

# Engagement Plan

## Distributed Energy Resources (DER) Potential Study

### Introduction

Distributed Energy Resources (DERs) have emerged as a major trend impacting the electricity grid and wholesale electricity markets. The IESO understands that effectively enabling DERs will provide significant benefits to the electricity grid, to consumers, and to the environment. The IESO is thus seeking to gain a better understanding of DERs, including their ability deliver system services, their cost effectiveness, and the most appropriate pathways to enable their uptake.

To help inform our path forward in enabling DERs, the IESO has commissioned a DER Potential Study. The primary objectives of the study are to determine the types and volumes of DERs that exist and can be expected to emerge in Ontario over a 10-year timeframe, as well as identify the potential for these resources to provide wholesale electricity services. The study will explore DER potential over a 10-year time horizon and will include:

- A description and identification of promising DER technologies and their use cases most relevant for the Study's ten-year time-horizon.
- Identification of those DER technologies and use cases that are most relevant for the Ontario context, to then be modelled in the study.
- A technical potential assessment of these DERs.
- An economic potential assessment based on an advanced benefit-cost analysis, under three scenarios.
- An achievable potential assessment of these DERs, under three scenarios.
- A discussion of the findings and implications of the potential assessment, and recommendations for the IESO on focus areas and timing for DER integration into the wholesale market or alternative options to enable DER participation.

At the conclusion of the study, the IESO intends to have a sense of the volume of DERs and a quantification of their potential contributions to each of energy, capacity, operating reserve and

regulation service, as well as their associated carbon emissions reductions. The findings of the DER Potential study will be a key input into the IESO's DER market enhancement efforts which will begin in October, 2021 as part of the DER Roadmap.

The IESO intends to use the results of the study for the following purposes:

- To establish the case for DER integration in IESO's wholesale markets where DERs prove cost-effective and / or where participation in wholesale markets would be likely to occur.
- To inform wholesale market design priorities to capture services from and eliminate barriers to cost-effective DERs and DERs that would likely see participation in wholesale markets.
- To identify circumstances where DERs prove cost-effective and / or where adoption would likely occur, but where wholesale market integration may be less likely, and in such cases, identify potential alternative opportunities for capturing value from these DERs.
- To provide estimates of resource potential and costs that can be used to inform / illustrate resource choices in bulk system and regional planning (as an alternative to large supply-side investments or wires).
- To identify and quantify cost-effective carbon emissions reductions opportunities, including from targeted fuel switching towards electricity.

This engagement plan outlines the objectives, approach, timeline and considerations for engaging with stakeholders during the DER Potential Study. This engagement plan may be subject to review and updates as the process evolves. All comments and enquiries on this engagement can be directed to [engagement@ieso.ca](mailto:engagement@ieso.ca).

## Stakeholders and Communities

The IESO encourages all interested parties to participate in this engagement through the public engagement activities described in the Approach section below. The IESO anticipates that this initiative will be of particular interest to current and prospective market participants, resource developers, DER technology and service providers, municipalities and Local Distribution Companies (LDCs).

## Engagement Objectives

The objectives of this engagement are:

- To ensure that stakeholders understand the purpose of this initiative;
- To purposefully engage on the development of the DER Potential Study, incorporating stakeholder feedback and considerations where possible;
- To determine the types and volumes of DERs that exist and can be expected to emerge in Ontario over a 10-year timeframe;
- To identify the potential for these resources to provide wholesale electricity services.

## Approach

This engagement plan will be implemented in accordance with the [IESO's approved engagement principles](#).

This is a public engagement process. All materials will be posted on the dedicated IESO engagement webpage, and, any information/input supplied by interested parties will also be posted (with consent).

The approach for this engagement includes opportunities to provide input through various channels such as webinars, information sessions, meetings, and written feedback. The project team will consider all relevant input and illustrate how feedback was considered to shape the stated objectives.

## Proposed Engagement Schedule

The anticipated timing for this engagement is presented below. Note that timing and content associated with upcoming activities are subject to change. Effort will be made to coordinate engagements with other initiatives active at a similar time, or with similar targeted communities and stakeholders. Updates will be posted to the DER Potential Study engagement page, when available.

Timing	Engagement Activity
August 25, 2021	Stakeholder webinar: <ul style="list-style-type: none"><li data-bbox="695 1010 1487 1157">• In this session, the IESO will provide an introduction to the DER Potential Study, in advance of a fulsome presentation and discussion to take place during the September engagement days.</li></ul>
September 22, 2021	Stakeholder webinar: <ul style="list-style-type: none"><li data-bbox="695 1283 1500 1703">• In this second stakeholder session related to the DER Potential Study, the IESO will introduce the consultant, who will then walk stakeholders through the project plan, covering key projects phases and timelines. Next, the consultant will present the initial assessment of DER technologies recommended for inclusion in the study along with rationale. Lastly, the consultant will outline other parameters and considerations that must be decided upon for the study, such as data requirements and scenarios. Stakeholder input will be welcome through each segment of the session.</li></ul>

Timing	Engagement Activity
November 23, 2021	Stakeholder webinar: <ul style="list-style-type: none"> <li>• The IESO and consultant will present the draft Detailed Project Plan, describing key components of the study including inputs, methodology, scenarios, and underlying assumptions for stakeholder feedback on appropriateness of these key components. A summary of stakeholder feedback and responses received from the September engagement meeting will also be presented.</li> </ul>
June, 2022	Stakeholder webinar: <ul style="list-style-type: none"> <li>• Final results and recommendations will be presented to the stakeholders</li> <li>• Feedback will be sought on the study's recommendations and on next steps to shape further areas of exploration</li> </ul>

## Related Engagements

[Distributed Energy Resources \(DER\) Roadmap](#)

[Capacity Auction](#)

[Demand Response Working Group \(DRWG\)](#)

[Distributed Energy Resources Survey](#)

[Enabling Resources Program](#)

[Expanding Participation in Operating Reserve and Energy \(EPOR-E\)](#)

[Hybrid Integration Project](#)

[IESO York Region Non Wires Alternatives Demonstration Project](#)

[Innovation and Sector Evolution White Paper Series](#)

[Resource Adequacy](#)