Schweitzer Electronic Relay Protection and Coordination Training
- Attended Distributech Conference
- Attended Schneider Electric LINK SCADA Conference
- Attended Canada – Brazil Smart Grid Match-Making Mission Conference organized by Ryerson University and the International Science and Technology Partnerships Canada
- Participate in the E8 Smart Grid Forum led by Toronto Hydro involving the 8 largest Ontario utilities
- Participate in various smart grid related sessions sponsored by the IESO, OEB and EDA.

At reference (iii), Veridian describes the long standing reliability degradation in South Ajax and approaches to improve it.

At reference (iv) the Board outlined the criteria for Smart Grid development activities, Smart Grid Demonstration Projects, Smart Grid Planning Exercises, and Smart Grid Education Training:

- Page 20, Re Smart Grid development activities: the Board emphasized that Distributors should avoid duplication of similar work others have undertaken including those in the United States, and that research and development activities related to smart grid development were not expected;
- Pages 21-22, Re Smart Grid Demonstration Projects, six bullets prescribe the information required as evidence for each such project.
- At page 22, Re Smart Grid Studies and Planning Exercises, three bullets describe the information requirements for each study or exercise; and
- At page 22, Re Smart Grid Education and Training, two bullets specify the information requirement to be filed by the applicant.

a) Using the information in references (i) and (ii), please create a table showing:
   - in the first column, listing of the six "Smart Grid Studies and Planning Exercises", and the six "Smart Grid Education and Training"; and
   - in the second column against each of the twelve items identified in the above bullet, the allocated amounts of the proposed disposition in the Test Year of $245,388 and $13,360 re the Smart Grid OM&A Deferral Account.
     Please also show that the summation of the individual allocations would sum up to the total of $258,848 ($245,388+$13,360).
b) Using the information in reference (ii) re: the six initiatives (demonstration projects and planning exercises) and the prescriptive requirements outlined in the fourth reference, please provide:
   - for each of the six Smart Grid initiatives, please classify either as a "Smart Grid Demonstration Project" or a "Smart Grid Study and Planning Exercise";
   - After classifying the six Smart Grid initiatives as outlined in the bullet above, please provide for each, the detailed information according to the classification, as prescribed in the fourth reference (and also summarized in the preamble above).

c) Please provide for each of the six items listed in reference (ii) under “Smart Grid Education and Training”, the prescriptive information as shown in the fourth reference (see page 22, two bullets under the section titled “3. Smart Grid Education and Training”).
d) Given that reference (ii) deals with a long standing issue with Reliability in South Ajax, please comment on the view that the Smart Grid Project titled “S&C Intelliteam” (see page 11), should be classed as sustainment capital (now Renewal Capital).
e) Given the Board’s previous direction, see reference iv p. 20, that research and development activities related to smart grid development were not expected, please comment on how the approval of the following projects would be consistent with the Board’s policy at the time that the costs were incurred:
    - Utilidata AdaptiVolt;
    - Better Place / Durham Strategic Energy Alliance Electric Vehicle Charging;
    - Tollgrade LightHouse Sensor Management System;
    - Siemens Durham Region Smart Grid Project.

5.1-Staff-26

Ref:(i) E9-T2-S1 p. 1 Table 1& p.3 Table 2 (ii) E9-T1-S1 pp. 9-10 (iii) Report of the Board- Framework for Determining the Direct Benefits Accruing to Consumers of a Distributor under Ontario Regulation 330/09 – June 10, 2010 (EB-2009-0349) Section 1.1 p. 3

At reference (i) Veridian proposes to dispose the following amounts related to Renewable Generation:

- Table 1 for Main:

1531 – Renewable Generation Connection Capital	$ 4,972
1532 – Renewable Generation Connection OM&A	$39,349

- Table 2 for Gravenhurst:

1531 – Renewable Generation Connection Capital	$ 273
1532 – Renewable Generation Connection OM&A	$2,158

At reference (ii) deferral accounts 1531 and 1532 are described as follows:

> *1531 Renewable Connection Capital Deferral Account*
> This account was established by the Board […] is used to record the capital costs associated with expansions to connect renewable generation facilities and renewable enabling improvements. This account is also used to record the capital cost of changes to Veridian’s Customer Information System to enable the automated settlement of Feed-in Tariff (FIT) or microFIT contracts. This account will not continue on a go forward basis.
>
> *1532 Renewable connection OM&A Deferral Account*

> This account was established by the Board […]is used to record the incremental operating, maintenance, administration and amortization expenses directly related to expansions to connect renewable generation facilities and renewable enabling improvements as defined in the Distribution System Code. This account is also used to record expenses associated with preparing a GEA Plan and changes to Veridian's Customer Information System to enable the automated settlement of FIT and microFIT contracts. This account will not continue on a go forward basis. During 2010, a Grid Operations Engineer was hired by Veridian to provide a resource with expertise in the area of Renewable Connections.

At reference (iii) the first bullet states:

> "Eligible investment" costs, as set out in O. Reg. 330/09 and section 79.1 (5) of the Act, are not limited to only the initial capital investment costs but also includes the up-front OM&A costs necessary for the purpose of "enabling the connection of a qualifying generation facility". However, given that section 79.1 focuses solely on the initial investment, ongoing OM&A costs that are incurred by the distributor after the investment has been made will not be eligible for provincial recovery.

a) Please clarify whether or not the salary of the engineer, or a portion thereof is included in the "1532 – Renewable Generation Connection OM&A".
b) If the answer to a) is yes, please indicate how much of the salary is included in the account.
c) Please confirm that the amounts in both accounts i.e., the 1531 and 1532, (once adjusted by deducting, if any, ongoing OM&A amount per the third reference), would be eligible investments for the allocation between the provincial ratepayers and the Veridian ratepayers.

5.1-Staff-27

<u>Ref: E2-T2-S5 p.5 Table 2 and E2-T3-S10 (Appendix 2-FB)</u>

Different amounts for 2014 to 2018 for Provincial Rate Protection for Renewable Enabling Improvement investments are shown in Table 2 versus Appendix 2-FB.

Please explain why the amounts are not the same.

6-Financial Performance

6.1 Do the applicant's proposed rates allow it to meet its obligations to its customers while maintaining its financial viability?

6.1-Staff-28

Ref: E6A-T1-S1 p 1-11 & attachment 1

Veridian notes that it is proposing to undertake capital additions in 2014 at approximately three times the level of amortization and that rates set on the mid-2014 value of rate base will not reflect the level of rate base, in place and approved by the Board at the start of the ensuing four year IRM period commencing January 1, 2015. Veridian also notes that those rates would not permit Veridian an opportunity to earn the Board approved rate of return during the IRM period.

Veridian proposes that the Board adopt a modified approach to establishing Veridian's rates in the 2014 Test Year that will result in: (i) the 2014 rate base being the same as if the half-year rule were applied; and (ii) Veridian's rates being approved in this proceeding at levels that will allow Veridian to earn a fair rate of return on the rate base approved in the 2014 proceeding during the subsequent IRM period.

a) Please elaborate on how Veridian's customers will be impacted by this modified approach. Were Veridian's customers consulted and/or informed of this modified approach?
b) Please elaborate whether this modified approach negatively or positively impacts the level of Veridian's business and/or financial risk.
c) Did Veridian consider an alternative solution within the 2014 COS framework, say the establishment of a rate rider which would be in place during the IRM term which would supply the same relief? If not, why not.
d) Please identify, including the evaluation/assessment, of the alternative approaches that Veridian considered to deal with its stated concern?
    i. If the considered alternatives did not include IRM-ICM and/or Customer IR, please explain why either approach was not investigated and/or pursued?

7- Revenue Requirement

7.1 Is the proposed Test year rate base including the working capital allowance reasonable?

7.1-Staff-29

Ref: E2-T1-S4 Attachment 3/ Elenchus Report-Working Capital Requirement

a) The Report at page 2 states that:

> "When a service is provided to a company or is provided by the company over a period of time, the service is deemed to have been provided or received evenly over the midpoint of the period, unless specific information regarding the provision or receipt of the service is available. If both the service start ("A") and end date ("B") are known, the midpoint of a service period can be calculated as follows: Mid-Point = [(B)-(A) +1]/2".

At page 3 the Report states that “The billing lag was derived by querying the billing system database for June 2012 by customer class for ‘Read date and Bill date’. The difference between those dates was determined.”

i. Was the difference used, or was the difference plus one day used?

b) The Report states at page 3 that “One day was added for the processing time for the billing contractor to process the bill and send it to the customer.”
   i. Does this mean that period used to calculate the billing lag is the difference between the dates plus 2?

c) At page 8 of the Report, the calculation of the lead (lag) days for HST is presented. The calculations are based on expenses and revenues that may vary by purchase levels and sales levels throughout the year.
   i. For the following items, were the lead (lag) days calculated on all actual bills and invoices throughout the year, or a sample of actuals bills and invoices from each month of the year?
      - Revenues from all customers
      - Revenues from other sources
      - Expenses from IESO
      - Expenses from Hydro One
      - OM&A expenses.
   ii. If sampling was used, please elaborate on the methodology
   iii. If neither actual bills and invoices for the year nor sampling of actuals were used, please describe the methodology that was used.

7.1-Staff-30

Ref: E2-T1-S4 Attachment 3/ Elenchus Report-Working Capital Requirement

Working Capital Study prepared by Elenchus Meters notes that residential, residential seasonal and unmetered scattered load customers are read bi-monthly while all remaining customer classes’ meters are read monthly. Also some General Service below 50 kW customers’ meters are currently read bi-monthly but Veridian expects that as of 2014 all General Service customers’ meters will be read monthly, so the meter reading frequency for these customers has been changed from bi-monthly to monthly for purposes of the study. The Report supports a 13.8% Working Capital Allowance.

a) Please elaborate on any plans Veridian has to change any or all of the remaining bi-monthly reads to monthly reads over the next 5 years.
b) Please provide an estimate of the Working Capital Allowance if Residential and Residential Seasonal customers were billed monthly.

7.3 Are the proposed levels of taxes appropriate?

7.3-Staff-31

Ref: E4-T7-S3 2012 T2 Corporate Tax Return & 2014 Test Year Income Tax _ PILs Workform_V2 0-082013_xlms_20131031.xlsm

Per Schedule 1 of the tax return, Veridian deducted $343,441 for Pension Contributions Capitalized for Accounting, $84,852 for P&OPEB Capitalized for Accounting and $483,960 for Assets Capitalized for Accounting. However in the 2014 PILs Workform, S. Taxable Income Test Year, Veridian has only deducted $400,000 for Assets Capitalized for Accounting. If this is the case, it appears that Veridian's 2014 Taxable Income may be overstated as a result.

c) Please explain why Veridian has not deducted amounts for Pension Contributions Capitalized for Accounting and P&OPEB Capitalized for Accounting.
d) Please estimate the amounts that should be deducted from the 2014 Taxable Income for Pension Contributions Capitalized for Accounting and P&OPEB Capitalized for Accounting. Please update the 2014 PILs provision, PILs Workform and associated evidence.

7.5 Are the proposed capital structure, rate of return on equity and short and long term debt costs appropriate?

7.5-Staff-32

Ref:E5-T1-S1 pp.4-5

Veridian indicates that the 2010 Settlement Agreement establishes the long term debt rate (for a $43,588,000 promissory note issued on November 9, 2009) held by Veridian's shareholders.

> *1. Term. The term of each promissory note shall be 30 years, subject to the limited early redemption or repayment rights set forth below.*
> *2. Interest. The interest rate shall be as follows:*
>
> > *a. For the period from May 1, 2010 to and including December 31, 2014, 5.57%, being the Board's deemed long-term debt rate, less 30 basis points*
> > *b. For each five year period after that date, the Board's deemed long-term debt rate set closest in time to the start of the period, less the same fixed 30 basis points. By way of example, if on February 15, 2015 the Board establishes a deemed long term-debt rate of 7.00%, for regulatory purposes, the rate on the notes commencing January 1, 2015 will be 6.7%, and will be fixed at that rate until December 31, 2019.*
> > *Notwithstanding the implementation date of the updated interest rate as stated in clause 2(a) of this proposed settlement agreement, the effective interest rate used to calculate Veridian's Cost of Debt in the 2010 test year for the purpose of setting distribution rates shall be 5.57%.*

Veridian notes that there is also another 2009 promissory note, held by Veridian Corporation in the amount of $17,850,000, which was also subject to the 2010 Settlement Agreement provisions.

a) Is Veridian aware that the deemed Long Term Debt rate for 2014 COS purposes issued by the Board on November 25, 2013 is 4.88%?
b) The Settlement Agreement requires that re-setting of the deemed rate occur based on 5 year periods with the first 5 year period ending on December 31, 2014. Was it anticipated at the time of the settlement that the next COS application would be for for 2015 rather than 2014?
c) Please provide an explanation of why it would be reasonable that the long term debt rates for 2014 and carried through the subsequent IRM term would be based on a Board deemed rate established in 2010?

7.6 *Is the proposed forecast of other revenues including those from specific service charges appropriate?*

7.6-Staff-33

<u>Ref: E3-T8-S2</u>

Please explain why forecasted revenues from Specific Service Charges decreases from $1,928,360 in 2013 to $1,789,404 in 2014. Please include in your explanation a completed table 2 reflecting the 2013 forecast.

7.7 Has the proposed revenue requirement been accurately determined from the operating, depreciation and tax (PILs) expenses and return on capital, less other revenues?

7.7-Staff-34

<u>Ref: E1-T4-S17</u>

Veridian states that it has not deviated from the Ontario Energy Board's Minimum Filing Requirements and has not identified any changes in methodologies used in previous applications.

Please explain why Veridian does not consider the modified approach described in Exhibit 6A as a "change in methodologies used in previous applications."

7.7-Staff-35

<u>Ref: E6-T1-S1</u>

Upon completing all interrogatories from Board staff and intervenors, please provide an updated RRWF in working Microsoft Excel format with any corrections or adjustments that the Applicant wishes to make to the amounts in the previous version of the RRWF included in the middle column. Please include documentation of the corrections and adjustments, such as a reference to an interrogatory response or an explanatory note.

7.7-Staff-36

Ref: Appendix 2-W

Upon completing all interrogatories from Board staff and intervenors, please provide an updated Appendix 2-W for all classes at the typical consumption / demand levels (e.g. 800 kWh for residential, 2,000 kWh for GS<50, etc.).

8-Load Forecast, Cost allocation and Rate Design

8.1 Is the proposed load forecast, including billing determinants an appropriate reflection of the energy and demand requirements of the applicant?

8.1-Staff-37

E3-T2-S2 attachment 1

Please explain why Veridian uses 5 years of actuals for Main to calculate the geometric mean to forecast 2014 residential customers while it uses 7 years for Gravenhurst?

a) Please calculate the MAIN 2014 forecast of residential customers using 7 years of actuals.
b) Please provide an estimate of the additional distribution base revenues that would be generated if the 7 year actuals is used.

8.5 Is the proposed forecast of other regulated rates and charges including the proposed Retail Transmission Service Rates appropriate?

8.5-Staff-38

Ref: E3-T4-S1

Do the forecasted transformer allowance credits for 2013 and 2014 take the closure of the Large Use customer into account? If so, please identify the step in the calculation where this is reflected.

8.5-Staff-39

Ref: E8-T3-S1

On January 9, 2014, the Board issued a Rate Order for the 2014 Uniform Transmission Rates and on December 19, 2013, the Board issued a Rate Order for Hydro One Distribution's Sub-transmission rates.

Please provide an updated RTSR Adjustment Workform in working Microsoft Excel format reflecting the new UTR and Sub-Transmission Rates, as applicable, including any other corrections or adjustments that the Applicant wishes to make to the previous version of the Workform. Please include documentation of the corrections and adjustments, such as a reference to an interrogatory response or an explanatory note.

9-Accounting

9.1 Are the proposed deferral accounts, both new and existing, account balances, allocation methodology, disposition periods and related rate riders appropriate?

9.1-Staff-40

Ref: E9-T2-S1 Tables 1and 2 & E 9-T4-S1 pp.1-6 Attachments 1 and 2

Veridian has requested the disposition of its LRAMVA – Account 1568, totaling $297,587 including $9,191 in carrying charges until April 30, 2014. Veridian is requesting the disposition of the lost revenues related to its 2011 CDM savings in both 2011 and 2012 and its 2012 CDM savings in 2012 through volumetric rate riders over a one-year period.

a) Please reconcile the total LRAMVA amount of $297,587 with the 1568-LRAMVA totals found in Table 1 (Veridian – Main $289,178) and Table 2 (Veridian – Gravenhurst $15,862), total of $305,040, of the “Overview of Proposed Disposition” Section.
b) Please discuss and provide more detail on what Veridian means when it says that it “is applying for partial disposition of Account 1568 – LRAMVA” in the LRAMVA Overview Section. In your response, please indicate if there are any eligible lost revenues Veridian is not seeking to dispose of at this time and the rationale for this request.
c) Please discuss the rationale and appropriateness of including the Residential New Construction and High Performance New Construction savings results in the Residential rate class when calculating the LRAMVA amounts.
d) Please confirm that Veridian applied the energy savings (kWh) results from the New Construction initiatives to the applicable rates to determine the LRAMVA amount. Please discuss the appropriateness for calculating its lost revenues in this manner as opposed to attributing the New Construction savings to its larger use rate group and using the peak demand (kW) savings to determine the LRAMVA amount.
e) Please provide an updated LRAMVA calculation with the New Construction Initiatives’ peak demand (kW) savings attributed to the appropriate larger rate class (either GS>50 kW or GS>5,000 kW), as opposed to the Residential rate class.
f) Please discuss Veridian’s rationale for not including any peak demand (kW) savings from its Demand Response 3 program in both 2011 and 2012.
g) Please discuss how Veridian has allocated its 2012 net incremental peak demand (kW) savings from its Business Program - Retrofit initiative (1,213 kW) across its rate classes. It appears to Board staff that only 1,095 kW of a potential 1.213 kW have been used.

9.1-Staff-41

Ref: E9-T4-S1

Please provide a table that lists all the appropriate OPA CDM Initiatives that produced net CDM savings which were used in the LRAMVA calculations. For each rate class, please list all relevant CDM initiatives in the applicable year and provide the subsequent net CDM savings for each. An example is provided below:

Residential	**Net kWh**	**Net kW**
Initiative 1		
Initiative 2		
Initiative 3		
Total		
GS<50	**Net kWh**	**Net kW**
Initiative 1		
Initiative 2		
Initiative 3		
Total		
GS>50	**Net kWh**	**Net kW**
Initiative 1		
Initiative 2		
Initiative 3		
Total		

9.1-Staff-42

Ref: E9-T1-S1 pp. 12-13 & E9- T2-S1 attachment 1 (2014 EDDVAR Continuity Schedule CoS_v2 2 Veridian Main xlsm_20131031.xls) & E9-T2-S1 attachment 2 2014_EDDVAR_Continuity_Schedule_CoS_v2 2 Gravenhurst _xlsm_20131031.xlsm) & E1-T4-S15

Veridian is requesting clearance of Account 2425, Other Deferred Credits, Test Year 2010 Building Project. As per E 9-T1-S1, the principal balance as at December 31, 2012 is a credit balance of $94,502. Veridian is applying to clear a forecasted principal and carrying charge credit balance of $129,841 as at December 31, 2013, with $123,090 being allocated to Veridian Main and $6,752 being allocated to Gravenhurst, as per the Veridian Main and Gravenhurst EDDVAR continuity schedules.

a) Please update the principal balance in Account 2425 as at December 31, 2013 with the actual balance incurred (or best estimate) and the associated carrying charges forecasted to April 30, 2014. Please update all necessary evidence as appropriate.

b) Please provide supporting documentation for the balance calculated in Account 2425 as at December 31, 2013. Please provide a breakdown of:
    a. The asymmetric revenue requirement variances that would result if the actual capital costs were less than the forecast capital costs, with the reduction in revenue requirement credited to the variance account
    b. The decrease in revenue requirement for the 2010 Test Year and the change (increase or decrease) in the revenue requirement for each of the subsequent IRM years, due to a change of in-service date of the Ajax Building Expansion Project from 2010 or beyond. The annual increase or decrease in revenue requirement was to be recorded in the variance account.
c) Please fill out a description of the balance in Account 2425 as at December 31, 2013 and the associated schedules (Appendix L, Ajax Building Expansion Project Variance Account Example – Annual Entries to Variance Account and YE Variance Account Balances, Working Capital Allowance, Amortization Calculations, OM&A Calculations), similar to Appendix B to the EB-2009-0140 Accounting Order included in Exh1/Tab4/Sch15. Please illustrate the baseline scenario and the variances from this baseline by year in the supporting documentation.

9.1-Staff-43

<u>Ref: E9-T2-S2</u>

Veridian indicates that it is filing for disposition of Account 1595 -2008 but not Account 1595 GA - 2008. However, per the EB-2009-0140 Tariff Sheet, the Rate Rider for Deferral/Variance Account Disposition is effective until April 30, 2012 and the Rate Rider for Global Adjustment Sub-Account Disposition (Applicable only for Non-RPP Customers) is effective until April 30, 2012. In addition, it appears that Veridian has two sub-accounts for Account 1595 - 2008 – one to hold the 2010 rate year Global Adjustment rate rider and the other to hold the 2010 rate year Deferral and Variance Account rate rider.

Per the 2014_EDDVAR_Continuity_Schedule issued by the Board, Sheet 2. 2013 Continuity Schedule, Footnote 7 states:

> Include Account 1595 as part of Group 1 accounts (lines 31, 32, 33 and 34) for review and disposition if the recovery (or refund) period has been completed.

a) Please explain if Veridian’s Account 1595 -2008 describes account balances that were cleared at a balance sheet date of December 31, 2008 in the 2010 rate year. Please confirm that the Board generally refers to this class of balances as Account 1595 (2010), according to the year the balances were cleared in rates. If this is the case, please re-label the appropriate evidence. If this is not the case, please explain.
b) Please explain if Veridian’s Account 1595 -2010 describes account balances that were cleared at a balance sheet date of December 31, 2010 in the 2012 rate year. Please confirm that the Board generally refers this class of balances as Account 1595 (2012), according to the year the balances were cleared in rates. If this is the case, please re-label the appropriate evidence. If this is not the case, please explain.

c) Please explain why Veridian has two sub-accounts for Account 1595 -2008. Please provide the direction from the Board that directed Veridian to use two sub-accounts for Account 1595- 2008 i.e. direction to record the Rate Rider for Global Adjustment and associated disposed variance account balance in a separate sub-account from the other Deferral/Variance Account Disposition Rate Rider and associated deferral/variance account disposed balances. Please combine the two sub-accounts of Account 1595 and file an updated rate design.
d) Please indicate why Veridian has not included the balance in Account 1595 - 2008 GA for clearance in this proceeding, for both Veridian Main and Gravenhurst. Please update the appropriate evidence and rate design with a balance in the accounts in the event the Board decides to dispose them.
e) Based on the rate design when the balances were cleared in the 2010 rate year, it is probable that there should be a non-zero residual principal balance in Account 1595-2008 for Veridian Main. Please explain why the residual principal balance in Account 1595 -2008 is zero, and update the rate design and evidence where appropriate with the correct balance.
f) Please explain why there are zero carrying charges forecasted on Account 1595-2008 for Veridian Main from January 1, 2013 to April 30, 2014. Please file an updated balance in the account and associated evidence.

9.1-Staff-44

Ref: E9-T2-S1

Veridian has requested a new variance account to track the variance between Veridian's revenue requirement required to support the portion of the investments that are eligible for the provincial rate protection, and the actual Provincial Rate Protection amounts collected from the IESO.

In the pre-filed evidence, Veridian proposed that the new variance account would meet the eligibility criteria of causation, materiality and prudence as set out in the Filing Requirements. The forecasted capital investments and operating expenses are outside the base upon which Veridian is seeking 2014 base revenue requirement and base distribution rates. Veridian proposes that the criteria of materiality and prudence are met through the Board's own proposal for the funding mechanism of these renewable enabling investments and costs as outlined in the Filing Requirements and underpinned by O. Reg 330/09.

Veridian also filed a proposed Accounting Order. However Veridian did not provide journal entries or the manner in which the applicant proposes to dispose of the account, contrary to page 56 of the 2014 Filing Requirements.

a) Please provide estimated balances that would be recorded in the account.
b) Please provide details on how the revenue requirement part of the variance account is to be calculated and explain all assumptions used in the calculation process.

c) Please describe how the underlying capital and OM&A amounts would be tracked and calculated.
d) Please file an updated Accounting Order in accordance with page 55 and 56 of the 2014 Filing Requirements, including the journal entries that would be made to record the balances in the account and details on how the account would be disposed in a future proceeding.

9.1-Staff-45

Ref: E9-T1-S1 Table 4 & E9-T3-S3

Table 4 shows the Allocation of Common Accounts between Veridian and Gravenhurst. However, Account 1576 is not included in this table. Per E9-T3-S3 different rate design is proposed for Account 1576.

a) Please explain the current rate design for Account 1576 per E9-T3-S3.
b) Please explain why the rate design for Account 1576 is different than the other “common” accounts (e.g. Account 1518, Account 1548) per Table 4.
c) Please update the rate design for Account 1576 to reflect the rate design used for the other “common” accounts.

**Attachment
to
Interrogatory 5.1-Staff-24**

IGEN Technologies

PowerStream Micro-Grid

Details

Created: 04 December 2013

- http://blog.powerstream.ca/2013/11/powerstream-shows-future-off-grid-solution-energy-consumers/

PowerStream shows future off-grid solution for energy consumers

Initial phase of Micro Grid demonstration project now operational at utility's head office

VAUGHAN, ON, November 26, 2013 – PowerStream is providing a glimpse of how energy consumers may be able to go off-grid in the future through a **Micro Grid demonstration project** the utility officially unveiled today at the company's head office.
The event, attended by key stakeholders, partners, industry associates and the media, also featured a **video** which explained the Micro Grid concept and provided insights on PowerStream's demonstration project.
Micro Grids work in the same way as large-scale electricity delivery systems or a provincial grid but instead of delivering electricity to hundreds of thousands or millions of customers at a time they can be scaled down and customized to meet the needs of communities or even just one customer. Micro Grids rely on a mix of clean and renewable sources of generation and can operate independently or feed electricity back to the provincial grid.

As one of the first utilities of its size in North America to initiate a proof-of-concept trial involving this technology, PowerStream is using its demonstration project to evaluate a Micro Grid's performance while it is connected to, and also disconnected from, the provincial grid.

PowerStream's Micro Grid demonstration project marks the next phase in the company's efforts to support Smart Grid development at the provincial level and leverage innovative 'smart' technologies in Ontario's electricity sector.

The company believes that Micro Grids will be an integral part of Ontario's energy future, not only changing the way electricity is distributed, but also in providing an innovative solution to the challenge of asset renewal in large-scale electricity delivery systems and demonstrating how renewable energy can effectively help to address the growing demand for electricity.

QUOTES

- "Micro Grid technology is an innovative way to offer Ontario consumers choices about how they generate and consume energy," said Tom Chapman, Director, Transmission and Distribution Policy for the **Ministry of Energy.** "Together with Smart Grid technology, Micro Grid development can help keep Ontario's energy flowing, bringing it to the businesses and consumers who need it, while providing new jobs and opportunities to create a sustainable future for energy in Ontario."

- "We believe that Micro Grid technology will help provide our customers with additional safe, sustainable and reliable choices for meeting their energy needs in the future." said Frank Scarpitti, PowerStream Board Chair and Mayor of the City of Markham. "This is why PowerStream is on the forefront of testing the use of this technology."

BACKGROUND

- PowerStream is implementing its Micro Grid in two phases, In phase one, which is currently in place, the company is drawing electricity from several sources – a solar array, a wind turbine, natural-gas generator, solar-assisted carport charging station as well as Lead Acid, Lithium Ion and Sodium Nickel Chloride batteries – in order to provide electricity for loads at its head office building such as lighting, air conditioning and refrigeration as well as to provide charging its fleet of electric vehicles.
- Other corporate partners involved in PowerStream's Micro Grid demonstration project include Enbridge, Enviro-Energy Technologies, General Electric, Navigant, Rosewater Energy, renewz sustainable solutions and SMA.

ABOUT POWERSTREAM

PowerStream is a community-owned energy company that provides power and related services to more than 360,000 customers residing or owning a business in communities located immediately north of Toronto and in Central Ontario. It is jointly owned by the Cities of Barrie, Markham and Vaughan.