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1. Introduction

Niagara Mohawk Power Corporation d/b/a National Grid (the “Company”) is an electric and gas investor-owned utility serving nearly 3.3 million electric and 3.5 million gas customers through its subsidiary companies in Massachusetts, New York, and Rhode Island. National Grid is committed to providing safe, reliable, and affordable energy to all customers throughout our service territory.

The Company has been offering demand response programs for both commercial and residential customers across its service territories for several years. Please visit https://www.nationalgridus.com/Upstate-NY-Business/Energy-Saving-Programs/Demand-Response for more information on the programs and available opportunities.

Disclaimer: This document contains only guidelines for the National Grid Demand Response (DR) programs. The National Grid Tariff prevails in any conflict. National Grid reserves the right to change any of the guidelines without notice if necessary, for operational purposes.

Purpose: This document is intended to provide additional clarification to Rules 61 and 62 of the Company’s PSC No. 220 Electricity – Schedule for Electric Service (“Tariff”). It is not meant to provide a comprehensive overview of DR or National Grid’s programs to new participants.

2. Acronyms and Definitions

- **AMI** – Advanced Meter Infrastructure. Also known as smart meters.
- **Aggregator** – Also known as Curtailment Service Provider or CSP. A third-party that aggregates and represents load and is responsible for the actions of its customers with respect to the National Grid’s DR programs. Assists customers and property owners/managers with DR program participation.
- **Aggregation** – Means either a sub-aggregation or all customers represented by an aggregator within a Network if there are no Sub-aggregations for that aggregator within that Network.
- **Capability Period** – May 1 through September 30.
- **CBL** – Customer Baseline Load. Average hourly energy consumption used to determine the level of load relief that is provided. The CBL calculation details are located here.
- **CSP** – Curtailment Service Provider (See: “Aggregator”)
- **CSRP** – Commercial System Relief Program (21-hour Notification ahead of Test or Planned Event)
- **DR** – Demand Response – load relief upon request. Also known as Smart Usage Rewards.
- **DRMS** – Demand Response Management System. System used to administer the DR programs.
- **Interval Meter** – An electric meter capable of measuring electric usage in intervals of 60 minutes or less. Required for DR program participation.
- **kW** – Kilowatt
- **kWh** – Kilowatt-hour
- **Load Relief** – Refers to power (kW) and energy (kWh): (a) ordinarily supplied by the Company that is displaced by use of Electric Generating Equipment and/or reduced by the Direct Participant or Aggregator at the Customer’s premises; or (b) produced by use of Electric Generating Equipment and delivered by that Customer to the Company’s distribution system during a Load Relief Period.
- **Load Relief Period** – the hours for which the Company requests Load Relief during an Event, typically a four-hour window after 2:00 PM. Load Relief will not be required between the hours of 12:00 AM and 6:00 AM
- **MHP** – Mandatory Hourly Pricing. A rate structure for large customers (typically >500 kW demand), where interval metering and communications are National Grid’s responsibility.
The Commercial System Relief Program (CSRP) aims to reduce peak demand at the network level by calling on customers to reduce energy use during a Load Relief Period. Load Relief Periods for a Planned CSRP Event can be requested during the Capability Period, Monday-Friday, excluding federal holidays. For a Planned CSRP Event, a day-ahead advisory notice (21 hours or more prior to dispatch) is triggered when the day-ahead system peak demand forecast reaches 92% of the overall summer peak demand forecast. The forecast must remain at 92% or higher on the day of the event or the event can be cancelled. A day-of notification is sent at least two hours ahead of each respective customer’s call window. Less than 21 hours of notice may be provided for an Unplanned CSRP Event, and participation is voluntary. Aggregators are responsible for communicating event notices to their respective customers; direct participants receive event notices directly from National Grid. This program is typically called system-wide (i.e., all enrolled customers are called for an event).

4. Program Enrollment

There are many factors to consider prior to enrolling in National Grid’s Demand Response programs. End-use customers or facility owner/managers should consider enrolling through a National Grid-approved aggregator for assistance. Each customer can only participate in the Reservation or Voluntary option for each program, but not both (i.e., each customer can only participate in either CSRP-R or CSRP-V). The sections below describe important enrollment requirements, deadlines, and processes.

4.1 Eligibility Requirements

A communicating interval meter is required for all participants. Aggregators must enroll a minimum of 50 total kW (in aggregate) of load reduction to participate in any National Grid Commercial DR program. A direct participant enrolling a single account must provide a minimum of 50 kW of load reduction. A direct participant may self-aggregate multiple individual accounts as long as the organization is not acting as a third-party aggregator. If a direct participant self-aggregates, then the performance factors and payments will be handled as they are for third-party aggregators. All customers enrolled in the Reservation programs must provide load relief during non-voluntary events. Aggregators must provide customer contact information to National Grid, if requested. National Grid may request contact information for various reasons, including: an account being enrolled by multiple aggregators, or for an administrative review.

4.2 Enrollment Deadlines

The 2021 enrollment deadlines for CSRP participants are by 11:59 PM EDT on the first business day in April for a May 1 start, and 11:59 PM EDT the first business day in May for a June 1 start. Interval meters must be installed 30 days prior to any account’s respective program start date, and communications must be established a day before respective program start. The final meter installation date for Reservation Option
customers is June 1, and the final meter communications date for Reservation Option customers is June 30. In this scenario, the account will commence participation on July 1 (assuming all other enrollment requirements are met by the May 1 deadline). If these metering requirements are not met for non-MHP customers, the associated account’s application will be rejected under the Reservation Option. Voluntary participants may enroll at any time after enrollments open through the end of the capability period. Voluntary customer interval meter(s) must be installed 30 days prior to the requested start date, with communications established by the requested start date.

4.3 Approved Aggregators

National Grid publishes a list of National Grid-approved aggregators on our DR website. If you are a new aggregator that wishes to be added to the list, or an existing aggregator that wishes to update information, please send an email to DR@nationalgrid.com with your request.

4.4 Public Service Commission DER Oversight

On October 19, 2017, the PSC published Uniform Business Practices for Distributed Energy Resource Suppliers (UBP-DERS). Aggregators are considered DER suppliers and these rules apply to those aggregating in National Grid’s DR programs. Further, DR payments are considered ongoing transactions. The following categories are addressed and elaborated on in the UBP-DERS starting on page 182.

- Sales Agreements
- General Marketing Standards
- Customer data authorization
- Responsibility for contractors and other third party agents
- Customer Inquiries and Complaints
- Consequences for violations
- Oversight requirements

It is the responsibility of aggregators to be familiar with DER Oversight and ongoing changes.

4.5 Required Documents

The first enrollment process step for any potential aggregator or direct participant is to fill out and submit the Demand Response Program Application. This document is required every year, regardless of past participation.

National Grid pays DR participants via ACH bank wire transfer, mailed check, or electric on-bill credit. New aggregators or direct participants must select a payment method and submit the associated required documents listed below prior to the start of the DR capability period. National Grid may periodically request updated documents. Any information that is repeated in the below documents (address on W-9 and Remittance Letter) must match exactly across documents.

If you would like to change your payment method or payment details, please email updated documentation to DR@nationalgrid.com before the end of enrollments. Failure to do so may result in a delay of incentive payments. If your financial information needs to be changed after the capability period has already started, you must notify National Grid immediately. Any change to payment information after the capability period
has started may result in a delay of incentive payments.

To receive payments via check, the aggregator or direct participant must submit:
- W-9
- Remittance Letter

To receive payments via wire transfer, the aggregator or direct participant must submit:
- W-9
- Remittance Letter
- ACH Form
- Bank letter or copy of a voided check

Aggregators are required to have sales agreements with customers they enroll in CSRP. These agreements should explicitly name the National Grid CSRP program as applicable and be agreed to by an authorized representative of the customer. The agreements must be dated. Aggregators should reconfirm participation with customers annually to avoid enrolling a customer who has switched to a different aggregator.

Aggregators are required to have sales agreements with customers they enroll in CSRP. These agreements should explicitly name the National Grid CSRP program as applicable and be agreed to by an authorized representative of the customer. The agreements must be dated. Aggregators should reconfirm participation with customers annually to avoid enrolling a customer who has switched to a different aggregator.

All DR aggregators are required to sign the Data Security Agreement (DSA) and pass National Grid’s Vendor Risk Assessment (VRA). These documents are required to receive customer data from National Grid in accordance with the Uniform Business Practices for

4.5 Generator Permits

Any direct participant or aggregator that is providing DR via generation in the CSRP DR program must ensure that all generators meet local, state, and federal requirements, including, but not limited to, all permitting requirements.

The following is required for each account with a generator:

1. For all generating equipment that is used to provide load relief in the CSRP DR program:
   New York State Department of Environmental Conservation (NYS DEC) permits or registrations.

2. For diesel-fired and natural gas lean-burn generating equipment with a model year older than 2000 that is used to provide load relief in the CSRP DR program:
   Written certification by a professional engineer (PE) attesting to the accuracy of all generation-related information contained in the application, including the NOx emission level. The NOx emission level for these engines must be no more than 2.96 lb/MWh.1

City (or other) permits will not be accepted in lieu of NYS DEC permits/registrations.

The deadlines for submitting NYS DEC permits and PE letters are:

1. If a NYS DEC permit or registration has already been issued by the enrollment deadline (see Section 3.2), the relevant documents must be submitted with the CSRP enrollment, or within 7 days of the enrollment deadline.

2. If the NYS DEC permit has not yet been issued by the enrollment deadline (see Section 3.2), a copy of the NYS DEC permit/registration application must be submitted with the CSRP enrollment or within 7 days of the enrollment deadline. The NYS DEC permit and PE letter (if applicable) must be submitted before commencing service under CSRP. The latest a permit can be submitted in this scenario is May 31st.
If the relevant documents are not all submitted by the above deadlines, the enrollment will be rejected. Please submit all permits and PE letters as early as possible so that National Grid can review them before the deadline. This will allow adequate time for mistakes to be corrected.

If enrolling a battery in the program, please email the interconnection number and enrollment ID to DR@NationalGrid.com.

For more information on generator permitting, please visit this NYS DEC website and direct all clarifying questions to NYS DEC staff.

5. Meter Data and Communications

A communicating interval meter is required for each National Grid DR program participant. If a customer is not billed at the time of enrollment with interval data, the customer is responsible for interval meter purchase and communications. National Grid is not responsible for notifying an aggregator or direct participant when a meter is not communicating. Aggregators and Direct Participant customers can review meter data via the National Grid Customer Website.

As of 2020, CSRP customers that are unable to obtain communications service prior to the start of the Capability Period are provisionally allowed to participate in the program until communications service is established. Customers participating under these circumstances may have their event performance set to zero and calculated after the fact if communications are not established before a Load Reduction Event. National Grid will follow guidelines for rectifying meter data issues in order to calculate performance in the event a provisional participant does not have communications service established.

6. DR Event Forecasting and Notification

When National Grid has a day-ahead forecasted load level that reaches at least 92% of the forecasted seasonal system-wide peak, a Planned CSRP event may be called. For Planned Events the company will provide no less than 21 hours advance notice to participants. A second notification, confirming or cancelling the event, will be sent at least two hours prior to the event start time. An Unplanned Event may be called fewer than 21 hours prior to the start of the event, participation in these events is compensated, but is also voluntary and does not impact a participant’s performance factor.

Notifications for National Grid DR events are sent via phone and/or email. Notifications are sent automatically and rely on aggregators and direct participants to provide at least two contacts at registration for the purpose of notification during events. To confirm proper event notification setup, National Grid will issue one or more communications tests before or during the capability period.
7. Settlements

7.1 Settlement Timeline

Payments will be made for Reservation Option payment customers for each capability period month, within 75 days after the end of the month (to coincide with billing cycle corrections), unless there are operational constraints. For example, the payment for May 2020 participation would be on or before 8/14/2020.

If you would like to change your payment method or payment details, please email updated documentation to DR@nationalgrid.com before the end of enrollments. Failure to do so may result in a delay of incentive payments. If your financial information needs to be changed after the capability period has already started, you must notify National Grid immediately. Any change to payment information after the capability period has started may result in a delay of incentive payments.

7.1 Test Events

If DR resources are called for a test event, performance (kWh) payments are paid out as in a Planned Event. Performance payments cannot be less than zero. However, negative kWh performance values at the account level will net against positive kWh performance values in the same aggregation.

The following example shows where negative kWh netted against other accounts in the same aggregation, the example also shows how kWh performance is capped at the total aggregation kW pledge amount for a test event.

<table>
<thead>
<tr>
<th>Aggregator-Customer</th>
<th>kW Pledge</th>
<th>Uncapped kWh Reduction (Actual Value)</th>
<th>Capped kWh Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agg 1- Customer 1</td>
<td>100</td>
<td>300</td>
<td>-</td>
</tr>
<tr>
<td>Agg 1- Customer 2</td>
<td>75</td>
<td>70</td>
<td>-</td>
</tr>
<tr>
<td>Agg 1- Customer 3</td>
<td>50</td>
<td>-60</td>
<td>-</td>
</tr>
<tr>
<td>Aggregator 1 Total</td>
<td>225</td>
<td>310</td>
<td>225</td>
</tr>
</tbody>
</table>

7.1 Aggregation-Level Payments

Aggregators are paid based on the performance of the entire aggregation. Below is an example of how performance would be calculated for an aggregation in a month with a single four-hour planned event. While customers within an aggregation can have negative performance, the aggregation’s total performance has a floor of zero.

<table>
<thead>
<tr>
<th>Aggregator-Customer</th>
<th>kW Pledge</th>
<th>Average Event kWh Reduction</th>
<th>Performance Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agg 1- Customer 1</td>
<td>100</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td>Agg 1- Customer 2</td>
<td>75</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Agg 1- Customer 3</td>
<td>50</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>
### 7.2 Mandatory and Voluntary Events

**Mandatory participation** means that actual Load Relief will be measured and will impact performance factor and therefore reservation payments. Performance factors are determined based on average hourly load relief across mandatory load relief hours, and they are used as a multiplier to determine reservation payments.

**Voluntary participation** means that performance payments (kWh) will be made, but that load relief will not impact performance factor or reservation payments, as there are no reservation payments and thus no performance factor for voluntary participants.

**Unplanned Events** are Voluntary, even for customers that are not otherwise voluntary program participants. Unplanned Events maybe announced fewer than 21 hours prior to the event start time. Customers are paid a slightly higher rate per kW performed in an Unplanned Event, and participation in these events does not impact Performance Factor calculations.

### 7.3 Performance Factors

For new aggregations or new direct participants:
- 50% performance factor is assumed for the capability period in months preceding a test or actual DR event. Once an actual or test event occurs, the performance factor achieved at that time will be carried forward.

For existing aggregations or direct participants:
- The previous year’s final aggregation or direct participant performance factor is assumed for the current capability period months preceding a test or actual DR event. Once an actual or test event occurs the performance factor will be set accordingly.

### 7.4 Weather Adjustment Factor

Direct Participants and Aggregators must select at time of enrollment whether an Average Day or Weather Adjusted CBL methodology should be used to assess demand (kW) and energy (kWh) Load Relief. Aggregators must specify the methodology to be used for each account number enrolled. Aggregators must specify the methodology to be used for each account number they are enrolling. If no selection is made, the Weather Adjusted CBL verification methodology will be applied by default.
CBL Load Verification Methodology is available on the National Grid Website here.