



**VERIDIAN**  
CONNECTIONS

November 21, 2006

**BY EMAIL AND COURIER**

Ms. Kirsten Walli  
Board Secretary  
Ontario Energy Board  
P.O. Box 2319  
2300 Yonge Street, 26th Floor  
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: Request for Approval  
Regulated Price Plan Time of Use Pilot Project**

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In accordance with the provisions of section 3.9 of the Ontario Energy Board's Standard Supply Service Code for Electricity Distributors, Veridian Connections Inc. ("Veridian") hereby requests approval to proceed with a regulated price plan (RPP) time-of-use pilot project as described in the attached proposal.

We believe this pilot project offers a unique opportunity to assess the response of mid-size to large general service customers (> 200 kW peak demand) to RPP time-of-use rates. It would also provide Veridian a means of live-testing its TOU settlement processes on a limited scale, in anticipation of broader TOU rate implementation in the near future. All pilot project costs would be funded through Veridian's approved third-tranche Conservation and Demand Management budget.

We are anxious to proceed with this pilot project as soon as possible so that the affected customers have adequate time to respond to the TOU price signals in advance of summer 2007. This will help mitigate any potential supply constraints during a time when system peak demand records are generally established. Therefore, we respectfully request that the Board process this application as expeditiously as possible.

If you have any questions, please do not hesitate to contact me at 905-427-9870, extension 2202, or by email at [garmstrong@veridian.on.ca](mailto:garmstrong@veridian.on.ca).

Yours truly,

  
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Manager of Regulatory Affairs and Key Projects

Enc.

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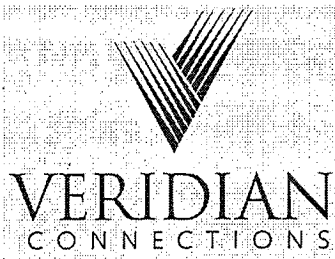
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## **Regulated Price Plan TOU Pilot Project for General Service Customers > 200 kW**

Veridian Connections Inc. (Veridian) is planning to undertake a pilot to determine the response of business customers with peak demand > 200 kW to Regulated Price Plan (RPP) Time-of-Use (TOU) rates. In combination with the introduction of TOU rates for this customer group, Veridian will also provide support to 1) increase participating customers' price-responsiveness and 2) facilitate customers' participation in demand response and dispatchable load programs that may be available from the Ontario Power Authority (OPA) and Independent Electricity System Operator (IESO). Increasing the price and demand responsiveness of this customer group is important to mitigate any supply constraints that could arise in Veridian's territory during the summer of 2007, depending on weather and local system conditions.

Information gleaned from this pilot will enable Veridian and other LDCs to expedite and enhance business customer response to RPP TOU rates when they are implemented more broadly, likely in 2007. The information will also support and inform the communication efforts of Veridian and other LDCs with designated customers who will not be eligible for RPP prices after April 1, 2008. The pilot provides a transitional path for these customers to the spot market pass through pricing they will be exposed to when they leave the RPP. Load shape information from participating customers will also help the Board to more accurately forecast the "residual" RPP load shape after designated customers leave the RPP in 2008.

Lastly, Veridian will gain valuable experience in providing TOU bills to its customers on a limited scale, in anticipation of broader implementation in the future. This last item is particularly relevant since Veridian has been approached by other LDCs that lack TOU billing capability, but will require such capability in the near future.

This pilot will be funded entirely from Veridian's third-tranche CDM funding. Given other CDM activities already undertaken and those currently being pursued by Veridian, the budget for the test is somewhat constrained. Accordingly, the scope of the pilot is limited to Veridian's designated customers with peak demand > 200 kW.

Veridian considered expanding the scope of the pilot to include all designated customers with peak demand > 50 kW, but this approach was rejected because 1) the most effective metering technology for these smaller business customers (likely some form of smart meter) has not been resolved yet, and 2) the number of eligible customers (and associated metering cost, regardless of meter type) for the larger pilot was beyond the available budget from Veridian's third-tranche CDM funding.

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## How this Pilot Addresses the OEB's Requirements

Veridian believes the proposed pilot is fully consistent with the OEB's requirements for TOU pilots. Specifically:

1. The pilot leverages Veridian's CIS and interval meter data management capabilities, which allows Veridian to offer TOU rates to participating customers at minimum incremental cost.
2. By focusing on medium-sized business customers, this pilot will complement the TOU pricing pilot the Board is currently undertaking jointly with Hydro Ottawa as well as Newmarket Hydro's TOU pricing pilot.
3. Navigant Consulting, who will support Veridian in this pilot, will undertake a quantitative analysis of the price and demand responsiveness of participating customers. To the degree possible given the different customer types, this analysis will be similar to the analysis Navigant Consulting is undertaking Newmarket Hydro's TOU pricing pilot, allowing a comparison of the elasticity of the different customer groups. The results of the Veridian pilot could also be extrapolated to similar customers in other LDCs.
4. Participation in the pilot will be voluntary; customers will be able to opt-out of participating in the pilot.
5. Veridian is committed to sharing the results of the pilot with the OEB, government and other LDCs.

## Pilot Objectives

The specific objectives of the proposed pilot are as follows:

1. Test the response of medium-sized designated business customers (with peak demand > 200 kW) to RPP TOU rates.
2. Compare the response of certain of the above group against their previous consumption patterns on the tiered RPP rates (NB – Veridian has hourly consumption data for the prior 12 months for more than half of the eligible customers).
3. Explore customer reaction to LDC efforts to reduce their consumption (conservation) and increase their price responsiveness (demand management) through education and seminars. Customers would also be encouraged to participate in any demand response programs offered by the Ontario Power Authority and Independent Electricity System Operator they are eligible for.
4. Estimate the customer elasticity of substitution of medium-sized business customers (with peak demand > 200 kW).

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## Test Structure and Design

Given the limited funds, this study will focus on customers with demand > 200 kW on TOU rates. There are 46 such customers in Veridian's territory. Given the small number of eligible customers, Veridian is not planning to break the eligible customer group into different cells or to offer specific subtreatments to certain customers.

Of the 46 eligible customers, Veridian has at least twelve months of hourly consumption data for 27 customers. This prior history will improve statistical confidence levels for the test results.

Note that although the eligible customer group is small, the analogous customer group in other LDCs is similarly small. Furthermore, Veridian will allow all eligible customers to participate, hence the pilot could ultimately represent a census (rather than just a random sample) of eligible customers.

## Proposed Approach

- The pilot will run for a minimum of nine months starting January 2, 2007 through the end of September 2007. This allows sufficient time for analysis and development of transitional plans for other similar designated customers in other LDCs who will have to leave the RPP on April 1, 2008.
- Following the pilot project all participating customers will be provided with the option of remaining on RPP TOU rates until such time that they leave the RPP.
- The demand response (DR) incentive for customers would depend on which, if any, demand response program offered by the OPA or IESO they participate in. For example, under the IESO's ELRP, the maximum incentive rate is 60 cents per kWh for reductions of four hours duration but such events are likely to be very infrequent. Customers can choose their rate under the OPA's Demand Response Program (DRP). The minimum rate as of October 2006 is 8 cents per kWh. As the rate chosen by the customer increases, the frequency and duration of events decreases, so customers have flexibility to choose an optimum rate given their unique circumstances and capabilities.

This approach of leveraging existing wholesale market DR programs will provide better understanding of the possible linkage between wholesale DR programs and retail customer DR. One possible outcome of this test is that it may be possible for any critical peak reward for retail customers to be partially or fully funded through a wholesale market DR program.

- Customers would be recruited with an opt-out provision (ie, customers would be told something along the lines of: *"You have been randomly selected to be on TOU rates as part of a test being undertaken by Veridian Connections. If you do not want to participate in this test, please let us know and we will exclude you from the test."*) This recruitment approach addresses a number of critical issues:

- There is a significant risk of self-selection bias under a strictly voluntary recruitment approach
- “Mandatory recruitment” to spot market pricing is essentially what will happen to this group of customers when they are no longer eligible for the RPP, expected to be April 1 2008.
- It reduces the recruiting period significantly, ensuring that the pilot is operational as soon as possible, and
- The pool of eligible customers is relatively small to accommodate a strictly voluntary approach, without compromising the total number of customers for whom both pre- and post-data is available.

### Test Activities and Responsibilities

<i>Activity</i>	<i>Veridian Connections</i>	<i>Navigant Consulting</i>	<i>Other (Who?)</i>
1. CIS modifications / settlement testing	✓		CIS Vendor (Harris Systems)
2. Recruit customers: • Introductory letter • Prepare customer service FAQs	✓	Support/ Input	
3. Install interval meters as required	✓		
4. Customer education • Site visit? • Seminar?	✓	Support/ Input	
5. CIS modifications / settlement testing	✓		CIS Vendor (Harris Systems)
6. Customer hotline	✓	Support/ Input	
7. Support in assessing conservation, energy efficiency and DR program participation opportunities	✓	Support/ Input	OPA and/or IESO
8. Ongoing data analysis	Input	✓	
9. Support in implementing conservation, energy efficiency and DR opportunities (including baseline calculations)	✓	Support/ Input	OPA, IESO and/or private sector firms
10. Closing survey (under consideration)	Input	Prepare and execute survey	Market research firm or post-secondary educational institution

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## Workback Schedule

A start date of January 23, 2007 is desirable to allow maximal coverage of the winter, shoulder and summer seasons with a pilot completion date of September 30, 2007. The following schedule reflects the January 23 target start date.

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<i>Key Activity</i>	<i>When (weeks from start)</i>	<i>Target Date</i>
Submit request for pilot to OEB	-8.5	24-Nov
Get missing customer contact details (eg, phone numbers)	-7	5-Dec
Collect hourly customer data and establish dataset	-6	12-Dec
Draft recruitment letters	-5	19-Dec
OEB approval of pilot	-4.5	22-Dec
Send recruitment letters	-3	2-Jan
Billing / baseline test	-3	2-Jan
Schedule customer education visits / sessions	-2	9-Jan
Set-up customer hotline	-1	16-Jan
<b>Launch / Go Live</b>		<b>23-Jan</b>

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## Summary

Veridian's proposed TOU pilot for business customers with peak demand > 200 kW will be fully funded from Veridian's third-tranche CDM funds. Veridian believes the proposed pilot is fully consistent with the OEB's requirements for TOU pilots. Specifically, the pilot, which will be based on voluntary customer participation, will:

- Leverage Veridian's CIS and interval meter data management capabilities at minimum incremental cost, and
- Complement the TOU pricing pilot the Board is currently undertaking jointly with Hydro Ottawa as well as Newmarket Hydro's TOU pricing pilot.

Veridian is committed to sharing the results of the pilot with the OEB, government and other LDCs, which will provide a number of important benefits including:

- Direct comparison of the elasticity of business customers with that of residential customers in Newmarket (since Navigant Consulting will be undertaking similar analysis for both pilots) and, to the degree that quantitative analysis is similar, with residential customers in Ottawa.
- Expediting and enhancing business customer response to RPP TOU rates when they are implemented more broadly.

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- Increasing the price and demand responsiveness of this customer group for the summer of 2007.
  - Informing the communication efforts of LDCs and others to designated customers who will not be eligible for RPP prices after April 1, 2008.
  - Increasing the accuracy of the OEB's RPP price forecast for the period after designated customers leave the RPP in 2008, based on a more accurate estimate of the "residual" RPP load shape.

Lastly, the pilot will provide valuable LDC experience in providing actual TOU bills on a limited basis and increase Ontario's TOU billing capacity in anticipation of broader implementation of TOU rates in the future.