



Comments on the Ottawa 2019 Integrated Regional Resource Plan (IRRP)

June 11, 2019

The Ottawa Renewable Energy Co-operative (OREC) and CoEnergy Ontario Co-operative are pleased to provide the following feedback on the information presented during Webinar #1 on May 29th 2019.

The Ottawa Renewable Energy Co-operative Inc. (OREC) was incorporated in 2010 as a renewable energy co-operative under the Co-Operative Corporations Act (Ontario). OREC is a for-profit co-operative created to develop and operate renewable energy projects in Eastern Ontario, producing electricity to sell to the Ontario grid. As of January 1, 2019, the Co-operative had 750 members and assets of over \$8 million.

Most of OREC's projects were acquired under IESO's Feed-in Tariff (FIT) procurement program under which the Co-operative sells electricity to the IESO under the FIT Rules & Regulations for a term of twenty (20) years, at a set price.

CoEnergy Ontario Co-operative Inc. (CoEnergy) is a multi-class co-op with two classes of membership – consumer and community members. Consumer members use the Co-op's energy services. Community members own and manage the Co-op's assets.

The focus of CoEnergy is to finance and own sustainable low carbon energy technologies and services in Eastern Ontario and West Quebec, including net metered solar, building retrofits, and energy storage in the commercial, institutional, and residential sectors.

The IESO is requesting feedback on the following:

- Determining the forecast Information used to identify and determine local needs
- · Potential options to address local needs and examination of these options
- Engaging with communities and interested parties

Determining the Forecast - Identifying needs

No specific details were provided as to how the electricity forecast for the Ottawa area was determined. However, we are puzzled by the way in which the net forecast was estimated by subtracting significant efficiencies from province wide CDM programs. These programs are currently under review and may not deliver the savings that have been assumed. It would be more conservative to assume that this demand may have to be met by locally delivered CDM under the IRRP.

Potential options to address local needs and examination of these options

OREC and CoEnergy are very pleased to see non-wires options such as distributed generation, storage and CDM considered in the Ottawa area IRRP. We believe that these options can play an important role in meeting future demand in the four key areas included in the Ottawa area IRRP – west Ottawa, Kanata, South East Ottawa, and Bilberry Creek/Orleans.

The cost of these non-wires options is falling every year. They can also be implemented when they are needed and where they are needed as opposed to wires options that require major up-front investment sized to meet the demand forecast for the final year of their life. Given the time frame of the IRRP, annual investments in non-wires options could therefore be the most cost-efficient option - keeping the price of electricity at reasonable levels for consumers.

We are particularly pleased to see the option of delivering non-wires assets through partnerships in Kanata and South East Ottawa. The keys to implementation of non-wires options are flexible and low-cost financing and delivery. Energy co-operatives like CoEnergy can provide both these – providing LDCs with the lowest cost and convenient option of acquiring these assets. Co-operatives finance and own non-wires assets which can be located and sized at the most efficient and needed locations - a large solar fam in a suburban area; selected roof mounted solar in urban or suburban areas; community storage at local distribution stations; or lighting retrofits of commercial buildings.

Energy co-operatives have access to community investment through their members – un untapped source of capital for power resources. They sell power, storage services, or CDM directly to utilities or to power users through power or efficiency purchase agreements. Co-operatives can bill a customer directly or through a "virtual net metering" billing system with the utility.

We would like to emphasize the importance of including virtual net metering (VNM) as an option in the IRRP. VNM allows community financing and ownership of larger more cost effective distributed generation and power storage systems while retaining the integrity of the local grid. In the United States VNM is known as Community Solar and has successfully delivered hundreds of MW of solar. Energy co-operatives are ideally suited to deliver power through VNM.

We would also like to point out that energy co-operatives like CoEnergy have the ability to finance, own and deliver energy storage and CDM savings. We have already financed several LED lighting replacement projects and stand ready to finance community storage projects when there is a business case to do so.

Engaging with communities and interested parties

We find the plan for engaging stakeholders in the IRRP satisfactory and look forward to seeing and reviewing the analysis of non-wires options this summer before the second engagement Webinar in July. We hope that this analysis recognizes the multiple advantage of non-wires options – their falling cost, their ability to be distributed within the demand areas, and their ability to be deliverer as needed rather than as single fixed asset such as a new transformer, transmission line or station.

However, we would also like to meet with the IESO planning team during the analysis phase to discuss the different energy co-operative partnership models that could be used to deliver nonwires options in the Ottawa area. Partnering with energy co-operatives provides both flexibility and cost advantages in delivering distributed generation, storage and CDM. and the choice of partnership model could determine the cost of delivering these options. These models, including VNM, power and CDM purchase agreements, and community storage therefore need to be analyzed before the final IRRP is finalized.

We look forward to continued participation in the IRRP engagement process.