

MEETING NOTE

NAME OF ORGANIZATION: Constant Power

DATE/TIME OF MEETING: 28 March 2017

LOCATION OF MEETING: TBA

PURPOSE: To introduce Constant Power and explain their “storage as a service” business model

ATTENDEES: Deputy Minister of Energy
Serge Imbrogno

Constant Power
Robert Koblinski, President
Jonathan Game, Operations Manager

ANTICIPATED AGENDA ITEMS (OR ‘AGENDA’ IF WE HAVE RECEIVED ONE):

1. Introduction to Constant Power
2. Future of Industrial Conservation Initiative

NOTES ON AGENDA ITEMS:

1. Introduction to Constant Power

- Constant Power would like to introduce themselves to the Deputy Minister and explain their business model of “storage as a service”.

Suggested Response:

- I am interested to hear of your approach to energy storage. Can you explain the advantages to customers of your “storage as a service” model?
- What opportunities exist for large customers to use such a service to reduce their electricity bills?

Background:

- The business model for Constant Power is focussed on providing storage systems behind the meter of large industrial and commercial customers and operating these in a way that reduces the demand charges and the Global Adjustment on customers' electricity bills
- Constant Power installs, owns, and operates the storage units and charges the customer a monthly fee designed to share the customer's bill savings. They refer to this as "storage as a service".
- The emergence of this business model affirms the conclusions of the draft report from Essex Energy on opportunities for energy storage in distribution systems. Essex found that behind-the-meter of large customers is currently the most valuable opportunity for the introduction of energy storage.
- Constant Power also seeks to use their storage systems to provide additional valuable services to network owners and to the IESO.
- Like many smart grid investments, owners of energy storage systems are unable to capture and monetize the value that their assets provide to the entire grid, including reducing the need for generation at system peak, or lessening the strain on transmission and distribution networks. This is known as the "diffuse benefits" problem.
- Options to address the diffuse benefits problem will be presented as part of the distribution grid modernization proposal for the forthcoming LTEP.

2. Future of Industrial Conservation Initiative

- Constant Power is expected to seek assurances on the continued existence of the Industrial Conservation Initiative (ICI).

Suggested Response:

- **The Industrial Conservation Initiative (ICI) has been successful at improving industrial competitiveness and reducing Ontario peak demand. ICI is not a time-limited program.**
- **Under Ontario's Fair Hydro Plan, we are proposing to expand ICI to include smaller manufacturers with average peak demand greater than 500 kW and less than 1 MW.**
- **Expanding ICI has extended the opportunity to participate to many more customers. How has this increase in your potential customer base affected your business activity in Ontario?**

Background:

- Under ICI, consumers are charged Global Adjustment based upon their share of Ontario demand during the 5 highest peak demands of the year. Customers who reduce their demand in those periods reduce their payments for Global Adjustment.
- The threshold for participating in the ICI was originally a demand of 5 MW but this has been reduced progressively to 1 MW. As part of the Fair Hydro Plan government is proposing to lower the threshold to 500 kW for manufacturers. Beginning July 1, 2017 many more customers will be participating in ICI.
- Storage services such as provided by Constant Power create an effective way for ICI customers to reduce their electricity costs while minimising the impact on their core operations.
- Should the ICI arrangements be discontinued at some point in the future, this would undermine the commercial position of companies such as Constant Power.
- Ministry staff have spoken to company representatives about the regulatory framework for the program and indicated that it is not time-limited.
- Constant Power has expressed an interest in having a role in increasing the knowledge of ICI and other government pricing programs across its client base.

KEY FACTS:

- Constant Power provides energy storage systems for large industrial and commercial customers. Rees systems can be used to minimise the customers' exposure to network demand charges and Global Adjustment charges.
- Constant Power's business case is to install, own and operate the storage units and charge the customer a monthly fee designed to share the customer's bill savings. They refer to this as "storage as a service".
- Constant Power provides customers with guarantees of energy savings which they back up with performance guarantees.
- They currently have two customers and are building a pipeline of future customers.
- Constant Power met with ENERGY staff on March 16. From that discussion ENERGY is making introductions for Constant Power to MOECC to discuss access to Green Bank funding and to IESO to discuss details of the SaveOnEnergy systems and process energy conservation program.