

2027 Local Demand Response Program Rules



The Local Demand Response (LDR) Program provides eligible customers with the opportunity to help support grid reliability and earn incentives by reducing electricity use during periods of high demand. This document outlines all relevant program information, including how it works, eligibility requirements, program rules and key processes.

If you have any questions or need assistance, please email us at local_dr@torontohydro.com.

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1. Background

The LDR Program is designed to help address short- to medium-term capacity constraints at targeted transformer stations by identifying opportunities where demand response (DR), including behind-the-meter and customer-owned Distributed Energy Resources (DERs), can be leveraged to support the broader distribution system by deferring the need for infrastructure upgrades.

The program is Toronto Hydro's flagship Non-Wires Solutions (NWS)¹ initiative, which has been running successfully since 2018, and represents a big step forward in evolving conventional utility station planning to include the consideration of NWS alongside traditional poles and wires investments.

Toronto Hydro is targeting nine transformer stations (TS) for the next three years, aiming to procure up to 30 megawatts (MW) of capacity. The target stations are Finch TS, Leslie TS, Manby TS, Horner TS, Strachan TS, Dufferin TS, Ellesmere TS, Cecil TS (limited availability²) and Terauley TS (limited availability²) (refer to **Section 4: Target areas and capacity** for maps).

The LDR Program will run until 2029. However, the program rules highlighted throughout this document pertain to the 2027 program year. The program rules are subject to change annually as required.

2. How does the LDR Program work?

The LDR Program relies on contractual capacity commitments made by third parties to Toronto Hydro, meaning Toronto Hydro will not be directly controlling or dispatching the DR capacity.

Potential participants can apply through our *Local Demand Response Program Participation Application* form. The application form is available on our website at torontohydro.com/localdemandresponse. For a timeline of the registration process, please refer to **Section 3: Timelines**.

Successful applicants will enter into a contractual agreement with Toronto Hydro, indicating the contracted capacity and its attributes, the maximum number of DR events, measurement and verification (M&V) expectations, and all other program requirements.

During the obligation period, successful applicants will be considered “on-call” during the availability window for Toronto Hydro to use as necessary to manage peak demand at the identified stations. For more information about activations, including the expected number of activations, please refer to **Section 9: Capacity payments and maximum activations**.

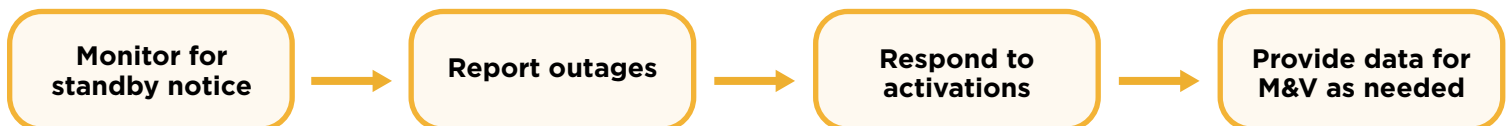
Figures 1 and 2 outline the responsibilities of both the participant and Toronto Hydro during the procurement and deployment stages of the program.

Figure 1. Participant responsibilities

Procurement stage



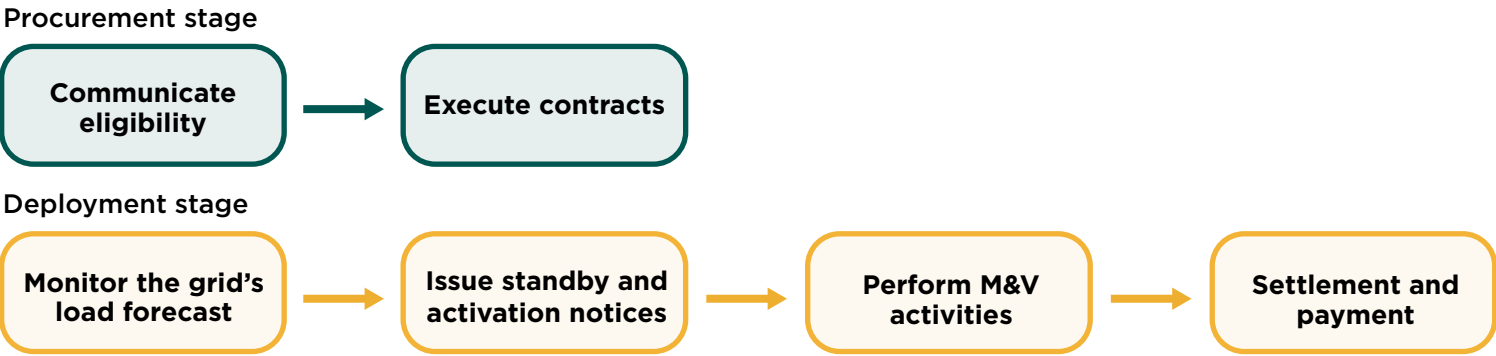
Deployment stage



¹ NWS refer to operating practices, activities or technologies that can enable the utility to defer the need for specific distribution projects at a lower total resource cost. This is done by reliably reducing distribution system constraints at times of maximum demand in specific grid areas. Typically, these NWS leverage the use of DERs, often in partnership with utility customers or with other enabling third parties.

² Only certain neighbourhoods within the Cecil and Terauley TS service areas are eligible to participate due to the localized need for demand response in these areas.

Figure 2. Toronto Hydro responsibilities



3. Timelines

Key program dates are summarized in Table 1 for the 2027 program year.

Table 1. Key program dates

Activity	Date
Registration opens	September 1, 2026
Registration closes	November 30, 2026
Application changes deadline (capacity reduction)	February 1, 2027
Application changes deadline (all else)	April 1, 2027
Contracting period	April 1, 2027 to May 31, 2027

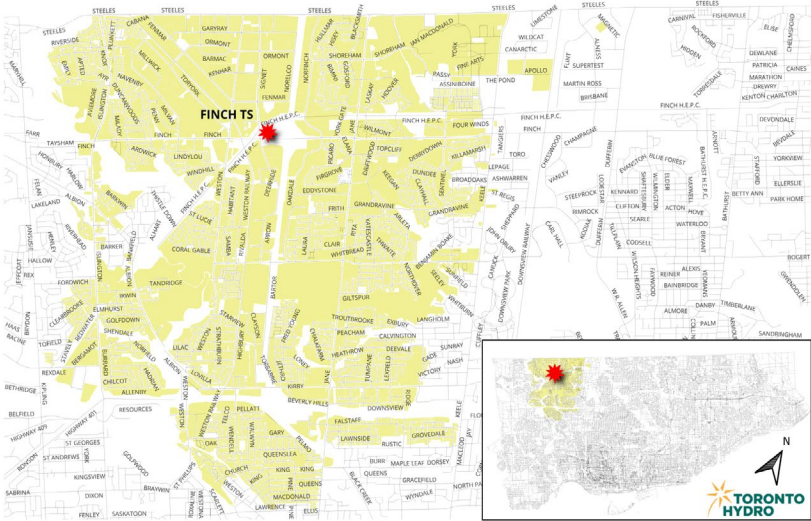
4. Target areas and capacity

Between 2026 and 2029, Toronto Hydro aims to procure up to 30 MW of capacity across multiple transformer stations. In 2026, procurement focused on the service areas of Finch TS, Leslie TS, Manby TS, Horner TS, Strachan TS and Dufferin TS.

In 2027, Toronto Hydro will expand the program to include three additional service areas: Ellesmere TS, Cecil TS (limited availability) and Terauley TS (limited availability).

The target service areas are depicted in Figures 3.1 to 3.9.

Figure 3.1 Finch TS target service area



³ Only certain neighbourhoods within the Cecil and Terauley TS service areas are eligible to participate due to the localized need for demand response in these areas.

Figure 3.2 Leslie TS target service area

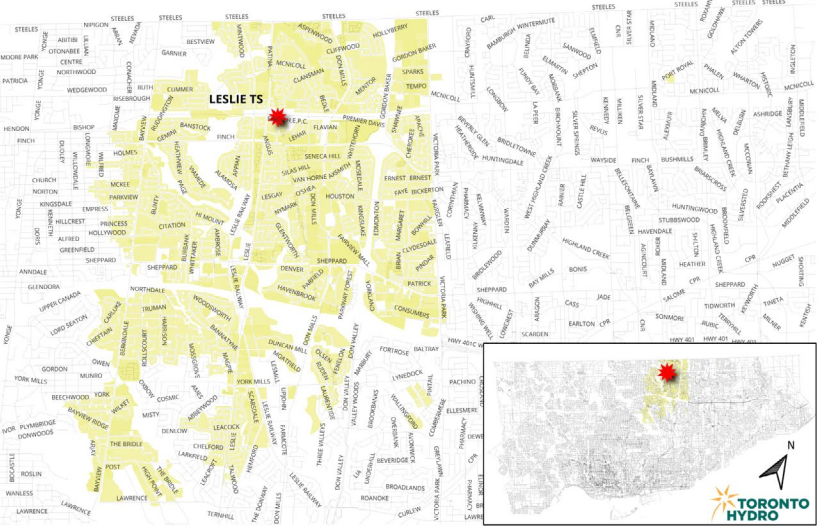


Figure 3.3 Manby TS target service area

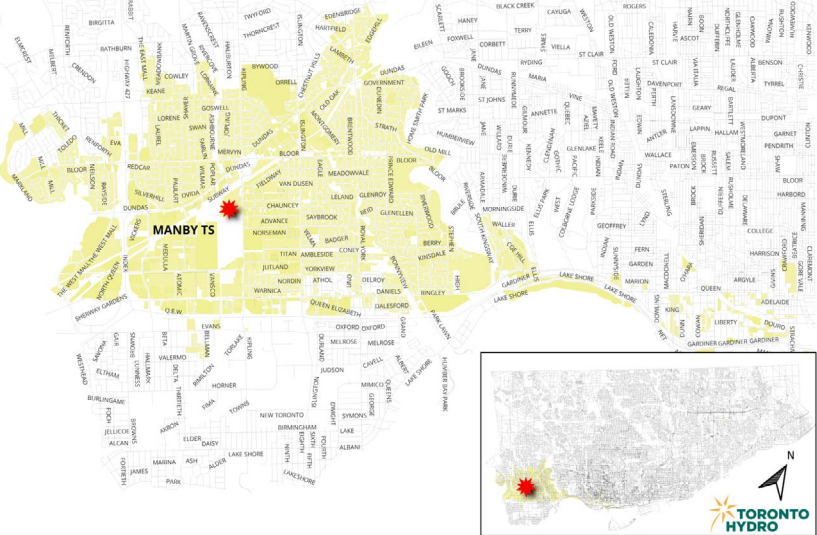


Figure 3.4 Horner TS target service area



Figure 3.5 Strachan TS target service area



Figure 3.6 Dufferin TS target service area

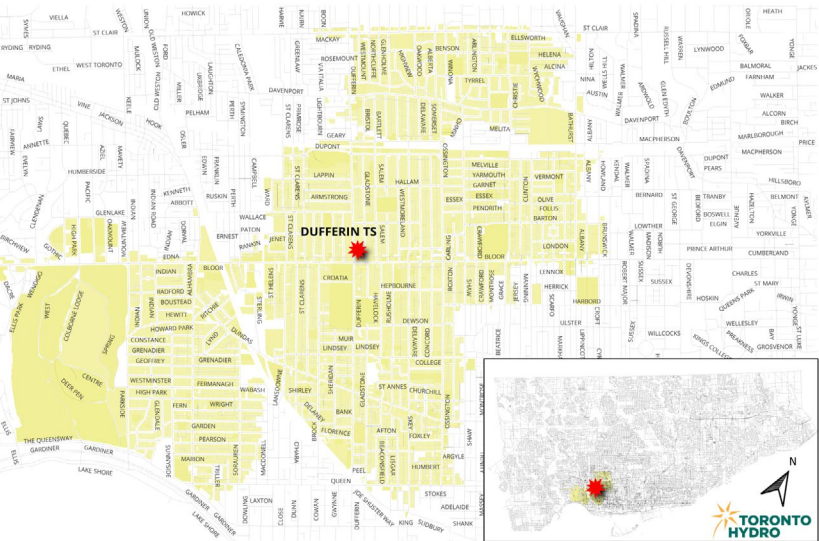


Figure 3.7 Ellesmere TS target service area

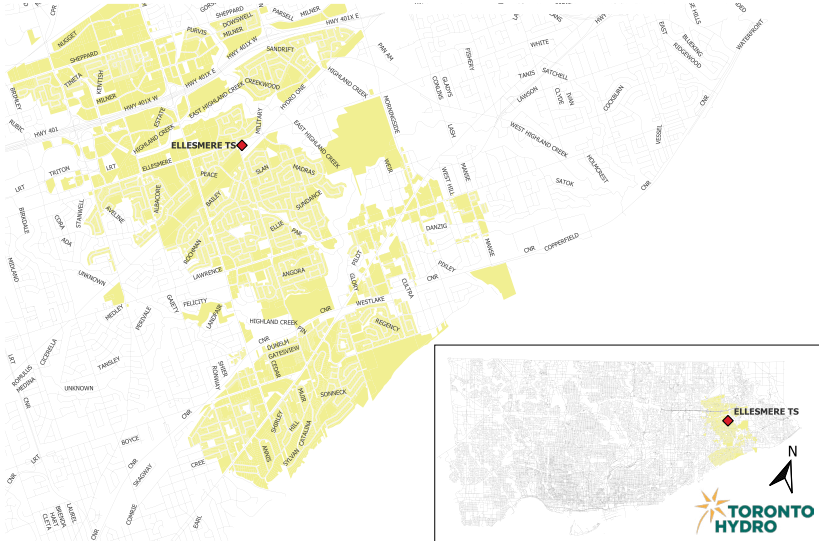


Figure 3.8 Cecil TS target service area (limited availability⁴)

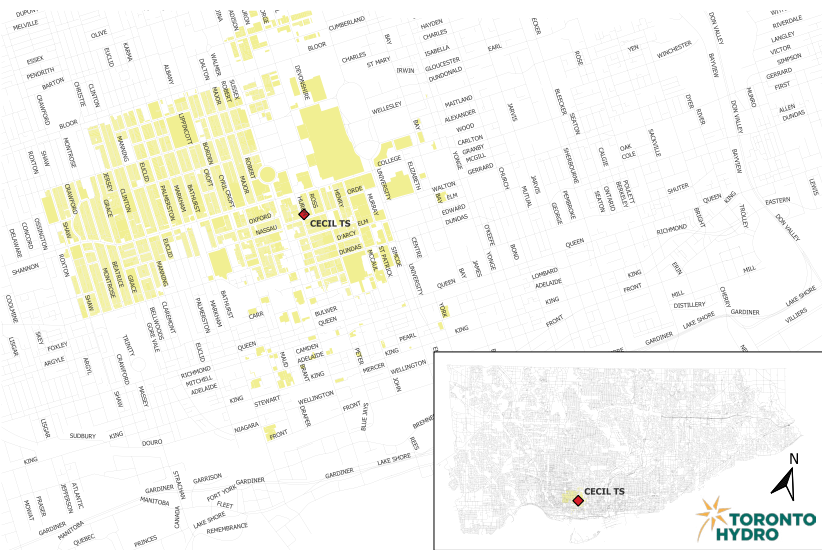
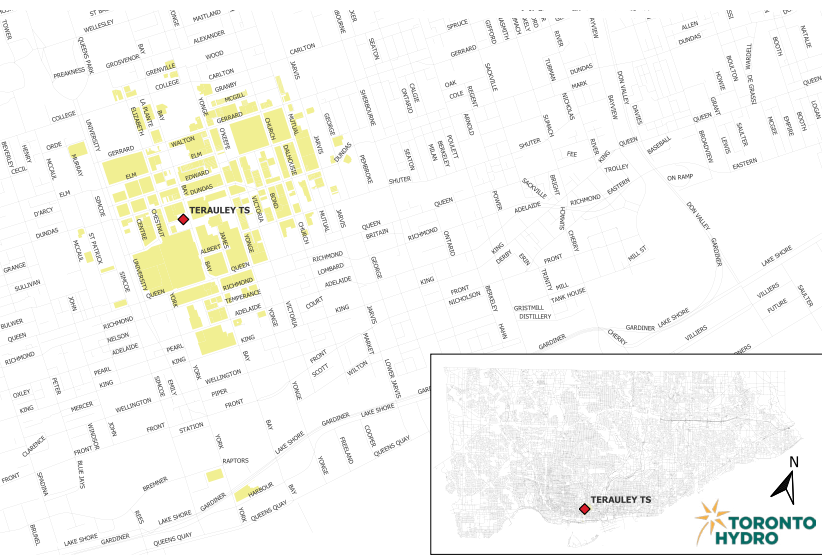


Figure 3.9 Terauley TS target service area (limited availability⁴)



Source: Toronto Hydro

5. Eligibility

To be eligible for this program, the following requirements must be met:

- Participating loads must be located in the area served by one of the nine target transformer stations outlined in **Section 4: Target areas and capacity**
- The total resource capacity must be at least 500 kilowatts (kW) (i.e., single facility or aggregated resource)

Note: Toronto Hydro will evaluate each address to determine its contribution to system needs and program objectives. Addresses that are not expected to provide sufficient system value may be deemed ineligible for participation in the program at Toronto Hydro’s discretion.

6. Obligation period

The obligation period refers to the period of time when the contracted capacity resources are expected to be available. The LDR obligation period is defined as June 1 to September 30, inclusive.

⁴ Only certain neighbourhoods within the Cecil and Terauley TS service areas are eligible to participate due to the localized need for demand response in these areas.

7. Availability window

The availability window is the timeframe of the obligation period during which a DR activation could occur. The expectation is that contracted LDR resources will be available for virtual dispatch during this time. Toronto Hydro will not be directly controlling the DR capacity, but will require DR providers to respond to activations by reducing demand as per their capacity obligation outlined in their LDR contracts.

The availability window for this program is 12 p.m. EST to 9 p.m. EST on business days (excluding statutory holidays).

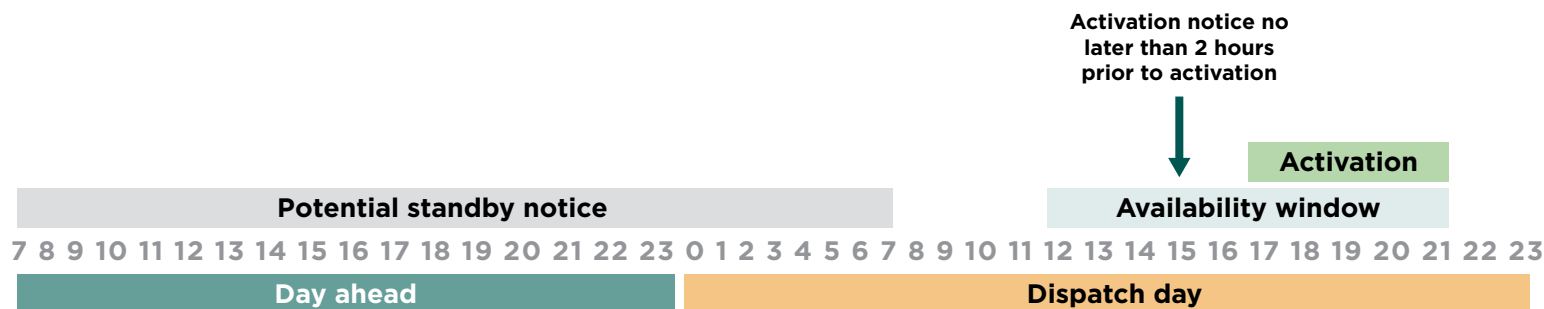
8. Standby and activation notices

Activation notices will only be sent if LDR resources are placed on standby. A standby notice may be sent through email to the participant between 7 a.m. the day before an activation and 7 a.m. the day of an activation.

In the event that Toronto Hydro cannot issue a standby notice during the period indicated above, LDR participants would not be subjected to Dispatch or Capacity Charges for that activation.

If placed on standby, activation notices may be sent by email to the participant at least two hours prior to the time of the activation. Activations can happen anytime within the availability window and will always be four hours in duration. Only one activation will happen during any given availability window on any given business day during the obligation period. See Figure 4 for an overview of timeline. Please refer to **Section 9: Capacity payments and maximum activations** of these Program Rules for information on the expected number of activations per obligation period.

Figure 4. Daily timeline with example activation



9. Capacity payments and maximum activations

Program participants will be eligible to receive a daily capacity payment (\$/MW-day).

The capacity price for the 2027 program was determined to be \$700 per MW-day during the capacity auction held in October 2025.

Based on Toronto Hydro's previous experience with LDR programs, it is expected that there will be a maximum of six activations (including tests) for the 2027 obligation period.

10. Capacity offer process

Participants will have the opportunity to register their capacity through our *Local Demand Response Program Participant Application* form to determine eligibility. As part of the registration process, participants must provide:

- Participant information (e.g., participant name, contact address, etc.)
- DR resource information, including:
 - Number of contributors (if more than one contributor, the DR resource will be considered an aggregated DR resource)
 - Toronto Hydro account number(s) (provide the customer account number for each contributor)
 - Customer address(es) (provide address for each contributor)
 - DR capacity size(s) (provide capacity in MW for each contributor)
 - DR resource type(s) (provide resource type [e.g., battery, gas, load curtailment, etc.] for each contributor)

If Toronto Hydro determines that the participant is eligible, the participant will be invited to sign a Participant Agreement and execute the contract. Please note that acceptance into the LDR Program will be on a first-come, first-served basis until Toronto Hydro's capacity target has been reached. If Toronto Hydro reaches its target capacity, the next opportunity to participate in the LDR Program will be through the capacity auction in October 2027 for the 2028 program year.

Please note that, once accepted into the program, participants must report any capacity reductions by February 1, 2027. All other application changes must be reported by April 1, 2027.

For the 2027 obligation period, Toronto Hydro requires that all participants offer capacity that's capable of reducing energy draw from the grid for at least **four continuous hours** in compliance with activation notices issued by Toronto Hydro.

11. Capacity selection process

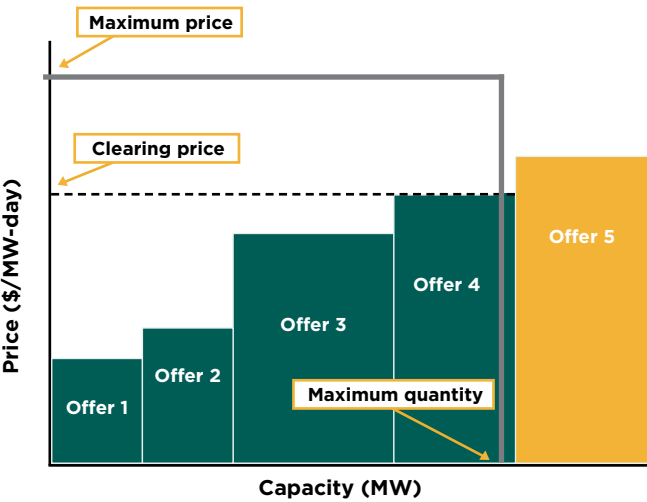
Bi-annual auctions

Capacity auctions will be held bi-annually throughout the 2025–2029 period. The first one took place in October 2025 and set the capacity price at \$700/MW-day for the 2026 and 2027 program years. The second auction will take place in October 2027 and will set the capacity price (\$/MW-day) for 2028–2029.

Toronto Hydro will use a demand curve to determine the clearing price for the auction (refer to Figure 6). Toronto Hydro's demand curve consists of the reference price and the target capacity for the LDR Program. The reference price represents the maximum price Toronto Hydro will pay, and the target capacity reflects the maximum quantity of DR capacity that Toronto Hydro will buy.

Toronto Hydro will receive DR capacity offers from registered participants, consisting of price (\$/MW-day) and quantity (MW). Toronto Hydro will stack all capacity offers from registered participants from lowest to highest price, as shown in Figure 5. If two DR offers have the same price, the one that was submitted first will be stacked lower on the demand curve. The lowest-priced offers below the maximum quantity will clear and will be offered LDR contracts by Toronto Hydro **at the clearing price**. The clearing price represents the point at which the last accepted DR offer intercepts the demand curve.

Figure 5. Illustrative demand curve



12. Settlement and payment process

At the end of each month during the commitment period, a settlement statement will be sent to the participant summarizing the activity and performance of the previous month. Once the settlement statement has been accepted, the participant will submit an invoice to Toronto Hydro and will be paid out by the end of the following month.

The settlement statement will include:

- The participant’s contracted capacity
- The participant’s delivered capacity in the event of an activation (including test activations)
- The expected payment based on the delivered capacity, minus any program performance charges

Monthly settlements equal total LDR payments minus total LDR charges, as shown in Tables 3 and 4.

Table 3. Program payments

LDR payments	Description
Monthly Capacity Payment	Earned daily (\$/MW-day) on business days (excluding holidays) during obligation period. Total payment for each month in an obligation period is calculated by multiplying LDR capacity clearing price (\$/MW-day) by the resource’s contracted capacity (MW) and business days in the month. (Example: 1 MW x \$600/MW-day x 21 days = \$12,600)

Program performance charges, including Dispatch Charges and Capacity Charges, are detailed in Table 4. These charges are applied when a participant does not meet the delivery threshold during an activation.

Table 4. Program performance charges

LDR charges	Description
Dispatch Charge	Applies when a LDR resource is dispatched, but does not deliver at least 85 per cent of its contracted capacity during an activation. Calculated as the product of the contracted capacity (MW), the LDR capacity clearing price (\$/MW-day) and a non-performance factor ranging between one and two depending on the month, according to Table 5. (Example for July: 1 MW x \$600/MW-day x 2.0 = \$1,200)
Capacity Charge	Applies when a LDR resource is dispatched, but does not deliver least 50 per cent of its contracted capacity more than once. Calculated to equal the total capacity payment for one month, and capped at one charge per month. (Example: 1 MW x \$600/MW-day x 21 days = \$12,600) Note: If subject to a Capacity Charge, the participant will not be subject to a Dispatch Charge as well for that given month.

The Dispatch Charge is calculated using a non-performance factor, which varies by month. These monthly factors are outlined in Table 5.

Table 5. Non-performance factors

Month	Factor
June	1.5
July	2.0
August	2.0
September	2.0

The following example illustrates how monthly payments and charges are calculated.

Monthly settlement calculation example:

Sample calculation	
Participant contracted capacity	1 MW
Capacity payment	\$600/MW-day
Business days in the month	21
Non-performance factor for the month	2
Number of failed dispatches for the month (less than 85 per cent)	2
Number of failed dispatches for the month (less than 50 per cent)	1

Monthly Capacity Payment: 1 MW x \$600/MW-day x 21 days = \$12,600

Dispatch Charge: 2 failed dispatches x 1 MW x \$600/MW-day x 2.0 = \$2,400

Capacity Charge: \$0 (as this charge applies when failing to provide at least 50 per cent of capacity more than once)

Net LDR monthly payment: \$12,600 - \$2,400 = \$10,200

The delivered capacity will be assessed based on the M&V process outlined in **Section 14: Measurement and verification**. The participant will then review the applicable monthly settlement statement to ensure they're aligned.

13. Performance expectations and testing

Performance expectations

Participants are responsible for several key actions to ensure compliance with program requirements:

- Monitoring their email for standby notices
- Responding to both tests and activations by curtailing load
- Informing Toronto Hydro of any outages during the day-ahead period and no later than 9 a.m. on the day of a possible activation

Participants are expected to curtail load to reflect contracted capacity during any and all activations. Refer to **Section 12: Settlement and payment process** for a full explanation of performance charges that would apply if load isn't curtailed sufficiently to meet the contract capacity.

Testing

Toronto Hydro will conduct at most one test per obligation period. Participants will receive notice of a test 24 hours in advance. In response to a test, participants will be expected to curtail load per their contracted capacity. Should a participant fail a test, they'll be subject to a Dispatch Charge, which is calculated as referenced in **Section 12: Settlement and payment process**. Note that, should an activation occur prior to a test, successful response to such an activation will replace the need for testing.

14. Measurement and verification (M&V)

The volume of capacity a participant provides in an activation period will be calculated on an hourly basis. It will be determined as the difference between the participant's calculated baseline applicable to the activation period and their measured consumption of electricity during the period.

The baseline value for a particular hour of an activation period will be calculated using the last 20 suitable business days, selected from up to 35 business days before the day the activation notice was issued. If there are less than 20 suitable business days available, then we'll use all available suitable business days within the maximum of 35 business days to calculate the baseline. Suitable business days are any business days where a participant was **not** activated to provide DR capacity.

Business days prior to the obligation period will be deemed as suitable business days, irrespective of the aforementioned definition of suitable business days. For example, when settling the month of June and assuming the resource was registered to participate as of June 1, then all business days in May will be deemed as suitable business days.

Baseline calculation

For each hour of an activation event to deliver a capacity obligation, the baseline shall be calculated as follows:

i. $\text{Baseline}_h = \text{Standard Baseline}_h \times \text{In-Day Adjustment Factor}^5$

Where:

- "h" is an hour within the activation event
- "Standard Baseline" is one of two components of the Baseline and is calculated as described below
- "In-Day Adjustment Factor" is one of two components of the Baseline and is calculated as described below

ii. Standard Baseline: High 15 of 20

The Standard Baseline is the average of the highest 15 measurement data values for the same hour that was activated in the last 20 suitable business days prior to the activation.

iii. In-Day Adjustment Factor⁵

The In-Day Adjustment Factor is calculated as follows:

$$\text{In-Day Adjustment Factor} = A \div B$$

Where:

- "A" is the average actual consumption during the adjustment window⁶ hours on the actual activation day
- "B" is the average actual consumption during the adjustment window hours in the past highest 15 of 20 suitable business days prior to the activation day

⁵ The In-Day Adjustment Factor can only be as low as 0.8 and as high as 1.2. For greater clarity, the In-Day Adjustment Factor will be rounded either up or down if calculated as being less than 0.8 or greater than 1.2, respectively.

⁶ The adjustment window is the three-hour window occurring one hour before an activation event.