

# IESO York Region Non-Wires Alternatives Demonstration Project

Demonstration Project Rules (v. 2.0)

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## 1. Introduction

These Rules set out the eligibility requirements and auction processes associated with the IESO York Region Non-Wires Alternatives Demonstration Project (the “**Demonstration**”) developed by the Independent Electricity System Operator (“**IESO**”) and Alectra Utilities Corporation (“**Alectra**”). Alectra is the distribution system operator for the Demonstration (the “**DSO**”).

Capitalized terms used in these Rules, unless the context otherwise requires, have the meaning ascribed to those terms in the *Appendix A - Glossary of Terms* attached hereto.

The Rules are intended to provide interested parties with information about:

- Demonstration objectives and scope;
- Demonstration eligibility requirements;
- the mechanics of the Local Capacity Auction and Local Energy Auctions;
- the Contract to be entered into between a Participant and the DSO; and
- Demonstration timelines.

These Rules pertain to the Local Capacity Auction in 2021 for the summer 2022 Commitment Period, and may be amended, superseded or replaced prior to the Local Capacity Auction for the summer 2022 Commitment Period. These Rules include the Appendices attached hereto:

Appendix A – Glossary of Terms

Appendix B – Electricity Retailer Waiver

Appendix C - 2021 Local Capacity Auction Timeline

Appendix D – Contract

Appendix E – Activation and Scheduling

Appendix F – Process Overview

Appendix G – DSO Coordinates.

### 1.1 ABOUT THE IESO

The IESO ensures there is enough power to meet the province’s electricity needs in real time, operating the electricity grid and markets, while forecasting and monitoring demand for electricity – and coordinating resources and services to meet that demand. It achieves a reliable power system in an efficient manner by balancing the supply of and demand for electricity in Ontario through the IESO-Administered Markets (also referred to collectively as the “**Wholesale Markets**”), planning for the province’s medium-and long-term energy needs, and securing clean sources of supply to meet those needs. The IESO also facilitates innovation that improves the cost-effectiveness and reliability of the province’s electricity system, including demonstration projects, that help achieve these objectives.

The IESO is governed by an independent board of directors whose chair and directors are appointed by the Government of Ontario. Its fees and licenses to operate are set by the Ontario Energy Board (“**OEB**”) and it operates independently of participants in the electricity market.

The IESO Grid Innovation Fund advances innovative opportunities to achieve electricity bill savings for Ontario ratepayers by funding programs that either enable customers to better manage their energy consumption or reduce the costs associated with maintaining reliable operation of the province's grid. The Demonstration is supported by funding from the IESO Grid Innovation Fund.

## **1.2 ABOUT NATURAL RESOURCES CANADA**

Natural Resources Canada ("NRCan") is a department of the Canadian Government that is committed to improving the quality of life of Canadians by ensuring the country's abundant natural resources are developed sustainably, competitively and inclusively.

The NRCan Smart Grid Demonstration provides funding for programs to reduce greenhouse gas emissions, better utilize existing electricity assets and foster innovation and clean jobs for demonstration of smart grid technologies. The Demonstration is supported by funding from NRCan.

## **1.3 ABOUT ALECTRA**

Alectra is the LDC serving approximately one million homes and businesses across a 1,924 square kilometre service territory comprising 17 communities including Alliston, Aurora, Barrie, Beeton, Brampton, Bradford, Guelph, Hamilton, Markham, Mississauga, Penetanguishene, Richmond Hill, Rockwood, St. Catharines, Thornton, Tottenham and Vaughan. Alectra holds OEB Electricity Distributor Licence No. ED-2016-0360 for its licensed service territory and is the acting DSO for the Demonstration.

Alectra contributes to the economic growth and vibrancy of the communities it serves by investing in essential energy infrastructure, delivering a safe and reliable supply of Electricity, and providing innovative energy solutions.

## **1.4 DEMONSTRATION OBJECTIVES**

The IESO, the project sponsor and electricity market operator, and Alectra, the acting DSO, have initiated the Demonstration in York Region to explore how to use Distributed Energy Resources ("DERs") as Non-Wires Alternatives ("NWAs") to help meet electricity system needs. When used in the Demonstration as NWAs, DERs are expected to help meet local system needs by managing local peak demand. When not used as NWAs in the Demonstration to help meet local system needs, the DERs are expected to be available to support wholesale-level needs. DERs can offer services to defer, reduce, or avoid capital and operating costs associated with the distribution networks as well as transmission network and resource infrastructure.

The objectives of the Demonstration include:

1. Exploring the use of auctions to secure local capacity and local energy services, including local reserve, from DERs to demonstrate their use as NWAs and alternatives to traditional wholesale-level resources;
2. Exploring models of coordination and interoperability between the IESO, as the transmission system and electricity market operator in Ontario, and Alectra, acting as DSO in York Region for the purposes of the Demonstration;
3. Demonstrating the interest of parties in participating in and the potential for the creation of a Local Energy Price on Alectra's Distribution System in York Region;
4. Assessing the interest and ability of different DERs to compete to provide capacity, energy and reserve services through the Auctions;
5. Assessing the operational impact of DERs on the local distribution system to facilitate the maintenance of safe, reliable and efficient system operations;
6. Identifying market and systems operations barriers to the use of DERs as NWAs and exploring potential solutions to such barriers;
7. Exploring how elements and benefits of the wholesale electricity market could be extended to the distribution system level;
8. Drive community engagement and development by enabling local solutions to meet local needs; and
9. Assessing the unique operational and reliability characteristics of particular DERs as compared to traditional transmission-level system resources and transmission and distribution infrastructure.

## 1.5 THE DEMONSTRATION AREA

On February 28, 2020, the IESO published the York Region Integrated Regional Resource Plan ("IRRP"), which included a load forecast of peak electricity demand for the period from 2018 to 2037 based on electricity demand forecast information from distributors and provincial energy efficiency assumptions from the IESO. The IRRP found that York Region was one of the fastest-growing regions in Ontario due to extensive urbanization over the past decade and that continued load growth was expected over the 20 year forecast period. At present, peak demand in the Demonstration Area is approximately 1350 MW, and existing station infrastructure is expected to reach its limit in the mid-to-late 2020s.

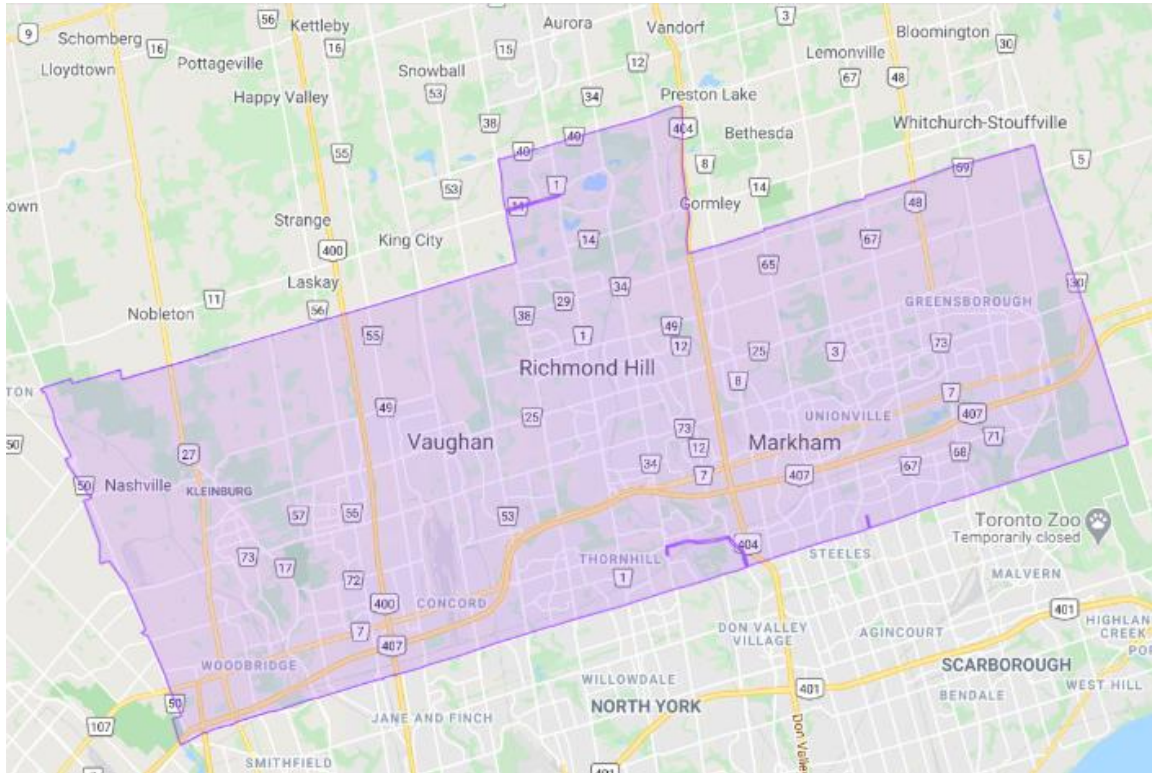
The Demonstration is focused on southern York Region, in the southern part of Alectra's service territory, and includes the municipalities of Richmond Hill, Vaughan, and Markham.

The Demonstration will be open to DERs with a Connection Point within the area described below (the "**Demonstration Area**"):

1. approximately bounded by Highway 50 and Albion-Vaughan Road to the west, King Vaughan Road to the north, Bathurst Street to the east, and Steeles Avenue West to the south;
2. approximately bounded by Bathurst Street to the west, Bloomington Road West to the north, Highway 404 to the east, and Steeles Avenue West and Steeles Avenue East to the south; and

3. bounded by Highway 404 to the west, 19<sup>th</sup> Avenue to the north, Highway 30 to the east, and Steeles Avenue East to the south.





**Figure 1: Demonstration Area**

There will only be a single zone for the 2022 Commitment Period.

More information about the Demonstration Area can be found on the Website.

Alectra customers can verify whether a particular Connection Point associated with their account is located within the Demonstration Area using a search tool accessible via the Website and confirming the Meter Number with the DSO.

## **1.6 RESPONSIBILITY FOR DER VIABILITY**

Persons participating in the Demonstration are solely responsible for ensuring the technical, regulatory, financial and economic and overall viability of their DERs. The DSO shall have no responsibility whatsoever to independently assess the viability of any DER, nor any liability whatsoever in the event a DER is not viable in any respect.

## **1.7 THE SOFTWARE PLATFORM & NOTICES**

The DSO will use the Platform to register Demonstration participants and DERs, contract, schedule and activate DERs, and carry out settlement (i.e. payment for services). The Platform is accessible via the Website.

Notices sent by the DSO to Registrants, Eligible Registrants and Participants will be sent via the Platform. The DSO will also use reasonable efforts to send a copy of any such Notice by email to the registered email the Registrant has provided in its Registration. Once a Contract is entered into, Participants are responsible for routinely checking the Platform, reviewing and responding to, where required, all Notices. In particular, the Participant shall be wholly responsible, and the DSO shall not have any liability to the Participant, in the event the Participant fails to take any necessary actions during the Commitment Period following and pursuant to any Notice that is provided using the Platform or sent by email.

Unless required to respond directly on the Platform or otherwise noted in these Rules, Registrants, Eligible Registrants and Participants should contact the DSO using the email listed in *Appendix G – DSO Coordinates*.

## **1.8 DEMONSTRATION OVERVIEW**

Persons that meet the eligibility criteria of the Rules are invited to apply to register in the Demonstration. Registration is carried out exclusively via the Platform. The DSO retains the discretion to approve Registrations.

The Registration process is divided into two stages. The Initial Registration pertains to registering the Registrant and some preliminary information with respect to the DERs, while the Supplemental Registration pertains to finalizing registration of the DERs. The Initial Registration must be completed within the Initial Registration Period. The Supplemental Registration must be completed within the Supplemental Registration Period.

There are two categories of Registrants: Direct Participants and Aggregators. Direct Participants are DSO customers (or future customers) and participate in the Demonstration with one or more DERs that are directly connected to the DSO's Distribution System and for which the Direct Participant has User Rights (a "**Direct DER**"). Aggregators are not customers of the DSO, but rather participate in the Demonstration by aggregating User Rights over DERs that are directly connected to the DSO's Distribution System and owned by a Contributor (a "**Contributor DER**"). For clarity, with respect to Demand Response Resources for both Contributor DERs and Direct DERs, the DER is comprised exclusively of the load facility, and does not include any behind-the-meter facilities that service such load facility.

Registrants that successfully complete the Initial Registration process will be issued an Eligibility Notice (defined below). Registrants who have received an Eligibility Notice in respect of one or more DERs will be entitled to offer their capacity into the Local Capacity Auction and are considered "**Eligible Registrants**" (as further defined herein).

Eligible Registrants with one or more DERs that clear the Local Capacity Auction will be assigned a Local Capacity Obligation for each DER that clears the auction, and Eligible Registrants with one or more Reserve-Capable DERs that clears the Local Capacity Auction will be assigned a Local Reserve Obligation for each Reserve-Capable DER that clears the auction. A DER is considered "**Reserve-Capable**" for the purposes of these Rules if it is capable of

Delivering or Reducing its Energy, for the entirety of its DER Capacity, within 30 minutes of receiving notice to do so, and such Delivery or Reduction of Energy can be sustained for up to 4 hours.

Eligible Registrants with a Local Capacity Obligation and, if applicable, Local Reserve Obligation, will be required to make the applicable DER(s) available to provide Local Capacity and Reserve, if applicable, during the “**Availability Window**”, being each Business Day from 12:00 EDT to 21:00 EDT during the Commitment Period. Note that for the purposes of the Demonstration, day-light savings time will not be observed and the Availability Window will not be adjusted to turn back clocks by an hour over the summer period.

Eligible Registrants with a DER(s) that clears the Local Capacity Auction will be issued a Contract for the duration of the Commitment Period. Once a Contract has been executed, the Eligible Registrant is considered a “**Participant**” and will be required to meet certain ongoing eligibility and performance requirements related to the DER that is set out in the Contract. Pursuant to the Contract, a Participant will receive an Availability Payment, which is intended to cover a DER’s costs associated with making its Eligible Capacity available in the Local Energy Auctions.

Following the clearing of the Local Capacity Auction, Participants will be required to complete the Supplemental Registration with respect to their DERs. The DSO will assess the DERs against the eligibility criteria set out in these Rules. DERs that have been approved by the DSO in the Supplemental Registration will be obligated to participate in the Local Energy Auction.

Local Energy Auctions will run each Business Day during the Commitment Period. Pursuant to the Contract, Participants will be obligated to Bid or Offer their DERs, as applicable, into the Local Energy Auction for each hour within the Availability Window. The DSO will provide notice to the Participants that have cleared the Local Energy Auction to activate their DERs to manage the peak loading in the Demonstration Area to meet simulated distribution-level and transmission-level needs. Participants with DERs that are activated will Deliver Energy (Thermal Resources or Storage Resources) or Reduce Energy (Demand Response Resources) and will be compensated for the energy services they provide. Participants that fail to meet their Local Capacity Obligations or Local Reserve Obligations or fail to adhere properly to activation or deployment instructions, as applicable, will be subject to non-performance charges under the Contract and may be default thereunder.

Throughout the Demonstration, participants will be required to make certain covenants, representations and warranties: (i) at the time of Initial Registration and Supplemental Registration; (ii) prior to the Local Capacity Auction; and (iii) as part of the Contract upon its execution. Interested parties are encouraged to review the covenants, representations and warranties in detail to ensure their understanding prior to initiating the registration process.

An overview of the Demonstration is laid out in *Appendix F – Process Overview*, attached hereto.

## **1.9 ACCOUNT NUMBERS**

Direct Participants and Contributors must be DSO customers with an active account (the “**DSO Customer Account**”, which account must be in good standing at the time of Initial Registration and throughout the Demonstration) in order to participate in the Demonstration. With respect to Direct Participants, it is possible that such Registrant will not have an active DSO Customer Account if the DER the Registrant intends to have participate in the Demonstration is not operational at the time of Initial Registration. In the event the Direct Participant does not have an active DSO Customer Account but wishes to register a Future DER, the Direct Participant must contact the DSO (mailto: [NWADemo@AlectraUtilities.com](mailto:NWADemo@AlectraUtilities.com)) prior to initiating the registration process to obtain a temporary account number (a “**Temporary Account Number**”) for registration purposes, which request shall be accepted in the DSO’s discretion. Registrants seeking a Temporary Account Number must meet the Registrant eligibility criteria set out in Section 2.1.

With respect to Aggregators, a DSO Customer Account is not required in order to complete the Initial Registration. Contributors must have an active DSO Customer Account at the time of registration and are not eligible to request a Temporary Account Number. However, an Aggregator may register Contributors and Contributor DERs up until the last day of the Supplemental Registration Period.

## **2. Eligibility Requirements**

Sections 2.1 and 2.2 apply to Registrants that wish to participate directly in the Demonstration as a Direct Participant with one or more Direct DERs.

Sections 2.3 and 2.4 apply to Registrants that wish to participate in the Demonstration as an Aggregator with two or more Contributor DERs.

## **2.1 REGISTRANT ELIGIBILITY (DIRECT PARTICIPANTS)**

### **2.1.1. Registrant Eligibility Requirements**

To be eligible to participate in the Demonstration as a Direct Participant the Registrant:

- a) must be an existing customer of the DSO with an active DSO Customer Account, or if not an existing customer of the DSO must have obtained a Temporary Account Number;
- b) must be a corporation (with or without share capital), co-operative, partnership, or limited partnership;
- c) must be solvent and have sufficient financial capability to perform its obligations under the Contract;

- d) must be registered or otherwise qualified to carry on business in the Province of Ontario;
- e) have a Registered Bank Account;
- f) must have the requisite power to enter into a Contract and to perform its obligations under the Contract;
- g) may only register once during the Registration Period, unless the prior Registration has been formally withdrawn and de-registered from the Demonstration; and
- h) must submit one or more Direct DERs into the Demonstration, provided that the aggregate DER Capacity of the DERs submitted by a Registrant and its Affiliates cannot exceed 3,000 kW.

### **2.1.2. Registrant Ineligibility**

To be eligible to participate in the Demonstration as a Direct Participant the Registrant:

- a) must not be an Aggregator;
- b) must not be a Contributor;
- c) must not be a natural person, sole proprietorship, trust, joint venture or other type of unincorporated association;
- d) must have no bankruptcy, insolvency, reorganization, receivership, seizure, realization, arrangement or other similar proceedings pending against or being contemplated by the Registrant, or to the knowledge of the Registrant, threatened against the Registrant; or
- e) must not be the IESO, Alectra, Alectra Energy Solutions and Services, or Util-Assist Inc.

### **2.1.3. Considerations with no impact on eligibility**

A Direct Participant may be a registered *market participant* (as such term is defined in the IESO Market Rules) and also participate in the Demonstration.

Participation in the Industrial Conservation Initiative or the IESO Energy Efficiency Auction Pilot will not impact eligibility to participate in the Demonstration.

## **2.2 DER ELIGIBILITY (DIRECT PARTICIPANTS)**

### **2.2.1. DER Eligibility Requirements**

A Registrant that is a Direct Participant may register multiple Direct DERs under its Registration. To be eligible to participate in the Demonstration the Direct DER:

- a) must have User Rights that are held by the Direct Participant;
- b) must be only one of the following:
  - i) a Demand Response Resource (C&I);
  - ii) a Thermal Resource; or
  - iii) a Storage Resource;
 (collectively, a “**Permitted Resource**”, as further defined in Section 2.3 below)
- c) must have a DER Capacity of at least 100 kW and no more than 3,000 kW; and
- d) must, no later than the last day of the Supplemental Registration Period:
  - i) have achieved its In-Service Date;
  - ii) have a valid Meter Number that is registered under the Direct Participant’s DSO Customer Account;
  - iii) connect directly to the DSO’s Distribution System at a single Connection Point in the Demonstration Area, or, multiple Connection Points in the Demonstration Area, provided that the Registrant has obtained the written consent of the DSO, acting in its discretion, prior to registering such DER;
  - iv) be capable of providing the DER Capacity for four (4) consecutive hours at any time during each Availability Window;
  - v) have revenue-quality metering connected to the Distribution System and approved and verified by Measurement Canada and the DSO as usable for billing purposes on an hourly or sub-hourly basis (an “**Approved Meter**”); and
- e) must, for a Direct DER that intends to provide Reserve during the Commitment Period:
  - i) be Reserve-Capable; and
  - ii) have an Approved Meter that is capable of 5-minute interval readings.

### **2.2.2. DER Ineligibility**

Direct DERs are not eligible to participate in the Demonstration if they are a Direct DER that:

- a) has not, following the close of the Supplemental Registration Period, achieved its In-Service Date;
- b) is not in compliance with all Laws;
- c) is a registered facility in the IESO-Administered Markets, which restriction shall apply during the Commitment Period only;
- d) uses coal or diesel as a fuel source;



- e) has the same Connection Point as another DER that has already been registered in the Demonstration, unless that other DER has been formally withdrawn and de-registered from the Demonstration;
- f) is the subject of an existing contract relating to the generation or storage of Electricity, conservation or demand management of Electricity or other form of contract, including a net-metering contract, or unit sub-metering contract relating to Electricity or Related Products (an “**Existing Contract**”), unless otherwise consented to by the DSO in accordance with Section 11.4(a) of these Rules;
- g) is the subject of a contract with a licensed electricity retailer with respect to its Electricity requirements in the Demonstration Area, provided however that this criteria will be waived by the DSO upon the entering into of an agreement between the DSO and the electricity retailer, the form of which is attached hereto as *Appendix B – Electricity Retailer Waiver* and will be available on the Platform;
- h) is the subject of rate regulation by the OEB pursuant to the *Ontario Energy Board Act, 1998*;
- i) is electrically connected to more than one Connection Point, either to a Distribution System or to the Transmission System, unless the Direct Participant has obtained the consent of the DSO to have multiple Connection Points in accordance with Section 2.2.1(d)(iii);
- j) is in respect of an energy efficiency resource; or
- k) has received funding from a Governmental Authority or Alectra that is directly or indirectly related to Electricity, unless otherwise consented to by the DSO in accordance with Section 11.4(b) of these Rules.

## 2.3 REGISTRANT ELIGIBILITY (AGGREGATORS)

Aggregators are entities that aggregate User Rights over Contributor DERs to participate in the Demonstration. An Aggregator is required to group the Contributor DERs it intends to register into “**Aggregator DERs**”. An Aggregator DER is comprised of two or more Contributor DERs of the same Permitted Resource category and will be treated as a single DER for the purposes of the Demonstration.

When used in reference to an Aggregator DER, other than Reserve-Capable Aggregator DERs, the term “**Permitted Resource**” refers to: (i) Demand Response Resource (C&I); (ii) Demand Response Resource (Residential); (iii) Thermal Resource; or (iv) Storage Resource.

When used in reference to an Aggregator DER that is Reserve-Capable the term “**Permitted Resource**” refers to: (i) Demand Response Resource (C&I); (ii) Thermal Resource; or (iii) Storage Resource. For greater clarity, an Aggregator DER that is comprised of Demand Response Resources (Residential) is not eligible to receive a Local Reserve Obligation or participate in the Local Reserve Auctions.

### **2.3.1. Registrant Eligibility Requirements (Aggregators)**

To be eligible to participate in the Demonstration as an Aggregator the Registrant must:

- a) be a corporation (with or without share capital), co-operative, partnership, or limited partnership;
- b) be solvent and have sufficient financial capability to perform its obligations under the Contract;
- c) be registered or otherwise qualified to carry on business in the Province of Ontario;
- d) have a Registered Bank Account;
- e) have the requisite power to enter into a Contract and to perform its obligations under the Contract; have User Rights over two or more Contributor DERs of the same Permitted Resource category;
- f) may only register once during the Registration Period, unless the prior Registration has been formally withdrawn and de-registered from the Demonstration; and
- g) register one or more Aggregator DERs in its Registration, provided that the aggregate DER Capacity of the Aggregator DERs submitted by a Registrant and its Affiliates cannot exceed 3,000 kW.

### **2.3.2. Registrant Ineligibility (Aggregators)**

To be eligible to participate in the Demonstration as an Aggregator the Registrant:

- a) must not be a Direct Participant;
- b) must not be a natural person, sole proprietorship, trust, joint venture or other type of unincorporated association, which restriction, for clarity, does not apply to a Contributor;
- c) must have no bankruptcy, insolvency, reorganization, receivership, seizure, realization, arrangement or other similar proceedings pending against or being contemplated by the Registrant, or to the knowledge of the Registrant, threatened against the Registrant; or
- d) must not be the IESO, Alectra, Alectra Energy Solutions and Services, or Util-Assist Inc.

### **2.3.3. Considerations with no impact on eligibility**

An Aggregator or a Contributor may be a registered *market participant* (as such term is defined in the IESO Market Rules) and also participate in the Demonstration.

Participation in the Industrial Conservation Initiative or the IESO Energy Efficiency Auction Pilot will not impact eligibility to participate in the Demonstration.



## **2.4 DER ELIGIBILITY (AGGREGATORS)**

### **2.4.1. DER Eligibility Requirements (Aggregators)**

A Registrant that is an Aggregator will be permitted to register multiple Contributor DERs and Aggregator DERs during the registration process. To be eligible to participate in the Demonstration:

- a) each Contributor DER, no later than the last day of the Supplemental Registration Period must:
  - i) have achieved its In-Service Date;
  - ii) have a valid Meter Number registered under the Contributor's DSO Customer Account;
  - iii) connect directly to the DSO's Distribution System at a single Connection Point within the Demonstration Area;
  - iv) be in respect of a Permitted Resource;
  - v) have an Approved Meter; and
  - vi) for a Contributor DER that will be part of an Aggregator DER that is Reserve-Capable, have an Approved Meter capable of 5-minute interval readings.
- b) each Aggregator DER must:
  - i) be in respect of a single Permitted Resource category;
  - ii) be capable of providing the Eligible Capacity over at least four (4) consecutive hours during each Availability Window;
  - iii) have an Eligible Capacity (which capacity will be the sum of the DER Capacities of the underlying Contributor DERs) of at least 100 kW and no more than 3,000 kW; and
  - iv) for an Aggregator DER that intends to provide Reserve during the Commitment Period, be Reserve-Capable.

Aggregators and Contributors may be registered *market participants* (as such term is defined in the IESO-Market Rules) and also participate in the Demonstration.

### **2.4.2. DER Ineligibility (Aggregators)**

Contributor DERs are not eligible to participate in the Demonstration if they are a Contributor DER that:

- a) has not achieved its In-Service Date by the end of the last day of the Supplemental Registration Period;
- b) is not in compliance with all Laws;

- c) is registered as a contributor in the IESO-Administered Markets, provided that this restriction shall only apply to the Commitment Period;
- d) that uses coal or diesel as a fuel source;
- e) has the same Connection Point as another DER that has already applied to the Demonstration, unless that other DER has no Existing Contract in place and has been formally withdrawn and de-registered from the Demonstration;
- f) is the subject of an Existing Contract, unless otherwise consented to by the DSO in writing in accordance with Section 11.4(a);
- g) is the subject of a contract with a licensed electricity retailer with respect to its Electricity requirements in the Demonstration Area, provided however that this criteria will be waived by the DSO upon the entering into of an agreement between the DSO and the electricity retailer, the form of which is attached hereto as *Appendix B- Electricity Retailer Waiver* and will be available on the Platform;
- h) is the subject of rate regulation by the OEB pursuant to the *Ontario Energy Board Act, 1998*;
- i) is electrically connected to more than one Connection Point, either to a Distribution System or to the Transmission System;
- j) is in respect of an energy efficiency resource; or
- k) has received funding from a Governmental Authority or Alectra that is directly or indirectly related to Electricity, unless otherwise consented to by Alectra in accordance with Section 11.4(b) of these Rules.

### 3. Registration Completeness Requirements

#### **3.1 REGISTRATION MATERIALS**

A Registration should be prepared having regard to these Rules, including the *Appendix A - Glossary of Terms*, and should meet all of the requirements set out in Section 2, as applicable.

A Registrant must complete and submit as part of the Registration process:

- a) During the Initial Registration:
  - i) all information about the Registrant that is required by the Platform, including:
    - A. all information needed to demonstrate Registrant eligibility and otherwise successfully participate in the Demonstration;
    - B. details regarding the authorized Delegate that has the legal authority to bind the Registrant in respect of the Demonstration; and
    - C. preliminary information regarding the DERs that the Registrant intends to have participate in the Demonstration, including Future DERs;

- ii) the Direct Deposit Form, which form will be available for download on the Platform for completion by the Registrant and must be uploaded by the Registrant fully completed as part of the Initial Registration;
  - iii) confirmation that the Registrant has accepted the Platform Terms & Conditions; and
  - iv) confirmation of the legally binding covenants, representations and warranties in Section 3.2;
  - v) an authorization permitting the DSO to provide to the IESO and NRCan any and all information relating to the Registrant, the Registration, Contributors, the DERs and any other information pertaining to this Demonstration, including without limitation each DER Connection Point, meters, metering and billing data and accounts as the IESO and NRCan may require for the purposes of evaluating the Demonstration; and
  - vi) any Additional Information (as defined below) that may be requested by the DSO within the requested timeframes.
- b) During the Supplemental Registration:
- i) all information required by the Platform for each Direct DER and Contributor DER, as applicable;
  - ii) confirmation of the legally binding representations and warranties specified in Section 3.3; and
  - iii) any Additional Information that may be requested by the DSO within the requested timeframes.

Registration will not be considered complete unless all of the Registration materials, including any Additional Information requested by the DSO, have been submitted either via the Platform or by email to the DSO, as determined by the DSO in its discretion.

### **3.2 INITIAL REGISTRATION: COVENANTS, REPRESENTATIONS & WARRANTIES**

A Registrant must be prepared to represent and warrant in the Initial Registration that it satisfies the eligibility requirements set out in Section 2.1 and Section 2.3 of these Rules, as applicable.

A Registrant must covenant in the Initial Registration that:

- a) no later than the last day of the Supplemental Registration Period, each Direct DER, and each Contributor and Contributor DER, and each Aggregator DER, will satisfy the eligibility requirements set out in Section 2.2 and Section 2.4 of these Rules, as applicable; and

- b) during the Demonstration and until the Commitment Period closes, it will promptly notify the DSO in writing of any material adverse change in the business or financial affairs of the Registrant or the existence of any circumstance that would make any representation or warranty of the Registrant untrue in any respect or constitute a breach of any covenant of the Registrant.

### **3.3 SUPPLEMENTAL REGISTRATION: REPRESENTATIONS AND WARRANTIES**

A Registrant must be prepared to represent and warrant upon finalizing the Supplemental Registration that:

- a) to the best of its knowledge and belief, having made all due inquiry into the applicable requirements, each of the Registrant, and each Direct DER, and each Contributor and Contributor DER, and each Aggregator DER, satisfies the applicable eligibility requirements set out in Section 2 of these Rules;
- b) to the best of its knowledge and belief, having made all due inquiry into the applicable requirements, each of the Registrant, and each Direct DER, and each Contributor and Contributor DER, and each Aggregator DER, is not ineligible under Section 2 of these Rules;
- c) the DER Capacity of each of the Contracted DERs is greater than or equal to the Local Capacity Obligation and if applicable, Local Reserve Obligation, assigned to such Contracted DER;
- d) for each Contracted DER that has been assigned a Local Reserve Obligation, it is Reserve-Capable;
- e) if the Registrant is a Direct Participant, it has the necessary User Rights for the Direct DER that it has registered in the Demonstration;
- f) if the Registrant is an Aggregator, it has the necessary User Rights for each Contributor DER that it has registered in the Demonstration;
- g) the Registrant has made all reasonable inquiries into requirements to obtain any applicable approvals, including environmental assessments, required for each DER pursuant to all Laws; and
- h) all statements, supporting documentation, specifications, data, confirmations, representations and information that have been set out in the Registration and supporting evidence and documentation are complete and accurate in all material respects and there is no material information omitted from the Registration or supporting evidence or documentation which would make the information in the Registration or supporting evidence or documentation misleading or inaccurate.

#### 4. Registration Submission and Review

##### **4.1 REGISTRATION SUBMISSION**

Each Local Capacity Auction will have a separate registration process. A Registration submitted for the 2021 Local Capacity Auction will not be considered for subsequent Local Capacity Auction(s), if any. Registration is composed of the Initial Registration and the Supplemental Registration.

##### **4.1.1. Initial Registration**

- a) The dates for the Initial Registration Period will be confirmed in the Pre-Auction Report. Important dates in the Demonstration and approximate time periods between such dates are outlined in *Appendix C – 2021 Local Capacity Auction Mock Timeline* and are illustrative only.
- b) Initial Registration shall take place via the Platform in accordance with these Rules and any instructions posted on the Website from time to time. A Registrant must complete the Initial Registration and submit Additional Information, if any, required to establish that the Registrant has satisfied the Registrant eligibility criteria set out in Section 2.1 and Section 2.3 of these Rules, as applicable.
- c) With respect to the Registrant, the following information will be required:
  - i) Legal entity name
  - ii) Business address
  - iii) If the Registrant is a Direct Participant, the DSO Customer Account number or Temporary Account Number, as applicable
  - iv) The Registered Bank Account
  - v) HST number.
- d) A Registrant must appoint two Delegates in order to initiate and successfully complete the Initial Registration. Such Delegates will be required to provide the following information when completing the Registration:
  - i) Name
  - ii) Title or position within the Registrant
  - iii) Email
  - iv) Phone number capable of receiving SMS messages
  - v) Confirmation that (i) they are duly authorized to act on behalf of the Registrant and bind the Registrant in all matters related to the Demonstration; and (ii) the DSO may consult with them at all reasonable times regarding matters related to the Demonstration.
- e) With respect to the DERs that will be registered to participate in the Demonstration, the following information will be required:

- i) for Aggregators, (i) the DER Capacity, (ii) the Permitted Resource type of each Aggregator DER, and (iii) whether the Aggregator DER is Reserve-Capable;
  - ii) for Direct Participants with a Direct DER: (i) the DER Capacity, (ii) the Permitted Resource type, (iii) the Meter Number, and (iv) whether the Direct DER is Reserve-Capable;
  - iii) for Direct Participants with a Future DER: (i) the DER Capacity, (ii) the Permitted Resource type, (iii) the municipal address of the Future DER (which municipal address cannot be a post office box), (iv) whether the Future DER will be Reserve-Capable, and (iv) the expected In-Service Date, which In-Service Date must not be later than the last day of the Supplemental Registration Period (defined below).
- f) The Registrant must complete the Initial Registration within the Initial Registration Period.

#### **4.1.2. Supplemental Registration**

The DSO will review and assess the Initial Registration in accordance with Section 4.1.3. In the event the DSO approves the Initial Registration, the DSO will send the Registrant a Notice confirming that it may proceed to complete the Supplemental Registration and will be issued a DER ID for each DER that was registered.

- a) Supplemental Registration will begin immediately following the close of the Initial Registration Period and end prior to the Bid/Offer Submission Start Date (which period shall be referred to as the “**Supplemental Registration Period**”), which timeframe will be published in the Pre-Auction Report.
- b) Registrants will be permitted to continue to register their DERs at any time during Supplemental Registration Period except for during the Blackout Period.
- c) A Registrant that is a Direct Participant will be required to provide the following information with respect to each Eligible DER (defined below) if not already provided in the Initial Registration:
  - i) Meter Number;
  - ii) actual In-Service Date;
  - iii) whether the Eligible DER is Reserve-Capable; and
  - iv) if applicable, an Outage Notice providing the dates for any Planned Outages falling within the Commitment Period for the Direct DER.
- d) A Registrant that is an Aggregator will be required to provide the following information if not already provided in the Initial Registration:
  - i) whether the Aggregator DER is Reserve-Capable;
  - ii) with respect to each Contributor DER:
    - A. Meter Number;

- B. confirmation that it has acquired the necessary User Rights over such Contributor DER; and
  - C. if applicable, an Outage Notice providing the dates for any Planned Outages falling within the Commitment Period for an Aggregator DER.
- e) The Registrant must complete the Supplemental Registration within the Supplemental Registration Period.

#### **4.1.3. Review and Assessment**

- a) The Initial Registration and Supplemental Registration must be completed using the Platform within the Initial Registration Period and Supplemental Registration Period, respectively, failing which the Registration will be deemed incomplete and will be Terminated in accordance with Section 11.3.
- b) Initial Registrations and Supplemental Registrations that are submitted within the Initial Registration Period and Supplemental Registration Period respectively, will be reviewed by the DSO for completeness and subsequently assessed for eligibility as outlined below:
  - i) Information submitted during the Initial Registration pertaining to the Registrant will be reviewed for completeness and, if complete, the DSO will assess the Registrant against the eligibility requirements in Section 2.1 (Direct Participants) and Section 2.3 (Aggregators), as applicable. In the event the Initial Registration is not considered complete, or the Registrant is not considered eligible by the DSO in its discretion, the Registration will be subject to Termination in accordance with Section 11.3.
  - ii) In the event the DSO approves the Initial Registration, the DSO will send the Registrant a Notice that they may proceed with completing the Supplemental Registration by submitting all required information pertaining to the Eligible DERs.
  - iii) Information submitted during the Supplemental Registration will be reviewed for completeness and, if complete, the DSO will assess the Eligible DERs against the eligibility requirements in Section 2.2 and Section 2.4, as applicable.
  - iv) With respect to a Registrant that is an Aggregator, the Contributor DERs that successfully complete the Supplemental Registration will be included on the Contributor List for the Aggregator DER. Changes to the Contributor List may only be made in accordance with Section 8 of the Rules and following the issuance of a Contract for the Aggregator DER.
  - v) In the event the Supplemental Registration is not considered complete, or all, but not less than all of the Eligible DERs submitted are deemed ineligible by the DSO in its discretion, the Registration will be subject to Termination by the DSO in accordance with Section 11.3.



- vi) Direct DERs, Contributor DERs and Aggregator DERs that do not meet the eligibility criteria in Section 2.2 and Section 2.4, as applicable, will not be permitted to participate in the Local Energy Auction or Local Reserve Auction and the DSO will draw down on the Completion Security in accordance with Section 5.12 for each such ineligible DER.
- c) Registration delivered through the Platform must be fully transmitted and fully received during the Initial Registration Period and Supplemental Registration Period, as applicable.
- d) The DSO will only review information submitted through the Platform. Information submitted through email or any other form will not be considered unless it constitutes Additional Information (defined below) and specifically requested by the DSO.
- e) The calendar and clock within the Platform, whether accurate or not, will establish the time of Registration. The DSO will not be responsible for late deliveries or deliveries through any means other than the Platform.
- f) The DSO may, at its discretion, request Additional Information from a Registrant in order to assess a Registration against the eligibility requirements of these Rules. Additional Information must be submitted within the requested timeframes, failing which the Registration shall be deemed incomplete and Terminated in accordance with Section 11.3.
- g) The Registration, and Additional Information, if any, must be in English.
- h) Registration must be completed having regard to these Rules, including *Appendix A - Glossary of Terms*, and must meet the requirements set out in these Rules.
- i) All materials submitted during the Registration process are the property of the DSO and shall not be returned to the Registrant for any reason.

Any Registrant whose Registration has been Terminated may submit a new Registration in respect of the DER(s) that were included in the Terminated Registration or any other DER during a subsequent Local Capacity Auction registration period in accordance with the Rules. The DSO may, in its discretion, allow a Registrant to re-submit an Initial Registration or Supplemental Registration that was terminated within the same registration period.

Additional details pertaining to use of the Platform and the Registration process can be found in Section 3.1 above and the Website.

## 4.2 ELIGIBILITY NOTICE

- a) Following the completeness and eligibility assessments pertaining to the Initial Registration carried out in Section 4.1.1 and 4.1.3, the DSO will send notification (an “**Eligibility Notice**”) to each Registrant that the DSO deems to be eligible to participate in the Local Capacity Auction (an “**Eligible Registrant**”) and confirming which DERs have been successfully registered to participate in the Local Capacity



Auction (an “**Eligible DER**”, as further defined in *Appendix A – Glossary of Terms*), including any Future DERs, and the respective Eligible Capacity of each such DER. The Eligibility Notice will also specify whether such Eligible DER has been successfully registered as Reserve-Capable.

- b) Registrants should carefully review their Eligibility Notices, as the Eligible Capacity may be less than the DER Capacity specified in the Initial Registration.
- c) Only Eligible Registrants that have paid the Auction Deposit (described below) will be permitted to participate in the Local Capacity Auction in respect of their Eligible DERs and Eligible Capacity.
- d) The DSO may decline to authorize an Eligible Registrant to participate in the Local Capacity Auction if the DSO determines at any time prior to the Auction that there has been a change in the applicable eligibility or ineligibility criteria specified in Section 2 of these Rules in respect of an Eligible Registrant or its Eligible DERs. If the DSO declines to authorize an Eligible Registrant to participate in a Local Capacity Auction, or declines to permit one or more Eligible DERs to participate in the Local Capacity Auction, the DSO will notify the Eligible Registrant at least two (2) Business Days before the Capacity Auction Offer Window takes place.

## 5. Local Capacity Auction

Only Eligible Registrants with one or more Eligible DERs will be authorized to participate in the Local Capacity Auction up to their respective Eligible Capacity.

### 5.1 CAPACITY AUCTION PERIOD

The Demonstration will initially consist of a single Local Capacity Auction, which will be held in 2021 for the 2022 summer Commitment Period.

### 5.2 PRE-AUCTION REPORT

The DSO will publish a “**Pre-Auction Report**” on the Website prior to the start of the Initial Registration Period and no less than two months prior to the Capacity Auction Offer Window. The Pre-Auction Report will include the following parameters for the applicable Local Capacity Auction:

- the Initial Registration Period
- the Supplemental Registration Period
- Blackout Period
- the Target Capacity
- the Reserve Sub-Target Capacity
- the Capacity Auction Offer Window
- Minimum Capacity Price
- Maximum Capacity Price

- Bid/Offer Submission Start Date
- the Commitment Period Start Date and Commitment Period End Date
- Minimum Energy Price
- Maximum Energy Price
- Minimum Reserve Price
- Maximum Reserve Price

In addition to the publication of the Pre-Auction Report, the DSO will send a Notice to Eligible Registrants prior to the start of the Local Capacity Auction advising them that the Pre-Auction Report has been published. Further Registrant-specific details will be available for each Registrant once they log onto the Platform.

### **5.3 REPRESENTATIONS AND WARRANTIES**

Prior to accessing the Capacity Auction Offer Window to submit Capacity Offers, an Eligible Registrant will be required to give the following representations and warranties:

- a) the Capacity Offers, the Auctions, or any matter relating thereto have not been discussed with or prepared in consultation, or in coordination with any other Eligible Registrant or an Affiliate thereof or disclosed directly or indirectly in any manner with any other Registrant or an Affiliate thereof;
- b) the Eligible Registrant has not directly or indirectly engaged or attempted to engage in conduct, alone or with another person, that they know, or ought reasonably to know:
  - i) exploits an Auction, including by, without limitation, exploiting any gap or defect in the Rules;
  - ii) circumvents any of the Rules;
  - iii) manipulates an Auction, including by, without limitation, manipulating the determination of a settlement amount;
  - iv) undermines through any means the ability of the IESO or the DSO to carry out its powers, duties or functions under the Rules or Laws; or
  - v) interferes with the determination of a market price or activation outcome by competitive market forces.
- c) the covenants, representations and warranties contained in Section 3.2 of the Rules with respect to the Initial Registration are true and correct.

### **5.4 AUCTION DEPOSIT**

An Eligible Registrant is required to provide an Auction Deposit in order to participate in the Local Capacity Auction for each Eligible DER in the following manner:

- a) A separate Auction Deposit is required for each Eligible DER.
- b) The Auction Deposit must be provided by electronic funds transfer sent from the Registered Bank Account to the DSO using the banking instructions provided in the Eligibility Notice.
- c) Upon payment of the Auction Deposit, the Participant is required to email the DSO confirmation (the “**Deposit Confirmation**”) to [EFT@alectrautilities.com](mailto:EFT@alectrautilities.com) with a copy to [NWADemo@alectrautilities.com](mailto:NWADemo@alectrautilities.com). The Deposit Confirmation shall provide:
  - i) The name of the Eligible Registrant and the DER ID,
  - ii) A copy of the bank remittance issued by the Participant’s financial institution evidencing the electronic funds transfer of the Auction Deposit, which bank remittance form must include DSO reference number (P0010-217305-638155), the name of the Eligible Registrant and the DER ID, and
  - iii) in the event payment of the Auction Deposit did not originate from the Registered Bank Account, the Eligible Registrant must provide the DSO with a Direct Deposit Form for such account as an attachment to the Deposit Confirmation.
- d) The Auction Deposit amount shall be equal to: two dollars per kilowatt (\$2/kW) multiplied by the Eligible Capacity of the Eligible DER.
- e) The Auction Deposit and the Deposit Confirmation must be received by the DSO by 17:00 EDT on the Auction Deposit Date:
  - i) Under no circumstances will the DSO accept late payment of the Auction Deposit and the Eligible Registrant is responsible for ensuring that it sends the Auction Deposit by electronic funds transfer with a sufficient amount of lead time to account for any clearing periods that are imposed by the banking institution that owns the Registered Bank Account.
  - ii) If the Auction Deposit and the Deposit Confirmation are not received by the DSO by 17:00 EDT on the Auction Deposit Date, the Eligible DER may not be entitled to participate in the Local Capacity Auction or the Local Energy Auctions.
  - iii) The calendar and clock of the DSO’s banking institution (with respect to receipt of the Auction Deposit) and the DSO (with respect to receipt of the Deposit Confirmation), whether accurate or not, will establish the date and time that the Auction Deposit and Deposit Confirmation are received, respectively. The DSO will not be responsible for late payment of the Auction Deposit or late delivery of the Deposit Confirmation, nor shall the DSO be responsible for payment of the Auction Deposit to a bank account other than the DSO’s bank account or delivery of the Deposit Confirmation to an email address other than the email addresses provided in Section 5.4(c).
- f) The Eligible Registrant acknowledges that the DSO will not pay interest on Auction Deposits.

- g) The Auction Deposit will be refunded to the Eligible Registrant by the DSO within a reasonable timeframe in the event (i) the Eligible DER associated with the Auction Deposit did not clear the Local Capacity Auction, or (ii) the Auction Deposit is received after 17:00 EDT on the Auction Deposit Date and Registration is terminated.
- h) With respect to an Eligible DER that cleared the Local Capacity Auction:
  - i) in the event the Registrant has completed the Supplemental Registration at the time the Contract is executed, the Auction Deposit shall be refunded by the DSO within a reasonable timeframe following receipt by the DSO of the executed Contract, or
  - ii) in the event the Registrant has not completed the Supplemental Registration at the time the Contract is executed, the Auction Deposit will not be refunded and instead will be exchanged for Completion Security upon execution of the Contract for such Contracted DER. Completion Security will be refunded in accordance with the Contract.

## **5.5 LOCAL CAPACITY TARGET AND RESERVE SUB-TARGET CAPACITY**

The Local Capacity Auction will have a Target Capacity and a Reserve Sub-Target Capacity, which will be published in the Pre-Auction Report on the Website.

## **5.6 CAPACITY AUCTION FORMAT**

The Local Capacity Auction will use a single round, pay-as-clear price, electronically-sealed offer format, which means:

- Eligible Registrants will submit their Capacity Offer for each Eligible DER during the Capacity Auction Offer Window and will be able to submit multiple offers with different prices for different quantities (referred to together as a “**price-quantity pair**”) of capacity, provided the capacity offered shall not exceed the Eligible Capacity of the Eligible DER;
- Capacity Offers and other information that is confidential to the Eligible Registrant will not be visible to other Eligible Registrants at any point during the auction process or thereafter; and
- Capacity Offers are automatically electronically sealed upon submission and cannot be viewed by the DSO or any of its Representatives or the IESO until after the Local Capacity Auction clears.

## **5.7 MAXIMUM AND MINIMUM CAPACITY, ENERGY AND RESERVE PRICES**

The Pre-Auction Report will set out the:

- a) Maximum Capacity Price (\$/kW-day), which price reflects the maximum price at which an Eligible Registrant will be permitted to offer their Eligible Capacity and is further defined in *Appendix A – Glossary of Terms*.
- b) Maximum Energy Price and Minimum Energy Price so that Eligible Registrants that choose to participate in the Local Capacity Auction are aware of the range of Bids/Offeres they may submit into the Local Energy Auction during the Commitment Period in the event they clear the Local Capacity Auction.
- c) Maximum Reserve Price and Minimum Reserve Price so that Eligible Registrants that choose to participate in the Local Capacity Auction as Reserve-Capable Eligible DERs are aware of the range of Offers (Reserve) they may submit into the Local Reserve Auction during the Commitment Period in the event they clear the Local Capacity Auction.

The Maximum Energy Price, Minimum Energy Price, Maximum Reserve Price and Minimum Reserve Price are further described in Section 6.5.

## 5.8 CAPACITY OFFER SUBMISSION

Capacity Offers into the Local Capacity Auction will be made exclusively through the Platform. Eligible Registrants can submit one Capacity Offer per Eligible DER.

A “**Capacity Offer**” in the Local Capacity Auction will be specific to an Eligible DER and will require the completion of three fields in the Platform for each price-quantity pair, along with one additional field indicating whether the Eligible DER is Reserve-Capable:

- First, the quantity of DER Capacity (in kW), in increments of 10 kW, that is being offered into the Local Capacity Auction;
- Second, the price (in \$/kW-day) at which the Eligible Registrant is willing to supply 1 kW of DER Capacity per day;
- Third, an indication as to whether the price-quantity pair has a full or partial clearing flag, as described in subsection (h) below; and
- Fourth, if the Eligible DER is Reserve-Capable, an indication that all of its price-quantity pairs have a Reserve-Capable clearing flag.
- A Capacity Offer that is flagged as Reserve-Capable is referred to herein as a “**Capacity Offer (Reserve)**” and shall constitute a subset of the Capacity Offers.
- With respect to Aggregators, the above fields will be completed for each Aggregator DER that is an Eligible DER.

Each Capacity Offer must comply with the following requirements:

- a) Eligible Registrants must submit Capacity Offers individually for each Eligible DER;
- b) A Capacity Offer would, if accepted, be binding for the entirety of the Commitment Period;
- c) The Capacity Offer will only be applicable for each day there is an Availability Window;

- d) The Capacity Offer quantity must not be less than 100 kW and must not exceed the Eligible Capacity for the Eligible DER;
- e) The Capacity Offer price must not be less than the Minimum Capacity Price and must not be greater than the Maximum Capacity Price;
- f) Eligible Registrants will be able to submit up to five (5) monotonically increasing price-quantity pairs (i.e. as the quantity increases so does the price), with the total offered quantity of all price-quantity pairs equal to or less than the Eligible Capacity for the Eligible DER;
- g) The Capacity Offer quantity must increase with every new price-quantity pair added to an offer set;
- h) Each Capacity Offer must specify, for each price-quantity pair, whether the entire capacity represented in the price-quantity pair must be cleared in full or whether it may be partially cleared. A full clearing flag is an indication that the quantity of capacity offered in a given price-quantity pair must be fully selected or not selected at all. A partial clearing flag indicates that all, part, or none of the capacity offered in a given price-quantity pair may be selected; and
- i) Capacity Offers shall be expressed in dollars and whole cents.

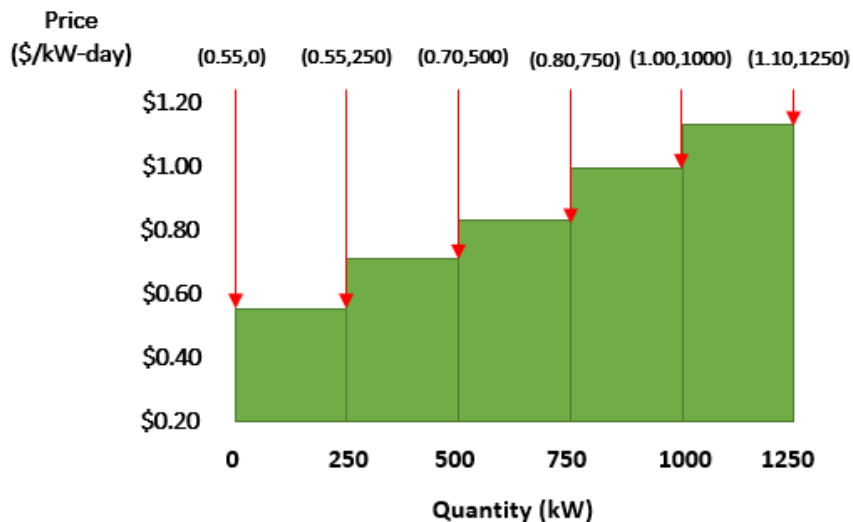


Figure 2: Example of price-quantity pairs monotonically increasing in a Capacity Offer

## 5.9 CAPACITY AUCTION CLEARING

Once the Capacity Auction Offer Window closes, the Platform will aggregate the quantities associated with the Capacity Offers (Reserve) (the “**Aggregate Offered Reserve**”) and determine whether the Aggregate Offered Reserve is greater than or equal to the Reserve Sub-Target Capacity.

If the Aggregate Offered Reserve is less than the Reserve Sub-Target Capacity, then the Local Capacity Auction will clear in accordance with Section 5.9.1 of the Rules.

If the Aggregate Offered Reserve is greater than or equal to the Reserve Sub-Target Capacity, then the Local Capacity Auction will clear in accordance with Section 5.9.2 of the Rules.

#### **5.9.1. Insufficient Aggregate Offered Reserve**

If the Aggregate Offered Reserve is less than the Reserve Sub-Target Capacity, then

- a) the DSO will not procure Reserve during the Commitment Period and notwithstanding that an Eligible DER may be Reserve-Capable, it will not receive a Local Reserve Obligation. Such Eligible DER may still receive a Local Capacity Obligation in accordance the process detailed in this Section 5.9.1 of the Rules, and
- b) the Platform will determine:
  - i. the Local Capacity Clearing Price;
  - ii. the total Local Capacity cleared for the Demonstration Area; and
  - iii. the Local Capacity Obligation for each Eligible DER.

To determine the Local Capacity Clearing Price, the Platform algorithm will order the Eligible DERs with Capacity Offers less than or equal to the Maximum Capacity Price from least to most expensive.

The Platform will then select Capacity Offers, including both full and partial Capacity Offers, until the sum of the quantities submitted as part of those Capacity Offers equals or is below the Target Capacity. The Target Capacity will not be exceeded, therefore in the event the last Capacity Offer considered results in cleared aggregate Local Capacity that exceeds the Target Capacity, such offer will not be cleared and the Local Capacity Auction will clear with an amount that is less than the Target Capacity. The Local Capacity Clearing Price is equal to the last cleared price-quantity pair submitted as part of a Capacity Offer, and includes price-quantity pairs with partial clearing flags.

If two or more Eligible Registrants submit a Capacity Offer at the same price for the last available quantity, the Capacity Offer with the earlier Time Stamp will be selected as the successful Capacity Offer. The Platform is structured such that only a single Capacity Offer can be submitted at the same time, to the millisecond.

#### **5.9.2. Sufficient Aggregate Offered Reserve**

If the Aggregate Offered Reserve is greater than or equal to the Reserve Sub-Target Capacity, then the Local Capacity Auction will clear in accordance with the standard process (unconstrained) as described in subsection (a) below. The standard process (unconstrained) initially ignores the Reserve Sub-Target Capacity when clearing the Local Capacity Auction. If the standard process (unconstrained) fails to produce enough Capacity Offers (Reserve) to meet the Reserve Sub-Target Capacity, then the DSO will proceed to use the special process (constrained) to determine the Local Capacity Clearing Price and the Local Reserve Clearing Price. The special process (constrained) ensures that the Reserve Sub-Target Capacity is met.

- a) **Standard Process (Unconstrained)**



Step (1): The Platform algorithm will order Eligible DERs with Capacity Offers that are less than or equal to the Maximum Capacity Price from least to most expensive.

Step (2): The Platform will then select Capacity Offers, including both full and partial Capacity Offers, until the sum of the quantities submitted as part of these Capacity Offers equals or is below the Target Capacity. The Target Capacity will not be exceeded, therefore in the event the last Capacity Offer considered results in cleared total Local Capacity that exceeds the Target Capacity, such offer will not be cleared and the Local Capacity Auction will clear with an amount that is less than the Target Capacity.

Step (3):

- If the sum of the quantities submitted as part of the Capacity Offers (Reserve) and selected in Step (2) is greater than or equal to the Reserve Sub-Target Capacity, then the Local Capacity Auction has cleared, and the Local Capacity Clearing Price and the Local Reserve Clearing Price are both equal to the last cleared price-quantity pair submitted as part of a Capacity Offer (which may include a Capacity Offer (Reserve)), and include price-quantity pairs with partial clearing flags. If two or more Eligible Registrants submit a Capacity Offer at the same price for the last available quantity, the Capacity Offer with the earlier Time Stamp will be selected as the successful Capacity Offer; or
- If the sum of the quantities submitted as part of the Capacity Offers (Reserve) and selected in Step (2) is less than the Reserve Sub-Target Capacity, then the standard process (unconstrained) will end, and the Local Capacity Auction will be cleared in accordance with the special process (constrained) described in subsection (b) below.

**b) Special Process (Constrained)**

Step (A): The Platform algorithm will first order the Capacity Offers (Reserve) that are less than or equal to the Maximum Capacity Price from least to most expensive.

Step (B): The Platform will then select the Capacity Offers (Reserve) in Step (A), including both full and partial Capacity Offers (Reserve), until the sum of the quantities submitted as part of the Capacity Offers (Reserve) equals or exceeds the Reserve Sub-Target Capacity. The Reserve Sub-Target Capacity may be exceeded. In the event the last Capacity Offer (Reserve) causes the Reserve Sub-Target Capacity to be exceeded, such offer will be cleared and the Local Capacity Auction will clear with an amount that is more than the Reserve Sub-Target Capacity. The Local Reserve Clearing Price is equal to the last cleared price-quantity pair associated with a Capacity Offer (Reserve) selected, and includes price-quantity pairs with full and partial clearing flags.

Step (C): The Platform will then order any remaining Capacity Offers that were not Capacity Offers (Reserve) selected in Step (B) less than or equal to the Maximum Capacity Price ("**Remaining Capacity Offers**") from least to most expensive.

Step (D): The Platform will select Remaining Capacity Offers, including both full and partial Capacity Offers, until the sum of the quantities submitted as part of the Remaining Capacity Offers plus the Capacity Offers (Reserve) cleared in the Local Capacity Auction in Step(B) equals or is below the Target Capacity. The Target Capacity will not be exceeded, therefore in



the event the last Remaining Capacity Offer causes the Target Capacity to be exceeded, such Remaining Capacity Offer will not be cleared and the Local Capacity Auction will clear with an amount that is less than the Target Capacity. The Local Capacity Clearing Price is equal to the last cleared price-quantity pair associated with a Remaining Capacity Offer selected, and includes price-quantity pairs with partial clearing flags.

If two or more Eligible Registrants submit a Capacity Offer at the same price for the last available quantity, the Capacity Offer with the earlier Time Stamp will be selected as the successful Capacity Offer.

### **5.9.3. Local Reserve Obligations and Local Capacity Obligations**

All Eligible DERs that clear the Local Capacity Auction (including Eligible DERs that are Reserve-Capable) will be assigned a Local Capacity Obligation equal to the sum of the quantities (kW) contained in the Capacity Offers that cleared the auction.

Reserve-Capable Eligible DERs that clear the Local Capacity Auction will, in addition to their Local Capacity Obligation, also be assigned a Local Reserve Obligation, as follows:

- a) If the Local Capacity Auction cleared on the standard (unconstrained) basis, then the Local Reserve Obligation will equal the Local Capacity Obligation for such Eligible DER.
- b) If the Local Capacity Auction clears on the special (constrained) basis, the Local Reserve Obligation will be equal to the sum of the quantities contained in the Capacity Offers (Reserve) submitted by the Eligible DER in Step (B) of the special process (constrained). For clarity, the Local Capacity Obligation for such Eligible DER will be equal to the sum of the quantities contained in all Capacity Offers accepted during the special process (constrained), such that the Local Reserve Obligation may be less than the Local Capacity Obligation.

## **5.10 CONTRACT**

### **5.10.1. Contract Issuance**

- a) A Contract will be issued to Eligible Registrants for each Eligible DER, including Future DERs, that clears the Local Capacity Auction following the close of the Capacity Auction Offer Window. An Eligible DER that is the subject of a Contract is referred to in these Rules as a Contracted DER.
- b) With respect to Aggregators, a single Contract will be issued for each Aggregator DER that clears the Local Capacity Auction. An Aggregator DER that is the subject of a Contract is also referred to in these Rules as a Contracted DER.

- c) The Contract will specify the Local Capacity Obligation and if applicable, Local Reserve Obligation, for the Contracted DER.
- d) An Eligible Registrant that has not completed the Supplemental Registration for the Eligible DER prior to the issuance of the Contract for such DER is required to provide Completion Security.
- e) The Contract will be issued to Eligible Registrants via the Platform.
- f) An Eligible Registrant will have not less than twenty (20) Business Days from the issuance of the Contract to the Eligible Registrant (which issuance will be Time Stamped by the Platform) to submit an executed Contract to the DSO by email. The Contract includes the explicit consent of the Eligible Registrant to permit the DSO to exchange the Auction Deposit for the Completion Security. If the DSO does not receive the executed Contract from the Eligible Registrant within the required timeframes, the Contracted DER will be deemed to have been withdrawn by the Eligible Registrant from the Demonstration and the Contract shall be null and void, and the Eligible Registrant shall pay to the DSO as liquidated damages and not as a penalty, a sum of money equal to the Auction Deposit.
- g) Upon receipt of the executed Contract the DSO will execute the Contract and notify the successful Eligible Registrant that they are qualified to participate in the Local Energy Auctions, and the Eligible Registrant shall be classified as a Participant for the purpose of these Rules.

#### **5.10.2. Form of Contract**

The form of Contract is attached hereto as *Appendix D - Contract*. Changes to the form of Contract will be governed by the terms of the Contract.

#### **5.10.3. Resolving Inconsistencies**

For greater certainty, to the extent that there is any inconsistency between these Rules and the Contract, the Contract shall prevail.

### **5.11 POST-AUCTION REPORTING**

Following the Local Capacity Auction clearing and execution of Contracts, the DSO will prepare a public and a private post-auction report to communicate the results of the Local Capacity Auction. The private post-auction report will be available to each Participant only via the Platform and list each Eligible DER and its associated Local Capacity Obligation and if applicable, Local Reserve Obligation. The public post-auction report will be posted on the Website and will group all Local Capacity Obligations and, if applicable, all Local Reserve Obligations for each Eligible Registrant.

The public post-local capacity auction report will also provide the following information for the Commitment Period:

- a) The Local Capacity Clearing Price and if applicable, the Local Reserve Clearing Price;
- b) The amount of Local Capacity, including Local Capacity offered by Reserve-Capable Eligible DERs, cleared through the Local Capacity Auction; and
- c) The quantities of cleared and un-cleared capacity for each category of Permitted Resource.

The public post-local capacity auction report will be available following the close of the Capacity Auction Offer Window on a date to be published in the Pre-Auction Report.

## **5.12 CONFIRMING ELIGIBILITY OF CONTRACTED DERs**

For each Contracted DER for which the Supplemental Registration was not completed prior to execution of the Contract, the Participant must complete its Supplemental Registration by providing the information required in Section 4.1.2(c) and Section 4.1.2(d), as applicable via the Platform no later than the last day of the Supplemental Registration Period:

- a) The DSO will review and assess the information provided in the Supplemental Registration, including any Additional Information provided within the requested timeframes, against the eligibility criteria listed in Sections 4.1.2 and 4.1.3. Contracted DERs, and, in the case of Aggregators, Contributor DERs, that meet the eligibility criteria will be required to participate in the Local Energy Auctions.
- b) For a Participant that is an Aggregator, all Contracted DERs that successfully complete the Supplemental Registration will be included on the Contributor List. Changes to the Contributor List may only be made in accordance with Section 8 of the Rules.
- c) Upon successful completion of the Supplemental Registration of a Contracted DER, the Completion Security associated with such Contracted DER will be refunded to the Participant by the DSO within a reasonable timeframe in accordance with the Contract.
- d) In the event a Contracted DER is deemed ineligible by the DSO acting reasonably, the Contract for such DER will be terminated and the Participant shall pay to the DSO as liquidated damages and not as a penalty, a sum of money equal to the Completion Security associated with such Contracted DER.
- e) In the event all, but not less than all, of a Participant's Contracted DERs are deemed ineligible, the Registration will be Terminated in accordance with Section 11.3.

Following the close of the Supplemental Registration Period, the results of the review and assessment of the Supplemental Registrations will be published on the Platform and confirm which Contracted DERs are eligible to participate in the Local Energy Auctions.

## 5.13 BID/OFFER SUBMISSION START DATE

The Platform will be open to receive Bids or Offers, as applicable, for each Contracted DER for the first Local Energy Auction as of the Bid/Offer Submission Start Date.

Prior to the Bid/Offer Submission Start Date, Participants will be encouraged to view the pre-recorded videos accessible on the Website that provide an overview of the Platform user interface in preparation for the Local Energy Auction.

## 6. Local Energy Auctions and Local Reserve Auctions (Commitment Period)

### 6.1 THE COMMITMENT PERIOD

The second Local Capacity Auction will consist of a single Commitment Period from May 1, 2022 to October 31, 2022. During the Commitment Period, Participants are required to satisfy their Local Capacity Obligation(s) and if applicable, Local Reserve Obligation(s), by participating in the Local Energy Auctions and Local Reserve Auctions by carrying out the following for each Contracted DER:

- submitting Bids/Offers in the Local Energy Auctions and if applicable, Local Reserve Auctions;
- submitting information regarding Outages, if required; and
- responding to activation instructions and if applicable, deployment instructions, from the DSO during the Availability Window.

### 6.2 LOCAL REQUIREMENTS AND WHOLESALE MARKET SIMULATION

The “**Local Requirement**” (kW) will be determined for the Demonstration Area for each hour of an Availability Window. The Local Requirement is calculated as the Loading Forecast less the Loading Threshold. If the Loading Forecast is greater than the Loading Threshold, then there is a Local Requirement. The Quantity Activated as a result of the Local Requirement will be set by the DSO at its sole discretion. The “**Loading Threshold**” is based on a simulated limit on the loading in the Demonstration Area. The Loading Threshold will be published close to the start of the Commitment Period and may be adjusted on a monthly basis during the Commitment Period or on a more or less frequent basis at the DSO’s discretion. The “**Loading Forecast**” is the forecasted load in the Demonstration Area, and is generated on a rolling basis by the DSO’s forecasting tool 24 hours ahead of each hour in the Availability Window. The Platform will present a daily chart showing the Loading Forecast and Loading Threshold.

The DSO will determine whether there is a Local Requirement prior to 07:00 EDT on each Business Day during the Commitment Period. The Platform will also track the Standby Shadow Price. A Standby Shadow Price greater than or equal to \$100/MWh (\$0.10/kWh) indicates a possible simulated energy need in the Wholesale Market.

In the event the DSO identifies a Local Requirement or the Standby Shadow Price is greater than or equal to \$100/MWh for any hour during the Availability Window (a “**Standby Hour**”)

of that Business Day, the DSO may in its discretion, issue a Standby Notice. Any Standby Notice issued will be issued to Participants at 07:00 EDT. A day during the Commitment Period that has a Standby Hour is referred to as a “**Standby Day**”.

The DSO will also determine, in its sole and absolute discretion, the “**Local Reserve Requirement**” (kW) for the Demonstration Area for each Standby Hour. The Local Reserve Requirement may range between 0 kW and the Reserve Sub-Target Capacity.

### **6.3 LOCAL ENERGY AUCTION AND LOCAL RESERVE AUCTION FORMAT**

The Local Energy Auctions and Local Reserve Auctions will use a single-round, pay-as-clear price format, electronically-sealed offer which means:

- a) Participants will submit their Bids/Offer during a single round and will be required to submit a single Bid/Offer for each hour of the Availability Window for their contracted Local Capacity Obligation and if applicable, Local Reserve Obligation;
- b) The Platform algorithm will clear the Local Energy Auction and, if applicable, Local Reserve Auction, based on the Bids/Offer submitted during the single round; and
- c) Once a Bid/Offer is submitted, it is automatically electronically sealed and cannot be viewed by the DSO, other Participants or any other third party until after the Local Energy Auction and Local Reserve Auction, if applicable, clears.

Notwithstanding anything to the contrary, Contracted DERs will be activated or if applicable, deployed, as applicable, to Deliver/Reduce Energy (whether to meet the Local Requirement or, if applicable, the Local Reserve Requirement) a maximum of ten (10) times during the Commitment Period, excluding Test Activations and Test Deployments.

Successful Participants that are activated or deployed, as applicable, during an Availability Window to Deliver/Reduce Energy to meet the Local Requirement will be paid the DLMP Payment for their activations in accordance with the settlement provisions in the Contract.

Successful Participants that are scheduled during an Availability Window to provide Reserve to meet the Local Reserve Requirement will be paid the Local Reserve Price (defined below) for their provision of Reserve in accordance with the settlement provisions in the Contract.

### **6.4 BID/OFFER FORMAT**

Demand Response Resources will submit energy Bids identifying the price at which they will Reduce their Energy usage. A Demand Response Resource will be activated “off” when the Local Energy Price is greater than or equal to their Bid, unless otherwise scheduled to provide Reserve.

Storage Resources and Thermal Resources will submit Offers (Energy) identifying the price at which they are willing to Deliver their Energy to the DSO’s Distribution System. Storage Resources and Thermal Resources will be activated “on” when their Offers are less than or equal to Local Energy Price, unless otherwise scheduled to provide Reserve.

Contracted DERs that have been assigned a Local Reserve Obligation will also be required to submit an Offer (Reserve) identifying the price at which the Contracted DER is willing to provide its Reserve to the DSO's Distribution System. Such Contracted DER may be scheduled to provide Reserve when there is a Local Reserve Requirement and its Offer (Reserve) is less than or equal to the Local Reserve Price.

Submitted Bids/Offers will be in the form of price-quantity pairs. A Bid/Offer in the Local Energy Auction and if applicable, Local Reserve Auction, will be specific to a Contracted DER and will have four fields for completion in the Platform for each price-quantity pair:

- First, the **quantity** of Energy (in kW), in increments or decrements of 10 kW, that is being offered or bid into the Local Energy Auction for one hour;
- Second, the **price** per kilowatt-hour (in \$/kWh) at which the Participant is willing to Deliver 1 kWh of Energy or Reduce their usage of Energy by 1 kWh using the Contracted DER;
- Third, an indication as to whether the price-quantity pair is a full or partial clearing flag, as described in subsection i) below; and
- Fourth, for Contracted DERs with a Local Reserve Obligation, for each **quantity** of Energy above, the corresponding **price** per kilowatt (in \$/kW) at which the Participant is willing to provide 1 kW of Reserve using the Contracted DER for the quantity.

Bids/Offers must be submitted for each hour of an Availability Window. Each Bid/Offer must comply with the following requirements:

- a) Participants must submit Bids/Offers individually for each Contracted DER;
- b) The Bid/Offer will, if accepted, be binding for the Activation Hour (defined below) or Reserve Hour, as applicable, for which it was submitted;
- c) The quantity in the Bid/Offer for one hour must not be less than 100 kW and must not exceed the Local Capacity Obligation or if applicable, Local Reserve Obligation, for the Contracted DER;
- d) The Bid or Offer (Energy) price must not be less than the Minimum Energy Price and must not be greater than the Maximum Energy Price specified in the Pre-Auction Report;
- e) If applicable, the Offer (Reserve) price must not be less than the Minimum Reserve Price and must not be greater than the Maximum Reserve Price specified in the Pre-Auction Report;
- f) Contracted DERs that are Thermal Resources or Storage Resources will be able to submit up to five (5) monotonically increasing price-quantity pairs (i.e. as the quantity increases so does the price) as part of each Offer (Energy) and the quantity must increase with every new price-quantity pair added to an offer set in increments of 10 kW;
- g) Contracted DERs that are Demand Response Resources will be able to submit up to five (5) monotonically decreasing price-quantity pairs (i.e. as the quantity decreases



so does the price) as part of each Bid and the quantity must decrease with every new price-quantity pair added to a bid set in decrements of 10 kW;

- h) Contracted DERs that have a Local Reserve Obligation must also submit an Offer (Reserve) price associated with each Bid or Offer (Energy) price-quantity pair submitted;
- i) The Bid/Offer must specify, for each price-quantity pair submitted, whether the entire quantity represented in the price-quantity pair must be cleared in full or whether it may be partially cleared in the Local Energy Auction and if applicable the Local Reserve Auction. A full clearing flag is an indication that the quantity of Energy specified in a Bid/Offer in a given price-quantity pair must be fully selected or not selected at all. A partial clearing flag indicates that (i) all, part, or none of the Energy specified in a Bid/Offer in a given price-quantity pair may be selected, in decrements or increments of 10 kWh, as applicable, and (ii) the Platform algorithm may, in accordance with Appendix E, split the Bid/Offer to meet the Local Requirement and/or Local Reserve Requirement as applicable;
- j) Bids/Offers shall be expressed in dollars and whole cents.

## **6.5 MAXIMUM AND MINIMUM ENERGY PRICE AND RESERVE PRICE**

The Maximum Energy Price, Minimum Energy Price, Maximum Reserve Price, and Minimum Reserve Price are established by the DSO and shall apply for the Commitment Period. The Maximum Energy Price, Minimum Energy Price, Maximum Reserve Price, and Minimum Reserve Price will be published on the Website and in the Pre-Auction Report. The Platform is set up such that only Bids or Offers (Energy) that are within the range established by the Minimum Energy Price and Maximum Energy Price will be accepted, and if applicable to only accept Offers (Reserve) that are within the range established by the Maximum Reserve Price and Minimum Reserve Price will be accepted.

## **6.6 BID/OFFER SUBMISSION**

Participants are expected to Bid/Offer the Local Capacity Obligation and if applicable, Local Reserve Obligation, for each Contracted DER into the Local Energy Auctions and Local Reserve Auctions.

On the Bid/Offer Submission Start Date the Platform will send notice to Participants inviting them to begin submitting their Offers or Bids, as applicable, for the first Local Energy Auction and the first Local Reserve Auction, if applicable, for each of their Contracted DERs.

Bids/Offers must be in place prior to the Commitment Period start date or Participants risk incurring non-performance charges. Once submitted, a Bid/Offer will remain in place as a standing Bid/Offer throughout the Commitment Period and will apply to subsequent Local Energy Auctions and Local Reserve Auctions unless the Participant takes steps to change the Bid/Offer or withdraw it.

Participants will be able to submit and change Bids/Offers for Contracted DERs throughout the Commitment Period except during the hours of 09:00 EDT to 10:00 EDT of a Standby Day.

Bids/Offers for the Availability Window of a Business Day in the Commitment Period must be updated by 09:00 EDT to apply to the Availability Window of that Business Day. Amendments made to Bids/Offers after 10:00 EDT of any Business Day will only be applied to the Availability Window of the next Business Day.

In the event a Participant fails to submit Bids/Offers for a Contracted DER by 09:00 EDT on the first Activation Day (defined below) of the Commitment Period, withdraws its Bids/Offers at any time during the Commitment Period, or submits Bids/Offers that are less than the Local Capacity Obligation or Local Reserve Obligation, if applicable, for the respective Contracted DER, non-performance charges shall apply.

## **6.7 AUCTION CLEARING, SCHEDULING AND ACTIVATION**

A Standby Notice may be issued to Participants for each Contracted DER at 07:00 EDT of each Standby Day. The Standby Notice informs the Participant that their Contracted DER(s) may be activated by the DSO as a result of the Local Energy Auction or scheduled by the DSO as a result of the Local Reserve Auction during the upcoming Availability Window.

Standby Notices will be sent to Participants via the Platform and email.

Following issuance of the Standby Notice, the DSO will continue to update the Loading Forecast using the most recent data and use the updated Loading Forecast to confirm whether there is a Local Requirement in each hour during the Availability Window. An hour in which a Contracted DER is activated to meet the Local Requirement is a “**DSO-Activation Hour**”.

The DSO will also monitor the Activation Shadow Price for each hour during the Availability Window to assess whether Bids or Offers (Energy) are less than the Activation Shadow Price. The activation of a Contracted DER based on the Activation Shadow Price is a “**TSO-Activation Hour**”. An hour during the Availability Window that is either a DSO-Activation Hour or a TSO-Activation Hour for a Contracted DER is referred to as an “**Activation Hour**” (as further defined in *Appendix A – Glossary of Terms*). A Business Day during the Commitment Period that has an Activation Hour is referred to as an “**Activation Day**”.

Following issuance of the Standby Notice, the DSO will determine whether there is a Local Reserve Requirement for each Activation Hour in accordance with Section 6.2 above.

An hour in which there is a Local Reserve Requirement is a “**Reserve Hour**”. By default, a Reserve Hour can only occur on an Activation Day.

### **6.7.1. Auction Clearing**

Approximately three hours prior to each hour of the Availability Window, the Platform algorithm will determine if the hour that is three hours ahead is an Activation Hour or Reserve



Hour for the Contracted DERs in the Demonstration by first assessing whether there is a Local Requirement.

In the event there is no Local Requirement, the Platform algorithm will accept all such Bids and Offers (Energy) that are less than or equal to the Activation Shadow Price, and the process will terminate.

In the event there is a Local Requirement, the Platform algorithm will determine the Total Energy Quantity to be cleared in the Local Energy Auction and, if there is a Local Reserve Requirement, the Total Reserve Quantity to be cleared in the Local Reserve Auction.

To satisfy the Total Energy Quantity and, if applicable, the Total Reserve Quantity, the Platform algorithm will accept Bids or Offers (Energy) and Offers (Reserve) in accordance with the process described in *Appendix E – Activation and Scheduling*.

### **6.7.2. Activation, Scheduling and Deployment**

If the Platform algorithm determines that a Contracted DER has an Activation Hour, a Reserve Hour, or both an Activation Hour and Reserve Hour in the hour that is three hours ahead, the Platform algorithm will determine if each of the next three hours is also an Activation Hour or Reserve Hour, or both, as applicable, and, if so, the Quantity Activated and if applicable, Quantity Reserved, for such Contracted DER. Activation Hours and Reserve Hours must also be consecutive. Contracted DERs will only be activated to provide Energy once during an Availability Window. Contracted DERs will only be scheduled to provide Reserve once during an Availability Window. The total of the consecutive Activation Hours and Reserve Hours will not exceed four (4) consecutive hours (for clarity, the same hour will not be counted twice if it is both an Activation Hour and a Reserve Hour). For clarity, an hour can be both an Activation Hour and a Reserve Hour for the same Contracted DER, provided that the Quantity Activated and Quantity Reserved are each in respect of different portions of such Contracted DER's DER Capacity.

If no Bids or Offers (Energy) are selected pursuant to Section 6.7.1 above, then the hour is not an Activation Hour, and by default, cannot be a Reserve Hour. If no Offers (Reserve) are selected for the Activation Hour pursuant to Section 6.7.1 above, then the hour is not a Reserve Hour.

#### **a) Energy Activations**

In the event the Platform determines that there are one or more Activation Hours within that day's Availability Window, the DSO may, in its discretion, issue an Activation Notice to the Participant. Activation Notices are sent to Participants no later than two hours ahead of an Activation Hour. The Activation Notice will confirm the Quantity Activated required from the Contracted DER for each Activation Hour in the Availability Window. In the event a

Contracted DER is activated for more than one hour during the Availability Window, the Activation Notice will include the Quantity Activated for each Activation Hour.

Activation Notices will be sent to Participants via the Platform and email. Within one hundred twenty (120) minutes of receiving an Activation Notice, a Participant must acknowledge the Activation Notice by either accepting or declining the Activation Notice via the Platform. In the event a Participant fails to acknowledge the Activation Notice within one hundred twenty (120) minutes of receiving the Activation Notice, the Participant will not be activated and will be subject to an Availability Charge for that day.

Once activated, a Participant will be paid the Local Energy Price for the Energy Delivered or Reduced, as applicable, during the Activation Hour(s) in accordance with the terms of the applicable Contract. The “**Local Energy Price**” is equal to the greater of (i) the highest Bid/Offer accepted to meet (or exceed) the Total Energy Quantity in accordance with procedures set out in Appendix E, and (ii) the Activation Shadow Price for such Activation Hour. The Local Energy Price is used as the “**Distribution Locational Marginal Price**”, which notionally represents the marginal price of Energy in the Demonstration Area, and will be used in the Demonstration to settle all Participants.

#### b) **Reserve Scheduling**

For Contracted DERs that have been assigned a Local Reserve Obligation, in the event the Platform determines that there are one or more Reserve Hours within that day’s Availability Window, the DSO may, in its discretion, issue a Reserve Notice to the Participant. Reserve Notices are sent to Participants no later than two hours ahead of a Reserve Hour. The Reserve Notice will confirm the Quantity Reserved required from the Contracted DER for each Reserve Hour in the Availability Window. In the event a Contracted DER is scheduled for more than one hour during the Availability Window, the Reserve Notice will include the Quantity Reserved for each Reserve Hour.

Reserve Notices will be sent to Participants via the Platform and email.

For clarity, a Contracted DER may be assigned an Activation Hour and a Reserve Hour within the same Availability Window. Contracted DERs that have been assigned a Local Reserve Obligation may be activated and/or deployed within the same Availability Window.

Once scheduled, Participant will be paid the Local Reserve Price for the Reserve provided during the Reserve Hour(s) in accordance with the terms of the applicable Contract.

The “**Local Reserve Price**” is calculated in accordance with procedures set out in the applicable Contract.

#### c) **Reserve Deployment**

In the event of a Contingency, the DSO may, in its discretion, set a Total Deployment Quantity.

To satisfy the Total Deployment Quantity, the DSO may use the Platform to issue a Deployment Notice to any Participant that received a Reserve Notice in respect of a Contracted DER for one or more Reserve Hours. A Deployment Notice shall indicate the Deployment Intervals and Quantity Deployed. For the purposes of this Demonstration, the Quantity Deployed shall be consistent across all Deployment Intervals identified in a Deployment Notice. The DSO may issue a Deployment Notice at any time prior to or during a Reserve Hour.

The Platform algorithm will, subject to this Section 6.7.2, deploy up to the Quantities Scheduled by ordering price-quantity pairs for Energy, which were submitted as part of the Bids/Offers of Reserve-Capable Contracted DERs by each Participant that has received a Reserve Notice, from lowest to highest Energy price until the Total Deployment Quantity is met or exceeded (in the event the last price-quantity pair is not a partial clearing flag).

Once deployed, a Participant will be paid (the “**Deployment Payment**”) the greater of (i) the DLMP, and (ii) Bid/Offer price for Energy during the Deployment Interval(s) in accordance with the terms of the applicable Contract.

## **6.8 DEMONSTRATION INTEROPERABILITY WITH THE WHOLESALE MARKET**

The Demonstration will explore and test the interoperability of local electricity markets with the Wholesale Markets as described above in Section 6.7.

Interoperability will be managed exclusively between the DSO and the IESO. Participants will only be required to submit Bids/Offers via the Platform for activation by the DSO. For transparency however, Activation Notices sent to Participants will confirm whether the Activation Hour is a DSO-Activation Hour or a TSO-Activation Hour. Settlement will also distinguish between payments that are earned due to DSO activations or TSO activations.

## **6.9 OUTAGES**

### **6.9.1. Outage Management**

Contracted DERs may experience Planned Outages and/or Forced Outages during the Commitment Period.

With respect to Planned Outages, Participants are required to submit the notice (an “**Outage Notice**”) accessible on the Platform advising the DSO of the Planned Outage, which Outage Notice must be submitted prior to the Bid/Offer Submission Start Date. The Outage Notice must describe the cause of the Outage, the expected duration, whether it is a full or partial Outage and the DER Capacity that will be unavailable during the Outage on an hourly basis.

With respect to Forced Outages, Participants should make commercially reasonable efforts to notify the DSO in accordance with terms of the Contract as soon as the Participant is aware of a potential Forced Outage or, in the event this is not possible, immediately upon becoming aware of the Forced Outage and in no event, no later than twenty-four (24) hours following the start of the Forced Outage. Participants will be required to submit an Outage Notice via the Platform, whether in advance of the Forced Outage if possible, or as soon as possible after the start of the Forced Outage. For clarity, an Outage caused by a force majeure event does not constitute a Forced Outage. Force majeure events are dealt with in detail in the Contract.

Upon submission of an Outage Notice, the Platform will treat the Bids/Offer of the Contracted DER as completely withdrawn. In the event the Contracted DER is only experiencing a partial Outage, the Participant must access the Platform to update the Bids/Offer for the Contracted DER to reflect a partial Outage in order to ensure that the Contracted DER may be activated or scheduled, as applicable, for that portion of the DER that is available. Provided that the Participant has submitted an Outage Notice, and for partial Outages, updated the Bids/Offer of the Contracted DER to reflect the partial Outage, the Contracted DER will not be activated to Deliver or Reduce Energy or scheduled to provide Reserve. In the event the Participant fails to submit an Outage Notice or fails to update the Bids/Offer of the Contracted DER to reflect a partial Outage, non-performance charges may apply. Contracted DERs that are experiencing an Outage will not receive all or a portion of their Availability Payment due to non-performance charges calculated in accordance with *Exhibit C – Settlement* of the Contract. Participants may request an adjustment to non-performance charges using the notice of disagreement (NOD) process outlined in *Exhibit F – Form of Notice of Disagreement* of the Contract.

### **6.9.2. Recordkeeping and Reporting**

Participants with a Contracted DER are required to maintain records of all reductions in Local Capacity in an amount equal to 15% of the Local Capacity Obligation or greater, or 15% of the Local Reserve Obligation or greater, if applicable, during the Commitment Period. The DSO may request the records for a period of twenty-four (24) months from the end of the Commitment Period. The records must contain the following details:

- Description of Event
- Account number
- Meter Number
- Activation Date
- Hours of reduced Local Capacity
- Eligible Capacity of the Contracted DER
- Amount of reduction (kW) to Local Capacity
- Action taken to manage energy Bid or Offer, as applicable
- Adjustment of Bids/Offer (timing and amount).

## **6.10 TEST ACTIVATIONS AND TEST DEPLOYMENTS**

Up to two (2) tests in respect of Energy (each a "**Test Activation**") and up to two (2) tests in respect of Reserve (each a "**Test Deployment**") will be performed at the DSO's discretion on Contracted DERs during the Commitment Period to verify that the Contracted DER can satisfy its Local Capacity Obligation or Local Reserve Obligation, as applicable. Test Activations will be conducted by the DSO to verify that a Contracted DER that is a Demand Response Resource can Reduce its Energy in an amount equal to or greater than the Contracted DER's Local Capacity Obligation. In the case of a Contracted DER that is a Thermal Resource or a Storage Resource, Test Activations will be conducted to verify that the Contracted DER can Deliver Energy in an amount equal to or greater than its Local Capacity Obligation. In the case of a Contracted DER that has been assigned a Local Reserve Obligation, Test Deployments will be conducted to verify that the Contracted DER can provide Reserve in an amount equal to or greater than its Local Reserve Obligation for a period of up to four (4) consecutive hours within thirty (30) minutes of the Test Deployment.

Participants that successfully complete Test Activations or Test Deployments will be compensated by means of the Test Activation Payment or Test Deployment Payment, respectively, in accordance with the applicable Contract.

### **6.10.1. Test Activations**

Test Activations will be conducted during the Commitment Period, and will be scheduled to occur during the Availability Window of an Activation Day. A Contracted DER may be tested for up to four consecutive hours (each a "**Test Activation Hour**") and will be expected to follow their activations for the entire duration of the test.

Participants with Contracted DERs will receive a Standby Notice a day ahead of the Test Activation day informing them of a possible Test Activation, and an Activation Notice not less than two (2) hours in advance of the first Activation Hour of the Test Activation.

A Test Activation is considered valid, unless:

- The Participant has (i) provided an Outage Notice to the DSO of a Planned Outage or a Forced Outage with respect to the Contracted DER within the prescribed timeframes in accordance with the Contract, and (ii) if the Outage is a partial Outage, the Participant has updated the Bids/Offer for the Contracted DER to reflect the available DER Capacity during the Outage;
- The DSO did not send either the Standby Notice or the Activation Notice in advance of the Test Activation as per the timelines specified above; or
- The DSO cancels the test prior to the start of the first Activation Hour of the Test Activation.

If the Contracted DER is unable to comply with the Test Activation on the Activation Day, it is the responsibility of the Participant to manage its non-performance in accordance with the terms of the Contract, whether such non-performance is due to force majeure, an Outage, or falls under one of the described performance exemptions. If the Participant advises the DSO

that the entirety of the Contracted DER's Local Capacity is unavailable, subsequent Test Activations will be rescheduled by the DSO following the completion of the non-performance event.

Failure of a Contracted DER to successfully complete the first Test Activation will result in the Capacity Charge being applied. The DSO may also, in its discretion, require the Contracted DER to undergo a second Test Activation. Failure of a Contracted DER to successfully complete a subsequent Test Activation will be considered an event of default under the Contract and may result in the termination of the Contract.

The DSO may determine in its discretion that a Test Activation for a Contracted DER is not required if the DSO is able to verify that the Contracted DER satisfied the performance parameters during a previous Test Activation within the Commitment Period. During a Test Activation, the Quantity Delivered/Reduced for the Contracted DER for each Test Activation Hour must be within a twenty percent (20%) dead-band of the Quantity Activated for such Contracted DER (e.g. at least 80% of the Quantity Activated must be Delivered or Reduced, as applicable). For Thermal Resources, Storage Resources or Demand Response Resources (C&I), Test Activations will be evaluated at every 5-minute interval in a Test Activation Hour. For Demand Response Resources (Residential), Test Activations are evaluated over a one hour period.

Performance parameters for Test Activations for Demand Response Resources will be assessed in accordance with the baselining methodologies outlined in *Exhibit D – Demand Response Baselining* of the Contract.

### **6.10.2. Test Deployments**

Test Deployments will be conducted during the Commitment Period, and will be scheduled to occur during the Availability Window during either:

- (1) a Reserve Hour; or
- (2) an hour that is not a Reserve Hour, but in respect of which the DSO issues a Reserve Notice solely for the purpose of performing a Test Deployment (each a "**Test Reserve Hour**").

A Contracted DER that has received a Local Reserve Obligation may be tested in Deployment Intervals for up to four consecutive hours (each a "**Test Deployment Interval**").

Participants with a Local Reserve Obligation will receive a Standby Notice a day ahead of the Test Deployment day informing them of a possible Test Deployment, and a Reserve Notice not less than two (2) hours in advance of the first Reserve Hour of the Test Deployment.

A Test Deployment is considered valid, unless:

- The Participant has (i) provided an Outage Notice to the DSO of a Planned Outage or a Forced Outage with respect to the Contracted DER within the prescribed timeframes in accordance with the Contract, and (ii) if the Outage is a

partial Outage, the Participant has updated the Bids/Offers for the Contracted DER to reflect the available DER Capacity during the Outage;

- The DSO did not send either the Standby Notice or the Reserve Notice or the Deployment Notice in advance of the Test Deployment as per the timelines specified above; or
- The DSO cancels the test prior to the start of the first Test Deployment Interval of the Test Deployment.

If the Contracted DER is unable to comply with the Test Deployment on the Activation Day, it is the responsibility of the Participant to manage its non-performance in accordance with the terms of the Contract, whether such non-performance is due to force majeure, an Outage, or falls under one of the described performance exemptions. If the Participant advises the DSO that the entirety of the Contracted DER's Local Capacity is unavailable, subsequent Test Deployment will be rescheduled by the DSO following the completion of the non-performance event.

Failure of a Contracted DER that has been assigned a Local Reserve Obligation to successfully complete the first Test Deployment will result in the Capacity Charge being applied. The DSO may also, in its discretion, require such Contracted DER to undergo a second Test Deployment. Failure by the Contracted DER to successfully complete a subsequent Test Deployment will result in:

- the forfeiture of the Contracted DER's right and obligation to participate in the Local Reserve Auction for the Commitment Period; and
- if the Local Reserve Clearing Price is greater than the Local Capacity Clearing Price, then the Contracted DER would become subject to the Local Capacity Clearing Price following its failure of the second Test Deployment.

A Contracted DER that fails two Test Deployments may continue to participate in the Local Energy Auctions in respect of its Local Capacity Obligation only. Such Contracted DER would be subject to Test Activations in accordance with the procedure described in the balance of this Section 6.10.

The DSO may determine in its discretion that a Test Deployment for a Contracted DER is not required if the DSO is able to verify that the Contracted DER satisfied the performance parameters during a previous Test Deployment within the Commitment Period. During a Test Deployment, the Quantity Deployed for the Contracted DER for each Test Deployment Interval must be within a twenty percent (20%) dead-band of the Quantity Reserved for such Contracted DER (e.g. at least 80% of the Quantity Reserved must be Deployed for each Test Deployment Interval). Test Deployments will be evaluated for each Test Deployment Interval.

Performance parameters for Test Deployments for Demand Response Resource (C&I) will be assessed in accordance with the baselining methodologies outlined in *Exhibit D – Demand Response Baselining* of the Contract.



## 7. Settlement

A Participant that meets its Local Capacity Obligation and Local Reserve Obligation (if applicable) by providing Energy and Reserve (if applicable) during the Commitment Period will be compensated for such services on a monthly basis in accordance with the terms of the applicable Contract. Monthly settlement will be done on a stand-alone basis in accordance with the DSO's invoicing process, such that Participants will receive an invoice specific to the Demonstration that is separate from any monthly electricity bill associated with Alectra, as their LDC.

For each Contracted DER the Monthly Payment shall be equal to the amount specified in Exhibit C of the applicable Contract..

In the event the non-performance charges are greater than the total payments made to the Participant in the Monthly Payment, the Monthly Payment shall be zero dollars. *Exhibit C – Settlement* of the Contract sets out the calculations for each of the Availability Payment, DLMP Payment, Local Reserve Payment, Test Activation Payment, Test Deployment Payment, and the non-performance charges in detail.

### 7.1 AVAILABILITY PAYMENTS

Availability Payments compensate a Participant for the Local Capacity it makes available during the Commitment Period. A Participant will receive Availability Payments for each month in the Commitment Period in which it has a Local Capacity Obligation and a Local Reserve Obligation, if applicable, regardless of whether it is activated, scheduled or deployed, as applicable, in the Local Energy Auctions or Local Reserve Auctions. The Availability Payment is based on the Local Capacity Obligation, Local Capacity Clearing Price (normalized hourly), Local Reserve Obligation, if applicable, Local Reserve Clearing Price (normalized hourly), if applicable, Availability Window and number of Business Days within a month. The Local Capacity Obligation amount (kW) and Local Reserve Obligation amount (kW) is specific to the Contracted DER. The Local Capacity Clearing Price or Local Reserve Clearing Price will be specified in the applicable Contract for all Contracted DERs.

### 7.2 DLMP AND RESERVE PAYMENTS

The Contract is structured as a contract for differences. In order to simulate the economics of a Participant being exposed to Distribution Locational Marginal Price, Distribution Locational Marginal Price payments or “**DLMP Payments**” will be provided in the Demonstration to a Participant for the Quantity Delivered/Reduced during Activation Hours. For each Activation Hour that a Participant successfully Delivers Energy (in the case of Thermal Resources or Storage Resources) or successfully Reduces Energy (in the case of Demand Response Resources), the Participant will be paid the DLMP Payment equal to the Quantity Delivered/Reduced (kWh) multiplied by a price per kilowatt hour (\$/kWh) that is equal to the



Distribution Locational Marginal Price (DLMP) less the Hourly Ontario Energy Price, as more fully specified in the applicable Contract.

In addition, in order to compensate Participants for Reserve provided during the Commitment Period, “**Local Reserve Payments**” will be provided in the Demonstration to a Participant for the Quantity Reserved during Reserve Hours. For each Reserve Hour that a Participant provides Reserve, the Participant will be paid the Local Reserve Payment equal to the Quantity Reserved (kW) multiplied by a price per kilowatt (\$/kW) that is equal to the Local Reserve Price, as more fully specified in the applicable Contract.

### **7.3 TEST ACTIVATION PAYMENTS AND TEST DEPLOYMENT PAYMENTS**

Test Activation Payments compensate a Participant for the Quantity Delivered/Reduced provided during a Test Activation. For each Test Activation Hour that a Participant successfully Delivers Energy (in the case of Thermal Resources or Storage Resources) or Reduces Energy (in the case of Demand Response Resources), the Participant will be paid an amount equal to the Quantity Delivered/Reduced multiplied by a fixed Test Activation rate of \$0.25/kWh.

Test Deployment Payments compensate a Participant for the Quantity Deployed during a Test Deployment. For each Test Deployment Interval that a Participant successfully Delivers Energy (in the case of Thermal Resources or Storage Resources) or Reduces Energy (in the case of Demand Response Resources (C&I)), the Participant will be paid an amount equal to the Quantity Delivered/Reduced multiplied by a fixed Test Deployment rate of \$0.25/kWh.

In addition, if the DSO issued a Reserve Notice to a Participant solely for the purpose of performing a Test Deployment, for each Test Reserve Hour, the Participant will be paid an amount (the “**Test Reserve Payment**”) equal to the Quantity Reserved multiplied by a fixed rate of \$0.03/kW.

### **7.4 NON-PERFORMANCE CHARGES**

Non-performance charges resulting from a failure to satisfy Local Capacity Obligations and Local Reserve Obligations are intended to incentivize compliance, ensure integrity of the Local Energy Auctions and Local Reserve Auctions and avoid the DSO paying for the Local Capacity that has not been provided (whether to meet the Local Requirement or the Local Reserve Requirement). A Participant that fails to meet its obligations under the Contract will be liable for non-performance charges. Non-performance charges in the Demonstration are applicable to each category of Permitted Resource and are laid out in detail in *Exhibit C – Settlement* of the Contract.

Availability Charges apply when a Participant fails to submit Offers (Energy) or Bids in the Local Energy Auctions for Local Capacity up to their Local Capacity Obligation or when a

Participant fails to submit Offers (Reserve) in the Local Reserve Auction for Reserve up to their Local Reserve Obligation, as applicable. For greater clarity, a Participant who fails meet both its Local Capacity Obligation and Local Reserve Obligation, if applicable, will be subject to an Availability Charge for each such failure. Availability Charges are structured to be a partial charge such that the Participant will only be charged for that portion of the Local Capacity Obligation or Local Reserve Obligation, as applicable, that was not provided.

Capacity Charges apply to a Contracted DER that fails a Test Activation or Test Deployment.

Dispatch Charges apply to a Contracted DER that is a Thermal Resource, Storage Resource or Demand Response Resource (C&I) when they fail to follow their activation instructions. A fifteen percent (15%) dead band of the dispatch instruction will be used in this assessment, which will be conducted on a 5-minute interval basis, as further detailed in *Exhibit C – Settlement* in the Contract. Demand Response Resources (C&I) are evaluated using a baseline that is calculated in accordance with *Exhibit D – Demand Response Baseline* of the Contract. Dispatch Charges do not apply to Demand Response Resources (Residential). For clarity, a Contracted DER that has been deployed to meet the Local Reserve Obligation and fails to Deliver Energy (in the case of Thermal Resources or Storage Resources) or Reduce Energy (in the case of Demand Response Resources (C&I)) within thirty (30) minutes following the receipt by a Participant of a Deployment Notice is deemed to have failed to follow its deployment instructions.

In addition to incurring Capacity Charges and Dispatch Charges, as applicable, any Contracted DER that (i) fails a Test Deployment, or (ii) fails to follow its deployment instructions, on a given Activation Day, will not receive any Local Reserve Payments (to which it would have otherwise been entitled if not for such failures) for that Activation Day.

## **7.5 METER DATA**

The DSO has access to the meters and meter data for each Contracted DER. In the event of a dispute or breakdown of a meter, Measurement Canada will be responsible for settling any outstanding disputes between the Parties with respect to the meter and meter data used in the Demonstration.

## **8. Changes to Contributor DERs**

Following the close of the Supplemental Registration Period and until the end of the Commitment Period, a Participant that is an Aggregator may request to amend its Contributor List for the Contracted DER by exchanging a Contributor DER for one or more new Contributor DERs (i.e. Contributor DERs that were not previously registered and are not on the Contributor List) by submitting a Change Request. Any new Contributor DER must meet the applicable eligibility criteria in these Rules.

Change Requests must be made at least fourteen (14) Business Days ahead of the first day of each month of the Commitment Period (the “**Change Request Date**”) for a total of six Change Request submission windows. The DSO will review all Change Requests received by the Change Request Date for the upcoming month and notify the Participant of its decision with respect to the Change Request within six (6) Business Days of the Change Request Date. In the event the DSO rejects some or all of the new Contributor DERs that were the subject of the Change Request, the Participant shall have two (2) Business Days following Notice from the DSO to submit a revised Change Request with alternative new Contributor DERs. The DSO shall provide its decision with respect to the revised Change Request no later than two (2) Business Days prior to the first day of the upcoming month in the Commitment Period.

All Change Requests will be submitted for DSO approval using the “Manage Meter Number” feature accessible via the Platform and, with respect to a Contracted DER that is a Demand Response Resource (Residential), must be done simultaneously with the identification of the Control Group for the Contracted DER in accordance with the terms of the Contract. The Control Group must be identified fourteen (14) Business Days ahead of the first day of each month of the Commitment Period. For clarity, new Contributor DERs that are being added to the Contributor List pursuant to the Change Request must be identified as part of the Control Group or Treatment Group at the time the Change Request is submitted.

A Change Request is limited to changing the Meter Number of a Contributor DER that is being removed from the Contributor List (and de-registered from the Demonstration) for the Meter Number of one or more new Contributor DERs. Change Requests will only be approved provided that the new Contributor DER meets the applicable eligibility criteria outlined in Section 2.4 of these Rules, including providing an electricity retailer waiver in the form of *Appendix B – Electricity Retailer Waiver*. Change Requests that are approved by the DSO will be effective the first day of the month following the month in which the Change Request was submitted. Participants may not change any contractually binding information during the Contract term including but not limited to the Permitted Resource category, the Local Capacity Obligation or the Eligible Capacity for the Contracted DER.

## 9. Demonstration Review and Amendments

- a) The DSO may from time to time review and Amend as necessary the Demonstration, the Rules, the form of Contract (which, for greater certainty, shall not affect any executed Contracts) (a “**Demonstration Review**”). The DSO may make an Amendment outside of a Demonstration Review in response to direction from the IESO, changes in Laws, significant changes in market conditions or other circumstances as determined by the DSO in its discretion.
- b) Notice of any Amendment as a result of a Demonstration Review will be posted on the Website at least thirty (30) days prior to the effective date of such Amendment. Notice of any Amendment that is not as a result of a Demonstration Review will be posted by the DSO on the Website for such time period, if any, prior to the effective date of such Amendment, as circumstances may permit.

- c) Amendments made by the DSO shall be without any liability whatsoever to Registrants or Eligible Registrants or any other Person.

## 10. Confidentiality

- a) All information provided by or obtained from the DSO in any form in connection with the Demonstration, either before or after the execution of a Contract, that is not otherwise publicly available is the sole property of the DSO and must be treated as confidential, and:
  - i) is not to be used for any purpose other than participating in the Demonstration and the performance by the Participant of its obligations under the Contract;
  - ii) must not be disclosed without the prior written authorization of the DSO, other than to the OEB and the IESO and other than to the Registrant's, Eligible Registrant's or Participant's employees, counsel or contractors that have a need to know that information for the purpose of participating in the Demonstration and the performance by the Participant of its obligations under the Contract provided the Registrant, Eligible Registrant or Participant obtains similar confidentiality commitments from such third parties; and
  - iii) shall be returned to the DSO or destroyed by the Registrant, Eligible Registrant or Participant or third party (as applicable) DSO immediately upon request of the DSO.
- b) All information contained in a Capacity Offer, Bid or Offer provided by or obtained from an Eligible Registrant in connection with the Demonstration that is not otherwise publically available (the "**Sensitive Information**") will be treated as confidential by the DSO and:
  - i) will not to be used for any purposes other than the Demonstration or any of the Demonstration objectives as set out in Section 1.4 more generally; and
  - ii) must not be disclosed without the prior written authorization of the Registrant or Participant as applicable, except as otherwise provided in this Section 10.
- c) Information provided by a Person participating in the Demonstration may be released in accordance with the provisions of the MFIPPA or FIPPA. Notwithstanding any confidentiality statement provided by the Demonstration participant, the DSO or the IESO may be required to disclose information provided to it by a Demonstration participant and is otherwise not protected from disclosure through an exemption in MFIPPA, FIPPA or any other applicable legislation, regulation or policy. Demonstration participants should not assume that such an exemption is available.
- d) Information provided by a Person participating in the Demonstration in relation to a DER, including location, date, status within the Demonstration and name of Demonstration participant, may be disclosed by the DSO on the Website or

otherwise, and such disclosure may be made on an individual basis, or on an aggregated basis with information provided by other Demonstration participants.

- e) Persons participating in the Demonstration are advised that the any information obtained by the DSO, whether directly or indirectly, including via the Platform or other means, will, as necessary, be disclosed on a confidential basis to the IESO, NRCan, the OEB, the Ministry of Energy, Northern Development and Mines, the DSO's counsel, consultants and any other advisers retained for the purpose of administration of the Demonstration.
- f) If the DSO or any other person specified in paragraph (e) above is requested or required (by oral question, interrogatories, requests for information or documents, court order, civil investigative demand, or similar process) to disclose any Sensitive Information in connection with litigation or any regulatory proceeding or investigation, or pursuant to any applicable Laws, the DSO will promptly notify the Eligible Registrant so that the Eligible Registrant may seek an appropriate protective order. If, in the absence of a protective order or the receipt of a waiver hereunder, the DSO or other person is compelled to disclose the Sensitive Information, the DSO or other person may disclose only such of the Sensitive Information to the person compelling disclosure as is required by Laws and only to such person or persons to which the DSO or other person is legally compelled to disclose and, in connection with such compelled disclosure, the DSO or other person shall provide notice to each such recipient (in co-operation with legal counsel for the Eligible Registrant) that such Sensitive Information is confidential and subject to non-disclosure on terms and conditions as provided in these Rules.

## 11. Additional Rules

### 11.1 RESERVED RIGHTS

- a) The DSO reserves the right to request clarification, additional information, documentation and statements from any Registrant, Eligible Registrant or Participant in relation to any Registration, DER, Bid or Offer, and other information relevant to this Demonstration at any time ("**Additional Information**"). Any requested Additional Information must be submitted to the DSO by e-mail within five (5) Business Days of the date of such request, or by such other means and within such other time frame as may be requested by the DSO, failing which the Registration and Contract, if applicable, may be Terminated. Except in response to the request for Additional Information, a Registrant may not supplement, amend, correct or modify its Registration in any respect once received by the DSO.
- b) The DSO reserves the right to verify with a Registrant, Eligible Registrant or Participant, or with a third party, any of the information set out in a Registration, Bid or Offer.

- c) The DSO reserves the right to waive any informality or irregularity or defect, including any alteration, qualification, omission, inaccuracy or misstatement, non-compliance with these Rules, non-conformity (including in form, content and substance) or irregularity in a Registration, Bid or Offer which is not material, including by extending any deadline set out in these Rules.
- d) The DSO reserves the right to at any time make changes to these Rules, the form of Contract or the Demonstration (including substantial changes or a suspension or cancellation of the Demonstration) without any liability whatsoever to Registrants, Eligible Registrants or any other Person.
- e) The DSO shall not be liable for any delays in delivering the Demonstration, including but not limited to delays in processing, reviewing, accepting or Terminating a Registration, Bid or Offer, providing an Eligibility Notice, commencing an Auction or any step pertaining to an Auction, providing a Pre-Auction Report or post-auction report, or issuing a Contract.
- f) The DSO reserves the right to withdraw the eligibility status of an Eligible Registrant and/or an Eligible DER if the Eligible Registrant and/or Eligible DER, as applicable, ceases to satisfy all of the eligibility requirements or otherwise becomes ineligible pursuant to Section 2 of these Rules.
- g) The DSO reserves the right to withdraw the issuance of a Contract that is extended to an Eligible Registrant, for any reason and at any time, without penalty of any kind, before the Contract is duly executed by the Parties. A decision by the DSO to Terminate any Registration, to withdraw the eligibility status of any Eligible Registrant and/or Eligible DER, or to withdraw the issuance of a Contract with an Eligible Registrant, shall be final and binding and not subject to appeal or judicial review.

## **11.2 ASSIGNMENT**

A Registrant or Eligible Registrant shall not assign its Registration to another Person (including by way of amalgamation or by operation of law) without the consent of the DSO. If a Registrant violates this Section 11.2, the DSO shall be entitled to Terminate the Registration.

## **11.3 TERMINATION**

Termination by the Registrant or Eligible Registrant:

- a) A Registrant or Eligible Registrant may withdraw its Registration from the Demonstration through the Platform at any time prior to the Auction Deposit Date. Upon confirmation by the DSO in writing of the withdrawal from the Demonstration, the Registration shall be deemed Terminated and the Parties shall have no further liability to each other.



- b) A Registrant or Eligible Registrant may not re-apply to the Demonstration during the current Registration Period following the Termination of its Registration.

Termination by the DSO:

- a) The DSO reserves the right to Terminate any incomplete Registration, any Registration that does not satisfy all of the eligibility requirements or is ineligible as set out in Section 2, and any Registration where there was a breach by the Registrant or Eligible Registrant, as applicable, of any of the covenants, representations, warranties or other requirements in these Rules. If a Registration is so Terminated, the DSO will provide the Registrant or Eligible Registrant with notice of the reason(s) for Termination. Termination by the DSO of a Registration may take place by notice to the corresponding Registrant or Eligible Registrant at any time following the receipt of such Registration by the DSO. Eligible Registrants and Eligible DERs that are the subject of a Terminated Registration are no longer eligible to participate in this Demonstration.
- b) The DSO reserves the right to cancel all or any part of the Demonstration, including one or more Auctions and/or Commitment Periods, at any time and for any reason or to suspend the Demonstration in whole or in part for any reason for such period of time as the DSO shall determine in its discretion, in each case without any obligation or any reimbursement to a Registrant or Eligible Registrant, as applicable, except as provided in the Contract, provided however that in the foregoing circumstances, the DSO shall refund any Auction Deposit or Completion Security it holds back to the Eligible Registrant or Participant that submitted such Auction Deposit or Completion Security.
- c) Except as provided for in these Rules, the DSO will not reimburse the Registrant or Eligible Registrant, as applicable, in any manner whatsoever, in the event of Termination of any or all Registrations for any reason, in the event of the revocation of the issuance of the Contract.

## 11.4 GENERAL

A reference to “**Registrant**” in this Section 11.4 shall include “**Eligible Registrant**” unless otherwise indicated.

- a) In the event the consent of the DSO is required to admit a DER to the Demonstration that is the subject of an Existing Contract, the Registrant shall submit a request for such consent in writing within three (3) Business Days of completing its Initial Registration via the Platform and include in its request the rationale for allowing the DER with an Existing Contract to participate in the Demonstration, details of the Existing Contract and the general specifications of the DER including the category of Permitted Resource, DER Capacity, Connection Point.
- b) In the event the consent of the DSO is required for any reason under these Rules other than with respect to an Existing Contract, the Registrant, Eligible Registrant or

Participant, as applicable, must submit a request for such consent in writing and include in its request sufficient detail to allow the DSO to make an informed decision.

- c) Except for changes to the Registrant's coordinates or a change in the Delegate, which changes must be executed via the Platform and confirmed in writing to the DSO, the Registrant is not permitted to make any changes to its Initial Registration or Supplemental Registration, except in accordance with these Rules.
- d) The DSO shall not be obligated in any manner whatsoever, or have any liability, to any Person participating in the Demonstration in any manner, unless and until a Contract is executed with such Person, and then only in accordance with the terms of such Contract, save and except as expressly set out in these Rules.
- e) The DSO shall not be liable to pay a Registrant's costs or expenses under any circumstances. By submitting a Registration, the Registrant irrevocably and unconditionally waives any Claims against the DSO relating to the Registrant's costs and expenses including costs incurred to satisfy the eligibility criteria described in Section 2, the Registration completeness criteria described in Section 3 or any costs associated with, if selected, entering into a Contract.
- f) The Parties acknowledge and agree that it would be difficult and impracticable to determine precisely the amount of actual damages that would be suffered by the DSO and its customers as result of a failure by the Registrant to meet its obligations stipulated in the Rules. The Registrant further acknowledges and agrees that the liquidated damages set forth in the Rules are a fair and reasonable approximation of the amount of actual damages that would be suffered by the DSO and its customers as a result of a failure by the Registrant to meet its obligations under the Rules, and does not constitute a penalty.
- g) Each Registrant, Eligible Registrant and Participant shall be solely responsible for its own costs and expenses relating to the preparation and submission of its Registration, the development, operation, maintenance, and connection to the DSO's Distribution System of its DERs, fuel charges, and participation in the Demonstration, whether or not a Registration is accepted or Terminated or the Demonstration is cancelled, suspended, revoked, amended or revised.
- h) The acceptance by the DSO of a Registration or the issuance of an Eligibility Notice by the DSO to a Registrant shall not be construed as:
  - i) evidence that the DSO has accepted the authenticity or sufficiency of the Registration and its supporting documentation; or
  - ii) a waiver of or bar to any of the DSO's rights under these Rules or otherwise.
- i) The rights reserved by the DSO in these Rules are in addition to any other express rights or any other rights which may be implied in the circumstances, and the DSO shall not be liable for any Claim, losses, damages, liabilities, penalties, obligations, payments, costs and expenses, costs, losses or any direct or indirect damages incurred or suffered by any Registrant or any third party resulting from the DSO exercising any of its express or implied rights under the Demonstration, including



the right to exercise its discretion hereunder. In submitting a Registration or participating in an Auction, each Registrant agrees that it waives any rights it may have to bring a Claim or otherwise as against the DSO for failing to issue the Registrant an Eligibility Notice, issuing an Eligibility Notice to another Registrant, or failing to issue a Contract, as applicable.

- j) In submitting a Registration or participating in an Auction, each Registrant or Eligible Registrant respectively, shall agree that, in no circumstances shall it nor any third party be entitled to recover any damages as against the DSO, whether such claim for damages arises in contract, warranty, equity, negligence, intended conduct, detrimental reliance or otherwise, including any action or claim arising from the acts or omissions, negligent or otherwise, of the DSO, and including any claim by the Registrant that the DSO has failed to comply with these Rules.
- k) By submitting a Registration, the Registrant authorizes the collection by the DSO of the information set out in the Registration and otherwise collected in accordance with the terms hereof, and the use of such information for the purposes set out in or incidental to these Rules and the Contract, and for the purpose of offering, managing and directing the Demonstration generally.

## **11.5 INTERPRETATION**

- a) **Consent.** Whenever a provision requires an approval or consent and the approval or consent is not delivered within the applicable time limit, then, unless otherwise specified, the Party whose consent or approval is required shall be conclusively deemed to have withheld its approval or consent.
- b) **Currency.** Unless otherwise specified, all references to money amounts are to the lawful currency of Canada.
- c) **Discretion.** Where the DSO may take an action or make a determination under these Rules, the decision to take such action or make such determination shall be at the DSO's sole and absolute discretion. Any reference to the DSO's discretion in these Rules shall mean the DSO's sole and absolute discretion.
- d) **Extensions of Time.** The DSO may extend the time to meet the requirements of these Rules at its discretion. Any failure to meet the revised time requirement shall have the same consequences as if the original time requirement had not been met.
- e) **Governing Law.** These Rules are made under and shall be governed by and construed in accordance with, the laws of the Province of Ontario and the federal laws of Canada applicable in the Province of Ontario.
- f) **Headings.** Headings of sections are inserted for convenience of reference only and do not affect the construction or interpretation of these Rules. References to Sections means Sections of these Rules, unless otherwise specified.
- g) **No Strict Construction.** Despite the fact that these Rules were drafted by the DSO's legal and other professional advisors, Registrants submitting Registrations or

Eligible Registrants acknowledge and agree that any doubt or ambiguity in the meaning, application or enforceability of any term or provision in these Rules shall not be construed against the DSO or in favour of the Registrant when interpreting such term or provision, by virtue of such fact.

- h) **Notice.** No person may provide any notices or otherwise communicate with the DSO in respect of a Registration other than the primary contact provided in the Registration, provided that a duly authorized signatory of the Registrant may enter into a Contract that is the subject of an Eligibility Notice, if any, in relation to such Registration.
- i) **Number and Gender.** Unless the context otherwise requires, words importing the singular include the plural and vice versa and words importing gender include all genders.
- j) **Severability.** If any provision of these Rules or its application to any Party or circumstance is restricted, prohibited or unenforceable, the provision shall be ineffective only to the extent of the restriction, prohibition or unenforceability without invalidating the remaining provisions of these Rules and without affecting its application to the other Party or circumstances.
- k) **Statutory References.** A reference to a statute includes all regulations and rules made pursuant to the statute and, unless otherwise specified, the provisions of any statute, regulation or rule which amends, supplements or supersedes any such statute, regulation or rule.
- l) **Time.** Time is of the essence in the performance of the Parties' respective obligations.
- m) **Time Periods.** Unless otherwise specified, time periods within or following which any payment is to be made or act is to be done shall be calculated by excluding the day on which the period commences and including the day on which the period ends and by extending the period to the next Business Day following if the last day of the period is not a Business Day.
- n) **References to Time.** Any reference to time in these Rules shall be in the 24-hour clock and shall be read to the millisecond.

## Appendix A - Glossary of Terms

In these Rules the following terms shall, unless the context otherwise requires, have the meaning stated below:

Term	Definition
Access Rights	Either title or rights of access to the Site, such rights being sufficient to allow the Registrant, Eligible Registrant or Participant, as applicable, to meet the requirements of the Demonstration, including allowing the DSO to access the Site from time-to-time, as determined by the DSO.
Activation Day	Has the meaning given to it in Section 6.7 of the Rules.
Activation Hour	The hour(s) during the Availability Window that the Contracted DER is obligated to Deliver Energy or Reduce Energy, as applicable, by an amount equal to the Quantity Activated.
Activation Notice	A notice issued to the Participant via the Platform and email on an Activation Day confirming the Activation Hours for the Contracted DER and the Quantity Activated for each such hour, and for clarity, include notices issued to the Contracted DER for Test Activations.
Activation Shadow Price	The shadow price type for the YORKCGS-LT.G1 node published in the <i>IESO Pre-dispatch Shadow Price Report</i> .
Additional Information	Has the meaning given to it in Section 11.1(a) of the Rules.
Affiliate	Any Person that (i) Controls a Person; (ii) is Controlled by a Person; or (iii) is Controlled by the same Person that Controls that Person.
Aggregate Offered Reserve	Has the meaning given to it in Section 5.9 of the Rules.
Aggregate Reserve Quantity	Has the meaning given to it in Section 6.7 of the Rules.
Aggregator	A Person who is not a Direct Participant and has or will have User Rights over more than one Contributor DER, and aggregates such Contributor DERs for the purposes of participating in the Demonstration, including to provide a portion of the Aggregator's Local Capacity Obligation or Local Reserve Obligation, if applicable.
Aggregator DER	Has the meaning given to it in Section 2.3 of the Rules.

Term	Definition
Alectra	Alectra Utilities Corporation.
Amendment	Amendment means a change, revision or addition to the Demonstration, the Rules, or the form of Contract and <b>Amend</b> has a corresponding meaning. For greater certainty, a suspension of the Demonstration, in whole or in part, shall constitute an Amendment.
Approved Meter	Has the meaning given to it in Section 2.2.1(d)(v).
Auction	Either a Local Capacity Auction, a Local Energy Auction, or a Local Reserve Auction, or all three, as applicable.
Auction Deposit	The deposit that is required to be made by an Eligible Registrant as a condition of participating in a Local Capacity Auction pursuant to Section 5.4 of the Rules.
Auction Deposit Date	The date as published in the Pre-Auction Report.
Availability Charge	A non-performance charge (\$) payable by the Participant with respect to the Contracted DER in the event the Participant fails to submit Offers or Bids in the Local Energy Auction, as applicable, for each hour of the Availability Window, as further described in <i>Exhibit C – Settlement</i> of the Contract.
Availability Payment	A monthly amount (\$) that may be paid to a Participant for each Business Day of that month in which a Contracted DER makes its Local Capacity Obligation and Local Reserve Obligation, if applicable, available for dispatch in the Local Energy Auction and Local Reserve Auction, if applicable, as more fully stipulated in <i>Exhibit C – Settlement</i> of the Contract.
Availability Window	Has the meaning given to it in Section 1.8 of the Rules.
Bid	The price per kilo-watt hour (\$/kWh) at which a Participant with a Contracted DER that is a Demand Response Resource will Reduce their Electricity in the Local Energy Auction.
Bid/Offer	Shall refer to: (i) (a) a Bid with respect to a Contracted DER that is a Demand Response Resource; or (b) an Offer (Energy) with respect to a Contracted DER that is a Thermal Resource or a Storage Resource; and (ii) an Offer (Reserve) in respect of a Contracted DER that has a Local Reserve Obligation.

Term	Definition
Bid/Offer Submission Start Date	The date Eligible Registrants will be permitted to submit their Bids or Offers, as applicable, for the first Local Energy Auction via the Platform, which date is published in the Pre-Auction Report.
Biodiesel	<p>A fuel or fuel component that is comprised of mono-alkyl esters of long-chain fatty acids that are derived from plant oils or animal fats, if the fuel or fuel component,</p> <ul style="list-style-type: none"> <li>a) conforms to the detailed requirements shown in Table 1 of ASTM International Standard D6751, entitled “Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels”, as amended from time to time, when tested by the test methods indicated in that standard, or</li> <li>b) is in accordance with the limits specified in Table 1 of European Standard EN 14214, entitled “Automotive Fuels – Fatty acid methyl esters (FAME) for diesel engines – Requirements and test methods”, as amended from time to time, when tested by the test methods indicated in that standard.</li> </ul>
Biofuel	A liquid fuel made solely from Biomass and includes ethanol, methanol and Biodiesel.
Biomass	<p>Organic matter, other than source separated organics, that is derived from a plant or animal, is available on a natural renewable basis and is,</p> <ul style="list-style-type: none"> <li>a) grown or harvested for the purpose of being used to generate electricity,</li> <li>b) waste from harvesting or processing agricultural products or waste from processing forestry products, including spent pulping liquor,</li> <li>c) agricultural waste,</li> <li>d) organic waste materials from a greenhouse, nursery, garden centre or flower shop,</li> <li>e) pulp and paper biosolids,</li> <li>f) waste from food processing, distribution and preparation operations, such as food packing, food preserving, wine making, cheese making, restaurants and grocery stores, and includes, as an example, organic waste from the treatment of wastewater from facilities where food or feed is processed or prepared,</li> <li>g) sewage biosolids,</li> <li>h) hauled sewage,</li> </ul>

Term	Definition
	<ul style="list-style-type: none"> <li>i) waste from the operation of a sewage works subject to the <i>Ontario Water Resources Act</i>, as amended from time to time,</li> <li>j) woodwaste, or</li> <li>k) forest resources made available under a forest management plan approved under the <i>Crown Forest Sustainability Act, 1994</i>, as amended from time to time, or a managed forest plan approved under the Managed Forest Tax Incentive Program.</li> </ul>
Blackout Period	The period of time that begins prior to the first day of the Capacity Auction Offer Window and ends after the last day of the Capacity Auction Offer Window, which calendar dates are published in the Pre-Auction Report.
Business Day	Any day other than a Saturday, a Sunday or holiday in Ontario, being New Year's Day, Family Day, Good Friday, Easter Monday, Victoria Day, Canada Day, Labour Day, Thanksgiving Day, Remembrance Day, Christmas Day, Boxing Day, and as further defined in Section 88 of the <i>Legislation Act, 2006</i> , S.O., chap 26, Sched F.
Capacity Auction Offer Window	In respect of a Local Capacity Auction, the period of time during which Eligible Registrants are permitted to submit offers into a Local Capacity Auction, as specified in the Pre-Auction Report.
Capacity Charge	A non-performance charge (\$) applicable to a Contracted DER in the event the Contracted DER fails a Test Activation or Test Deployment, as applicable, and as further described in <i>Exhibit C – Settlement</i> of the Contract.
Capacity Offer	Has the meaning given to it in Section 5.8 of the Rules.
Capacity Offer (Reserve)	Has the meaning given to it in Section 5.8 of the Rules.
Change Request	With respect to a Contracted DER that is an Aggregator DER, a request submitted by the Participant following the close of the Supplemental Registration Period to exchange the Meter Number of an existing Contributor DER for the Meter Number of a new Contributor DER.
Change Request Date	Has the meaning given to it in Section 8 of the Rules.
Claim	A complaint, claim, demand, suit or cause of action in contract, in tort, equity, under a Law, or otherwise.

Term	Definition
Commitment Period	The period of time for each Local Capacity Auction over which the DSO secures Local Capacity, and for which a Participant is required to satisfy its Local Capacity Obligation and if applicable, Local Reserve Obligation, by making some or all of its DER Capacity available for dispatch in the Local Energy Auctions and, if applicable, the Local Reserve Auctions; and which period begins at 01:00 EDT on the Commitment Period Start Date and ends at 23:59 on the Commitment Period End Date.
Commitment Period End Date	The last day of the Commitment Period, as provided for in the Pre-Auction Report.
Commitment Period Start Date	The first day of the Commitment Period, as provided for in the Pre-Auction Report.
Completion Security	The financial security required for the completion of the Supplemental Registration, which is equal to \$2.00/kW multiplied by the Eligible Capacity of the Contracted DER.
Conditions of Service	The conditions in effect from time to time published by the applicable LDC in accordance with the Distribution System Code setting out the conditions of service as between that LDC and a customer of that LDC.
Connection Point	The electrical connection point between a DER and the DSO's Distribution System where the Electricity is withdrawn from, or injected into, the DSO's Distribution System, and is associated with the Meter Number.
Contingency	<p>In any Activation Hour, means any of the following events or circumstances:</p> <ul style="list-style-type: none"> <li>a) a Forced Outage with respect to a Contracted DER;</li> <li>b) the failure by a Participant to acknowledge an Activation Notice;</li> <li>c) the failure by a Participant to follow activation instructions issued by the DSO to provide the Quantity Delivered/Reduced;</li> <li>d) the actual load in the Demonstration Area is materially higher than the Loading Forecasted;</li> <li>e) a partial or total interruption in the ability of a Contracted DER to meet its Local Capacity Obligation; or</li> <li>f) any other event or circumstances deemed to constitute a Contingency by the DSO in its sole and absolute discretion.</li> </ul>

Term	Definition
	Whether or not an event constitutes a Contingency will be determined by the DSO in its sole and absolute discretion.
Contract	A contract entered into between the DSO and an Eligible Registrant who successfully clears the Local Capacity Auction and is awarded a Local Capacity Obligation and, if applicable, a Local Reserve Obligation for one or more of its Eligible DERs.
Contracted DER	An Eligible DER that is subject to a Contract.
Contributor	An existing Alectra customer with a Meter Number, that owns one or more DERs and has entered into a legally binding agreement with an Aggregator, pursuant to which it provides the Aggregator User Rights over its DER(s) for the purposes of participating in the Demonstration.
Contributor DER	Has the meaning given to it in Section 1.8 of the Rules.
Contributor List	With respect to an Eligible Registrant or Participant that is an Aggregator, the list of Contributor DERs that have successfully completed the Supplemental Registration and comprise the Aggregator DER or the Contracted DER, which list shall be established following completion of the Supplemental Registration, and as may be amended in accordance with Section 8 of the Rules.
Control	With respect to any Person at any time (i) holding, whether directly or indirectly, as owner or other beneficiary (other than solely as the beneficiary of an unrealized security interest) securities or ownership interests of that Person carrying votes or ownership interests sufficient to elect or appoint fifty percent (50%) or more of the individuals who are responsible for the supervision or management of that Person; or (ii) the exercise of de facto control of that Person, whether direct or indirect and whether through the ownership of securities or ownership interests or by contract, trust or otherwise; and <b>Controlled by</b> has a corresponding meaning.
Control Group	With respect to a Contracted DER that is a Demand Response Resource (Residential), refers to a subset of Contributor DERs from the Contributor List, which Contributor DERs are randomly selected to be part of such subset in accordance with <i>Exhibit D – Demand Response Baseline</i> ing of the Contract.
Delegate	A natural person who shall be duly authorized to act on behalf of the Registrant and with whom the DSO may consult at all reasonable times, and whose instructions, requests, and decisions, provided the



Term	Definition
	same are in writing and made via the Platform or email, shall be binding on the Registrant, Eligible Registrant or Participant, as applicable.
Deliver	In relation to Energy, means delivered to the Connection Point (which, for greater certainty, is net of Site-Specific Losses) and is measured in five-minute intervals by the Contracted DER's Meter, and <b>Delivery, Delivered</b> and <b>Delivering</b> shall have the corresponding meanings.
Demand Response Capacity	The expected Reduction a Demand Response Resource can provide over four (4) consecutive hours during an Availability Window, and with respect to Demand Response Resource (Residential), it is the expected Reduction that the Treatment Group can provide over four (4) consecutive hours during an Availability Window.
Demand Response Resource	Refers to a Demand Response Resource (C&I) and a Demand Response Resource (Residential), collectively.
Demand Response Resource (C&I)	A facility owned by a commercial or industrial customer that is capable of providing Demand Response Capacity.
Demand Response Resource (Residential)	A dwelling owned by an individual that is capable of providing Demand Response Capacity.
Demonstration	Has the meaning given to it in Section 1 of the Rules.
Demonstration Area	The part of the DSO's service area as defined in Section 1.5 of the Rules.
Demonstration Review	Has the meaning given to it in Section 9(a) of the Rules.
Deployment Interval	Means a five (5) minute interval, which first (or only) Deployment Interval shall commence at least thirty (30) minutes later than the time stamp of the relevant Deployment Notice and which last Deployment Interval shall not extend beyond the end of the last Reserve Hour specified in the applicable Reserve Notice.
Deployment Notice	A notice issued to the Participant via the Platform on an Activation Day instructing the Participant to deploy a Contracted DER, and shall indicate the Deployment Intervals and Quantity Deployed, and for clarity, includes notices issued to the Contracted DER for Test Deployments.

Term	Definition
Deployment Payment	Has the meaning given to it in Section 6.7(c).
Deposit Confirmation	Has the meaning given to it in Section 5.4 of the Rules.
DER (Distributed Energy Resource)	A facility capable of providing DER Capacity that is directly connected to the Distribution System as well as all equipment and property comprising the facility as described in the Registration.
DER Capacity	The Demand Response Capacity, Thermal Capacity, or Storage Capacity, as applicable.
DER ID	The number assigned to each DER upon Registration, which number shall be used to identify the DER for the duration of the Demonstration, including the Commitment Period.
Direct Deposit Form	<p>The form that must be completed by the Registrant as part of the Initial Registration and which is available on the Platform and contains details of the Registered Bank Account including:</p> <ul style="list-style-type: none"> <li>i. the name of the registered account holder,</li> <li>ii. the account number,</li> <li>iii. the address of the bank,</li> <li>iv. the institution number, and</li> <li>v. the bank number.</li> </ul>
Direct DER	Has the meaning given to it in Section 1.8 of the Rules.
Direct Participant	A Person that participates in the Demonstration directly and not through an Aggregator or other third party.
Dispatch Charge	<p>A non-performance charge (\$) payable by a Participant with respect to a Contracted DER in the event the Participant</p> <p>(i) fails to follow activation instructions issued by the DSO and provide the Quantity Delivered/Reduced within a 15% dead band of the Quantity Activated for such Contracted DER, as further described in <i>Exhibit C – Settlement</i> of the Contract, or</p> <p>(ii) fails to Deliver Energy or Reduce Energy, as applicable, within thirty (30) minutes following a Deployment Notice (which notice shall be time-stamped).</p>
Distribution System	A system connected to the IESO-Controlled Grid for distributing Electricity at voltages of fifty (50) kilovolts or less and includes any

Term	Definition
	structures, equipment or other things used for that purpose, provided that a Distribution System shall be deemed not to include any equipment controlled by the IESO pursuant to the Distribution System Code.
Distribution System Code	The code approved by the OEB and in effect from time to time, which, among other things, establishes the obligations of an LDC with respect to the services and terms of service to be offered to customers and retailers and provides minimum technical operating standards of Distribution Systems.
DLMP (Distribution Locational Marginal Price)	Has the meaning given to it in Section 6.7 of the Rules.
DLMP Payment	Has the meaning given to it in <i>Exhibit C – Settlement</i> of the Contract.
DR (C&I) Baseline	Has the meaning given to it in <i>Exhibit D – Demand Response Baseline</i> of the Contract.
DR (Residential) Baseline	Has the meaning given to it in <i>Exhibit D – Demand Response Baseline</i> of the Contract.
DSO (Distribution System Operator)	A system operator that manages the low-voltage distribution system and represents a potential new type of entity or function that is distinct from, but has many parallels with a transmission system operator and for the purposes of the Demonstration, Alectra shall be acting as the DSO.
DSO-Activation Hour	Has the meaning given to it in Section 6.7 of the Rules.
DSO Coordinates	The contact information provided for the DSO as set out in <i>Appendix G – DSO Coordinates</i> .
DSO Customer Account	Has the meaning given to it in Section 1.9 of the Rules.
Electrical Safety Code	The code issued by the Canadian Standards Association as amended by the Electrical Safety Authority pursuant to O.Reg. 164/99 of the <i>Electricity Act, 1998</i> .
Electricity or Energy	Electric energy, measured in kWh unless expressly stated otherwise.

Term	Definition
Eligibility Notice	Has the meaning given to it in Section 4.2(a) of the Rules.
Eligible Capacity	The capacity (kW) of an Eligible DER determined by the DSO following completion of the Initial Registration by the Registrant, to be eligible to participate in a Local Capacity Auction, provided that such capacity shall not exceed the Demand Response Capacity, Thermal Capacity and Storage Capacity, as applicable for that Eligible DER.
Eligible DER	Means, <ul style="list-style-type: none"> <li>a) with respect to a Direct Participant, a Direct DER, including a Future DER, that was submitted during the Initial Registration and has been approved by the DSO to participate in the Local Capacity Auction for its Eligible Capacity, and</li> <li>b) with respect to Aggregators, an Aggregator DER that was submitted during the Initial Registration and has been approved by the DSO to participate in the Local Capacity Auction for its Eligible Capacity.</li> </ul>
Eligible Registrant	Has the meaning given to it in Section 4.2 of the Rules.
Existing Contract	Has the meaning given to it in Section 2.2.2(f) of the Rules.
FIPPA	<i>Freedom of Information and Protection of Privacy Act</i> , R.S.O. 1990, c. F 31.
Forced Outage	An unanticipated Outage, and for which an Outage Notice is submitted following the Bid/Offer Submission Start Date.
Forward Period	For each Participant, the period of time beginning immediately following acceptance of a Contract and ending on the commencement of the applicable Commitment Period.
Future DER	A Direct DER that has not achieved its In-Service Date.
Governmental Authority	The Crown, any federal, provincial, or municipal government, parliament or legislature, or any regulatory authority, agency, tribunal, commission, board or department of any such government, parliament or legislature, or any court or other law, regulation or rule-making entity, having jurisdiction in the relevant circumstances, including the IESO, the OEB, the Electrical Safety Authority, and any Person acting under the authority of any Governmental Authority.

Term	Definition
Hourly Ontario Energy Price	The hourly energy price (\$/kWh) published by the IESO and available at <a href="http://www.ieso.ca/Power-Data">http://www.ieso.ca/Power-Data</a> .
IESO	The Independent Electricity System Operator of Ontario established under Part II of the <i>Electricity Act, 1998</i> or its successor.
IESO-Administered Markets	The Electricity markets administered by the IESO, as further defined in the IESO Market Rules.
IESO-Controlled Grid	The Transmission Systems with respect to which the IESO has authority to direct operations, as further defined in the IESO Market Rules.
IESO Energy Efficiency Auction Pilot	The energy efficiency auction pilot administered by the IESO pursuant to the IESO Market Rules.
IESO Market Rules	The rules made under Section 32 of the <i>Electricity Act, 1998</i> , together with all market manuals, policies, and guidelines issued by the IESO, as may be amended from time to time.
Industrial Conservation Initiative	The industrial conservation initiative allowing participating customers to manage their global adjustment costs pursuant to O.Reg. 429/04 under the <i>Electricity Act, 1998</i> .
Initial Registration	The first stage of the registration process for the Demonstration, which process must be completed via the Platform and requires an interested party to register the Registrant and submit the DER Capacity and Permitted Resource type for each Direct DER, Aggregator DER or Future DER, as applicable.
Initial Registration Period	The time period during which an interested party can complete the Initial Registration process.
In-Service	A DER that has achieved its In-Service Date.
In-Service Date	The date that a DER, which was not previously operational, is in the case of a Thermal Resource or a Storage Resource, commissioned and synchronized to the DSO's Distribution System such that it is capable of Delivering Energy to the DSO's Distribution System in compliance with Laws, and in the case of a Demand Response Resource, connected to the DSO's Distribution System via the Connection Point such that it is capable of Reducing Energy from the DSO's Distribution System in compliance Laws.

Term	Definition
kW	Kilowatts.
kWh	Kilowatt-hours.
Laws	<p>(i) applicable Canadian federal, provincial or municipal laws, orders-in-council, by-laws, codes, rules, policies, regulations and statutes;</p> <p>(ii) applicable orders, decisions, codes, judgments, injunctions, decrees, awards and writs of any court, tribunal, arbitrator, Governmental Authority or other Person having jurisdiction;</p> <p>(iii) applicable rulings and conditions of any licence, permit, certificate, registration, authorization, consent and approval issued by a Governmental Authority;</p> <p>(iv) any requirements under or prescribed by applicable common law;</p> <p>(v) the Retail Settlement Code, the Distribution System Code, and any other codes issued by the OEB from time to time that are binding on the Registrant, Eligible Registrant or Participant, the DSO or the IESO.</p>
LDC	The owner or operator of a Distribution System that is licensed by the OEB as an “electricity distributor”.
Loading Forecast	Has the meaning given to it in Section 6.2 of the Rules.
Loading Threshold	Has the meaning given to it in Section 6.2 of the Rules.
Local Capacity	Means the capacity (kW) provided by the Contracted DER for the purposes of meeting the Local Requirement and, if applicable, the Local Reserve Requirement.
Local Capacity Auction	An auction operated by the DSO to acquire Local Capacity pursuant to these Rules.
Local Capacity Clearing Price	The price at which the Local Capacity Auction clears for a Commitment Period and will be quoted in \$/kW-day.
Local Capacity Obligation	Following the completion of a Local Capacity Auction, with respect to a Contracted DER, the amount of Local Capacity (kW) such Contracted DER is required to provide by participating in the Local Energy Auction, as stipulated in the Contract.
Local Requirement	Has the meaning given to that term in Section 6.2 of the Rules.

<b>Term</b>	<b>Definition</b>
Local Energy Auction(s)	An auction operated by the DSO to acquire energy pursuant to Section 6 of these Rules.
Local Energy Price	Has the meaning given to it in Section 6.7 of the Rules.
Local Reserve Auction(s)	An auction operated by the DSO to acquire Reserve pursuant to Section 6 of these Rules.
Local Reserve Clearing Price	The price at which the Local Capacity Auction clears for a Commitment Period in respect of Reserve-Capable Eligible DERs in accordance with the special process (constrained) described in Section 5.9.2 of the Rules, and will be quoted in \$/kW-day.
Local Reserve Obligation	Following the completion of a Local Capacity Auction, the amount of Local Capacity (kW) a Reserve-Capable Contracted DER is required to provide by participating in the Local Reserve Auction, as stipulated in the Contract.
Local Reserve Payment	Has the meaning given to it in Section 7.2 of the Rules.
Local Reserve Price	Has the meaning given to it in Section 6.7 of the Rules.
Local Reserve Requirement	Has the meaning given to that term in Section 6.2 of the Rules.
Maximum Capacity Price	The maximum Capacity Offer (\$/kW) that can be made by an Eligible Registrant in the Local Capacity Auction for supplying Local Capacity which value will be established by the DSO in its discretion.
Maximum Energy Price	The maximum Offer (Energy) or Bid (\$/kWh) that can be made by a Participant in a Local Energy Auction for Delivering Energy or Reducing Energy, as applicable, which price is established by the DSO in its discretion, and will apply throughout the Commitment Period.
Maximum Reserve Price	The maximum Offer (Reserve) (\$/kW) that can be made by a Participant in a Local Reserve Auction for providing Reserve, which price is established by the DSO in its discretion, and will apply throughout the Commitment Period.
Meter Number	The number of the meter of the DER that is registered for the purposes of the Demonstration, which number is assigned by the DSO and associated with a single DSO Customer Account.

Term	Definition
Minimum Capacity Price	The minimum Capacity Offer (\$/kW) that can be made by an Eligible Registrant in the Local Capacity Auction for supplying Local Capacity, including Reserve-Capable Local Reserve, which value will be established by the DSO in its discretion.
Minimum Energy Price	The minimum Offer (Energy) or Bid (\$/kWh) that can be made by a Participant in a Local Energy Auction for Delivering Energy or Reducing Energy, as applicable, which price is established by the DSO in its discretion, and will apply throughout the Commitment Period.
Minimum Reserve Price	The minimum Offer (Reserve) (\$/kW) that can be made by a Participant in a Local Reserve Auction for providing Reserve, which price is established by the DSO in its discretion, and will apply throughout the Commitment Period.
Monthly Payment	The payment (\$) a Participant will receive for each month of the Commitment Period, which payment may be zero dollars but shall not be less than zero dollars, and is calculated in accordance with the settlement provisions outlined in <i>Exhibit C – Settlement of the Contract</i> .
MFIPPA	The <i>Municipal Freedom of Information and Protection of Privacy Act</i> , RSO 1990, c. M.56.
MW	Megawatts.
MWh	Megawatt-hours.
Non-Wires Alternatives or NWAs	Resources, including certain DERs, that are capable of providing Services as alternatives to transmission and distribution solutions, such as a new stations or lines.
Notice	A written communication provide by one Party to the other Party concerning any matter directly or indirectly related to the Rules or the Contract, as applicable, and includes Activation Notices and Standby Notices.
OEB	The Ontario Energy Board, or its successor.
Offer	Means an Offer (Energy) or an Offer (Reserve).



Term	Definition
Offer (Energy)	The price per kilo-watt hour (\$/kWh) at which a Participant with a Contracted DER that is a Thermal Resource or a Storage Resource will Deliver Electricity in the Local Energy Auction.
Offer (Reserve)	The price per kilo-watt (\$/kW) at which a Participant with a Contracted DER will provide Reserve in the Local Reserve Auction.
Outage	The removal of equipment from service, unavailability for connection of equipment or restriction of use or reduction in performance of the Contracted DER for any reason, including to permit the performance of inspections, tests, repairs or maintenance on the facility, which results in a partial or total interruption in the ability of the Contracted DER to meet its Local Capacity Obligation and Deliver Energy or Reduce Energy, as applicable.
Outage Notice	Has the meaning given to it in Section 6.9.1 of the Rules.
Participant	A Party to a Contract, other than the DSO, who has one or more Contracted DERs with a Local Capacity Obligation(s) and Local Reserve Obligation(s), if applicable, and has authorized as such.
Party	<p>(i) with respect to the Contract, any one of the Participant and the DSO, and the DSO and the Participant are collectively referred to as the <b>Parties</b>; and</p> <p>(ii) with respect to the Demonstration Rules, any one of the Registrant or the Eligible Registrant and the DSO, and the DSO and the Registrant or the Eligible Registrant are collectively referred to as the <b>Parties</b>.</p>
Permitted Resource	With respect to a Direct DER, has the meaning ascribed to that term in Section 2.2.1 of the Rules, with respect to an Aggregator DER, has the meaning ascribed to that term in Section 2.4.1 of the Rules, and with respect to an Aggregator DER that is a Reserve-Capable DER, and the underlying Contributor DERs thereof, has the meaning ascribed to that term in Section 2.4.3 of the Rules.
Person	A natural person, First Nation that is a “band” as defined in the <i>Indian Act</i> , RSC 1985, c. I-5, co-operative, firm, trust, partnership, limited partnership, company or corporation (with or without share capital), joint venture, sole proprietorship, Governmental Authority or other entity of any kind.

Term	Definition
Planned Outage	An Outage that is intentional and planned ahead of time, and for which an Outage Notice must be submitted before the Bid/Offer Submission Start Date in order to be eligible as a Planned Outage.
Platform	The web-portal operated by the DSO to procure, contract, schedule, dispatch, measure and verify DERs and otherwise run the Demonstration.
Pre-Auction Report	Has the meaning given to it in Section 5.2 of the Rules.
Quantity Activated	The amount (kWh) of Energy that is activated by the DSO pursuant to an Activation Notice for a given DER Activation Hour for the Contracted DER.
Quantity Delivered	The amount (kWh) of Energy that is Delivered.
Quantity Delivered/Reduced	With respect to Thermal Resources and Storage Resources, refers to the Quantity Delivered (kWh), and with respect to Demand Response Resources, refers to the Quantity Reduced (kWh).
Quantity Deployed	The amount (kWh) of Energy that is to be Delivered or Reduced, as applicable, during the applicable Deployment Intervals as specified in a Deployment Notice.
Quantity Reduced	The amount (kWh) of Energy that is Reduced, calculated in accordance with <i>Exhibit D – Demand Response Baselineing</i> of the Contract.
Quantity Reserved	The amount (kW) of Reserve that is scheduled by the DSO pursuant to a Reserve Notice for a given Reserve Hour in an Availability Window for the Contracted DER, including during a Test Deployment.
Reduce	In relation to Energy, means the Energy reduced by a Demand Response Resource at the Connection Point as measured by the Contracted DER's Meter, or in the case of a Contracted DER that is an Aggregator DER, the Contributor DERs' Meters, and calculated using the commercial & industrial baselining methodology or the residential baselining methodology outlined in <i>Exhibit D – Demand Response Baselineing</i> of the Contract as applicable, and <b>Reduced</b> and <b>Reduction</b> shall have the corresponding meaning.
Registered Bank Account	A bank account registered in Ontario, which may be in the name of the Participant one of its Affiliates, and which bank account must be

Term	Definition
	capable of sending and receiving of funds by electronic funds transfer.
Registrant	A Person who has successfully completed the Initial Registration via the Platform to participate in the Demonstration.
Registration	Refers to the Initial Registration and the Supplemental Registration together.
Registration Period	Means the Initial Registration Period and the Supplemental Registration period together.
Reserve	Means Demand Response Capacity (C&I), Thermal Capacity or Storage Capacity, measured in kW, provided by a Reserve-Capable Contracted DER that clears a Local Reserve Auction, which can be called upon on short notice, being thirty (30) minutes or less, by the DSO to replace scheduled Energy supply which is unavailable as a result of a Contingency.
Reserve-Capable	Has the meaning given to it in Section 1.8 of the Rules.
Reserve Hour	Has the meaning given to it in Section 6.7 of the Rules.
Reserve Notice	A notice issued to the Participant via the Platform and email on an Activation Day confirming the Reserve Hours or Test Reserve Hours for the Contracted DER and the Quantity Reserved for each such hour, and for clarity, includes notices issued to the Contracted DER for Test Deployments.
Reserve Sub-Target Capacity	A subset of the Target Capacity that corresponds with the targeted level of Reserve the DSO will seek to clear in a Local Capacity Auction.
Retail Settlement Code	The code established and approved by the OEB, governing the determination of financial settlement costs for electricity retailers, consumers, distributors and generators.
Rules	The rules governing the Demonstration as may be Amended in accordance with its terms, from time to time.
Sensitive Information	Has the meaning given to it in Section 10(b) of the Rules.
Service	Services provided by a DER to the Distribution System and Transmission System, as applicable, which includes providing Local Capacity (kW), Reserve (kW) in accordance with Reserve Notices, and

Term	Definition
	Delivering or Reducing Electricity (kWh) in accordance with Activation Notices and Deployment Notices.
Site	In respect of a DER, is the real property on, over, in or under which the DER is situated, as such real property is identified in the Registration and in the Contract.
Site-Specific Losses	Electricity losses due to line resistance, the operation of transformers and switches, and other associated losses of Electricity incurred by the DER that may occur as a result of the difference between the location of the meter and the Connection Point, as determined pursuant to loss factors applied in accordance with the Retail Settlement Code and other Laws.
Standby Day	Has the meaning given to it in Section 6.2 of the Rules.
Standby Hour	Has the meaning given to it in Section 6.2 of the Rules.
Standby Notice	The written notice issued by the DSO to the Participant via the Platform and email on a Standby Day informing the Participant that the Contracted DER that is the subject of such notice may be activated that day during the Availability Window pursuant to an Activation Notice or may be subject to a Test Activation.
Standby Shadow Price	The energy shadow price type for the YORKCGS-LT.G1 node published in the <i>IESO Day-Ahead Shadow Prices Report</i> .
Storage Capacity	The power that a Storage Resource is capable of sustaining during four consecutive hours of re-injection of Electricity to the Connection Point when starting fully charged, measured in kW.
Storage Resource	A DER capable of withdrawing Electricity at a controlled rate, storing such Electricity for a controlled period of time and then injecting only the stored Electricity, minus losses arising from roundtrip efficiency, at a controlled rate, all in accordance with all Laws, to the Distribution System.
Supplemental Registration	The second stage of the registration process for the Demonstration, which process must be completed via the Platform and requires the Registrant to complete the registration process for its Eligible DERs.
Supplemental Registration Period	Has the meaning given to it in Section 4.1.2 of the Rules.

Term	Definition
Target Capacity	The targeted level of Local Capacity the DSO will seek to clear in a Local Capacity Auction, and includes the Reserve Sub-Target Capacity.
Temporary Account Number	Has the meaning given to it in Section 1.9 of the Rules.
Terminate	With respect to a Registration, means the termination, rejection, discharge and release of the Registration and all rights of the Registrant or Eligible Registrant (if any), and all obligations of the DSO (if any) to the Registrant or Eligible Registrant, in respect of or arising out of the Demonstration, including the Time Stamp.
Test Activation	Has the meaning given to it in Section 6.10 of the Rules.
Test Activation Hour	Has the meaning given to it in Section 6.10 of the Rules.
Test Activation Payment	A monthly amount (\$) that may be paid to a Participant for each Business Day of that month in which a Contracted DER successfully completes one or more Test Activations, as more fully stipulated in <i>Exhibit C – Settlement</i> of the Contract.
Test Deployment	Has the meaning given to it in Section 6.10 of the Rules.
Test Deployment Interval	Has the meaning given to it in Section 6.10 of the Rules.
Test Deployment Payment	A monthly amount (\$) that may be paid to a Participant for each Business Day of that month in which a Contracted DER successfully completes one or more Test Deployments, as more fully stipulated in <i>Exhibit C – Settlement</i> of the Contract.
Test Reserve Hour	Has the meaning given to it in Section 6.10 of the Rules.
Test Reserve Payment	Has the meaning given to it in Section 7.3 of the Rules.
Thermal Capacity	The power that a Thermal Resource is capable of sustaining during four (4) consecutive hours of Delivery to the Connection Point, measured in kW, which is less than or equal to the manufacturer's total installed rated capacity of the Thermal Resource to generate Electricity, measured in kW.
Thermal Resource	A DER that generates Electricity from natural gas, Biomass, or Biofuel, and delivers such Electricity through a meter in accordance

Term	Definition
	with all Laws, which includes combined-cycle generating facilities and combined heat and power generating facilities.
Time Stamp	The DSO's official record of the date and time that a Capacity Offer is completed, as generated by the Platform, and <b>Time Stamped</b> shall have the corresponding meaning.
Total Energy Quantity	The total quantity of Energy to be procured by the DSO through a Local Energy Auction, as determined by the DSO in its sole discretion.
Total Deployment Quantity	The total quantity of Energy, as determined by the DSO in its sole discretion, to be procured by the DSO on an Activation Day from Contracted DERs that have received Reserve Notices.
Total Reserve Quantity	The total quantity of Reserve to be scheduled through a Local Energy Auction, as determined by the DSO in its sole discretion.
Transmission System	A system for conveying electricity at voltages of more than fifty (50) kilovolts and includes any structures, equipment or other things used for that purpose.
Treatment Group	With respect to a Contracted DER that is a Demand Response Resource (Residential), refers to those Contributor DERs on the Contributor List that do not form part of the Control Group, and as further defined in <i>Exhibit D – Demand Response Baseline</i> of the Contract.
TS	Transformer station.
TSO	Transmission system operator, which in Ontario is the IESO, responsible for managing the operations of high-voltage transmission systems and administers a wholesale energy market.
TSO-Activation Hour	Has the meaning given to it in Section 6.7 of the Rules.
User Rights	With respect to a DER that is registered in the Demonstration (being a Direct DER, Contributor DER and, following the entering into of a Contract, a Contracted DER), ownership and operational control, or in absence of ownership and operational control, a contractual right broad enough to permit the Registrant, Eligible Registrant or Participant, as applicable, to use the DER in such a manner to meet the requirements of the Rules and, if applicable, the Contract, which rights shall include but are not limited to, Access Rights, the right to

Term	Definition
	use the DER to participate in the Demonstration and the right to allow the DSO to use and share the meter data from the DER exclusively for the purposes of the Demonstration.
Website	The DSO's Demonstration website at <a href="http://www.YRdemo.ca">www.YRdemo.ca</a> or such other website as the DSO may designate from time to time.
Wholesale Markets	Has the meaning given to it in Section 1.1 of the Rules.

## Appendix B – Electricity Retailer Waiver

### CONSENT, ACKNOWLEDGMENT AND WAIVER AGREEMENT

[NOTE TO CUSTOMER: This form of waiver has been amended, and Participants and their respective electricity retailer are required to execute a new waiver in order to participate in the second phase of the Demonstration.]

Date	
Legal name of electricity retailer (the “ <b>Retailer</b> ”)	
Legal name of customer (the “ <b>Customer</b> ”)	
Address of Customer	
Alectra Account Number	
Alectra Meter/Premise Number	

**TO:** The Customer, Alectra Utilities Corporation (“**Alectra**”) and the Independent Electricity System Operator (“**IESO**”)

#### RECITALS:

1. **WHEREAS** the Customer is a party to an electricity retail agreement (the “**ERA**”) with the Retailer.
2. **AND WHEREAS** the ERA may contain provisions that limit the Customer either generally or explicitly from entering into any other contract or agreement relating directly or indirectly to the supply of electricity or any other electricity program.
3. **AND WHEREAS** the Customer would like to participate in the IESO York Region Non-Wires Alternatives Demonstration Project (“**Demonstration**”) which is being administered by Alectra as delivery agent and acting distribution system operator (“**DSO**”).
4. **AND WHEREAS** the Retailer is prepared to provide this consent, acknowledgment and waiver (referred to collectively as the “**Waiver**”) to the addressees of this Waiver.

**NOW THEREFORE** for good and valuable consideration between the Customer and the Retailer, receipt of which is acknowledged by the signatories hereto, the parties agree as



follows:

1. The Retailer acknowledges being advised that the Customer intends to participate in the Demonstration and that it has reviewed a copy of the rules (the “**Rules**”) governing the Demonstration, which are publicly available on the IESO’s website under Active Engagements.
2. The Retailer hereby consents to the Customer participating in the Demonstration either as a Direct Participant or a Contributor DER (as such terms are defined in the Rules).
3. The Retailer acknowledges and agrees that the Customer and the DSO, or the Customer and an Aggregator, as applicable, may enter into contracts relating directly or indirectly to the supply of electricity, capacity and/or energy, including reserve, pursuant to the Demonstration.
4. The Retailer acknowledges and agrees it shall have no entitlement to or receive any benefit from the Customer, the Aggregator or the DSO relating to the Demonstration.
5. The Retailer acknowledges and agrees that Alectra is not in violation of any of its obligations under applicable law by acting in its role as the delivery agent and DSO for the Demonstration.
6. The Retailer acknowledges and agrees that this Waiver shall not give rise to any event of default by the Customer or provide any remedy or right by it as against the Customer or any third party.
7. The Customer acknowledges and agrees that this Waiver shall not give rise to any event of default by the Retailer or provide any remedy or right by it as against the Retailer or any third party.
8. This executed Waiver is being provided pursuant to the Rules to the parties described therein for the express purposes of ensuring that the Customer meets the eligibility criteria described in (i) Section 2.2.2(g) of the Rules if the Customer is a Direct Participant, and (ii) Section 2.4.2(g) of the Rules if the Customer is a Contributor DER.
9. Delivery of an executed copy of this Waiver by electronic transmission will be as effective as personal delivery of an originally executed copy.
10. This Waiver may not be assigned by either Party without the prior written consent of the DSO.

*[Signatures follow]*

Signed the day first above written.

**RETAILER**

**[Retailer name]**

Per: \_\_\_\_\_

Name:

Title:

I have authority to bind the Retailer

**CUSTOMER (LEGAL ENTITY)**

**[Customer name]**

Per: \_\_\_\_\_

Name:

Title:

I have authority to bind the Customer

**CUSTOMER (INDIVIDUAL)**

Per: \_\_\_\_\_

Name:

## Appendix C – 2021 Local Capacity Auction Mock Timeline

The dates below are to demonstrate by way of example the sequence of events relative to one another during the Demonstration and approximate timeframes. Final dates will be confirmed in the Pre-Auction Report. Persons participating in the Demonstration should rely exclusively on the dates published in the Pre-Auction Report.

Milestone	Date
Demonstration's year 2 launches	August 25, 2021
Pre-Auction Report	August 25, 2021
Initial Registration Period opens	August 25, 2021
Initial Registration Period closes and DSO begins issuing Eligibility Notices	September 22, 2021
Supplemental Registration period opens	September 22, 2021
Final date for DSO to issue Eligibility Notices	September 24, 2021
Auction Deposit Date	October 6, 2021
Blackout Period starts	October 13, 2021
Capacity Auction Offer Window	October 20-21, 2021
Post-Auction Reports published (public and private)	October 27, 2021
Contracts issued	November 3, 2021
Blackout Period ends	November 3, 2021
Executed Contracts must be delivered to DSO	November 30, 2021
Supplemental Registration Period closes	March 31, 2022
Bid/Offer Submission Start Date	April 14, 2022
Supplemental Post-Auction Report published (identifying Contracted DERs that will participate in the Local Energy Auctions)	April 28, 2022
Commitment Period starts	May 1, 2022

Milestone	Date
Commitment Period ends	October 31, 2022

## Appendix D – Contract

(see attached)

## Appendix E – Activation and Scheduling

Local Energy Auctions and Local Reserve Auctions will clear Bids/Offers according to the steps described in this Appendix E.

**Step 1:** Approximately three hours prior to each hour of the Availability Window, the Platform algorithm will determine if the hour that is three hours ahead is an Activation Hour and a Reserve Hour for the Contracted DERs in the Demonstration by assessing whether there is a Local Requirement and Local Reserve Requirement. In the event there is a Local Requirement, the Platform algorithm will proceed to Step 2A. Otherwise, the Platform algorithm will proceed to Step 2B.

**Step 2A:** In the event there is a Local Requirement, the DSO will determine the Total Energy Quantity. In the event there is also a Local Reserve Requirement, the DSO will determine the Total Reserve Quantity to be cleared in the Local Reserve Auction, and the process will proceed to Step 3.

**Step 2B:** In the event there is no Local Requirement, the Platform algorithm will accept all such Bids and Offers (Energy) that are less than or equal to the Activation Shadow Price, and the process will terminate.

**Step 3:** Participants will submit their Bids or Offers (Energy) into the Local Energy Auctions. Participants with Local Reserve Obligations will also submit their Offers (Reserve) into the Local Reserve Auction.

**Step 4:** The Platform algorithm will first accept the Bids and Offers (Energy) for the Local Energy Auction by ordering price-quantity pairs (submitted as part of the Bids and Offers (Energy)) from lowest to highest price and accepting the lowest price pairs until the Total Energy Quantity is met or exceeded (in the event the last price-quantity pair does not have a partial clearing flag). In the event of a tie between two or more price-quantity pairs, the tie shall be broken by successive random selection.

**Step 5:** For any Bids or Offers (Energy) submitted into the Local Energy Auction in Step 3 by Participants with Local Reserve Obligations that were not selected in Step 4, including that portion of any Bid or Offers (Energy) with a partial clearing flag that were not selected, the Platform algorithm will determine whether the sum of the quantities submitted as part of the associated Offers (Reserve) of such Contracted DERs into the Local Reserve Auction (the “**Aggregate Reserve Quantity**”) is equal to or greater than the Total Reserve Quantity.

- (1) Where the Aggregate Reserve Quantity is equal to or greater than the Total Reserve Quantity, the process proceeds to Step 6.

- (2) Where the Aggregate Reserve Quantity is less than the Total Reserve Quantity, the process proceeds to Step 7.

**Step 6:** If the Aggregate Reserve Quantity is equal to or greater than the Total Reserve Quantity, the Platform algorithm will accept Offers (Reserve) by ordering price-quantity pairs submitted as part of the Offers (Reserve) in Step 5 from lowest to highest price until the Total Reserve Quantity is met or exceeded (in the event the last price-quantity pair is not a partial clearing flag). In the event of a tie between two or more price-quantity pairs, the tie shall be broken by successive random selection.

**Step 7:** If the Aggregate Reserve Quantity is less than the Total Reserve Quantity, the Platform algorithm will:

- (1) deselect the Bids or Offers (Energy) accepted in Step 4, which were submitted into the Local Energy Auction in respect of Contracted DERs with Local Reserve Obligations, in the order of highest to lowest price, until the sum of the quantities of the Offers (Reserve) associated with such Bids or Offers (Energy), plus the Aggregate Reserve Quantity calculated in Step 5, is equal or greater than the Total Reserve Quantity;
- (2) accept Offers (Reserve) in the Local Reserve Auction by ordering price-quantity pairs submitted as part of the Offers (Reserve) of the Reserve-Capable Contracted DERs, including the price-quantity pairs that were deselected in subsection (1) above, from lowest to highest price until the Total Reserve Quantity is met or exceeded (in the event the last price-quantity pair is not a partial clearing flag); and
- (3) in respect of (i) a Contracted DER that was not selected to provide Reserve pursuant to subsection (2) above and, (ii) that portion of any Offer (Reserve) with a partial clearing flag that was not selected in subsection (2) above, accept the associated Bids and Offers (Energy) in the Local Energy Auction by ordering price-quantity pairs (submitted as part of the Bids and Offers (Energy)) from lowest to highest price until the Total Energy Quantity is met or exceeded (in the event the last price-quantity pair is not a partial clearing flag).

**Step 8:** Once all Bid and Offers (Energy) are selected pursuant to Steps 4 to 7 above, the Platform algorithm will accept all such Bids and Offers (Energy), which were not accepted to meet the Total Energy Quantity in the Local Energy Auction, that are less than or equal to the Activation Shadow Price.

## Appendix F – Process Overview

<b>INITIAL REGISTRATION PERIOD</b> (Approximately 3 weeks)	<b>LOCAL CAPACITY AUCTION</b> (Two days)	<b>FORWARD PERIOD</b> (Approximately 5 months)	<b>COMMITMENT PERIOD (LOCAL ENERGY AUCTIONS)</b> (6 months May 1 - Oct 31)
<ul style="list-style-type: none"> <li>Auction parameters and timelines are published</li> </ul> <b>Registrant Registration</b> <ul style="list-style-type: none"> <li>People wishing to participate in the Local Capacity Auction must register as a Registrant on the Platform</li> <li>Must register as either a Direct Participant or an Aggregator</li> <li>DSO reviews and approves Eligible Registrants</li> </ul> <b>DER Registration</b> <ul style="list-style-type: none"> <li>Registrant registers their DERs on the Platform</li> <li>DSO reviews and approves Eligible DERs</li> <li>Subject to the supplemental registration evaluation to be completed during the Forward Period</li> <li>Eligible Registrants receive an Eligibility Notice identifying their Eligible DERs, Eligible Capacity, and an indication as to whether any of the Eligible DERs have been successfully registered as Reserve-Capable</li> <li>Registrant may proceed to Supplemental Registration to finalize registration of its DERs</li> </ul>	<ul style="list-style-type: none"> <li>Only Eligible Registrants and Eligible DERs may participate in the Local Capacity Auction</li> <li>Eligible Registrants must deliver their Auction Deposit prior to the Local Capacity Auction</li> <li>Eligible Registrants submit Capacity Offers</li> <li>DSO clears the Local Capacity Auction</li> <li>The DSO will offer a Contract to Eligible Registrants for each Eligible DER that clears the Local Capacity Auction</li> <li>Establishes the Local Capacity Obligation and, if applicable, Local Reserve Obligation, for each Contracted DER</li> </ul>	<ul style="list-style-type: none"> <li>Eligible Registrants execute a Contract and pay the required Completion Security for each DER</li> <li>Once the Contract is executed and Completion Security posted Eligible Registrants become Participants and Eligible DERs become Contracted DERs</li> <li>DSO will publish the Post Auction Report</li> </ul> <b>Supplemental Registration</b> <ul style="list-style-type: none"> <li>Supplemental Registration must be completed by Participants for all Contracted DERs</li> <li>All Direct DERs must be in-service, and all Contributors must be contracted, before the deadline specified in the Rules</li> <li>DSO assesses all Contracted DERs against eligibility criteria. Failure to meet eligibility criteria will result in termination of the Contract</li> </ul>	<ul style="list-style-type: none"> <li>Participants must meet its Local Capacity Obligation and, if applicable, Local Reserve Obligation, by submitting Bids/Offer for each of its Contracted DERs into the Local Energy Auction and, if applicable, Local Reserve Auction processes</li> <li>Local Energy Auctions and Local Reserve Auctions occur each Business Day during the Commitment Period</li> <li>Aggregators may update their Contributor DERs periodically during the Commitment Period</li> </ul>



## Appendix G – DSO Coordinates

The following should be used to contact the DSO for purposes under the Rules and the Contract:

Address: Alectra Utilities Inc.  
161 Cityview Blvd.  
Vaughan, Ontario  
L9H 0A9

Attn: NWA Demo Project Team

Telephone:

Email: [NWADemo@alectrautilities.com](mailto:NWADemo@alectrautilities.com)

Facsimile: