

Demand Response Potential in Ontario

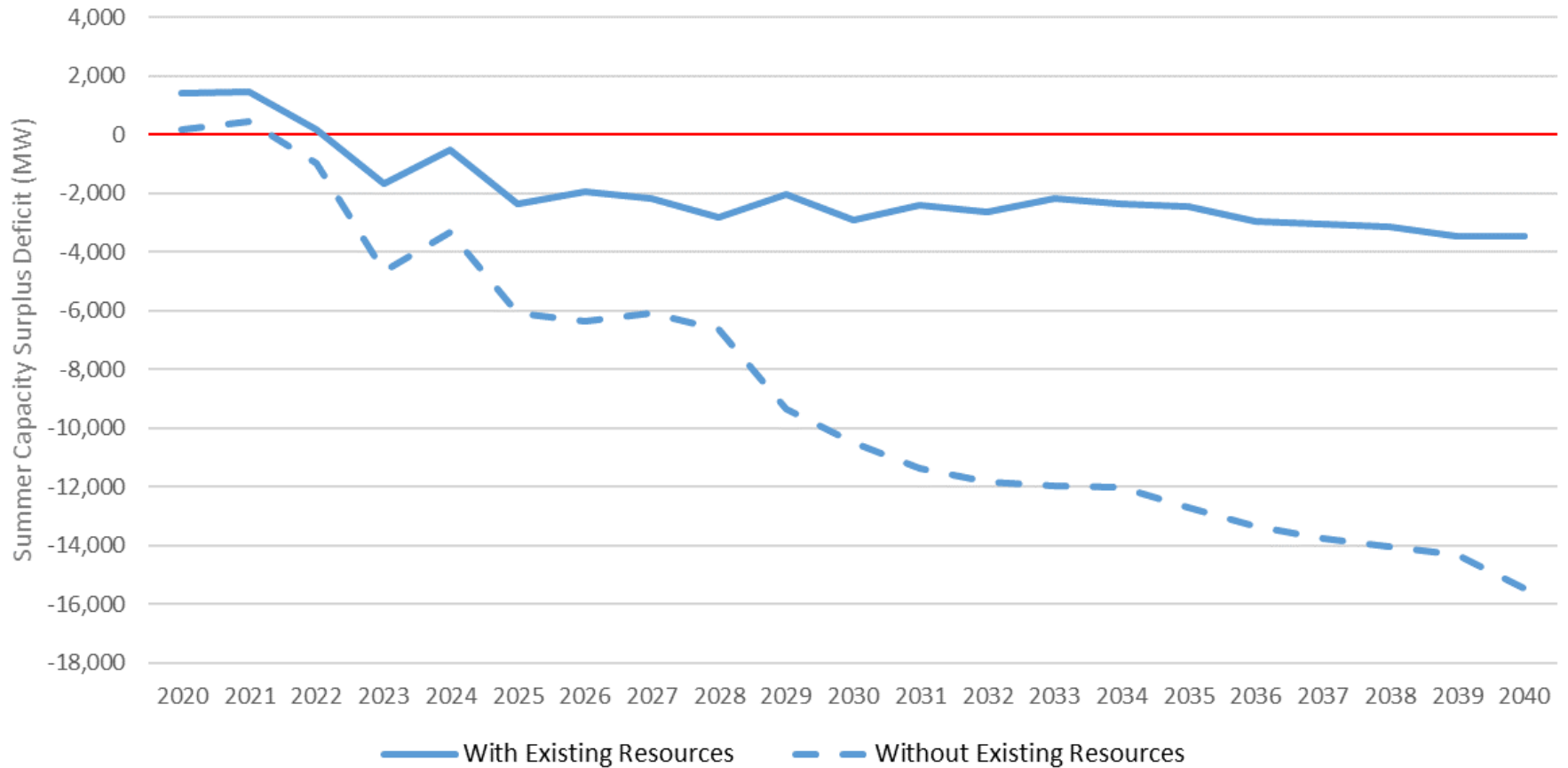
For Discussion with the Demand Response Working Group

September 4, 2019

Purpose

- The IESO is interested in understanding how DR resources can contribute to meeting future capacity needs. As such, the IESO is undertaking an initiative to better understand and assess DR potential in Ontario over the next ten years
- Ontario is generally **expected to have enough energy** to meet demand over the 20 year planning period
- Beginning in 2023, a **capacity need** emerges and grows slowly through 2040
 - This capacity need is limited – it only exists for a few hours of **peak demand** each year
 - The need can be met by acquiring capacity from existing and available resources, including:
 - **Demand Response**
 - Imports
 - Merchant Generators
 - Enhancements of current facilities
 - Energy efficiency
 - **Distributed Energy Resources**

Preliminary resource adequacy outlook: summer



Notes:

- Existing resources includes continued availability of Demand Response
- Continued level of energy efficiency factored into the demand forecast

Preliminary resource adequacy outlook: winter



Notes:

- Existing resources includes continued availability of Demand Response
- Continued level of energy efficiency factored into the demand forecast

Objective

- In order to determine how DR resources can contribute to meeting future capacity needs, the IESO is undertaking an initiative to better understand and assess DR potential in Ontario over the next ten years.
- The IESO is seeking input from the DRWG to enhance our planning assumptions as they relate to DR.
 - All individual input will be kept confidential
- Specifically, the IESO is interested in any insight on:
 - How many MW of DR resources are available;
 - How much do they cost (\$/MW);
 - When are they available (i.e., year and season); and,
 - Where are they available (i.e. location and sector)

How to Participate in the Discussions

- Interested DRWG members are invited to participate in a one-on-one meeting with the IESO to discuss DR potential
- If you are interested in participating, please contact engagement@ieso.ca to note your interest by **September 11, 2019**. The IESO will follow up to schedule a meeting with you.
 - The meetings will be held from mid September to mid October
 - Teleconference or in person
- Thank you for your support.